ELK RIDGE CITY, UTAH

TRANSPORTATION MASTER PLAN



JANUARY 2024

Table of Contents

1	INTI	RODUCTION	2
	1.1	DauNeround	
	1.2	NEEU IUL AII UUUALEO TEARSDORFATION Flomont	
	1.3	Transportation Planning Purpose	2
	1.4	Transportation Planning Purpose	2
	1.5	coordination with Local, State, and Federal Governments	4
	1.6	Land Use	7 5
2	EXIS	TING CONDITIONS	
	2.1	Demographic & Socioeconomic Data	8
	2.2	Roadway Network Inventory	8
	2.3	FUILCHORAL CLASSIFICATION	
	2.4	Roadway Conditions	9
	2.5	Level of Setvice	122
	2.6	Traffic Crash Data 1 Revenue Sources 1	4
	2.7	Revenue Sources	7
3	FUTI	JRE GROWTH	1
1	3.1	JRE GROWTH	0
	3.2	Land Use and Transportation	0
		Transportation Improvement Plans	0
	3.4	Transportation Improvement Plans 2 Other Future Actions 2	2
			5
4	CLOS	SURE	6

List of Figures

Figure 1 – Elk Ridge City Zoning Map	6
Figure 2 – Elk Ridge City Zoning Map	0
Figure 3 – Roadway Level of Service Representation	/ _
Figure 4 - Traffic Crash Data	с С
	0

List of Tables

Table 1 – Elk Ridge City Population and Housing Data (2021 Estimate)	0
Table 2 – Population Growth Trends	0
Table 3– Population Growth Estimates	0
Table 4 – Allowable Percentage of Road Miles and VMT Table 5 – 2022 ADT for Selected File Pile	9
Table 5 – 2025 ADT for Selected Elk Ridge Roadways	10
Table 6 – Roadway Speed Analysis for Selected Roadways	12
Table 7 – neavy Truck Percentages for Selected Roadways	1 /
Table 6 – 2023 LOS for Selected Tooele County Roadways	10
Table 7 - Traffic Grash Data	17
Table 10 – Apportionment Method of Class B and C Funds	.1/
Table 11 - Class B & C Roadway Funds Allocated by Fiscal Year	.10
Table 12 – Roadway Level of Service for Selected Roadways	.18
Table 13 – STIP Projects Within or Adjacent to Elk Ridge	.21
Table 14 – MAG Projects Within or Adjacent to Elk Ridge	.43
Table 15 – Short-range Transportation Improvement Plan	.23
	.24

1 INTRODUCTION

1.1 Background

Elk Ridge, nestled into the mountains of southeast Utah County, was incorporated as a town in 1976. Elk Ridge officially became a city in November 2000. The residents of Elk Ridge enjoy long, snowy winters and beautiful, warm summers. The city overlooks Utah Lake, and residents enjoy the benefits of living in a small and quiet community while remaining close to bigger cities to the north.

1.2 Need for an Updated Transportation Element

Elk Ridge is a mostly residential city with a few scattered commercial and public facility zones. Because of its location, the city is somewhat limited in development potential, and the city's location on the hillside prevents construction of a large, gridded roadway network. The city consists of mostly winding local residential corridors. Continued development in the city is anticipated to continue following this pattern of growth, and this Transportation Master Plan (TMP) has been established to ensure that this development is able to occur within the bounds of a functional transportation network. Roadway functional classification, future corridor, and capital project planning are essential in ensuring that the transportation network continues to provide for the needs of the expanding community.

1.3 Transportation Planning Purpose

The existing general plan for Elk Ridge City contains a transportation element that was adopted in 2018. The Utah Department of Transportation (UDOT) recommends that transportation master planning documents be updated every five years to ensure that all transportation planning remains up to date with the changing demands of a city's transportation network. Additionally, the City seeks to expand the existing transportation element by adding a more in depth analysis of the existing network. This TMP has been established for three key purposes:

- 1. Analyze existing traffic and roadway conditions with traffic counters to establish an expanded roadway network inventory and determine likely growth patterns and future transportation-related needs,
- 2. Plan for future development, roadway maintenance and construction projects, and funding acquisition,
- 3. Create maps of analysis and planning that will be included in the TMP.

1.3.1 Analyze Existing Traffic and Roadway Conditions

The analysis of existing traffic and roadway conditions is included in Section 2 of this document, and includes the following information:

- Existing land use data and maps,
- Existing demographic and socioeconomic data and future population growth estimates,
- Existing funding sources and opportunities, and
- An inventory of the existing roadway network, including:

- Functional classification of vehicle roadways,
- Vehicle crash data and patterns,
- ADTs and associated speed and vehicle classification data.

1.3.2 Plan for Future Development

Future planning addresses the transportation needs of the city as determined by the analysis of existing traffic and roadway conditions. Planning for future growth in Elk Ridge City is analyzed and described in Section 3. These needs include, but are not limited to:

- Future roadway functional classification map,
- Roadway Level of Service (LOS) analysis,
- Statewide Transportation Improvement Plan (STIP) and Mountainland Association of Governments (MAG) projects, and
- Elk Ridge Transportation Improvement Plan (TIP).

Future roadway capital projects have been separated into three categories: STIP projects, MAG projects, and TIP projects.

1.3.3 Create Maps

The following maps are included in the TMP:

- Existing Transportation Network
 - Existing Functional Class Map
 - Traffic Crash Heat Map
 - Existing Average Daily Traffic Map
- Future Transportation Network
 - Future Functional Class Map
 - o Transportation Improvement Plan Map
 - o Future Level of Service Map

1.4 Study Goals

Some of the benefits of a reliable and effective transportation network include improved mobility, citizen health, connectivity, and economy. These benefits are the four cornerstones of the Utah Department of Transportation's (UDOT) quality of life framework.¹ Elk Ridge seeks to comply with

¹ Utah Department of Transportation, "2022 UDOT Strategic Direction," Utah Department of Transportation, 2022, <u>https://www.udot.utah.gov/strategic-direction/index.html#missionSection</u>.

UDOT's quality of life framework and establish these factors as the framework for its transportation planning. This section will explain how Elk Ridge City seeks to integrate this quality of life framework into its transportation planning.

1.4.1 Better Mobility

Elk Ridge City seeks to improve mobility within the city by prioritizing established corridor preservation techniques, access management principles, functional classification standards, and other development standards. Mobility improves when roadways are designed by functional classification type (see Section 2.3). This ensures that mobility and access are balanced throughout the city. Elk Ridge City commits to finding the most cost-effective and efficient alternatives to future roadway design. Future planning ensures the network mobility is preserved. Elk Ridge City seeks to address, where possible, mobility deficiencies in the existing roadway network caused by undermaintained roads, unpaved roads, under signalized roads, or network areas with a lack of redundancies.

1.4.2 Good Health

Elk Ridge City seeks to improve citizen health by expanding its active transportation network. Elk Ridge seeks to coordinate with UDOT, the County, and other transportation planning authorities in establishing active transportation networks. Elk Ridge City also seeks to improve citizen health by seeking safety- and sustainability-focused alternatives in planning, construction, and maintenance of transportation facilities. These alternatives will allow the City to lessen its environmental impacts further improving the ability of residents to enjoy the community's natural beauty and environment. Elk Ridge City wants its residents to live with the benefits of safer roadways, cleaner air, and more expanded active transportation opportunities.

1.4.3 Connected Communities

Elk Ridge City seeks to improve its interconnectedness with other cities, the county, and the rest of the state. The City also seeks to foster connectivity within the city through promoting beneficial development, public amenities, and an effective transportation network. The City seeks to maintain and expand existing roadways that connect internal and external communities while planning new roadways which will further connect the city. The City will do this through proper application of corridor preservation techniques, access management principles, and establishment of transportation improvement plans. The City continually seeks the input of transportation and roadway professionals, residents, and other local and regional officials to ensure that the concerns and needs of every community are voiced.

1.4.4 Strong Economy

Elk Ridge City seeks to strengthen its economy through transportation network planning that will encourage economic-boosting development consistent with desires and needs of the community. Establishing future road network planning is greatly beneficial for the City in preventing future unnecessary expenditures and ensuring only that which is needful is constructed. This supports the local economy and allows the City to expend resources in a way that maximizes benefit to the community.

1.5 Coordination with Local, State, and Federal Governments

Elk Ridge City recognizes the benefits of coordinating with other local, regional, state, and federal agencies. This coordination and collaboration allows each entity to plan for all needs of their

respective transportation networks. This collaborative effort also ensures that the differing needs of each community are addressed. The City is dependent on functional state and county transportation networks, which function as most of the arterial and major collector roadways in the region. Elk Ridge City wants to ensure that these roads are capable of providing for the changing needs of the city. The City also seeks to assist the county and state in their development planning by coordinating roadway improvement projects.

Where possible and necessary, Elk Ridge City seeks to inform and be informed by local, state, and federal entities about transportation-related planning, development, and standards.

1.6 Land Use

Land use is used to direct development and growth within the city. The land use map (2024) for Elk Ridge City is included as Figure 1. The future land use/annexation map (2024) is included as Figure 2. Land use designation is an important aspect of transportation planning. Land use mapping should correlate with roadway functional classification and access management design. By coordinating with planning and zoning, transportation planning and development can occur consistent with city growth and development. Zoning and annexations are planned by the city so that the city is able to guide growth in a direction most suitable to the needs of the community.

Zoning Map



Figure 1 – Elk Ridge City Zoning Map



Future Land Use / Annexation Map

Figure 2 – Elk Ridge City Zoning Map

2 EXISTING CONDITIONS

An inventory of existing conditions was created to assist in determining future expansion, development, and maintenance needs.

2.1 Demographic & Socioeconomic Data

Table 1 shows the 2021 estimated population and housing data for Elk Ridge City. Table 2 compares the population growth for Elk Ridge City, Utah County, and the State of Utah from 2000 to 2020. Demographic and socioeconomic data was used in determining future growth patterns for Elk Ridge City. Estimates were based on existing growth trends. Future roadway ADT and LOS was determined based on an assumed growth rate determined in the demographic analysis.

Population	Housing Units	Area (Sq. Mi.)	Population Density (Persons / Sq. Mi.)	Housing Density (Housing Units / Sq. Mi.)		
4,687	437	2.82	1.662	155		

Table 1 – Elk Ridge	City Population	and Housing Data	(2021 Estimate) ²
---------------------	------------------------	------------------	------------------------------

Year	State of Utah ³	Utah County ⁴	Elk Ridge City
2000	2,233,169	368,536	1,865
Average Annual Growth (2000-2010)	2.13%	3.37%	2.67%
2010	2,763,885	516,564	2,436
Average Annual Growth (2010-2020)	1.69%	2.44%	6.54%
2020	3,271,616	659,399	4,687
Average Annual Growth (2000-2020)	2.14%	2.91%	4.61%

Table 2 - Population Growth Trends

Table 3 shows a population growth estimate for the next 40 years based on values provided by estimates included in the General Plan. Growth in Elk Ridge City has grown more rapidly in recent years compared to the county and the state (ranging from 3 to 12 percent in recent years). It is anticipated that this growth will gradually slow over the upcoming 40 years, however, due to limitations caused by adjoining municipalities and topography. The City's population is still anticipated to approximately double by 2060, though. Based on existing and future estimates, a traffic growth rate of 3.0 percent was used for Level of Service (LOS) analysis (see Section 2.5 and Section 3.3.2).

² American Community Survey, "ACS Demographic and Housing Estimates," United States Census Bureau, <u>https://data.census.gov/table?q=Elk+Ridge,+Utah+2000</u>.

³ United States Census Bureau, "Historical Population Change Data (1910-2020)," United States Department of Commerce, <u>https://www.census.gov/data/tables/time-series/dec/popchange-data-text.html</u>.

⁴ United States Census Bureau, "QuickFacts: Utah County, Utah," United States Department of Commerce, https://data.census.gov/table?g=utah+county,+Utah+2020.

Year	Population
2020	4,687
2030	5,755
2040	7,015
2050	8,500
2060	10,382

Table 3- Population Growth Estimates

2.2 Roadway Network Inventory

A roadway network inventory organizes all City roadways by functional classification and includes relevant data for selected roadways. A visual representation of various data for the roadway network inventory can be found in maps included in this TMP.

The following information was gathered for the existing roadway network:

- Functional classification data;
- Pavement characteristics of roadways;
- Roadway average daily traffic (ADT) and level of service (LOS) data;
- Volumes, speeds, and vehicle classification percentages of selected roadways;
- Historical funding allocation;
- Vehicle crash information.

The City roadway network provides the dominant means of transportation for this area, with the county and state highway system serving as the main accesses to this network. Vehicular travel relies heavily on a well-maintained and efficient roadway network. The data gathered for the existing Elk Ridge City roadway network inventory is included in the following sections.

2.3 Functional Classification

Roadway functional classification is used by the United States Department of Transportation (USDOT) and UDOT to categorize highways and other roadways. This categorization assists planners and designers in creating roadways compatible with intended needs of the roadway network. The American Association of State Highway and Transportation Officials (AASHTO) describes functional classification as the process of "[defining] the role of each roadway in serving motor-vehicle movements within the overall transportation system."⁵ It is an organized system with established parameters.

Roadway networks can be categorized into rural and urban. Elk Ridge City's roadway network functions as a rural network. Functional classification is defined in a hierarchical structure based upon factors including roadway design volume, speed, access, and mobility.

Existing and future functional classification maps are included in Appendix 1. The existing functional classification map matches the existing functional classification map standardized by UDOT. The future functional classification map was created by Mountainland Association of Governments (MAG)

⁵ American Association of State Highway and Transportation Officials, *A policy on Geometric Design of Highway and Streets*, 7th Edition, 2018.

as part of its regional planning effort. It is not intended to show roadways that will be classified into UDOT's future functional classification map but is intended to guide development and road design in the city. Road design is based on functional classification. Typical road sections are in Appendix 4.

Functional classifications are now listed in hierarchical order from highest mobility and lowest accessibility to lowest mobility and highest accessibility.

2.3.1 Freeways

Freeways (Federal Highways) are highways included in the national Interstate Highway System. Freeways are maintained by state transportation departments. Freeways are designed with high speed limits and are created to serve high mobility needs with limited access. Access on these highways is limited to ensure that the greatest level of mobility possible can be achieved. These highways have grade-separated interchanges. There are no freeways within Elk Ridge.

2.3.2 State Highways

State highways are designed similar to freeways with emphasis given to high mobility and high speed. These highways, however, are not generally grade-separated at intersections and can have trafficcontrol at intersections, particularly within municipalities. These are toll-free state-controlled highways. They are generally designed as arterials and major collectors throughout counties within the state.

There are no state highways within Elk Ridge. The closest state highway to Elk Ridge is SR-198.

2.3.3 Arterials

Arterials are classified and designed to function as the "spine" of transportation networks. All other roadways of the transportation network should function to provide access to arterials. Arterials are roadways that function as the main access road for municipalities. Mobility is the primary function of arterials. Within cities, some mobility may be sacrificed for accessibility, but priority should be given to arterials at all intersections. Arterials can be classified as both principal and minor. There are currently no arterials classified in Elk Ridge. The closest state-classified arterial to Elk Ridge is SR-198.

2.3.4 Major Collectors

Major collectors, like arterials, prioritize mobility. However, they typically transport lower traffic volumes than arterials. These roadways connect local roads and minor collectors to arterials or highways. Access to residential developments and rural facilities is more common in major collectors than with arterials. Intersections between major collectors and lower-classified roadways should give priority to the major collector. This is done to ensure that major collectors provide increased mobility. Existing major collectors in Elk Ridge City include the following:

- Goosenest Drive (west of 1600 West)
- 1600 West
- 11200 South

2.3.5 Minor Collectors

Minor collectors provide access by connecting communities and neighborhoods. These roads funnel

traffic from major collectors or arterials to local roads. Minor collectors are intended to balance mobility and access. They are often stop controlled and have lower speed limits. They provide increased mobility over local roads yet still have residential access. Existing minor collectors in Elk Ridge City include the following:

- Goosenest Drive (from 1600 West to Elk Ridge Drive)
- Elk Ridge Drive (from Goosenest Drive to Park Drive)
- Park Drive
- Loafer Canyon Road (from Park Drive to 11200 South)

2.3.6 Local Roads

Local roads connect residential areas and sacrifice mobility to provide the highest level of accessibility. It is preferable that accesses be placed on local roads where possible, rather than arterials and collectors. Placing accesses on arterials and collectors requires frequent access points and intersections which leads to frequent stops and delays. Placing accesses on local roads can help to prevent these potential delays and stops. Local roads are designed to have lower speed limits and span shorter distances. They tend to have higher pedestrian traffic and are often built in a manner to discourage high amounts of through traffic. All unclassified roadways within Elk Ridge City are local roads or private roads.

2.3.7 Vehicle Miles of Travel (VMT)

Vehicle Miles of Travel (VMT) is a method established federally to determine the amount of vehicular usage for a specified roadway. VMT is calculated as the total miles of vehicular travel for a specified roadway over a specified period of time. This characteristic and roadway mileage are useful in determining roadway functional classification. The Federal Highway Administration (FHWA) specifies the allowable percentages of roadway mileage and VMT per functional classification type. These limitations are specified to provide balance within the roadway network and ensure an appropriate number of arterials, collectors, and local roads throughout the system.

Federally established guidelines should be referenced in determining changes to classification of the roadway network. The allowable percentages for each classification are shown in Table 4.

Functional Classification	Rural		Urban	
	Mileage	VMT	Mileage	VMT
Major Collectors	8%-19%	10%-23%	10%-17%	12%-24%
Minor Collectors	3%-15%	1%-8%	5%-13%	3%-10%
Local Roads	62%-74%	8%-23%	66%-74%	7%-20%

⁶ Federal Highway Administration, "Planning Processes: Statewide Transportation Planning," United States Department of Transportation, September 27, 2017,

https://www.fhwa.dot.gov/planning%20/processes/statewide/related/highway_functional_classifications/sect_ion03.cfm

2.4 Roadway Conditions

The current condition of each roadway is explained in this section. The condition of roadways serves as a basis for how well the transportation system functions and provides guidance for future roadway capital project planning and changes to future functional classification.

2.4.1 Travel Lanes and Surface Conditions

All roadways in Elk Ridge City consist of two travel lanes (one in each direction). Almost all roadways are unstriped except for a few roadways designed as collector roads, such as Elk Ridge Drive, Goosenest Drive, Park Drive, and Loafer Canyon Road. Almost all roads in Elk Ridge are paved with asphalt with very few exceptions. Unpaved roads are either private or on mountainous terrain.

2.4.2 Traffic Volumes

Traffic volumes indicate the travel demand of existing roadways and their relative importance to the functionality of the transportation network. Roadways with the greatest impact generally have the highest traffic volumes. Traffic volumes, road capacities, and level of service (LOS) are used to determine how well a road is functioning. The average daily traffic (ADT) is one of the most common metrics used to assess the amount of traffic a road experiences. ADT is calculated as the number of vehicles passing a certain point on a roadway in either direction on an average day. Traffic data is generally collected for 7 to 10 days and averaged to create an ADT. Table 5 lists the ADTs for all of the roadways studied as part of the TMP analysis. It also includes the anticipated ADT for the 20-year scope based on future population and traffic growth estimates. Peak hour volume (PHV) for 2023 is also included in this table. PHV is calculated as the 60-minute period of the day with the highest amount of vehicular traffic for a roadway. PHV is also used in determining the LOS for a road instead of ADT because it often functions as the controlling factor in peak traffic. It represents a smaller time frame that may have a much higher peak relative to ADT and, as such, may be used in determining a more accurate LOS. For future LOS analysis on these roadways, see Section 3.2.2. An existing ADT map is included in Appendix 2. Traffic count reports with detailed ADT analysis are in Appendix 6.

Roadway	2023 Peak Hour Volume	2023 ADT	2028 ADT	2033 ADT	2038 ADT	2043 ADT
Canyon View Drive	84	571	664	772	897	1043
Elk Ridge Drive (near Gladstan Drive)	137	1180	1371	1593	1851	2151
Elk Ridge Drive (to Salem Canal Road)	515	5397	6271	7286	8466	9837
Gladstan Drive	83	426	495	576	670	779
Sunbrook Drive (Gladstan RV Entrance)	8	31	37	43	50	59
Goosenest Drive	206	1792	2083	2421	2813	3269
Hillside Drive	128	944	1097	1275	1482	1722
Loafer Canyon Road	131	986	1146	1332	1548	1799
Park Drive	307	1800	2092	2431	2825	3283
Rocky Mountain Way	55	396	461	536	623	724
Sky Hawk Drive	60	460	535	622	723	841

Table 5 - 2023 ADT for Selected Elk Ridge Roadways

2.4.3 Speed Data

Speed data was collected from traffic counts performed as part of this study. Included in Table 6 is average speed, high speed, 85th percentile speed, and speed limit data. Generally, in transportation planning and design the 85th percentile speed is used as a key factor in determining roadway speed limit. Other important factors in roadway speed limit determination include traffic patterns, ADT data, vehicle crash history, access management and spacing, intersection controls, and existing safety concerns such as clear zone obstructions, limited sight triangle distances, and bridge and culvert crossings. It is recommended that the City assess the speed data to assist in determining any potential speed limits alterations. All required geometric design, safety, and other standards required by both the City and AASHTO must be followed when adjusting roadway speed limits. In Table 6, all 85th percentile speeds at least 5 miles per hour greater than the existing speed limit have been bolded. There were no roadways studied that had an 85th percentile speed more than 10 miles per hour greater than the existing speed limit. Traffic count reports with detailed speed data analysis are included in Appendix 6.

Roadway	Average Daily Traffic	Speed Average	Speed High	85th Percentile Speed	Speed Limit
Canyon View Drive	571	22	48	27	25
Elk Ridge Drive (near Gladstan Drive)	1180	29	55	34	30
Elk Ridge Drive (to Salem Canal Road)	5397	34	57	39	30
Gladstan Drive	426	27	65	33	25
Sunbrook Drive (Gladstan RV Entrance)	31	14	38	19	25
Goosenest Drive	1792	31	59	37	30
Hillside Drive	944	26	58	30	25
Loafer Canyon Road	986	29	52	34	25
Park Drive	1800	19	52	23	25
Rocky Mountain Way	396	26	50	31	25
Sky Hawk Drive	460	26	51	31	25

Table 6 - Roadway Speed Analysis for Selected Roadways

2.4.4 Heavy Truck Traffic Data

Heavy truck traffic can also be determined with the traffic counts. A heavy truck traffic percentage is included in Table 7. There were not any roads in Elk Ridge that had a heavy truck traffic percentage greater than 10 percent. There was only one road studied that had a percentage greater than 5 percent, and this was a minor roadway with very low ADT (less than 50). The 6.3 percent heavy truck traffic on this road represents 2 heavy trucks per day. None of the roadways studied are anticipated to experience more than 100 heavy trucks per day, and almost every roadway studied is expected to receive 25 or less heavy trucks per day (excl. Elk Ridge Drive and Goosenest Drive). Traffic count reports with detailed vehicle classification data analysis are included in Appendix 6.

Roadway	Average Daily Traffic	Heavy Truck Percentage	Average Number of Heavy Trucks per Day
Canyon View Drive	571	1.7	10
Elk Ridge Drive (near Gladstan Drive)	1180	1.3	15
Elk Ridge Drive (to Salem Canal Road)	5397	1.6	86
Gladstan Drive	426	0.6	3
Sunbrook Drive (Gladstan RV Entrance)	31	6.3	2
Goosenest Drive	1792	2.5	45
Hillside Drive	944	1.6	15
Loafer Canyon Road	986	2.5	25
Park Drive	1800	1.4	25
Rocky Mountain Way	396	1.9	8
Sky Hawk Drive	460	0.9	4

Table 7 - Heavy Truck Percentages for Selected Roadways

2.5 Level of Service

Traffic volumes and traffic flow of each roadway are used to determine a level of service (LOS) rating. LOS is a measurement of a road's ability to meet the traffic demand. LOS classifications are categorized with a letter rating "A," "B," "C," "D," "E," and "F." Free-flowing traffic is considered LOS "A," and maximum levels of vehicle congestion are considered LOS" F." A lower LOS rating (such as LOS "E" and LOS "F") indicates that the roadway is not functioning effectively and may cause mobility, congestion, and safety concerns. A LOS "A" through "D" is considered acceptable for most applications. LOS "F" and LOS "E" roadways should be given highest priority for improvement. Some common roadway LOS improvement methods include:

- Adding turn lanes at congested intersections,
- Adding signalization at congested intersections,
- Adding extra travel lanes,
- Adjusting existing roadway geometrics such as lane width and roadway design,
- Adjusting speed limits,
- Establishing alternative roadways to function as redundancies, and
- Improving mobility at accesses by either removing accesses or adding slip or merge lanes.

A visual representation of the LOS categories is included as Figure 3.



Figure 3 - Roadway Level of Service Representation

LOS is determined differently for highways and for intersections. Often on a rural road or freeway, the LOS will be determined based on highway travel patterns. On urban roads, which normally have more intersections and access points, intersection LOS will often be the controlling LOS factor. For rural and small urban roads, roadway level of service will often be the controlling LOS factor. There were no intersections analyzed as part of this study. The LOS analysis was performed using equations provided in the Institute of Transportation Engineers' *Highway Capacity Manual*. Highway and roadway LOS is measured in terms of volume to capacity (V/C) ratios, and intersection LOS is measured in terms of vehicle delay (in seconds/vehicle).

2.5.1 Volume to Capacity Ratios

The volume to capacity ratio (V/C) measures the traffic density of a road segment by comparing a road's traffic volume to the road's capacity. A V/C ratio of 1.0 signifies that the road is at its maximum capacity of traffic volume which leads to serious congestion and typically operates at a LOS "F." The closer a roadway V/C is to 1.0, the more congested the roadway will be. The capacity of a roadway is determined based on several factors including number of travel lanes, number of turn lanes, lane width, shoulder width, speed limit, road gradation, and percentage of heavy truck traffic.

2.5.2 Existing LOS Analysis

The existing LOS for the studied roadways is included in Table 8. All roadways studied currently function at an acceptable LOS. All roadways except Elk Ridge Drive (LOS "B") are a LOS "A," meaning that the roads are generally free-flowing.

For more information about future LOS analysis, see Section 3.2.2.

Roadway	2023 Peak Hour Volume	2023 ADT	2023 LOS A	
Canyon View Drive	84	571		
Elk Ridge Drive (near Gladstan Drive)	137	1180	A	
Elk Ridge Drive (to Salem Canal Road)	515	5397	В	
Gladstan Drive	83	426	A	
Sunbrook Drive (Gladstan RV Entrance)	8	31	A	
Goosenest Drive	206	1792	A	
Hillside Drive	128	944	A	
Loafer Canyon Road	131	986	A	
Park Drive	307	1800	A	
Rocky Mountain Way	55	396	Α	
Sky Hawk Drive	60	460	A	

Table 8 - 2023 LOS for Selected Tooele County Roadways

2.6 Traffic Crash Data

The Utah Department of Public Safety (UDPS) records all reported vehicular crashes throughout the state. Online records include all crash data since 2010. Crash data has been organized into Figure 4 and Table 9. This data includes all crash data from 2010 to 2022. A heat map of traffic crashes is included in Appendix 5, as well as a UDPS report including key crash statistics and data.



Figure 4 - Traffic Crash Data⁷

Year	Total Crashes	Total Injuries	Total Fatalities
2010	5	3	0
2011	3	0	0
2012	7	3	0
2013	7	1	0
2014	8	1	0
2015	16	5	0
2016	8	3	0
2017	9	1	0
2018	12	2	0
2019	9	9 0	
2020	2	0	0
2021	6	0	0
2022	4	0	0
Total	96	19	0
Average	7.4	1.5	0

Table 9 – Traffic Crash Data⁷

Both traffic crashes and injuries currently have a decreasing trendline. Both attributes peaked in 2015 and have continued a downward trend since that time. There are no reported fatalities on Elk Ridge roadways since 2010. These trendlines can be seen in Figure 3.

2.7 Revenue Sources

Funding for the maintenance and construction of the existing transportation facilities comes primarily from revenue sources which include the Elk Ridge City general fund, federal funds, and State Class B and C funds. Funding for local transportation projects consists of a combination of federal, state and local revenues. However, this funding total is not entirely available for transportation improvement projects because annual operating and maintenance costs must be deducted from the total revenue. In addition, the City is limited in its ability to subsidize the transportation budget from general fund revenues.

2.7.1 Federal Funds

Federal funds are available to cities and counties through the federal aid program. These funds are administered by the Utah Department of Transportation. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) can provide funding for any road functionally classified as a collector street or higher. STP funds may be used for a range of projects, including rehabilitation and new construction. Fifty percent of the STP funds are allocated to urban and rural areas of the state based on population. Thirty percent can be used in any area of the State at the discretion of the State Transportation Commission. The remaining twenty percent must be spent on highway safety

⁷ Utah Department of Public Safety's Highway Safety Office, *Utah Crash Summary*, Utah Department of Public Safety, Accessed July 14, 2022, <u>https://udps.numetric.net/utah-crash-summary#/</u>.

and enhancement projects. Transportation enhancements include ten categories, some of which are historic preservation, bicycle and pedestrian facilities, and water runoff mitigation.

Elk Ridge City is in UDOT's Region Three. Money for specific projects in the study area varies depending on what is planned for UDOT's Region Three each year. As a result, federal aid program money is not listed as part of the study area's transportation revenue.

2.7.2 State Class B and C Program

The distribution of Class B and C Program monies is established by state legislation and is administered by UDOT. Revenues for the program are derived from state fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Seventy-five percent of funds derived from the taxes and fees are kept by the Utah Department of Transportation for construction and maintenance programs. The remaining twenty-five percent is made available to counties and cities.

Class B and C funds are allocated to each county and city by a formula based on population, road mileage, and land area. Class B funds are given to counties, and Class C funds are given to cities and towns. **Error! Reference source not found.** identifies the method used to allocate class B and C road funds.

Based on	Of	
50%	Roadway Mileage	
50%	Total Population	

Table 10 - Apportionment Method of Class B and C Funds

Class B and C funds can be used for maintenance and construction of roadways; however, thirty percent must be used for construction or maintenance projects that exceed \$40,000. Class B and C funds may also be used to match federal funds or to pay the principal, interest, premiums, and reserves for issued bonds. Table 11 identifies B & C funds allocated to Elk Ridge City for the fiscal years 2019 to 2023.

Year	1st Payment	2nd Payment	3rd Payment	4th Payment	5th Payment	6th Payment	TOTAL
2019	\$23,722.07	\$31,375.31	\$30,297.86	\$25,109.78	\$29,174.23	\$37,871.24	\$177,550.50
2020	\$22,512.21	\$36,272.78	\$30,475.58	\$26,716.69	\$32,777.73	\$31,709.28	\$180,464.28
2021	\$27,324.68	\$33,328.89	\$30,195.76	\$31,188.32	\$34,952.55	\$46,837.98	\$203,828.19
2022	\$27,082.14	\$35,209.49	\$36,299.59	\$34,215.20	\$35,306.79	\$49,221.18	\$217,334.38
2023	\$27,196.07	\$40,615.32	\$36,737.97	\$32,142.98	\$41,479.51	\$54,670.97	\$232,842.82

Table 11 - Class B & C Roadway Funds Allocated by Fiscal Year⁸

⁸ Utah Department of Transportation, "Local Government Program Assistance," Utah Department of Transportation, 2022, <u>https://udot.utah.gov/connect/business/public-entities/local-government-program-assistance/</u>.

2.7.3 Local Funds

Elk Ridge City, like most cities, may use general fund revenues in its transportation program. Other local funding sources, such as impact fees, may also be used.

2.7.4 Private Sources

Private interests often provide sources of funding for transportation improvements. Developers construct local streets within new subdivisions and commercial buildings. They often dedicate right-of-way and participate in the construction of collector or arterial streets adjacent to their developments as well. This may include paying partial or complete costs for a traffic signal, turn lane, or median, among other improvements. Due to the impacts of the development on the city, developers can also be considered as potential sources of funding for projects.

Elk Ridge City, if electing to do so, may require new commercial and residential developments to perform a Traffic Impact Study (TIS). This study is used to determine the necessity of additional roadway improvements and the impact of the development on the roadway network. Other new developments may be required to perform a TIS as well.

3 FUTURE GROWTH

3.1 Land Use and Transportation

Elk Ridge City recognizes the importance of continuing coordination between land use and transportation planning. The City's future functional classification map, adopted with this TMP has been established in part to ensure that the future roadway network has the capacity to meet the demand of development.

For additional information on future land use planning and requirements, see the City's municipal code and future planning documents accessible through the City's website.

3.2 Future Elk Ridge City Roadway System

Roadway projects are selected in part based on the analysis provided in this document. The recommended project list includes projects that were determined based on the following key factors:

- Improving roadways with geometric issues;
- Improving roadways with safety concerns;
- Improving roadways with additional capacity needs;
- Constructing new roadways needed to add redundancies and provide alternatives to the transportation network;
- Incorporating new and existing roadways into other local, regional, and state networks; and
- Expanding the City's active transportation network.

3.2.1 Elk Ridge Future Functional Classification Map

Included in Appendix 1 is the roadway future functional classification map. This map shows the proposed future roadway system in the City delineated by roadway functional classification. These figures are schematic in nature and do not represent actual road alignments or curves. The primary focus of the plan is on improving arterial, major collector and minor collector roadways. As such, little detail is shown for future residential local roadways. This has been done to allow flexibility as development occurs between the collectors.

The roadway future functional classification map has been designed as a guideline for Elk Ridge, not the region or the state. Because of this, there are arterial and collectors classified on this map that may never be classified on UDOT's functional classification network. Due to Elk Ridge City's unique location, it is not anticipated that regional collectors and arterials will traverse Elk Ridge anytime within the scope of this plan. As such, the collectors and arterials defined in Elk Ridge City's future functional classification map have been delineated for development occurring in Elk Ridge City specifically. Typical sections have been created as part of this TMP to specify pavement design for roadways identified on the map. Roadway typical sections are included in Appendix 4.

3.2.2 Future Level of Service Analysis

A future LOS analysis was performed on all roadways that were counted as part of this TMP. The LOS of each roadway for every five years within the twenty-year scope is included in Table 12. Traffic growth rates were based on a 3.0 percent annual growth rate.

Roadway	2023 ADT	2023 LOS	2028 LOS	2033 LOS	2038 LOS	2043 LOS
Canyon View Drive	571	A	A	A	Α	A
Elk Ridge Drive (near Gladstan Drive)	1180	A	А	A	A	A
Elk Ridge Drive (to Salem Canal Road)	5397	В	С	С	C	D
Gladstan Drive	426	A	А	A	A	A
Sunbrook Drive (Gladstan RV Entrance)	31	A	Α	A	A	A
Goosenest Drive	1792	A	А	A	А	B
Hillside Drive	944	A	A	A	A	A
Loafer Canyon Road	986	A	А	А	A	A
Park Drive	1800	Α	В	В	B	B
Rocky Mountain Way	396	A	А	A	A	A
Sky Hawk Drive	460	A	A	A	A	A

Table 12 - Roadway Level of Service for Selected Roadways

3.2.2.1 Recommendations

Based on existing growth estimates, there are no roadways anticipated to function at a failing LOS (LOS "E" or LOS "F") within the twenty-year scope. There is only one roadway anticipated to function at LOS "D" within the twenty-year scope (Elk Ridge Drive north of Goosenest Drive), and it has been bolded. It is recommended that this roadway receive an additional in-depth study within five years of becoming LOS "D" to determine necessary alterations. LOS "D" does not indicate a failing roadway, but LOS E is considered unacceptable and should be avoided where possible. Roadways functioning at LOS "D" or lower may also be considered for intersection signalization, as discussed in the following section.

An existing ADT map and an existing and future LOS map are included in Appendix 2.

3.2.3 Traffic Signalization

As the City continues to develop and expand, it may become necessary to incorporate traffic signals at specified intersections. Current roadway use does not signify a need for any traffic signals. Based on current data for future level of service (LOS) analysis and traffic volumes, there are no intersections in Elk Ridge City that will require traffic signals by 2043. However, there are additional warrants that may necessitate a need for traffic signals. The Manual on Uniform Traffic Control Devices (MUTCD) identifies 9 warrants: Eight-Hour Vehicular Volume, Four-Hour Vehicular Volume, Peak Hour Volume, Pedestrian Volume, School Crossing, Coordinated Signal System, Crash Experience, Roadway Network, and Intersection Near a Grade Crossing. If any of these warrants are met at any time, it is recommended that the City require a Traffic Signal Needs study to be carried out. Traffic Signal Needs study requirements for developers may also be established by the City if it is deemed necessary.

3.2.3.1 Traffic Signal Needs Studies

The following are recommendations for requirements regarding traffic signal needs studies.

A traffic signal needs study should be conducted for all new proposed signals for the base year. If

warrants are not met for the base year, they should be evaluated for each year in the five-year horizon. Studying traffic signal needs should be conducted by a method pre-approved by the City and address the following:

- Speed Considerations
 - Vehicle speed is used to estimate safe stopping and cross corner sight distances. In general, the posted speed limit represents the 85th percentile speed. The design speed of the roadway should be used to calculate safe stopping and cross corner sight distances.
- Improvement Analysis
 - The roadways and intersections within the study area should be analyzed, with and without the proposed development, to identify any projected impacts in regard to LOS and safety.

Where the highway will operate at LOS "C" or better without the development, the traffic impact of the development on the roadways and intersections within the study area should be mitigated to LOS "D" for arterial and collector streets and LOS "C" on all other streets during peak hours of travel.

3.2.4 Active Transportation

Elk Ridge City seeks to coordinate with the County and UDOT in creating an active transportation network that provides residents and visitors with the ability to safely enjoy the area. Section 3.3 discusses several capital projects focused on expanding the existing active transportation (trails) network. These projects are locally, regionally, and state funded. Included in Appendix 1 is a proposed trails network map for the City.

3.3 Transportation Improvement Plans

This section includes transportation improvement plans for UDOT, Utah County, and Elk Ridge City. Each plan includes scheduled or planned projects with estimated costs and timelines.

3.3.1 UDOT's Statewide Transportation Improvement Program

UDOT's Statewide Transportation Improvement Program (STIP) is a five-year plan of highway and transit projects for the State of Utah. The STIP is maintained daily and includes transportation projects on the state, city, and county highway systems as well as projects in the national parks, national forests, and tribal lands. These projects use various federal and state funding programs. UDOT has programmed funds in the Statewide Transportation Improvement Plan (STIP) for the following roadways within or adjacent to Elk Ridge City. These projects are listed in Table 13.

Project Name	Estimated Start Year	Estimated Project Value	Project Primary Concept	Project Start Location	Project End Location
SR-198 and Elk Ridge Drive	2022	\$375,000	New Traffic Signal	SR-198 and Elk Ridge Drive	SR-198 and Elk Ridge Drive
Salem Canal Trail	2023	\$10,581,600	Bike Path	Woodland Hills Drive	Elk Ridge Drive

Table 13 – STIP Projects Within or Adjacent to Elk Ridge⁹

3.3.2 MAG's Utah County Transportation Improvement Plan

The Mountainland Association of Governments (MAG) is a planning organization that specializes in community and transportation development planning for Utah, Summit, and Wasatch counties. They have established a regional transportation master plan for Utah County through 2050. This plan, "2023 Transplan 50," can be found on MAG's website.¹⁰ Projects near connecting to Elk Ridge are included in Table 14.

Project Name	Project Cost (2023)	Phased Cost	Project Primary Concept	Project Start Location	Project End Location
Elk Ridge Drive – New Construction and Road Widening	\$32,500,000	\$68,300,000	Widen Elk Ridge Drive to 5 Lanes from 11200 South to SR-198, New Construction from SR- 198 to 6400 South	11200 South	6400 South
11200 South – Road Widening	\$16,200,000	\$38,300,000	Widen Elk Ridge Drive to 5 Lanes	Elk Ridge Drive	Woodland Hills Drive
Nebo Belt Road – New Construction	\$23,400,000	N/A	New 3-Lane Corridor Connecting Elk Ridge Drive to SR-198	SR-198	Elk Ridge Drive

Table 14 – MAG Projects Within or Adjacent to Elk Ridge¹¹

⁹ Utah Department of Transportation, "STIP Workshop Application," Accessed December 21, 2023, <u>https://www.udot.utah.gov/stip/</u>.

 ¹⁰ Mountainland Association of Governments, "2023 Transplan50," 2023, <u>https://mountainland.org/rtp/</u>.
 ¹¹ Mountainland Association of Governments, "2023 Regional Transportation Plan Map," 2023, https://experience.arcgis.com/experience/2572562782c0460400672272272b5Cc0/04bta.idu.t.c.

https://experience.arcgis.com/experience/2572562782c0469490fc727327eb56a0/?data_id=dataSource_5-1889baee446-layer-24-18a43a6e91f-layer-37%3A69.

3.3.3 Elk Ridge Short-Range Transportation Improvement Plan

A short-range transportation improvement plan (SRTIP) encompasses improvements to be completed within the next 10 years. City personnel will work with UDOT and other relevant agencies to ensure compatibility between transportation networks. The SRTIP is to be updated periodically to reflect the City's transportation goals. To utilize the SR TIP effectively, the City should:

- Update master plan every 5 years.
- Continue a routine chip seal maintenance program for old, asphalted roads to ensure longevity of pavements.
- Work with each of the cities in the County to monitor their transportation plans and update this plan as needed in accordance with the attached maps.
- Construct as many suggested roadway improvements as possible.

Projected costs and completion dates are provided for some projects. Appendix 3 contains all of the full cost estimates created for this TMP. The following table (Table 15) of projects are included in the short-range TIP with cost estimates.

Project Name	Estimated Start Year	Estimated Project Value	Project Primary Concept	Project Start Location	Project End Location
Elk Ridge Drive – Widening	2024	\$366,000	Extend 3 Lane Segment of Elk Ridge Drive with Curb and Gutter and Bike/ Pedestrian Trail on the East Side	Sky Hawk Way	11200 South
Elk Ridge Drive – Widening	2024	\$732,000	Widen Shoulders on Loafer Canyon Road with Sidewalk, Curb and Gutter, and Bike/Pedestrian Trail	Canyon View Drive	11200 South

Table 15 – Short-range Transportation Improvement Plan

3.3.4 Elk Ridge Long-Range Transportation Improvement Plan

A long-range transportation improvement plan (LRTIP) consists of transportation projects that are to be completed within 10 to 30 years. The City does not currently have any projects included in LRTIP. This section is included as a placeholder. As the TMP is updated and long-range projects are designated, they can be included here.

3.4 Other Future Actions

Along with the long- and short-term action items, the following actions should also be considered.

3.4.1 Land Use Planning Integration

Elk Ridge City does not currently have centralized commercial development, and residents must travel to other cities for shopping and other commercial needs. This places a higher burden on the regional road network and requires residents to increase vehicular travel. If desired by the City, additional internal commercial development could be encouraged through zoning changes. This may be undesirable to the City or its citizens, however, and in such cases, public input should be considered.

3.4.2 Updates to Transportation Master Plan

The transportation master plan adopted by Elk Ridge City should be updated at least every five years. It should be reviewed more frequently. Transportation improvement plans (TIP) should be updated at least every five years to ensure that all City transportation projects to be completed within any five year period are included on the TIP. This is done to ensure that the City is always aware of future expenditures and construction and maintenance needs.

3.4.3 Updates to Development and Planning Standards

As mentioned in Section 3.2.3, Elk Ridge City may require developers to study traffic impacts and/or pay for the cost of traffic improvements simultaneous or prior to the construction of developments. The City should look into establishing traffic impact study standards, traffic signal needs standards, access management standards, and impact fee requirements. These standards help to ensure that future development occurs in a consistent manner that is most beneficial to the needs of the City. This also helps to ensure that City funds are spent cost-effectively.

4 CLOSURE

The purpose of the transportation master planning effort is to create a general guideline for transportation-related growth and development and increase the quality of life for residents and visitors of Elk Ridge City. The transportation master plan is to act as a guide for future decisions in all City departments. The plan addresses the key components of a master plan by outlining projects that meet the goals of the City. These projects are economically viable, provide safer mobility for residents, focus on improving quality of life, and improve integration between local and regional transportation networks.

This plan identified the purposes of transportation planning and network maintenance through establishing quality of life principles (see Section 1). This plan also inventoried the existing conditions of the City's transportation system, including roadway functional classification data, pavement characteristics of roadways, roadway average daily traffic and level of service data, speeds and vehicle classification percentages of selected roadways, historical funding allocation, and vehicle crash information (see Section 2). Based on this data, this plan provided an analysis of growth and plan for development within the City. This plan included future functional classification, future level of service analysis, and future roadway capital project plans (see Section 3).

For more information regarding the transportation network or the transportation requirements, see the City's website. City officials are available to answer questions as needed.

APPENDIX 1 Roadway Classification and Active Transportation Maps



Transportation Map



for some some some some				199 18 18 18 AV	and the state of the state of the state of the
1	1	Ell.	Dialara	Calena	Dennadenna
8	1	CIK	RIOGe	LITV	BOUDDARV
Longas	đ				Boundary



0

0.25 0.5 1 Miles

Elk Ridge Roads

Principal ArterialProposed Principal ArterialMinor ArterialProposed Minor ArterialMajor CollectorProposed Major CollectorMinor CollectorPossible Minor CollectorLocal StreetPossible Local Street

Trails Map



Elk Ridge City Boundary

Elk Ridge Trails

- Separate Trail
- Convert Sidewalk to Separate Trail
- Convert Road Trail to Divided Trail
 Park Trail
- REFERENCE Pos
- Roadside Divided Trail
- Park Trail
- Natural Trail (dirt, gravel)

0.25

0.5

1 Miles

Possible Trail

0

APPENDIX 2

Average Daily Traffic and Level of Service Maps







APPENDIX 3

Transportation Improvement Plan and Cost Estimates


PIN: PROJECT # PROJECT NAME: Elk Ridge Drive Expansion Cost Estimate - Concept Level

Trepareu

Prepared By: Jones and DeMille Engineering

Date 12/28/2023

Proposed Project Scope: Expansion of Elk Ridge Drive to 3 lanes from 11200 South to Sky Hawk Way with Curb and Gutter and Trail

Approximate Route Reference Mile Post (BEGIN) =	0.000	(END) =	0.169
Project Length =	0.169	miles	890 ft
Current FY Year (July-June) =	2023		
Assumed Construction FY Year =	2024		
Construction Items Inflation Factor =	1.07	1 yrs	for inflation
Assumed Yearly Inflation for Engineering Services (PE and CE) (%/yr) =	3.25%		
Assumed Yearly Inflation for Right of Way (%/yr) =	4.0%		
Items not Estimated (% of Construction) =	10.0%		
Preliminary Engineering (% of Construction + Incentives) =	10.0%		
Construction Engineering (% of Construction + Incentives) =	10.0%		

Construction Items	Cost	Remarks
Public Information Services	\$0	
Roadway and Drainage	\$241,175	
Traffic and Safety	\$0	
Structures	\$0	
Environmental Mitigation	\$0	
ITS	\$0	
Subtotal	\$241,175	
Items not Estimated (10%)	\$24,118	
Construction Subtotal	\$265,293	
P.E. Cost P.E. Subtotal	\$26,529	10%
C.E. Cost C.E. Subtotal	\$26,529	10%
Right of Way Right of Way Subtotal	<u>\$0</u>	
Utilities Utilities Subtotal	<u>\$0</u>	
Incentives Incentives Subtotal	\$0	
Miscellaneous Miscellaneous Subtotal	\$0	

Cost Estimate (ePM screen 505)		20	023		2024
	P.E.		\$27,000		\$28,000
	Right of Way		\$0		\$0
	Utilities		\$0		\$0
	Construction		\$265,000		\$284,000
	C.E.		\$27,000		\$28,000
	Incentives		\$0		\$0
	Aesthetics	0.00%	\$0		\$0
	Change Order Contingency	9.00%	\$24,000		\$26,000
	UDOT Oversight		\$0		\$0
	Miscellaneous		\$0		\$0
		TOTAL	\$343,000	TOTAL	\$366,000
	PROPOSED COMMISSION REQUEST	TOTAL	\$343,000	TOTAL	\$366,000

Project Assumptions/Risks

1 Does not Include right-of-way acquisition costs.	8	
2 Includes shoulder widening to 42' of pavement.	9	
3 Includes 5' planter strip and 10' asphalt trail on east side.	10	
4 Includes new curb and gutter on east side.	11	
5 Includes removal of existing sidewalk and pedestrian ramp by Sky Hawk Way.	12	
6 Includes micro-surfacing of new and existing pavement.	13	
7 Pavement typical sections include 3.5" HMA, 6" UBC, 12" GB	14	
 4 Includes new curb and gutter on east side. 5 Includes removal of existing sidewalk and pedestrian ramp by Sky Hawk Way. 6 Includes micro-surfacing of new and existing pavement. 	11 12 13	

Roadway and Drainage	PROJECT # PROJECT NAME: Elk Ridge Drive Expansion
	PIN:

Item #	Item	Quantity	Units	Price	Cost	Remarks
Roadway						
015017010	Mobilization	Ļ	lump	\$24,320.20	\$24,320.20	
015547005	Traffic Control	Ļ	lump	\$14,186.78	\$14,186.78	Usually 3-5% of construction
023167020	Roadway Excavation (Plan Quantity)	209	cubic yard	\$25.00	\$17,725.00	
027417050	HMA - 1/2 Inch	466	ton	\$115.00	\$53,590.00	Includes 10' Trail
027217020	Untreated Base Course (Plan Quantity)	599	cubic yard	\$45.00	\$26,955.00	
020567015	Granular Borrow (Plan Quantity)	659	cubic yard	\$25.00	\$16,475.00	
022217125	Remove Concrete Curb and Gutter	150	foot	\$10.00	\$1,500.00	
027767025	Concrete Curb and Gutter Type B1	870	foot	\$30.00	\$26,100.00	
022217110	Remove Concrete Sidewalk	72	square yard	\$15.00	\$1,083.33	
027717058	Corner Pedestrian Access Ramp	2	each	\$5,000.00	\$10,000.00	
027357010	Micro-Surfacing	2,810	square yard	\$4.00	\$11,240.00	
018927040	Reconstruct Valve Box	4	each	\$1,200.00	\$4,800.00	
028917028	Sign Type A-1, 12 Inch X 36 Inch	2	each	\$300.00	\$600.00	
028917270	Remove Sign Less Than 20 Square Feet	2	each	\$200.00	\$400.00	
027657050	Pavement Marking Paint	64	gallon	\$100.00	\$6,400.00	
	Landscaping	4,325	square foot	\$4.00	\$17,300.00	5' Planter Strip on East Side
	Relocate Fire Hydrant	۲	each	\$8,500.00	\$8,500.00	
Roadway Subtotal					\$241,175	
Drainage						
Drainage Subtotal					\$0	
Ы						
					\$0	\$0 Usually 0.25% of construction
				_		

Page 4 of 62

Concept Level Est Form Rev. 5/30/2017

12/28/2023

PIN: PROJECT # PROJECT NAME: Loafer Canyon Road - Road Improvements Cost Estimate - Concept Level

Prepared By: Jones and DeMille Engineering

Date 12/28/2023

Proposed Project Scope: Road Widening, Curb and Gutter, Sidewalk, Bike Path on Loafer Canyon Road

Approximate Route Reference Mile Post (BEGIN) =	0.000	(END) =	0.237
Project Length =	0.237	miles	1,250 ft
Current FY Year (July-June) =	2023		
Assumed Construction FY Year =	2024		
Construction Items Inflation Factor =	1.07	1 vr	s for inflation
Assumed Yearly Inflation for Engineering Services (PE and CE) (%/yr) =	3.25%		
Assumed Yearly Inflation for Right of Way (%/yr) =	4.0%		
Items not Estimated (% of Construction) =	10.0%		
Preliminary Engineering (% of Construction + Incentives) =	10.0%		
Construction Engineering (% of Construction + Incentives) =	10.0%		

Construction Items	Cost	Remarks
Public Information Services	\$0	
Roadway and Drainage	\$485,845	
Traffic and Safety	<u>\$0</u>	
Structures	<u>\$0</u>	
Environmental Mitigation	\$0	
<u>ITS</u>	\$0	
Subtotal	\$485,845	
Items not Estimated (10%)	\$48,585	
Construction Subtotal	\$534,430	
P.E. Cost P.E. Subtotal	\$53,443	10%
C.E. Cost C.E. Subtotal	\$53,443	
Right of Way Right of Way Subtotal	\$0	
Utilities Utilities Subtotal	\$0	
Incentives Incentives Subtotal	\$0	
Miscellaneous Miscellaneous Subtotal	\$0	

Cost Estimate (ePM screen 505)		2023		2024
P.E.		\$53,000		\$55,000
Right of Way		\$0		\$0
Utilities		\$0		\$0
Construction		\$534,000		\$571,000
C.E.		\$53,000		\$55,000
Incentives		\$0		\$0
Aesthetics		\$0		\$0
Change Order Contingency	9.00%	\$48,000		\$51,000
UDOT Oversight		\$0		\$0
Miscellaneous		\$0		\$0
	TOTAL	\$688,000	TOTAL	\$732,000
PROPOSED COMMISSION REQUE	ST TOTAL	\$688,000	TOTAL	\$732,000

Project Assumptions/Risks

Roadway and Drainage	PROJECT NAME: Loafer Canyon Road - Road Improvements
	PROJECT #

PIN:

Item #	Item	Quantity	Units	Price	Cost	Remarks
Roadway						
015017010	Mobilization	1	lump	\$42,247.39	\$42,247.39	\$42,247.39 Usually 7-10% of construction
015547005	Traffic Control	~	lump	\$21,123.69	\$21,123.69	Usually 3-5% of construction
023167020	Roadway Excavation (Plan Quantity)	695	cubic yard	\$25.00	\$17,375.00	
027417050	HMA - 1/2 Inch	283	ton	\$115.00	\$32,545.00	
027217020	Untreated Base Course (Plan Quantity)	232	cubic yard	\$45.00	\$10,440.00	
020567015	Granular Borrow (Plan Quantity)	463	cubic yard	\$25.00	\$11,575.00	
027767010	Concrete Sidewalk	694	square yard	\$85.00	\$59,027.78	\$59,027.78 Sidewalk on east side of road
	Concrete Trail	1,733	square yard	\$85.00	\$147,333.33	\$147,333.33 Trail on west side of road
027767025	Concrete Curb and Gutter Type B1	2,500	linear foot	\$40.00	\$100,000.00	\$100,000.00 Curb and gutter on both sides
027357010	Micro-Surfacing	4,444	square yard	\$4.00	\$17,777.78	
028917028	Sign Type A-1, 12 Inch X 36 Inch	2	each	\$300.00	\$600.00	
028917270	Remove Sign Less Than 20 Square Feet	2	each	\$200.00	\$400.00	
027657050	Pavement Marking Paint	54	gallon	\$100.00	\$5,400.00	
	24" CMP Drainage Pipe	100	linear foot	\$90.00	\$9,000.00	
	Junction Box	2	each	\$5,500.00	\$11,000.00	
Roadway Subtotal					\$485,845	
Drainage						
Drainage Subtotal					\$0	
PI						

Concept Level Est Form Rev. 5/30/2017

APPENDIX 4 Roadway Typical Sections





LOCAL RESIDENTIAL ROADWAY

NOTE:

- DESIGN OF CURB AND GUTTER SHALL BE IN ACCORDANCE 1. WITH ELK RIDGE CITY DESIGN AND CONSTRUCTION STANDARDS.
- WIDTHS MAY INCREASE CONTINGENT ON PROJECT SPECIFIC 2 REQUIREMENTS.
- 3. DESIGN CLEAR ZONE SHALL MEET AASHTO STANDARDS.
- DEPTHS MAY VARY CONTINGENT ON AASHTO PAVEMENT 4. DESIGN. ALL PAVEMENT DESIGNS SHALL BE STAMPED BY PROFESSIONAL ENGINEER.

DRAWING SCALE: 1" = 10'

ELK RIDGE CITY STANDARD DRAWING

T. T.
when -

ELK RIDGE CITY 80 E. PARK DRIVE ELK RIDGE, UT 84651 (801) 423-2300 elkridgecity.org

ROADWAY TYPICAL SECTIONS

LOCAL ROADS

UPDATED: 12/28/2023

STANDARD DRAWING No. **TS-02** APPROVED: ____ BY:

DATE:

PREPARED BY: JONES AND DEMILLE ENGINEERING, INC.

APPENDIX 5

Crash Heat Map and Crash History Report



DASHBOARD REPORT

Elk Ridge Crash Summary

Created on December 11, 2023





Total Crash Count: 96









This chart shows the % of Total Crashes by Severity.







APPENDIX 6 Traffic Count Reports

CLASS DATA ANALYSIS



Canyon View Drive





0.015235 1.674603	23	B to A, None Snecified	2	- 2	0	0	2	0	~	С	Ю	9	12	22	40	13	21	11	0	23	16	13	0	4	2	5	224		11:00	22	12:00 PM	40
Latitude: 40.015235 Longitude: -111.674603	9/24/2023	A to B, E None Snerified Si		1 0	0	0	~	~	-	5	7	0	Ø	17	16	14	30	44	0	14	16	17	11	ო	0	-	226	450	11:00	- 1		44
Γο		B to A, None Snecified S		•	с С	~	0	0	0	3	10	12	Ø	23	15	14	10	19	20	23	14	28	19	7	10	9	250		11:00	23	7:00	28
	9/23/2023	A to B, None		- m	~	0	~	~	с С	9	17	23	23	16	21	16	20	19	15	13	22	21	8	5	10	4	269	519	00:6	23	6:00	22
	Average	B to A, None Snecified			0	0	0	~	2	5	80	12	10	11	18	16	19	21	24	22	24	21	20	17	11	3	265	0	00:6	12	4:00	24
	Weekday Average	A to B, None Snerified	Contrado	10	0	0	2	10	7	34	28	15	18	13	16	10	20	21	21	20	21	16	80	6	5	2	298	563	2:00	34	3:00	21
	023	B to A, None Specified	1	- 0	-	0	0	~	-	4	7	5	10	9	18	19	18	30	21	27	21	23	22	16	19	4	280	~	00:6	11	3:00	30
	9/22/2023	A to B, None Specified			0	0	С	7	7	33	17	12	21	13	18	7	18	24	21	17	15	22	10	13	80	3	293	573	7:00	33	3:00	24
	123	B to A, None		o ←	0	~	-	~	2	9	10	12	11	16	18	14	20	19	25	20	20	15	21	15	7	2	257		11:00	16	4:00	25
	9/21/2023	A to B, None			0	~	0	13	7	36	40	18	14	13	13	14	21	22	25	19	21	9	8	б	9	-	307	564	8:00	40	4:00	25
	123	B to A, None		*	*	*	*	*	*	*	*	*	*	*	*	*	*	15	27	20	32	25	18	19	7	4	167				6:00	32
	9/20/2023	A to B, None		*	*	*	*	*	*	*	*	*	*	*	*	*	*	17	17	24	26	21	9	9	~	-	119	286			6:00	26
	123	B to A, None		*	*	*	*	¥	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	¥	*	*	0					
	9/19/2023	A to B, None		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
	023	B to A, None		*	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	0					
	9/18/2023	A to B, None		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	¥	*	0	0				
	9/18/2023	Time	ADO OD ANA		2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume

Canyon View Drive Elk Ridge

-

.674603	3	B to A,	None Specified	*	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	0						
Latitude: 40.015235 Longitude: -111.674603	10/1/2023		None None Specified Sp		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					450
Long			q		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0			_		_	
	9/30/2023		None None Specified Specifie		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					519
	0				0	0	0	0	0	2	œ	10	0	13	15	21	21	18	29	27	25	29	27	18	11	5	1	11		00	15	0	29	
	Average	B to A,	Specified												x		¹											291		11:00	-	3:00		2
	Weekday Average	A to B,	None Specified	-	0	0	~	2	14	10	38	29	18	13	20	16	19	19	23	20	24	19	17	11	4	4	1	323	614	7:00	38	5:00	24	117
	023	B to A,	None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						
	9/29/2023	A to B,	None Specified		*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					573
	23	B to A,	None Specified S	1	0	0	0	0	~	2	6	16	S	*	*	*	*	*	*	*	*	*	*	*	*	*	*	38		8:00	16			
	9/28/2023		None Specified S		0	0	-	ო	6	10	38	31	20	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	112	150	7:00	38			714
	123	B to A,	None Specified S		- -	~	0	0	1	~	9	11	10	12	13	25	30	21	34	23	34	34	25	22	9	Ð	-	318		11:00	13	3:00	34	
	9/27/2023	A to B,	None Specified S		-	0	0	2	14	13	42	35	19	12	24	15	29	14	23	21	23	23	23	11	က	£	3	356	674	7:00	42	1:00	29	096
	23	B to A,	None Specified S		I 	0	0	0	0	2	6	9	6	15	16	22	15	13	26	35	24	22	26	19	11	9	~	280		11:00	16	4:00	35	87 AADT: 571
	9/26/2023		None Specified S	1.00	- -	0	~	~	16	ω	42	24	18	13	18	15	11	24	23	22	26	16	10	11	e	2	0	307	587	7:00	42	5:00	26	587 AA
	123		None Specified S		0	0	~	0	0	~	00	6	12	12	17	16	18	21	27	24	18	30	29	14	15	5	2	279		11:00	17	6:00	30	1 ADT: 571
	9/25/2023		None Specified S		0	·	2	~	16	00	32	25	17	13	19	19	17	19	23	18	22	19	19	11	7	4	0	312	591	7:00	32	3:00	23	591 A
	9/25/2023	Time	0.	12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume	Comb Total ADT

Canyon View Drive Elk Ridge 2



Elk Ridge Drive (near Gladstan Dr) Elk Ridge





Time	9/18/2023 9/18/2023	2023	9/19	9/19/2023	9/20/2023	2023	9/21/	9/21/2023	9/22/2023	323	Weekday Average	Average	9/23/2023	2023	9/24/2023	2023
		B to A, None	A to B, None		A to B, None	B to A, None	A to B, None	B to A, None		B to A, None	A to B, None	B to A, None	A to B, None	B to A, None	A to B, None	B to A, None
	Specified	Specified	Specified	Specified	Specified	Specified	Specified	Specified	Specified S	Specified						
12:00 AM	*	*	*	*	*	*	2	0	0	0	~	0	4	4	N	
1:00	*	*	*	*	*	*	2	2	~	0	2	~	4	~	-	
2:00	*	*	*	*	*	*	0	0	0	0	0	0	2	~	2	0
3:00	*	*	*	*	*	*	0	0	0	0	0	0	~	0	0	0
4:00	*	*	*	*	*	*	~	4	0	5	0	4	0	0	0	0
5:00	*	*	*	*	*	*	0	7	0	6	0	80	с С	4	0	
6:00	*	*	*	*	*	*	13	13	9	6	10	11	11	3	6	
7:00	*	*	*	*	*	*	42	35	35	33	38	34	38	14	27	
8:00	*	*	*	*	*	*	36	28	41	22	38	25	17	24	22	64
00:6	*	*	*	*	*	*	29	35	34	38	32	36	27	31	24	29
10:00	*	*	*	*	*	*	33	29	34	31	34	30		32	73	24
11:00	*	*	*	*	*	*	27	36	36	40	32	38		32	54	37
12:00 PM	*	*	*	*	*	*	26	32	41	29	34	30	48	55	43	38
1:00	*	*	*	*	*	*	38	45	41	47	40	46		39	35	23
2:00	*	*	*	*	45	40	44	38	36	41	42	40	44	45	30	35
3:00	*	*	*	*	35	61	69	58	65	39	56	53	36	31	39	36
4:00	*	*	*	*	51	34	63	42	67	65	60	47	41	42	55	48
5:00	*	*	*	*	40	41	50	45	45	68	45	51	33	54	51	52
6:00	*	*	*	*	46	59	36	65	33	54	38	59	37	50	29	60
7:00	*	*	*	*	32	42	21	43	40	53	31	46	32	33	27	61
8:00	*	*	*	*	39	23	20	17	28	14	29	18	28	17	13	17
00:6	*	*	*	*	14	4	21	9	22	18	19	6	17	13	5	2
10:00	*	*	*	*	4	S	10	e	11	9	80	4	10	4	4	ŝ
11:00	*	*	*	*	5	0	4	2	7	6	5	4	6	9	2	0
Total	0	0	0	0	311	307	587	585	623	630	594	594	543	535	547	550
Day	0 /	-	-	0	618	8	1172		1253		1188				1097	
AM Peak							7:00	11:00	8:00	11:00	7:00	11:00	7	10:00	10:00	8:00
Volume								36	41	40	38	38	- 1	32	73	- 50
PM Peak					4:00	3:00	ŝ	6:00	4:00	5:00	4:00	6:00	12:00 F	12:00 PM	4:00	00:7
Volume					51	61	69	65	67	68	60	59	48	55	55	61

Elk Ridge Drive (near Gladstan Dr) Elk Ridge ~

17/0		7/20	9/28/2023	2023	9/29/2023	2023	Weekday Average	Average	9/30/2023	2023	10/1/2023	2023
A to B, B to A, None None	A, A to B, ne None	, B to A, None	A to B, None	B to A,								
d S	S	S	S	σ	Specified	Specified	σ	Specified	Specified	Specified	Specified	Specified
2	0	2 0	0	2	*	*	2	-	*	*	*	*
~	~	1 0	0	~	*	*	0	0	*	*	*	*
2	0	0 0	0	0	*	*	~	0	*	*	*	*
	0	-	0	0	*	*	0	0	*	*	*	*
<i>۲</i> -	2	1 3	0	۲	*	*	-	2	*	*	*	*
Ð	11	8 11	~	0	*	*	4	10	*	*	*	*
17	11	10 11	ъ	13	*	*	12	13	*	*	*	*
33	34 2	29 36	42	31	*	*	36	32	*	*	*	*
46	35 35	34 26	37	29	*	*	44	31	*	*	*	*
40	40 3	37 34	5	9	*	*	28	29	*	*	*	*
27	31 4	44 34	*	*	*	*	32	33	*	*	*	*
38	37 37	31 34	*	*	*	*	36	36	*	*	*	*
52	41 2	29 38	*	*	*	*	40	42	*	*	*	*
35	57 4	40 52	*	*	*	*	43	47	*	*	*	*
41	49 49	45 39	*	*	*	*	42	52	*	*	*	*
66			*	*	*	*	56	52	*	*	*	*
60	45 5	55 37	*	*	*	*	57	42	*	*	*	*
35	47 5	56 51	*	*	*	*	43	53	*	*	*	*
45	59 59	52 68	*	*	*	*	46	58	*	*	*	*
31	55 3	39 73	*	*	*	*	33	59	*	*	*	*
24	13 2	28 11	*	*	*	*	25	13	*	*	*	*
22	10 1	19 5	*	*	*	*	18	7	*	*	*	*
2	~	5 1	*	*	*	*	5	~	*	*	*	*
3	0	8 4	*	*	*	*	5	-	*	*	*	*
629	622 638	38 634	6	92	0	0	609	614	0	0	0	0
1251		1272	182		0		1223	3	0		0	
8:00 5	9:00 10:00	00:2 00	2:00	7:00			8:00	11:00				
46	40 44	44 36	42	31			44	36				
	č	2:					4:00	2:00				
66	59 6.	64 73					57	59				
1251	-	1890	1354	4	1253	53	2411	7	1078	78	1097	2

Elk Ridge Drive (near Gladstan Dr) Elk Ridge

2

CLASS DATA ANALYSIS



Elk Ridge Drive (toward Salem Canal Road) Elk Ridge





9/18/2023	9/18/2023	2023	9/19/	9/19/2023	9/20/2023	2023	9/21/	9/21/2023	9/22/2023	023	Weekday Average	Average	9/23/2023	2023	9/24/2023	2023
Time	A to B, None	B to A, None														
	Specified															
12:00 AM	*	*	*	*	*	*	10	27	10	33	10	30	35	57	31	84
1:00	*	*	*	*	*	*	с С	13	2	б	2	11	20	35	13	37
2:00	*	*	*	*	*	*	4	с С	0	5	2	4	4	14	8	12
3:00	*	*	*	*	*	*	~	2	2	e	2	2	2	S	~	7
4:00	*	*	*	*	*	*	9	5	œ	e	7	4	с С	4	2	5
5:00	*	*	*	*	*	*	27	2	20	0	24	~	ъ С	4	S	
6:00	*	*	*	*	*	*	104	14	73	18	88	16	35	13	7	
7:00	*	*	*	*	*	*	149	43	125	30	137	36	52	16	11	Ť.
8:00	*	*	*	*	*	*	377	112	325	88	351	100	112	60	40	27
00:6	*	*	*	*	*	*	233	101	246	126	240	114	130	68	44	52
10:00	*	*	*	*	*	¥	170	101	188	117	179	109	176	87	134	60
11:00	*	*	*	*	*	*	158	104	156	66	157	102	192	133	119	58
12:00 PM	*	*	*	*	*	*	171	130	173	132	172	131	184	130	112	92
1:00	*	*	*	*	63	75		154	142	182	122	137	179	191	107	140
2:00	*	*	*	*	170	163	154	182	148	160	157	168	161	197	123	122
3:00	*	*	*	*	165	244	·	242	192	228	181	238	162	175	112	121
4:00	*	*	*	*	198	223	191	254	204	272	198	250	174	205	104	143
5:00	*	*	*	*	173	301	198	291	205	269	192	287	215	210	138	191
6:00	*	*	*	*	177	261	217	255	221	269	205	262	196	199	130	162
7:00	*	*	*	*	191	251	141	254	169	235	167	247	175	208	140	124
8:00	*	*	*	*	119	241	116	196	167	230	134	222	136	199	165	131
9:00	*	*	*	*	76	154	75	153	82	194	78	167	66	139	69	105
10:00	*	*	*	*	36	126	42	143	73	134	50	134	67	115	51	56
11.00	*	*	*	*	18	63	17	83	62	93	32	80	39	102	22	33
Total	0	0	0	0	1386	2102	2912	2864	2993	2929	2887	2852	2553	2564	1686	1783
Dav	0		0	0	3488	38	57	5776	5922	2	5739	6	5117	7	3469	99
AM Peak							8:00	8:00	8:00	00:6	8:00	00:6	11:00	11:00	10:00	12:00 AM
Volume							377	112	325	126	351	114	192	133	134	84
PM Peak					4:00	5:00	6:00	5:00	6:00	4:00	6:00	5:00	5:00	5:00	8:00	5:00
V/olimo					100	100	212	100	100	626	205	787	215	210	165	101

Elk Ridge Drive (toward Salem Canal Road) Elk Ridge ~

)23	B to A, None	Specified	*	*	×	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	0						6
10/1/2023		Specified S	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					3469
		Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						17
9/30/2023	A to B, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					5117
Weekday Average	B to A, None	Specified	26	12	4	3	3	2	12	39	100	122	114	106	153	155	157	231	258	286	278	246	193	188	110	59	2857		00:6	122	5:00	286	19
Weekday	A to B, None	Specified	10	5	с С	n	12	23	93	152	356	246	172	156	172	156	145	197	200	175	208	175	136	99	42	20	2923	5780	8:00	356	6:00	208	11519
2023	B to A, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						22
9/29/2023	A to B, None	Specified	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					5922
2023	B to A, None	Specified	32	11	S	3	2	S	12	35	92	128	101	*	*	*	*	*	*	*	*	*	*	*	*	*	422	0	9:00	128			9
9/28/2023	A to B, None	Specified	15	ω	9	S	10	20	104	149	353	227	163	*	*	*	*	*	*	*	*	*	*	*	*	*	1058	1480	8:00	353			7256
023	B to A, None	Specified	24	19	S	2	2	~	15	41	79	122	129	121	155	153	147	251	256	274	257	256	195	200	101	61	2864	1	10:00	129	5:00	274	6
9/27/2023	A to B, None	Specified	2	9	4	2	12	25	83	141	369	234	164	158	187	157	154	196	197	177	191	174	158	66	36	24	2917	5781	8:00	369	4:00	197	9269
023		Specified	26	16	9	с С	2	e	10	36	120	119	117	98	149	163	132	219	268	290	294	247	193	174	113	53	2851	N	8:00	120	6:00	294	0
9/26/2023		Specified 5	10	~	~	С		25	96	158	353	266	188	163	154	139	148	193	197	161	221	163	116	60	45	19	2891	5742	8:00	353	6:00	221	5742
323	o A, one	Specified S	22	4	4	4	5	(n)	6	45	110	121	107	98	155	150	192	224	249	293	282	236	191	189	116	62	2871		9:00	121	5:00	293	~
9/25/2023		Specified 5	11	9	~	с С	14	22	88	161	347	256	173	148	174	171	134	203	207	188	211	187	133	72	46	16	2972	5843	8:00	347	6:00	211	5843
9/25/2023			12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Dav	AM Peak	Volume	PM Peak	Volume	Comb Total

Elk Ridge Drive (toward Salem Canal Road) Elk Ridge 2

CLASS DATA ANALYSIS



Gladstan Drive



SPEED DATA ANALYSIS



9/18/2023	9/18/2023	2023	9/19,	9/19/2023	9/20/	9/20/2023	9/21/	9/21/2023	9/22/2023	123	Weekday Average	Average	9/23/2023	2023	9/24/2023	023
Time		B to A,	A to B,	B to A,	A to B,	B to A,	A to B,	B to A,	A to B,	B to A,	A to B,	B to A,	A to B,	B to A,	A to B,	B to A,
	None Specified	Specified S	None Specified	Specified	None Specified	Specified	Specified	Specified	Specified							
12:00 AM	1.0	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
1:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
2:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
3:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
4:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
5:00	*	*	*	*	*	*	0	0	0	0	0	0	0	0	0	0
6:00	*	*	*	*	*	*	11	0	4	1	Ø	0	6	0	6	0
7:00	*	*	*	*	*	*	28		22	0	25	-	36	С	26	
8:00	*	*	*	*	*	*	30		25	1	28	Ю	6	-	17	
9:00	*	*	*	*	*	*	14	6	20	9	17	8	5	4	12	80
10:00	*	*	*	*	*	*	15		14	о	14	б	4	4	14	2
11:00	*	*	*	*	*	*	10	13	12	10	11	12	14	6	18	10
12:00 PM	*	*	*	*	*	*	10	20	20	Ω	15	12	24	24	18	18
1:00	*	*	*	*	*	*	18	24	13	28	16	26	19	14	17	9
2:00	*	*	*	*	9	Ω.	25	18	11	10	14	1	10	15	14	19
3:00	*	*	*	*	15	38	37	29	27	12	26	26	9	00	16	22
4:00	*	*	*	*	21	18	30	20	19	24	23	21	5	12	20	25
5:00	*	*	*	*	14	18	14	20	7	34	12	24	4	20	13	31
6:00	*	*	*	*	-	16	0	36	9	34	2	29	4	30	ო	33
7:00	*	*	*	*	-	29	~	34	9	34	n	32	2	2	2	25
8:00	*	*	*	*	0	-	0	4	0	3	0	n	2	9	0	e
9:00	*	*	*	*	0	0	0	2	0	0	0	~	0	0	0	0
10:00	*	*	*	*	0	0	0	0	0	0	0	0	0	0	0	0
11:00	*	*	*	*	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	58	125	243	245	206	211	214	218	153	155	204	204
Dav	0			0	183	33	488	38	417		432		308		408	
AM Peak							8:00	11:	8:00	11:00	8:00	11:00	7:00	11:00	7:00	11:00
Volume							30	13	25	10	28	12	36	6	26	10
PM Peak					4:00	3:00	3:00	6:00	3:00	5:00	3:00	7:00	12:00 PM	6:00	4:00	6:00

Gladstan Drive Elk Ridge -

1.690224	23	B to A, None	Specified	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	0						
Longitude: -111.690224	1/20	A to B, I None	Specified S	*	*	¥	*	*	*	¥	*	¥	*	¥	*	*	*	*	*	*	*	¥	*	*	*	*	*	0	0					408
	9/30/2023	B to A, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						8
	9/30/	A to B, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	0	0					308
	Weekday Average	B to A, None	Specified	0	0	0	0	0	0	0	~	4	с С	2	12	18	21	29	24	22	24	32	37	2	0	0	0	236	0	11:00	12	7:00	37	12
	Weekday	A to B, None	Specified	0	0	0	0	0	0	80	24	28	13	14	19	20	16	20	24	29	12	5	2	0	0	0	0	234	470	8:00	28	4:00	29	902
	2023	B to A, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						7
	9/29/2023	A to B, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					417
	2023	B to A, None	Specified	0	0	0	0	0	0	0	2	2	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	S		7:00	2			e
	9/28/2023	A to B, None	Specified	0	0	0	0	0	0	4	31	26	б	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20	75	7:00	31			563
	023	B to A, None	Specified	0	0	0	0	0	0	0	~	ო	4	თ	10	21	29	10	32	18	19	38	49	с С	0	0	0	246	~	11:00	10	2:00	49	(0
	9/27/2023	A to B, None	Specified	0	0	0	0	0	0	5	19	24	20	22	13	14	22	19	34	28	14	6	4	0	0	0	0	247	493	8:00	24	3:00	34	676
	023	B to A, None	σ	0	0	0	0	0	0	0	-	5	0	ω	14	17	24	27	19	26	21	33	37	2	0	0	0	234		11:00	14	7:00	37	38 AADT: 426
	9/26/2023	A to B, None	g	0	0	0	0	0	0	11	20	27	18	12	17	24	10	18	26	32	14	4	-	0	0	0	0	234	468	8:00	27	4:00	32	468 AA
	J23	B to A, None	σ	0	0	0	0	0	0	0	0	9	9	ო	11	16	6	50	20	23	31	24	25	~	0	0	0	225	-	11:00	11	2:00	50) ADT· 426
	9/25/2023	A to B, None	σ	0	0	0	0	0	0	11	25	36	4	თ	26	23	16	23	13	26	7	С	2	0	0	0	0	224	449	8:00	36	4:00	26	449
	9/25/2023	Time	(0	12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume	Comb Total

Gladstan Drive Elk Ridge 2

CLASS DATA ANALYSIS


Sunbrook Drive (to Gladstan RV Park) Elk Ridge





023	B to A, None Specified	0	0	0	0	0	0	0	0	0	0	0	2		e	0	0	2	~		2	~	0	~	0	14		11:00	2	1:00	0
9/24/2023	A to B, None Specified	0	0	0	0	0	0	0	0	~	0		9	2	~	~	~	~	0	~	~	-	0	0	0	17	31	11:00	9	12:00 PM	Z
	B to A, None Specified	0	0	0	0	0	0	0	0	-	~	2	0	0	-	0	2	2	-	~	2	~	~	0	0	15		10:00	2	3:00	Z
9/23/2023	A to B, None Specified	0	0	0	0	0	0	~	0	0	0	e	-	~	-	2	-	2	0	~	-	2	0	0	0	16	31	10:00	en l	2:00	2
Average	B to A, None Specified	0	0	0	0	0	0	0	0	0	0	~	0	-	~			2	2	2	Э	~		0	0	16		10:00	-	2:00	n
Weekday Average	A to B, None Specified	0	0	0	0	0	0	~	0	2	0	4	~	2	~	~	-	-		~	2	n	0	0	0	21	37	10:00	4	8:00	ς.
2023	B to A, None Specified	-	0	0	0	0	0	~	0	0	0	-	~	0	0	0		2	e		3	S	2	0	0	19	1	12:00 AM	-	5:00	3
9/22/2023	A to B, None Specified	0	0	0	0	0	0	2	0	0	0	4	~	~	~	~	2	0	2	-	3	4	0	0	0	22	41	10:00	4	8:00	4
2023	B to A, None Specified	0	0	0	0	0	0	0	0	~	~	~	0	2	2	~	~	S	0	с С	2	~	0	0	٢	19	8	8:00	-	4:00	с С
9/21/2023	A to B, None Specified	0	0	0	0	1	0	0	0	с С	0	3	~	2	~	0	0	2	~	2	~	2	0	0	0	19	38	8:00	З	12:00 PM	2
2023	B to A, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	~	0	2	с С	~	3	0	-	0	0	11				5:00	с С
9/20/2023	A to B, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	~	0	~	0	0	~	S	0	0	0	9	17			8:00	ო
2023	B to A, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0					
9/19/2023	A to B, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
2023	B to A, None Specified	4	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0					
9/18/2023	A to B, None Specified		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
9/18/2023		12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Dav	AM Peak	Volume	PM Peak	Volume

Sunbrook Drive (to Gladstan RV Park) Elk Ridge -

1.688153 3	B to A,	None Specified	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0							
Longitude: -111.688153 10/1/2023		Specified Sp	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	0	0					31	
	o A,	None Specified S		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0							
9/30/2023	A to B,	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					31	
Average	B to Ă,	None Specified	0	0	0	0	0	0	0	~	0	0	0	~	0	0	0	2		2	2	0	~	~	0	0	13		7:00	-	3:00	2		
Weekday Average	A to B,	None Specified	0	0	0	0	0	0	0	0	0	0	~	-	-	0	~	~	-	~	2	0	~	0	0	0	10	23	10:00	~	6:00	2	60	
2023	B to A,	None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0							
9/29/2023	A to B,	None Specified	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					41	
023	B to A,	None Specified	0	0	~	0	0	0	0	-	~	~	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4		2:00	-				
9/28/2023	A to B,	Specified	0	0	0	0	-	0	0	0	~	-	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	e	7	4:00	-			45	
023	B to A,	None Specified	0	0	0	0	0	0	0	~	0	0	0	~	0	0	-	e	2	-	2	ი	2	~	0	0	17		2:00	-	3:00	3		
9/27/2023	A to B,	None Specified	0	0	0	0	0	0	~	0	0	-	~	2	0	-	0	~	č	-	2	~	-	0	0	0	15	32	11:00	2	4:00	3	49	
023	B to A,	None Specified	0	0	0	0	0	0	0	~	0	0	0	0	~	-	0	0	0	2	2	~	0	~	0	0	6		2:00	1	5:00	2		AADT: 31
9/26/2023	A to B,	Specified	0	0	0	0	0	0	0	0	0	0	~	2	~	0	~	~	0	-	-	0	~	0	0	0	ი	18	11:00	2	12:00 PM	1	18	4
023	B to A,	Specified		0	0	0	0	0	0	-	0	0	0	-	0	0	0	2	0	n	С	~	2	0	0	0	13		2:00	1		3		ADT: 31
9/25/2023	A to B,	None Specified		0	0	0	0	0	0	0	~	0	0	0	2	0		2	-	0	ო	0	2	0	0	0	12	25	8:00	1	6:00	3	25	
9/25/2023	Time	55	12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	00:6	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume	Comb Total	ADT

Sunbrook Drive (to Gladstan RV Park) Elk Ridge

CLASS DATA ANALYSIS



Goosenest Drive





123	B to A, None Specified	11	4	~	0	0	0	4	16	20	21	25	40	110	53	44	50	56	73	51	55	32	19	13	5	703		11:00	40	12:00 PM	110
9/24/2023	A to B, None Specified S	9	2	-	0	0	n	e	6	21	75	33	39	38	35	56	54	46	56	53	46	40	19	00	-	644	1347	00:6	- 1		56
	B to A, None Specified 3	9	~	0	0	0	~	6	23	22	34	47	99	79	96	75	67	87	74	66	73	53	38	20	18	955		11:00	66	1:00	96
9/23/2023	A to B, None Specified	0	0	0	2	5	2	15	23	48	57	55	59	63	58	62	60	54	84	69	56	30	22	19	11	859	1814	11:00	59	5:00	84
Average	B to A, None Specified	e	-	0	0	0	4	5	36	47	54	49	56	63	65	59	85	96	86	89	76	55	35	20	6	993		11:00	56	4:00	96
Weekday Average	A to B, None Specified	-	0	0	0	9	11	30	64	56	61	48	50	55	50	59	62	69	73	74	57	26	24	7	7	890	1883	7:00	64	6:00	74
2023	B to A, None Specified	2	0	Ţ	-	0	с С	9	34	44	49	49	50	75	78	67	80	109	84	73	84	61	43	26	13	1032	60	11:00	50	4:00	109
9/22/2023	A to B, None Specified	-	0	-	~	10	10	30	61	44	56	51	47	73	54	52	72	77	67	78	62	32	31	12	15	937	1969	7:00	61	6:00	78
023	B to A, None Specified	4	2	0	0	0	5	4	39	50	60	49	61	63	54	49	96	86	81	94	62	49	28	19	9	977	8	11:00	61	3:00	95
9/21/2023	A to B, None Specified		0	0	0	С	12	31	67	69	66	44	53	48	52	55	60	59	70	77	47	25	24	9	2	871	1848	8:00	69	6:00	17
2023	B to A, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	50	64	61	81	92	93	66	65	54	34	14	00	715	5			6:00	66
9/20/2023	A to B, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	43	43	70	54	70	83	68	63	21	17	4	4	540	1255			5:00	83
023	B to A, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0					
9/19/2023	A to B, None Specified	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
023	B to A, None Specified		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0					
9/18/2023	A to B, None Specified		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
9/18/2023		12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Dav	AM Peak	Volume	PM Peak	Volume

Goosenest Drive Elk Ridge -

23	B to A, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						
10/1/2023		Specified S	*	*	*	*	*	*	¥	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					1347
2023		Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						14
9/30/2023	A to B, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					1814
Average	B to A, None	Specified	с С	2	0	~	0	4	8	36	36	39	39	60	63	61	99	86	98	66	87	76	57	30	15	7	973		11:00	60	5:00	66	23
Weekday Average	A to B, None	Specified	~	~	-	0	5	10	30	62	50	57	48	52	52	50	53	78	72	84	66	50	30	14	7	e	876	1849	7:00	62	5:00	84	3732
023	B to A, None	Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						6
9/29/2023	A to B, None	Specified	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					1969
123		- ł	ო	2	0	~	0	2	80	44	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	71		7:00	44			
9/28/2023		Specified S	-	0		0	8	10	27	66	27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	140	211	7:00	66			2059
023		Specified 5	2	2	0	-	0	4	S	35	39	46	39	60	57	70	76	76	98	97	74	69	63	43	11	6	976	~	11:00	60	4:00	98	~
9/27/2023		Specified 3	2	0	0	0	5	13	29	63	63	60	50	44	51	60	45	85	74	60	71	58	28	7	7	2	877	1853	7:00	63	3:00	85	3108
123		Specified	2 2	2	0	2	~	9	10	33	42	34	37	64	72	53	57	100	92	101	94	89	60	21	18	5	998		11:00	64	5:00	101	1912
9/26/2023		Specified S	2	ო	~	0	с С	10	37	62	61	57	42	60	51	46	60	68	62	06	74	61	26	28	9	4	914	1912	7:00	62	5:00	06	1912
323		Specified S	2	0	0	~	0	5	10	30	53	37	41	56	61	59	65	81	105	98	93	69	49	27	15	œ	965		11:00	56	4:00	105	323
9/25/2023		Specified S	0	0	2	0	4	7	28	55	51	53	51	53	54	44	53	81	81	101	54	31	36	8	7	4	858	1823	7:00	55	5:00	101	1823
9/25/2023	Time		12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume	Comb Total

Goosenest Drive Elk Ridge







SPEED DATA ANALYSIS Satellite Г 7 L J Location Map Latitude: 40.013154 Longitude: -111.684734 Parkside Loop W Hillside Dr N Elk Ridge Dr W Hillside Dr **Analysis Time Period** Start End 9/20/2023 9/28/2023 8:55 AM 2:00 PM Elk Ridge Dr + Googla Keyboard shortcuts Map data ©2023 Google 20 m L Vehicles Analyzed Speed Limit SPEED 7,281 25 LIMIT **Total Enforceable Violations Average Speed** 4,478 26 % Enforceable Violations **Fastest Speed** 62% 58 **Enforcement Rating** 85th Percentile Speed 3()

HIGH

9/24/2023	B to A, None d Specified	1 14	0 3	0 2	1	0 0	3	5 2	4 6	1 58	23 10	65 12		30 31		27 25		24 31	30 31		21 27	2 10	5 5	6 7	3 5	0 376	736	8	- 1	12:00 F	30 31
	A to B, None Specified									~									ന			-				3(10		12:00 F	
	B to A, None Specified	10	8		0	~	0	0	7	10	16	25	22	37	37	38	35	34	21	36	40	24	19	16	11	448	4	10:00	25	7:00	40
9/23/2023	A to B, None Specified	4	~	0	~	0	4	6	18	20	44	25	45	32	25	36	24	31	23	27	, 25	17	12	8	5	436	884	11:00	45	2:00	36
werage	q	0	2	0	0	0	~	2	14	16	20	16	32	35	35	30	36	54	43	53	40	25	19	16	11	500	2	11:00	32	4:00	54
Weekday Average	A to B, None Specified S	0	0	0	-	4	80	19	46	44	32	36	34	32	22	29	30	35	40	39	24	14	00	5	с С	505	1005	7:00	46	5:00	40
	B to A, None Specified S	-	2	0	0	0	2	2	12	14	19	18	27	34	26	27	34	57	36	33	25	16	15	19	18	437		11:00	27	4:00	57
9/22/2023	A to B, I None Specified S	-	0	0	~	ო	9	14	42	43	33	35	30	28	17	26	33	45	45	25	23	13	10	10	7	490	927	8:00	43	4:00	15
23	o A, one cified	0	2	0	~	0	0	က	15	19	22	15	38	36	44	34	41	52	34	55	49	29	27	16	0	541		11:00	38	6:00	ц ц
9/21/2023	A to B, None Specified S	0	۲-	0	-	4	6	24	49	46	32	36	37	36	28	32	30	36	38	41	18	Ø	11	-	e	521	1062	7:00	49	6:00	44
23	o A, one cified	*	¥	*	*	*	*	*	*	*	*	¥	*	*	*	30	33	54	60	70	45	31	15	13	9	357				6:00	04
9/20/2023	A to B, None Specified S		*	*	*	*	*	*	¥	*	*	*	*	*	*	29	28	24	38	50	31	20	4	Ð	0	229	586			6:00	L L
23	o A, one cified	4	¥	×	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	×	*	*	*	0					
9/19/2023	A to B, None Specified S		*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
123	o A, one cified		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0					
9/18/2023	A to B, None Specified S		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
9/18/2023		12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	00:6	10:00	11:00	Total	Dav	AM Peak	Volume	PM Peak	

HillIside Drive Elk Ridge

23	B to A, None Snecified	*	+	¢	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						
1/2(A to B, None Specified S		+	¢	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					736
2023	B to A, None Snecified	L	+	¢	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						4
9/30/2023	A to B, None Snecified	*	+	ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					884
Average	B to A, None Snecified	0	V 7	-	0	~	0	-	2	18	21	22	14	26	24	26	36	42	50	46	46	43	30	19	15	Ð	490		11:00	26	4:00	50	~
Weekday Average	A to B, None Snecified		- (0	~	2	4	11	24	54	42	32	33	31	21	21	27	29	31	34	26	26	12	6	4	-	476	996	7:00	54	5:00	34	1971
023	B to A, None Snecified	*	,	ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						
9/29/2023	A to B, None Snecified		4	ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					927
123	B to A, None Snecified		N '	~	~	~	0	0	2	15	19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	41	c	8:00	19			
9/28/2023	A to B, None		- (0	2	2	2	10	23	50	46	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	136	177	7:00	50			1239
023	B to A, None Snerified	F			~	N	0	С	2	14	20	22	13	28	20	27	41	39	54	45	41	57	28	17	16	6	501		11:00	28	7:00	57	
9/27/2023	A to B, None Snerified		0	0	~	ო	4	13	23	60	32	30	29	27	22	25	27	30	32	32	30	34	10	Ø	4	0	476	977	7:00	60	7:00	34	1563
123	B to A, None		0	-	0	-	0	0	~	24	20	23	17	22	27	23	30	38	51	43	49	38	32	23	13	3	484		7:00	24	4:00	51	53 2 0 1 1
9/26/2023	A to B, None		2	0	0	0	4	6	27	52	48	34	37	32	17	23	27	29	30	34	23	25	11	6	ო	З	479	963	2:00	52	5:00	34	963
023	B to A, None Snacifiad	E		2	0	-	0	0	~	19	26	22	12	29	25	29	38	50	45	50	49	33	30	18	15	2	498		11:00	29	3:00	50) ADT. 044
9/25/2023	A to B, None		7	0	-	-	4	13	23	54	40	31	32	34	23	16	28	27	31	35	25	18	16	10	9	-	471	969	7:00	54	5:00	35	696
9/25/2023	Time	1_	IZ:UU AIM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume	Comb Total

Hilllside Drive Elk Ridge



CLASS DATA ANALYSIS



Loafer Canyon Road Elk Ridge



SPEED DATA ANALYSIS



Latitude: 40.026486 gitude: -111.672426	023	B to A, None Specified	9	5	~	0	~	5	n	9	5	15	15	25	19	22	35	28	35	30	48	25	15	თ	4	ς	360		11:00	25	6:00	48
Latitude: 40.026486 Longitude: -111.672426	9/24/2023	A to B, None Specified 3	11	2	0	0	-	2	2	ო	9	80	14	18	12	20	59	35	27	24	30	29	33	12	5	4	357	111	11:00	18	2:00	69
Γc	023	B to A, None Specified	2	7	~	0	e	5	ო	11	24	29	33	35	31	33	30	33	36	38	33	30	13	17	19	4	475		11:00	35	5:00	38
	9/23/2023	A to B, None Specified	сл I	2	2	~	2	2	-	4	13	12	18	36	29	37	26	32	38	46	33	30	35	14	20	80	446	921	11:00	36	5:00	46
	Average	B to A, None Specified	2	0	0	0	с	9	16	44	51	24	26	26	20	24	30	32	48	46	32	36	20	14	10	4	514		8:00	51	4:00	48
	Weekday Average	A to B, None Specified	4	~	0	0	-	2	Ø	14	29	16	20	22	21	26	39	42	45	53	51	42	32	27	16	9	517	1031	8:00	29	5:00	53
	2023	B to A, None Specified	°.	0	0	0	S	6	13	37	45	23	24	25	16	25	38	40	59	63	36	56	30	20	20	9	591		8:00	45	5:00	63
	9/22/2023	A to B, None Specified	2	0	0	0	0	2	10	12	24	10	22	19	18	31	36	68	54	66	57	45	42	24	27	10	584	1175	8:00	24	3:00	68
	2023	B to A, None Specified	0	0	0	~	С	4	19	51	57	26	27	27	24	23	22	51	44	36	26	25	12	თ	9	2	495	11	8:00	57	3:00	51
	9/21/2023	A to B, None Specified	0	2	0	0	2	2	9	17	34	22	19	24	24	21	42	52	44	49	44	37	28	22	6	9	506	1001	8:00	34	3:00	52
	2023	B to A, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	41	38	34	26	17	12	2 2	4	181	7			4:00	41
	9/20/2023	A to B, None Specified	*	×	*	*	*	*	*	*	*	*	*	*	*	*	*	7	36	45	51	44	26	34	11	2	256	437			6:00	51
	2023	B to A, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	******				
	9/19/2023	A to B, None Specified	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
	2023	B to A, None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0					
	9/18/2023	A to B, None Specified	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
	9/18/2023	Time	12-00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	00:6	10:00	11:00	Total	Dav	AM Peak	Volume	PM Peak	Volume

Loafer Canyon Road Elk Ridge

023	B to A, None Specified		¢	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	r I	0						
Longitude: -111.01 2420 10/1/2023	A to B, None Specified	,	¢	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	ĸ	0	D					717
	B to A, None Specified		ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						1
9/30/2023	A to B, None	oheniien	k	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					921
Average	B to A, None	oheniiten	2	-	0	-	2	8	21	49	53	31	20	31	23	28	37	31	37	36	35	30	15	o	2	4	511		8:00	53	2:00	31	80
Weekday Average	A to B, None	openileu	4		0	0	0	2	7	16	24	24	20	22	28	29	40	46	39	51	50	50	36	19	14	4	526	1037	8:00	24	5:00	19	2068
023	B to A, None	pannado	×	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						Q
9/29/2023	A to B, None		¥	*	*	*	*	*	*	*	*	¥	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	0	0					1175
123		- 1-	0	0	0	0	2	7	22	50	60	39	œ	*	*	*	*	*	*	*	*	*	*	*	*	*	188		8:00	60		-	
9/28/2023		specified	4	0	0	0	0	e	10	16	30	28	13	*	*	*	*	*	*	*	*	*	*	*	*	*	104	292	8:00	30			1293
123		- F	ო	2	0	~	~	0	22	47	58	24	26	37	22	29	39	37	42	39	32	27	13	80	10	8	536		8:00	58	4:00	42	
9/27/2023			ო	5	-	0	0	-	9	13	30	24	26	12	41	25	42	56	41	55	49	53	36	16	17	9	558	1094	8:00	30	3:00	56	1531
23	o A, one	specified u	9	~	0	~	2	6	19	47	40	33	21	31	20	26	31	33	39	33	44	34	19	6	ო	2	503		7:00	47	6:00	44	
9/26/2023		Specified S	2 2	0	0	0	0	2	7	17	15	25	20	24	23	27	33	45	39	51	53	51	42	20	8	9	513	1016	9:00	25	6:00	53	1016
23	o A, one	Specified S	0	0	~	2	က	0	20	51	55	27	27	26	27	29	41	24	29	36	30	29	12	11	7	2	498		8:00	55	2:00	41	
9/25/2023		Specified St	ю	0	0	0	0	, .	9	18	23	21	21	29	21	34	45	38	37	48	47	46	31	21	17	ب	508	1006	11:00	29	5:00	48	1006
9/25/2023			12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume	Comb Total

Loafer Canyon Road Elk Ridge

CLASS DATA ANALYSIS









Ato B, None Ato B, None Ato B, None Ato B, None Ato B, None Ato B, None None	9/20/2023	9/21/2023	9/22/2023	2023	Weekday Average	verage	9/23/2023	023	9/24/2023	2023
Specified Specified <t< td=""><td></td><td></td><td></td><td></td><td></td><td>7</td><td>A to B, None</td><td>B to A, None</td><td>A to B, None</td><td>B to A, None</td></t<>						7	A to B, None	B to A, None	A to B, None	B to A, None
	Specified Specified	Specified Specified	ried specified	specified	specified s	specified	specified	opecilieu	opecilieu	obecilien
0 0 0 103 103 387	*	-	11 3		2	11	12	28	13	30
0 0 0 103 103 387	*	-	4 0	ო	0	4	4	10	e	
0 0 0 103 103 387	*	0	2 0	0	0	-	n	4	က	2
0 0 0 0 387 0 0 0 387	*	1	0	~	~	0	-	0	-	ო
300 0 0 0 387 300 0 0 387 387	*	~	1 5	~	ო	-	4	2	-	0
0 0 0 0 387 0 0 0 387	*	7	6 0	0	ω	0	4	0	2	0
300 0 0 0 387 300 0 0 387 387	*	34	4 21	9	28	5	0	4	e	~
* *	*	41	5 39	Ð	40	5	16	4	4	2
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *	*	109	22 96	20	102	21	42	17	13	9
* *	*	27	23 74	26	76	24	55	26	26	0
* * * * * * <td< td=""><td>*</td><td>54</td><td>21 48</td><td>32</td><td>51</td><td>26</td><td>57</td><td>33</td><td>32</td><td>13</td></td<>	*	54	21 48	32	51	26	57	33	32	13
* * * * * * * * * * * * * * * * * * *	*	42	26 43	32	42	29	67	56	36	17
* * * * * * * * * * * * * * * * * * *	*	51	52 33	24	42	38	55	81	54	50
* * *	*	44	54 59	51	52	52	52	87	36	59
<pre> * * * * * * * * * * * * * * *</pre>	14 16	37	50 37	55	29	40	73	102	39	39
* * * * * * * * * * * * * * * * * * *	59 79	42	63 48	60	50	67	57	74	45	40
<pre>* * * * * * * * * * * * * * * * * * *</pre>		56	79 57	86	53	79	95	93	49	50
* * * * * * * * * * * * * 59 * * * * * * * * * * * * * * * * * * *	-	64	89 127	130	82	108	70	102	58	74
* * * * * * * * * * * * * * 51 * * * * * * * * 47 * * * * * * * * 47 * * * * * * * * 47 0 0 0 387 0 0 0 387	59 84	58	94 140	167	86	115	60	85	46	94
* * * 47 * * * * * 47 * * * * * 34 * * * * * * 34 * * * * * * * 14 0 0 0 387 0 0 0 387	51 83	53	71 97	116	67	90	64	79	46	62
* * * * * * * * * * * * * 34 * * * * * * * * * * * * * * * * 6 0 0 0 0 387 0 0 0 387	47 74	28	45 107	113	61	17	59	83	59	56
* * * * * * * * * * * * * * * * * * *	34 61	16	54 71	46	40	54	25	62	32	45
* * * 6 0 0 387 0 0 0 387 0 0 387	14 43	11	46 47	40	24	43	30	45	12	31
0 0 0 387 0 0 0 1039		4	32 33	32	14	33	11	31	3	17
0 1039		832	848 1195	1057	953	923	925	1108	616	716
UU-2	1039	1680	2252	52	1876		2033		1332	32
UU:		8:00 1	11:00 8:00	10:00	8:00	11:00	11:00	11:00	11:00	12:00 AM
UU·&		109		32	102	29	67	56	36	30
	3:00 5:00	5:00	6:00 6:00	6:00	6:00	6:00	4:00	2:00	8:00	6:00
	59 105	64	94 140	167	86	115	95	102	59	94

Park Drive Ellk Ridge -

A to B, B to A, A to B, B to A, None None None Specified	9/26/2023	6/27/2023	9/28/2023	3	9/29/2023		Weekday Average	verage	9/30/2023	33	10/1/2023
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A to B,		5	o A,	5	o A,	A to B,	B to A,		o A,	
$ \begin{bmatrix} & 7 & 10 & & & & & & & & & & & & & & & & & $	None None None Specified										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0	80	7	10	*	*	с С	10	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	6 0	2	2	8	*	*	-	5	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5 3	2	2	2	*	*	2	2	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 1	~	2	0	*	*	2	0	*	*	*
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1	с	2	0	*	*	2	2	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 7	0	6	2	*	*	80	2	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 29	ო	32	4	*	*	30	e	*	*	*
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	6 44	7	43	7	*	*	47	9	*	*	*
$ \begin{bmatrix} 64 & 21 \\ * & * \\$	28 100	29	93	24	*	*	98	26	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	26 69	30	64	21	*	*	73	26	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	31 54	22	¥	*	*	*	54	31	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	34 43	25	*	*	*	*	47	29	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	54 50	44	*	*	*	*	45	47	*	¥	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	51 43	47	*	*	*	*	45	47	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	43 40	50	*	*	*	*	41	58	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		65	×	*	*	*	52	69	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	85 59	80	¥	*	*	*	62	86	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	95 52	06	*	*	*	*	52	97	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	106 49	95	*	*	¥	*	60	98	* 0	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	98 60	87	*	*	*	*	54	89	*	¥	×
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	85 40	67	*	*	*	*	39	17	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	57 26	61	*	*	*	*	28	56	*	*	*
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	36 5	34	*	*	*	*	12	38	*	*	*
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	18 14	17	*	*	*	*	∞	21	*	*	¥.
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	941 832	872	256	78	0	0	865		0	0	0
8:00 8:00 10:00 10:00 <	1704		334		0		1790	- 1	0		0
93 24 98 31 98 31 1 4:00 6:00	11:00 8:00	00:6	8:00	8:00			8:00	10:00			
2014 2252 3666 2033	34 100	30	93	24		-	98	31			
2014 2252 3666 2033	2	6:00					4:00	6:00			
2252 3666 2033	106 60	95					62			_	
	2743	>>>	1 100		0000		2666		2033		1332

Park Drive Ellk Ridge

CLASS DATA ANALYSIS



Rocky Mountain Way Ellk Ridge





Longlude: -111.010304 9/24/2023	, B to A, None ed Specified	0	0	0	0	0	1	-			5 2					12 12					•	~	3	1 3	0	147 170	2	0:0		4:00 5:00
16	A to B, None Specified	~	C ¹	6		6	6		~	10	~											~	~	c.						
2023	B to A, None Specified	e	2	0	-	0	0	4	~	S	10	9	16	15	12	17	6	17	15	13	16	13	13	12	5	211		11:00	16	00.0
9/23/2023	A to B, None Specified	3	~	0	0	0	0	0	4	5	8	13	11	14	11	14	10	14	19	16	16	10	11	13	2	195	406	10:00	13	5.00
Werage	o	2	0	0	0	0	0	2	80	18	10	10	6	6	10	6	24	18	17	18	14	6	10	2	3	202		8:00	<u>0</u>	3.00
Weekday Average	A to B, None Specified	0	0	0	0	0	0	2	80	20	8	80	8	16	10	80	14	12	18	22	14	10	9	5	З	192	394	8:00	20	6.00
23	B to A, None Specified S	-	0	0	0	-	0	2	80	14	2	13	ი	8	10	9	23	23	13	21	16	7	10	5	5	194		8:00	14	3.00
9/22/2023	A to B, None Specified S	0	0	0	0	0	0	ო	Ø	17	7	6	ო	10	6	Ø	13	11	18	21	18	10	9	6	9	186	380	8:00	17	G-00
23	B to A, None Specified S	2	0	0	0	0	0	2	Ø	23	14	7	15	10	o	12	24	19	17	14	16	10	13	2	2	219		8:00	23	00.5
9/21/2023	A to B, None Specified S		0	~	0	0	0	2	6	22	Ø	7	14	22	10	8	16	17	19	23	11	б	10	4	2	215	434	8:00	22	0.00
23	o A, one cified	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13	21	20	11	6	9	0		81				E-00
9/20/2023	A to B, None Specified S	1.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8	16	22	12	11	С	2	~	75	156			0.00
23	o A, one cified		¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0				
9/19/2023	A to B, None Specified S		*	*	*	*	*	¥	*	×	¥	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	0	0			
123	o A, one cified	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	¥	*	¥	*	*	*	0				
9/18/2023	A to B, None Specified S		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0			
9/18/2023		12:00 AM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	00:6	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	00.6	10:00	11:00	Total	Day	AM Peak	Volume	-

Rocky Mountain Way Ellk Ridge

2023	B to A, None Specified	*	•		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	* ·	ĸ	0					
10/1/2023	A to B, None Specified	*	+	ĸ	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
2023	B to A, None Specified	*	+	ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	* ·	*	0					
9/30/2023	A to B, None Snecified	*	,	ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0	4			
Average	B to A, None Snecified	-	- (0	0	0	0	0	2	10	16	13	8	12	4	11	19	25	16	18	16	15	11	10	с С	с С	213		8:00	16	3:00	G7
Weekday Average	A to B, None Specified		0 0	0	0	0	0	~	2	6	18	ຓ	6	80	б	10	17	17	17	18	24	19	8	4	с С	0	202	415	8:00	18	6:00	24
2023	B to A, None Snecified	*		ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0					
9/29/2023	A to B, None Snecified	*		ĸ	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				
023	B to A, None Snecified			0	-	-	0	0	~	11	18	18	8	*	*	*	*	*	*	*	*	*	*	*	*	*	58	1	8:00	18		
9/28/2023	A to B, None Snacified			0	~	0	0	0	4	11	18	12	6	*	*	*	*	*	*	*	*	*	*	*	*	*	56	114	8:00	18		
023	B to A, None Specified	E	V	0	-	0	0	0	4	12	15	11	4	10	ო	14	17	30	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	22	18	14	5	5	с,	4	205		8:00	15	3:00	30
9/27/2023	A to B, None Snacified		D	0	0	0	0	0	č	9	20	Ø	5	6	7	12	15	18	22	20	19	15	9	4	e	0	192	397	8:00	20	4:00	22
023	B to A, None Specified	E	C	0	0	0	~	-	~	თ	13	14	8	16	9	12	15	32	23	17	19	12	14	16	ო	2	234		11:00	16	3:00	32
9/26/2023	A to B, None Specified		C	0	0	0	C		2	б	17	6	12	7	10	80	13	23	17	17	22	23	Ø	с С	с С	0	204	438	8:00	17	3:00	23
023	B to A, None	E	2	0	0	0		0	4	8	18	0	11	10	4	7	25	12	13	15	12	19	14	00	ო	2	196		8:00	18	2:00	25
9/25/2023	A to B, None		-	0	0	0	C	2	- -	0	18	80	1	6	10	б	22	1	13	16	30	20	<u>-</u>	5	2	-	209	405	8:00	18	6:00	30
9/25/2023	Time		12:00 AM	1:00	2:00	3:00	4-00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume

Rocky Mountain Way Ellk Ridge

CLASS DATA ANALYSIS







SPEED DATA ANALYSIS



														_	Latitude - ongitude: -	Latitude: 40.024665 Longitude: -111.687073
9/18/2023	9/18/2023	2023	9/19/2023	2023	9/20/2023	023	9/21/	9/21/2023	9/22/2023	2023	Weekday Average	Average	9/23/2023		9/24/2023	2023
Time	A to B,	B to A,	A to B, None	B to A,	A to B, None	B to A, None	A to B, None	B to A, None	A to B, None	B to A, None						
	Specified	Specified	Specified	Specified	p	Specified	Specified	Specified	Specified	Specified	Specified	Specified	Specified	Specified	Specified	Specified
12:00 AM	*	*	*	*	0	1	0	с С	0	4	0	Э	с	5	0	0
1:00	*	*	*	*	-	0	0	0	~	2	~	-	2	0	0	0
2:00	*	*	*	*	0	0	0	0	0	0	0	0	0	-	0	0
3:00	¥	*	*	*	0	2	0	~	0	0	0	~	~	2	-	0
4:00	*	*	*	*	4	0	-	0	0	0	2	0	0	~	က	~
5:00	*	*	*	*	6	~	9	e	Ļ	~	5	2	0	0	9	0
6:00	¥	*	*	*	10	5	9	-	5	с С	2	ო	0	-	80	с
7:00	¥	*	*	*	15	12	24	9	7	4	15	7	4	3	23	10
8:00	*	*	*	*	14	14	16	15	8	С	13	11	4	6	18	12
00:6	*	*	*	*	13	8		10	17	12	14	10	23	12	8	12
10:00	*	*	*	*	80	12	10	7	19	18	12	12	11	9	7	12
11:00	*	*	*	*	13	8	16	14	13	8	14	10	7	19	17	12
12:00 PM	*	*	4	ю	12	9	80	13	16	21	10	11	10	1	13	19
1:00	*	*	10	7	6	16	7	13	10	12	6	12	9	13	8	13
2:00	*	*	11	21	7	17	Ø	22	11	19	6	20	5	13	13	15
3:00	*	*	26	27	15	25	23	28	14	23	20	26	10	13	17	16
4:00	*	*	19	34	17	31	17	26	10	17	16	27	4	6	14	26
5:00	*	*	15	33	19	23	13	19	14	19	15	24	15	18	19	28
6:00	*	*	23	25	13	25	18	30	17	28	18	27	12	17	14	21
7:00	*	*	16	27	5	19	14	20	16	18	13	21	10	18	11	25
8:00	*	*	10	20	7	10	7	15	10	22	8	17	9		൭	20
9:00	*	*	2	11	e	15	2	11	7	13	5	12	4	2	00	13
10:00	*	*	0	4	2	6	5	13	7	13	4	10	2	4	~	7
11:00	*	*	-	~	-	0	З	3	2	12	2	4	0	-	0	ς
Total	0	0	137	213	197	259	220	273	205	272	212	271	139	189	218	268
Day	0		350	00	456	6	493	33	477	7	483		328		486	
AM Peak					7:00	8:00	7:00	80	10:00	10:00	7:00	10:00	9:00	11:00	7:00	8:00
Volume					15	14		15	19	18	15	12	23	19	23	12
PM Peak			3:00	4:00	5:00	4:00	3:00	6:00	6:00	6:00	3:00	4:00	5:00	5:00	5:00	5:00
Volume			26	34	19	31	23	30	17	28	20	27	15	18	19	28

Sky Hawk Drive Ellk Ridge ~

11.08/0/3	B to A,	None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	ĸ	*	*	*	*	*	*	*	*	*	*	0						
Longitude: -111.68/0/3 10/1/2023	A to B,	None Specified S	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				007	486
	B to A,	None	*	*	*	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	0						80
9/30/2023	A to B,	None Specified	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0				00	328
Average	B to A,	None Specified	-	0	0	0	4	~	3	10	15	11	0	16	10	12	21	28	24	29	26	18	18	8	4	4	269		11:00	91	00:9	59	6
Weekday Average	A to B,	None Specified	0	0	0		4	2	9	24	15	13	8	10	9	8	12	18	15	18	10	8	9	2	n	0	197	466	7:00	24	3:00	18	949
023	B to A,	None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						2
9/29/2023	A to B,	None Specified	*	*	*	*	*	*	*	*	*	*	*	*	*	¥	*	*	*	*	*	*	*	*	*	*	0	0					477
023	B to A,	σ	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0						
9/28/2023	A to B,	77		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0	0					493
023	B to A,	σ		0 0	C	0		. 0	ო	12	10	13	~	*	*	*	*	*	*	*	*	*	*	*	*	*	42		6:00	13			
9/27/2023	A to B.	-		. 0		o	·	о С	6	23	14	14	2	*	*	*	*	*	*	*	*	*	*	*	*	*	72	114	2:00	23			570
123	0 A.	σ	F	. 0	0 0	0 0) ~	- .	с С	0	13	13	14	15	11	13	23	30	17	30	21	16	18	10	4	4	267	8	11:00	15	3:00	30	11
9/26/2023	A to B.	σ		0		o ←	. 4	21	4	27	15	10	7	7	7	10	12	22	16	18	13	4	4	9	-	-	194	461	2:00	27	3:00	22	811
23	ο A.	τ		1 C				- -	· m	10	22	Ø	11	18	10	10	19	27	30	28	30	21	19	5	5	ო	282		8:00	22	4:00	30	-
9/25/2023	A to B.	7		0 0		-	- LC	0 4	ى م	23	17	14	15	13	4	7	13	14	14	19	00	13	7	00	2	0	209	491	7:00	23	5:00	19	491
9/25/2023			12-00 AM	1-00	00.0	3-00	4-00	5-00	6:00	7:00	8:00	00:6	10:00	11:00	12:00 PM	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	Total	Day	AM Peak	Volume	PM Peak	Volume	Comb Total

Sky Hawk Drive Ellk Ridge