



CITY COUNCIL

WORKSHOP AND REGULAR MEETING AGENDA

September 21, 2022
7:00 PM
202 Railroad Avenue, Rifle, CO

5:00 PM - Workshop Meeting

Discussion and Review

- a. Discuss Gateway Intersection Improvements
- b. Budget Workshop #2 - 2023 Budget
- c. Discuss Colorado FAMLI Program

7:00 PM - Regular Meeting

- 1. **Call to Order**
- 2. **Pledge of Allegiance**
- 3. **Roll Call**
- 4. **Public Comment**
- 5. **Consent Agenda**
 - 5.a. Consider Vacating a Portion of Whiteriver Avenue Right-of-Way at 236 East 1st Street - Ordinance No. 18, Series of 2022 - 2nd Reading
 - 5.b. Consider Approval to Purchase a 2021 Ford F-550 chassis (for medium-duty snowplow)
 - 5.c. Consider Minutes of the September 7, 2022, Regular Meeting
- 6. **Action, if any, on Workshop Items**
- 7. **Presentation**
 - 7.a. Recognize Tom Whitmore for 27 Years of Service to the City of Rifle
 - 7.b. Receive Presentation from YouthZone

7.c. Receive Presentation Regarding Island Outreach and Engagement Project Results

8. Regular Agenda

8.a. Consider Declining Participation in Colorado FAMLI Program - Resolution No. 13, Series of 2022

8.b. Ratification of Roadway Improvement Expenditure

8.c. Consider Third and Railroad Change Order for Final Payment

9. Administrative Reports

9.a. Report to City Manager

10. Comments from Mayor and Council

11. Executive Session

11.a. Executive Session for discussion of a personnel matter under C.R.S. Section 24-6-402(2)(f) and not involving: any specific employees who have requested discussion of the matter in open session; any member of this body or any elected official; the appointment of any person to fill an office of this body or of an elected official; or personnel policies that do not require the discussion of matters personal to particular employees - (Review of City Manager - 1 Year Review).

12. Adjournment



Agenda Item #a.

Agenda Item Name:

Discuss Gateway Intersection Improvements

Presenter:

Craig Spaulding, Civil Engineer

Item Description:

Discuss Gateway Intersection Improvements

Recommended Action:

N/A

Fiscal Impact:

Fiscal impact will occur later next year and the financial impact will be based upon the solution adopted.

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

N/A

Notification Requirements:

N/A

Prepared By:

Tommy Klein, City Manager

Attachments:

1. Rifle Gateway Traffic Report_09142022
2. Rifle Gateway Traffic Report_Appendices
3. Traffic Report recommendation_memo



ENGINEERING, REIMAGINED

Rifle Gateway Traffic Report September 2022

Prepared For:



EXECUTIVE SUMMARY

Existing issues with the Rifle Gateway study area identified failing traffic operations at US 6 and Whiteriver Avenue and the Hwy 13 and Whiteriver Avenue intersections. Five-year crash data identified an increasing average of 10.8 crashes per year, with 22 percent resulting in injury. The most common crash types are broadside and rear end type crashes at the three intersections. The intersection of US 6 and Whiteriver Ave exhibited a much higher-than-expected crash rate which meets CDOT's critical crash rate at similar intersections identifying the need for a safer design.

Future traffic growth was forecasted for the intersections in this study according to the CDOT Traffic Analysis and Forecasting Guidelines. Population growth, which had averaged about 3 to 4 percent per year from 1980-2005 has since leveled off to around 1 percent over the last 10 years representing 2045 Low Growth forecasts. Development growth expected in the *Downtown TOD Strategic Plan* is expected to create an additional 5,000 to 7,000 daily vehicle trips traveling into the study area in the 2045 Recreational / High Growth forecasts.

Table i – Future Traffic Daily Growth

Intersection	2022 AADT				2045 Historic Low Growth AADT				2045 Recreational / High Growth AADT			
	S Leg	N Leg	W Leg	E Leg	S Leg	N Leg	W Leg	E Leg	S Leg	N Leg	W Leg	E Leg
Hwy 13 and Whiteriver Ave	--	7,350	12,450	19,800	--	9,800	17,900	27,600	--	10,900	23,800	33,600
Railroad Ave and US 6	12,450	9,400	6,700	3,350	17,900	14,700	7,600	4,200	23,800	15,600	12,700	4,200
US 6 and Whiteriver Ave	7,350	6,250	3,350	5,250	9,800	8,600	4,200	6,400	10,900	9,800	4,200	6,400

Three build scenarios were compared including a signalized concept, mini roundabout concept, and multilane roundabout concept. The results of the BCA analysis show the signalized concept to have the highest benefit-cost ratio at over 64:1 with an expected benefit of \$72.7 Million in benefit over the next 20 years compared to \$1.5 Million in cost. The 2045 Multilane Roundabout with Metering maximizes the benefits for the study area up to \$78.0 Million, but also increases the total cost of the improvements to \$6.0 million. However, the Multilane Roundabout is expected to provide the best multimodal connections in the study area by providing mostly single lane ped crossings from Whiteriver Avenue to the existing trail on the south side of Hwy 13.

Figure i – Proposed Multilane Roundabout Concept



The recommended improvement for the Rifle Gateway Area is to convert the intersections of Whiteriver Avenue with Hwy 13 and US 6 into the Build 3 Multi-lane Roundabout, with the addition of metering on the northwest-bound approach to occur when warranted in approximately 15 to 20 years. This will provide the best available combination of reduced daily network delay, improved safety, better Park and Ride Access to residential areas, while increasing multimodal access through the addition of sidewalk connecting Whiteriver Avenue to existing multimodal facilities. While High Growth scenario results show the network close or at capacity during the PM Peak, expansion to a full 2x2 multilane roundabout in the future and additional future improvements at the Railroad Avenue and US 6 signalized intersection will provide acceptable operations even under the high-growth potential of the study area while maximizing the benefits over the next 20 years.

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INTRODUCTION

The intersections of Whiteriver Avenue, Centennial Parkway (US 6), 1st Street, and Railroad Avenue (Hwy 13) and adjacent intersections create unique traffic patterns and present both capacity and safety challenges in the downtown gateway area of Rifle, Colorado. The purpose of this report is to study the existing and future traffic operations and safety, evaluate alternative designs, and recommend improvements that will maximize multimodal safety and capacity of the study intersections. As noted in the *2019 Rifle Comprehensive Plan*, the current street configuration is expected to fail under future traffic volumes as the community continues to grow.

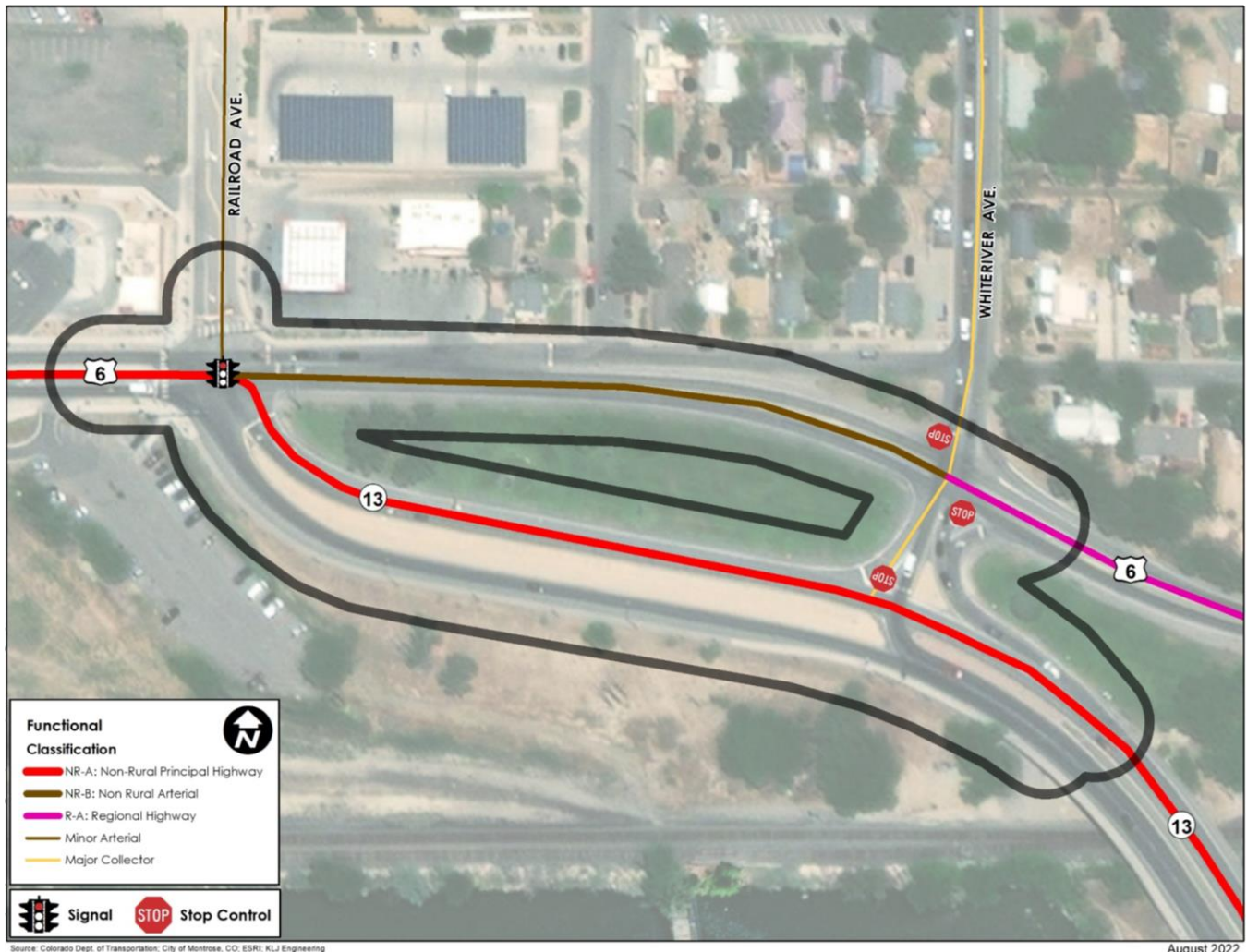
STUDY AREA AND BACKGROUND

The study area is located on the south edge of downtown Rifle and connects downtown across the Colorado River Bridge to the I-70 interstate, Rifle Airport, and a fast growing commercial and industrial area. As shown in **Figure 1**, the study area consists of Hwy 13 from Whiteriver Avenue to US 6, US 6 from Railroad Avenue to Whiteriver Avenue, and Whiteriver Avenue from US 6 to Hwy 13. The intersections that were studied include:

- » Hwy 13 and Whiteriver Avenue
- » Railroad Avenue and US 6 (Signal)
- » US 6 and Whiteriver Avenue

There are three analyzed intersections within the study area, one of which is signal-controlled while the other two are stop-controlled on the minor approaches. At Hwy 13 and Whiteriver Avenue, an eastbound bypass creates a continuous T.

Figure 1 - Study Intersections



Rifle Gateway Conceptual Alternatives Report

The Rifle Gateway Conceptual Alternatives Report, published in 2010, documents the development of alternatives seeking to improve the pedestrian paths, streets, and highways that constitute the principal gateways to downtown Rifle. Key among the project objectives were the creation of a distinctive and welcoming gateway design, accommodation of future traffic volumes, and encouragement of pedestrian use. Among other improvements, the recommended corridor conceptual alternative includes the conversion of the intersections of Whiteriver Avenue with Hwy 13 and US 6 to a roundabout configuration.

Rifle Downtown Transit Oriented Development Strategic Plan

The Rifle Downtown Transit Oriented Development Strategic Plan, published in 2014, identifies strategies for attracting investment to downtown Rifle, in part by positioning Rifle as a major node in a regional transit system. The staged expansion of regional bus rapid transit (BRT) is a key component of this plan. A north-south alignment along Railroad Ave and Hwy 13 that connects downtown with important destinations in North Rifle and South Rifle is the preferred local transit route and is targeted for initial implementation. It is therefore essential that the downtown gateway area be transit-ready, capable of supporting increased traffic volumes, and conducive to multimodal transportation.

ROADWAY CHARACTERISTICS

Hwy 13 is a four-lane roadway southeast of Whiteriver Avenue and transitions to a two-lane roadway west of Whiteriver Avenue. Both US 6 and Whiteriver Avenue are two-lane roadways. The posted speed limit along all roadways within the study area is 25 mph but increases to 40 MPH on Hwy 13 southeast of the study area.

Existing average annual daily traffic (AADT) is approximately 12,450 vehicles per day along Hwy 13 between US 6 and Whiteriver Avenue, 3,350 vehicles per day along US 6 between Hwy 13 and Whiteriver Avenue, and 7,350 along Whiteriver Avenue between US 6 and Hwy 13. The daily traffic volume experiences seasonal variation, increasing from average levels by approximately 10% during the recreational peak periods. The intersection of Hwy 13 and Whiteriver Avenue has the highest intersection volume at approximately 19,800 vehicles per day, followed by Railroad Avenue and US 6 at approximately 15,950 vehicles per day, and US 6 and Whiteriver Ave at approximately 11,100 vehicles per day.

FUNCTIONAL CLASSIFICATION

Most streets and highways have a predominant function: either to provide the motorist with access to a business/residence or to allow movement through an area. Functional classification is an important and widely accepted tool in planning highway system development and in fiscal planning. Arterials and Highways are meant to connect regional trips with less access, while collector roadways provide a balance between mobility and access. The functional classifications of study roadways are identified in **Figure 1**.

MULTIMODAL CONSIDERATIONS

There are three bus routes within the study area. The Roaring Fork Transit Authority (RFTA) operates the Hogback Bus Route along US 6 and Railroad Avenue in Rifle, connecting through Silt and New Castle to Glenwood Springs. A bus stop for this route is located at the Park & Ride southwest of the Railroad Avenue and US 6 intersection. The transit route has a 1 hour headway and operates between 5am-10am and 4pm-10pm. The Colorado DOT operates the Bustang Interregional Express Bus Service West Line Route along I-70, Hwy 13, US 6, and Railroad Avenue in Rifle, connecting to Grand Junction to the west and Denver to the east. There are four departure times in each direction throughout the day, operating between 6:45am and 10:20pm. The Traveler is an origin-to-destination service for seniors and those with disabilities that operates within a limited area of Rifle on weekdays. A sidewalk along the southwest side of Hwy 13 is the sole pedestrian connection to the commercial area south of the Colorado River and a sidewalk is also present on the north side of US 6. The study area does not include dedicated bike facilities and sidewalks are not currently wide enough to be conducive to bicycles.

EXISTING CONDITIONS

TRAFFIC VOLUMES

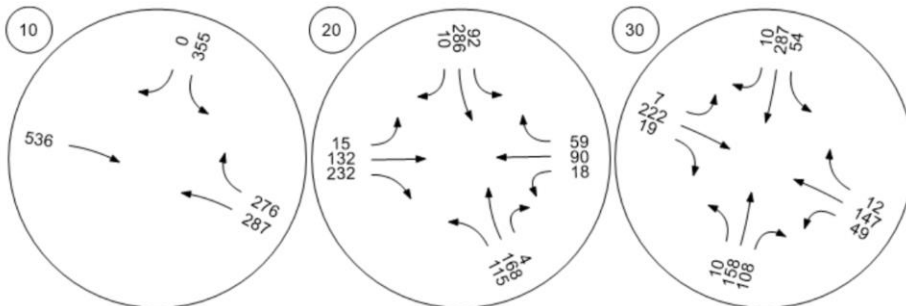
The current traffic volumes were studied to determine the existing traffic operation conditions and safety impacts. KLJ collected 24-hour video turning movement counts at the study intersections in March 2022. **Figure 2** shows the existing AM and PM Peak hour volumes at the three intersections.

Figure 2 - Existing Daily Traffic

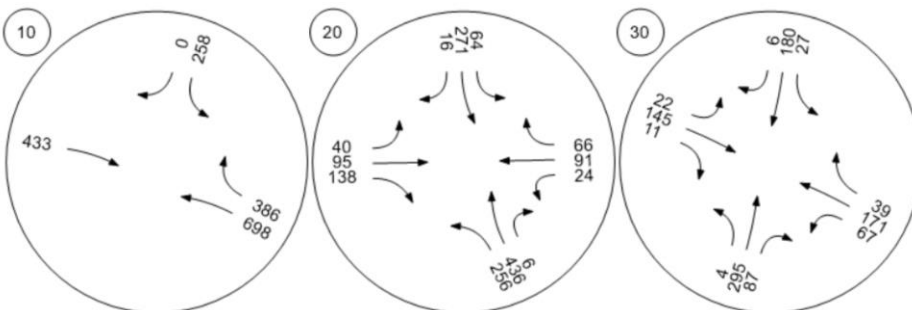


August 2022

Morning Peak (07:00 - 08:00 AM):



Evening Peak (05:00 - 06:00 PM):



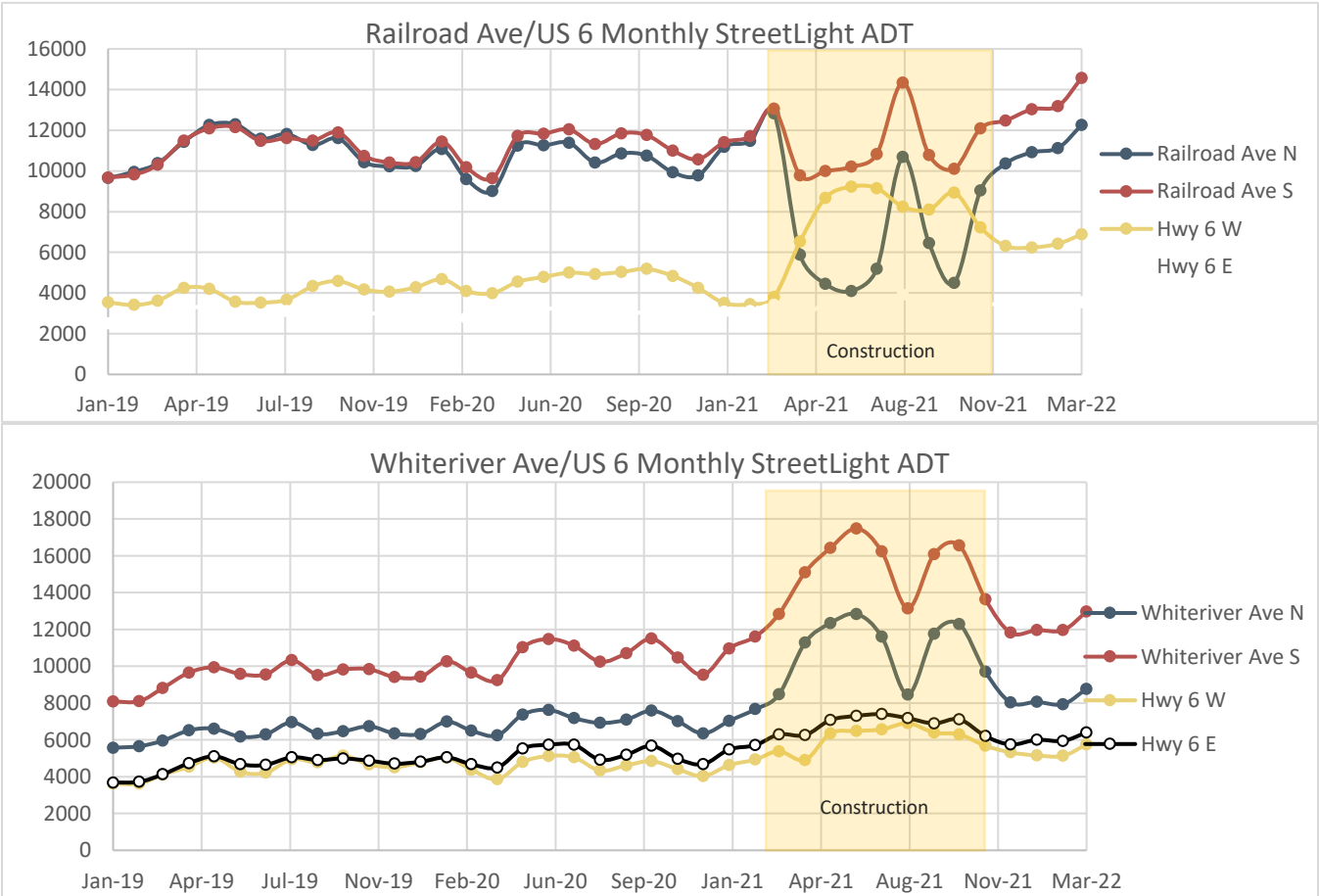
The 24-hour counts also included pedestrian and bicycle volumes to identify multimodal use within the study area. While pedestrian and bicycle volumes were very low in the counts, it is expected that multimodal activity does increase during the summer months especially at the Railroad Avenue/US 6 intersection with the Park and Ride to the southwest. Multimodal daily counts had 30 crossings on the north and west legs at the Railroad Avenue/US 6 intersection and 0-3 daily crossings at all other locations. 24-hour weekday volumes for the study area were finalized by validating intersection turning movements to AADT counts and StreetLight Data to represent above average conditions as a baseline. Raw count data can be found in **Appendix A**.

STREETLIGHT ANALYSIS

StreetLight data was used to supplement existing traffic data to provide a better understanding of the existing regional trips, provide turning movement count validation for study intersections, and to better understand the traveler and trip attributes in the study area. StreetLight utilizes anonymized location records from smart phones and navigation devices in cars and trucks to analyze regional travel patterns while preserving the anonymity of individual trips. This data is then calibrated to automatic traffic recorders to estimate traffic volumes matching the trip metrics for each roadway segment.

As seen in **Figure 3**, monthly variations in ADT reveal significantly altered network usage patterns from approximately March to October of 2021. This was caused by a closure on Railroad Avenue during this period; therefore, an average of 2019, early 2020, and 2022 values were used to perform validations to turning movement counts. StreetLight Data also identified that most of the study area roadways have seen a 15-20% increase in traffic volume between 2019 and 2022.

Figure 3 - StreetLight Seasonal Variation



WARRANTS ANALYSIS

Selecting the appropriate traffic control device requires consideration of traffic patterns, volumes, roadway geometry, lane configurations, crash conditions, and pedestrian/bicycle facilities. The Manual on Uniform Traffic Control Device (MUTCD) provides guidance and standards on the installation of traffic control methods (traffic signals, multi-way stop control, etc.) based on vehicle and pedestrian volumes and crash frequency thresholds for multiple roadway contexts. While no roundabout

specific warrants have been developed, roundabouts are generally justified in locations where a signal warrant or MWSA warrant has been warranted. Detailed warrant analysis is included in **Appendix B**.

Warrants were evaluated for the one signalized intersection and two stop-controlled intersections under existing traffic volumes. The following warrant analyses were conducted at the study intersections:

- » Warrant 1A – Eight-Hour Vehicular Volume: The Minimum Vehicular Volume, Condition A, is intended for application where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.
- » Warrant 1B – Eight-Hour Vehicular Volume: The Interruption of Continuous Traffic, Condition B, is intended for application where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.
- » Warrant 2 – Four-Hour Vehicular Volume: The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.
- » MWSA – Multi-Way Stop Applications: The MWSA warrant conditions are intended to be applied where the volume on all approaches to the intersection is approximately equal and the traffic volumes are relatively low. The MWSA alternative can be useful in unusual situations where two-way STOP control has not solved the safety problems, but where signalization is not yet warranted.

Table 1 - Signal Warrant Analysis

Intersection	Existing Control	Existing Conditions				
		Warrants with 100% Factor				Signal Warrant Met
		1A	1B	2	MWSA	
Hwy 13 & Whiteriver Ave	Stop	13/8	8/8	11/4	12/8	Yes
Railroad Ave & US 6	Signal	11/8	4/8	7/4	14/8	Yes
US 6 & Whiteriver Ave	Stop	0/8	0/8	3/4	8/8	No

The results from **Table 1** show that the intersections of Hwy 13 and Whiteriver Avenue and Railroad Avenue and US 6 both meet traffic signal warrants under existing conditions, while the intersection of US 6 and Whiteriver Avenue only meets the MWSA warrant. While traffic signal warrants are useful in identifying if an intersection has the appropriate level of traffic control, additional operations analysis should always be completed to quantify expected improvements and for selection of final traffic control at the intersection.

INTERSECTION ACCESS

Access density is a significant factor in the capacity and safety of a roadway, becoming more important as traffic volumes increase. For the intersections in this study, the closest and most potentially troublesome access comes from the intersection of 1st St and Whiteriver Avenue, which is located approximately 50' north from the intersection of US 6 and Whiteriver Avenue. This violates driver expectation and creates a heightened potential for conflict as traffic turns on and off US 6 from Whiteriver Avenue. Accesses near the intersection of Railroad Avenue and US 6, such as the driveways of the Park & Ride and Kum & Go, are more reasonably spaced and less likely to cause capacity or safety issues.

CORRIDOR CONSISTENCY

Across the Colorado River to the south, a traffic signal and two roundabouts currently circulate traffic between the commercial area, I-70, and TH 13. The conversion to a roundabout of one of more intersections within the downtown gateway area need to create corridor consistency within this portion of the corridor. Long term intersection control at Hwy 13 and the I-70 north ramps should match the recommendations of the gateway corridor if a roundabout corridor is proposed. Currently the assumption is that by 2045 a roundabout will be installed at the North I-70 ramp location converting this entire corridor into a roundabout corridor south of Railroad Avenue.

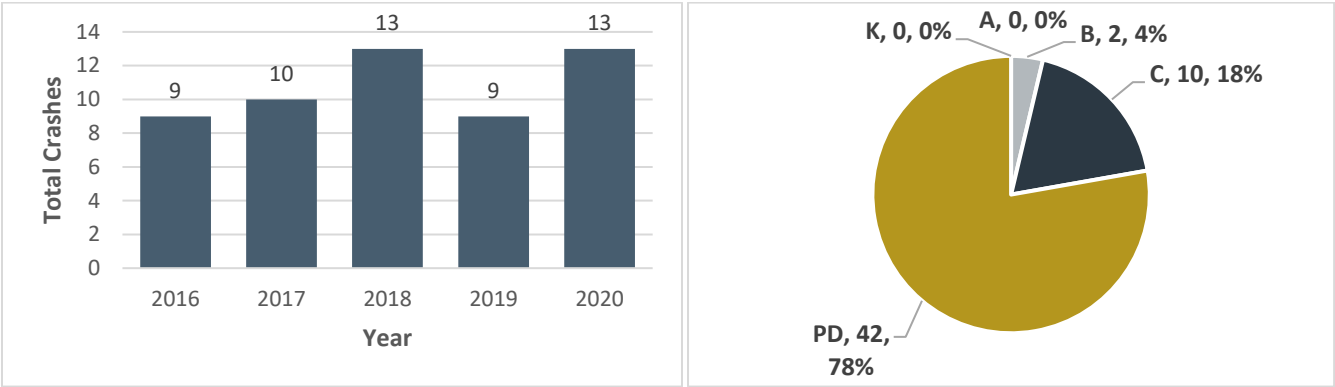
CRASH HISTORY

Reviewing historic crash information can help identify existing deficiencies that can be addressed through this study. Five years of crash records from January 1, 2016 through December 31, 2020 were obtained from the Colorado DOT. There were 54 crashes reported during this period within the study area. This total corresponds to an average of 10.8 crashes per year, with

2.4 crashes per year (22%) resulting in injury (including the possible injury classification). The estimated Crash Cost per year during this period, based on USDOT 2022 Crash Costs, is \$247,600.

Five-year crash frequency is shown in **Figure 4**. The number of crashes was generally increasing from 2016 to 2018, dropped in 2019, then returned to 2018 levels in 2020. Crashes were lowest in 2019 and highest in 2018 and 2020. Of the 54 total crashes during the five-year period, 42 involved property damage only (PD), 10 involved persons with possible injury (C), and 2 involved persons with suspected minor injury (B). There were no reported crashes involving either persons with suspected serious injury (A) or persons who were killed by the crash (K).

Figure 4 - Total Crashes by Year (left) and Severity (right)

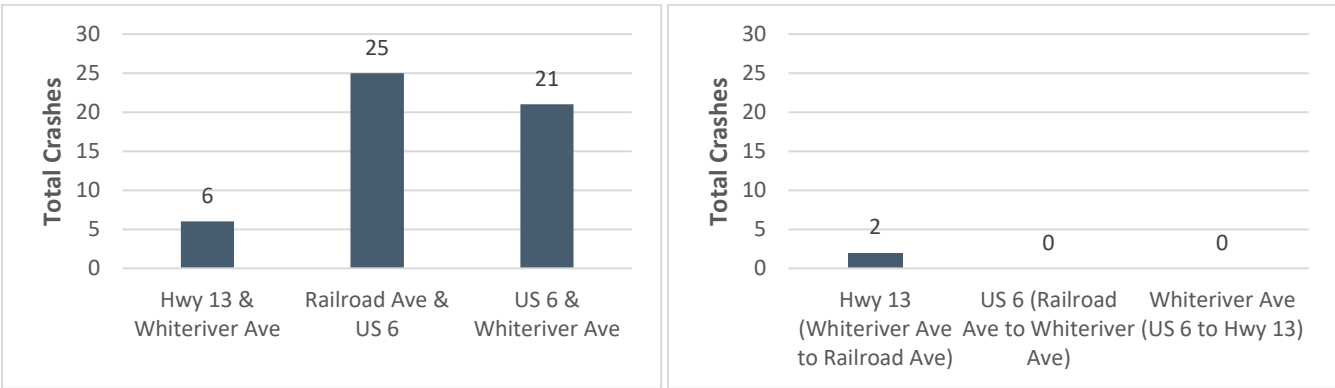


CRASH HOTSPOTS

Crash data was analyzed for both intersections and each roadway segment connecting them. This hotspot analysis, shown in **Figure 5**, identified high-crash locations within the study area. Details of these locations are found below.

- » Intersection Hotspots:
 - US 6 and Whiteriver Avenue – 21 total crashes occurred, including 13 broadside and 6 approach turn crashes. Angle type crashes are a big concern at this intersection due to congestion limiting gaps for turning traffic and possible injury crashes due to higher speeds to the southeast.
 - Railroad Avenue and US 6 – 25 total crashes occurred, including 13 rear-end, 5 sideswipe, and 4 approach turn crashes. Elevated rear end crashes are common at the existing traffic signal.
- » Segment Hotspot:
 - Hwy 13 – 2 total crashes occurred, including 1 sideswipe and 1 fixed object crash. No additional access points on Hwy 13 limit the expected number of crashes on that segment.

Figure 5 - Intersection Crashes (left) and Segment Crashes (right)

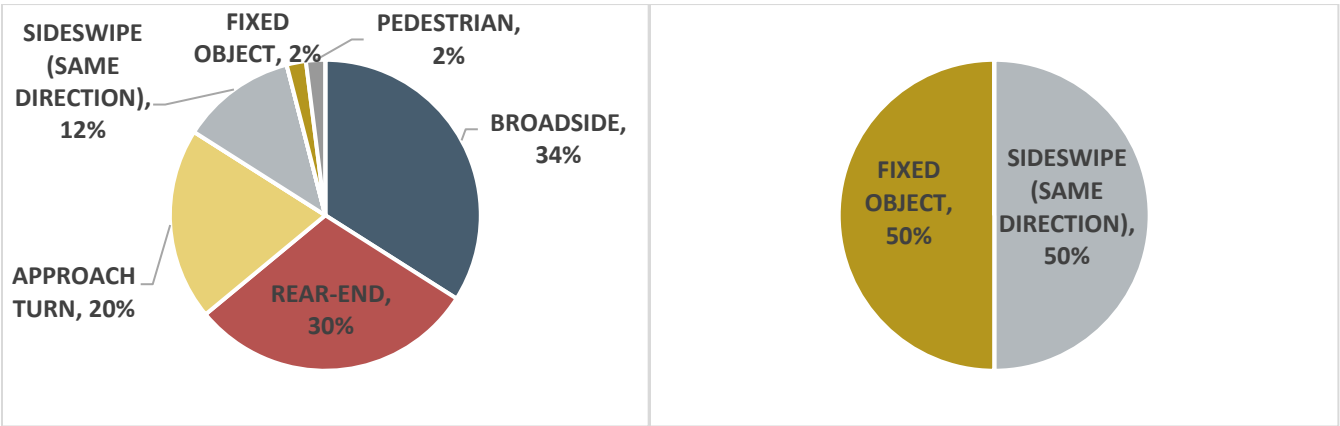


CRASH COLLISION TYPE

Identifying prevalent crash types allows for the development of countermeasures designed specifically to mitigate or reduce them. 52 intersection and 2 segment crashes were identified from the crash data and used to compare crash types, as shown in **Figure 6**. Broadside (34%), rear-end (30%), and approach turn (20%) crashes were the most typical crash types at

intersections. Sideswipe (same direction) (50%) and fixed object (50%) were the only two crash types reported along the segments. There was 1 pedestrian crash reported at the intersection of Railroad Avenue and US 6. The majority of crashes in the study area could likely be attributed to either a failure to properly yield right-of-way or failure to anticipate sudden stops, both of which could potentially be alleviated through congestion mitigation with improved traffic control.

Figure 6 - Crash Types for Intersections (left) and Segments (right)



LEVEL OF SERVICE OF SAFETY

The Colorado Department of Transportation (CDOT) quantifies Safety Performance Functions (SPF) for various types of roadways and intersections. The SPF reflects the relationship between the amount of traffic and the number of crashes per year on similar roadways. The SPF models provide an estimate of the expected crash frequency and severity for a range of AADT among similar facilities to compare analyzed locations throughout the state and assess a Level of Service of Safety (LOSS). LOSS is split into rankings of 1-4, with 1 representing a low crash reduction potential and 4 representing a high crash reduction potential. LOSS analysis was completed on both the total crash rate and the rate of injury and fatal crashes. An example of the SPF and LOSS analysis process is shown in Figure 7. LOSS analysis results for all intersections within the study area are provided in Table 2.

Figure 7 - Example Safety Performance Function Model (Hwy 13 and Whiteriver Ave)

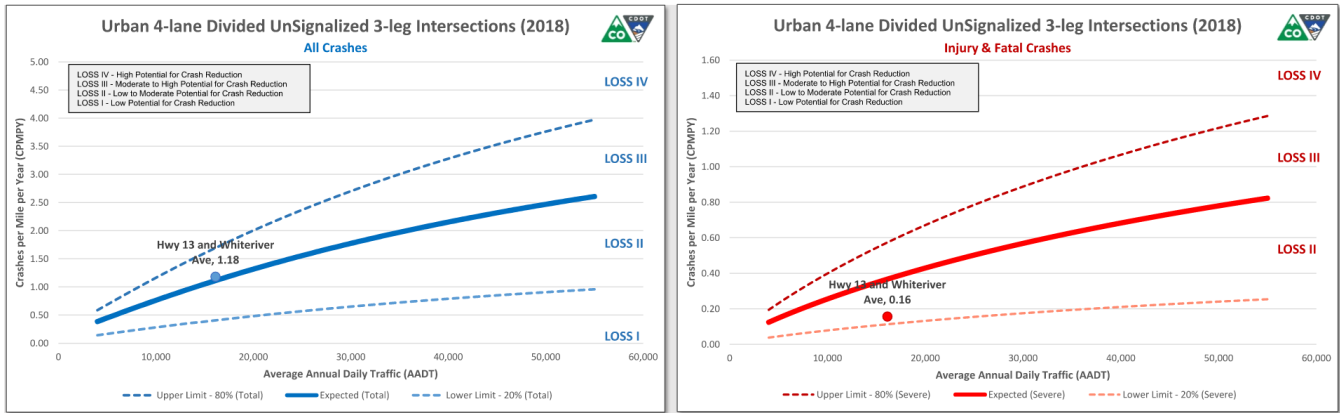


Table 2 - Intersection Safety Performance Function Summary

Intersection	LOSS	
	All Crashes	Injury and Fatal Crashes
Hwy 13 and Whiteriver Ave	III	II
Railroad Ave and US 6	III	III
US 6 and Whiteriver Ave	IV	III

LOSS analysis identified all the intersections within the study area as having either a moderate to high (LOSS III) or high (LOSS IV) potential for reduction of all crash types and either a low to moderate (LOSS II) or moderate to high (LOSS III) potential for reduction of injury and fatal crashes (see Appendix C for detailed models).

The intersection of US 6 and Whiteriver Ave exhibited a much higher-than-expected crash rate. Of the 21 total crashes reported, 13 (62%) were broadside crashes and 6 (29%) were approach turn crashes, with both crash types indicating a failure to properly yield right-of-way. Conversion to signalized or roundabout control at this intersection would likely result in significant reductions in total crashes, with conversion to a roundabout yielding even greater injury reductions.

The intersection of Railroad Ave and US 6 exhibited a moderately higher-than-expected crash rate. Of the 25 total crashes reported, 13 (52%) were rear-end crashes and 6 (29%) were approach turn crashes. For both crash types, high visibility enhancements to each signal, such as retroreflective borders or LED bulbs, as well as increased pavement friction could decrease potential future crashes. Additionally, improvements to the two Whiteriver intersections would likely shift some northbound traffic away from the Railroad Avenue intersection, thereby also reducing the number of crashes.

The intersection of Hwy 13 and Whiteriver Ave exhibited a crash rate essentially in line with expectations. Of the 6 total crashes reported, 4 (67%) were broadside crashes, which indicates a failure to properly yield right-of-way. Conversion to signalized or roundabout control at this intersection would likely have minimal reduction in total crashes, but a roundabout would help to decrease the severity potential because of the higher speeds just southeast of the intersection.

PEDESTRIAN AND BICYCLE RELATED CRASHES

There was one pedestrian related crash reported during the five-year analysis period, which resulted in possible injury. This occurred at the intersection of Railroad Ave and US 6 under dark conditions with no suspected impairments. Improvements to intersection lighting and pedestrian crossing enhancements may help to prevent future incidents of this type. There were no reported bicycle related crashes in the study area.

FUTURE CONDITIONS

Future growth rates were forecasted for the intersections in this study according to the CDOT Traffic Analysis and Forecasting Guidelines. The forecasts were determined using the Factor method using historical counts and population forecasts in the areas near the study intersections. The data sources that were used in the forecasting of traffic counts are the Online Transportation Information System (CDOT-OTIS) and the balanced existing count data that was gathered for this traffic study. Population growth, which had averaged about 3-4 percent per year from 1980-2005 but has since leveled off to around 1 percent over the last 10 years, was also considered in the future growth rate projections. Development growth expected in the *Downtown TOD Strategic Plan* identified almost 1 million sq ft of development expected to create around 10,000 trips within the west downtown study area. It is estimated that 50-70% of that traffic will distribute through the Railroad Avenue and US 6 intersection.

Taking both historical growth and potential areas of development into consideration, **Table 3** shows the projected growth in AADT's between 2022 and 2045. The 2045 Low Growth scenario matches the reduction in population growth rate over the last decade in the *2019 Rifle Comprehensive Plan*, but the 2045 Recreational / High Growth scenario matches the growth of the expected Centennial Parkway developments to the west of the study area. **Figure 8** and **Figure 9** show the projected 2045 Low Growth and High Growth turning movement counts for the AM and PM peaks.

Table 3 - Future Daily Traffic Growth

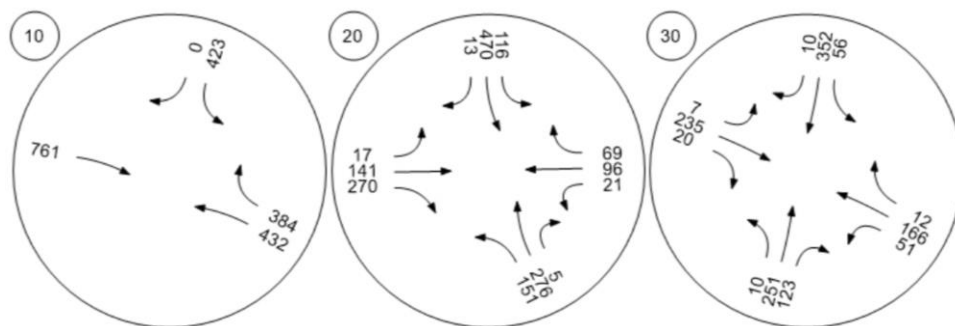
Intersection	2022 AADT				2045 Historic Low Growth AADT				2045 Recreational / High Growth AADT			
	S Leg	N Leg	W Leg	E Leg	S Leg	N Leg	W Leg	E Leg	S Leg	N Leg	W Leg	E Leg
Hwy 13 and Whiteriver Ave	--	7,350	12,450	19,800	--	9,800	17,900	27,600	--	10,900	23,800	33,600
Railroad Ave and US 6	12,450	9,400	6,700	3,350	17,900	14,700	7,600	4,200	23,800	15,600	12,700	4,200
US 6 and Whiteriver Ave	7,350	6,250	3,350	5,250	9,800	8,600	4,200	6,400	10,900	9,800	4,200	6,400

Figure 8 - Future 2045 Historic Low Growth Peak Hour Traffic



August 2022

Morning Peak (07:00 - 08:00 AM):



Evening Peak (05:00 - 06:00 PM):

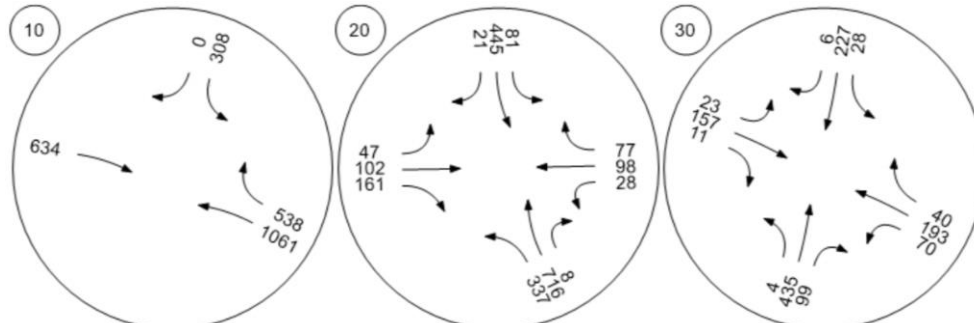
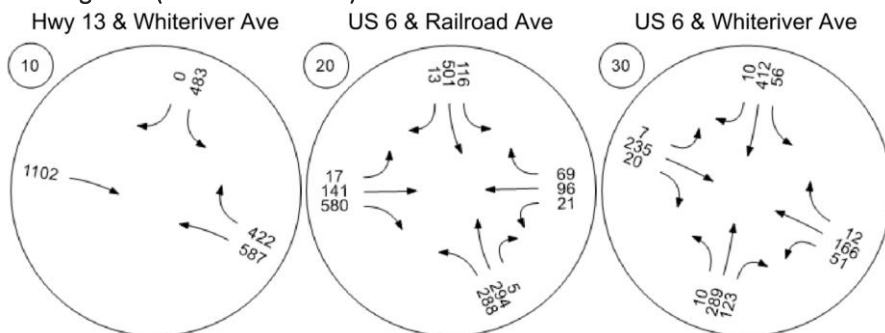


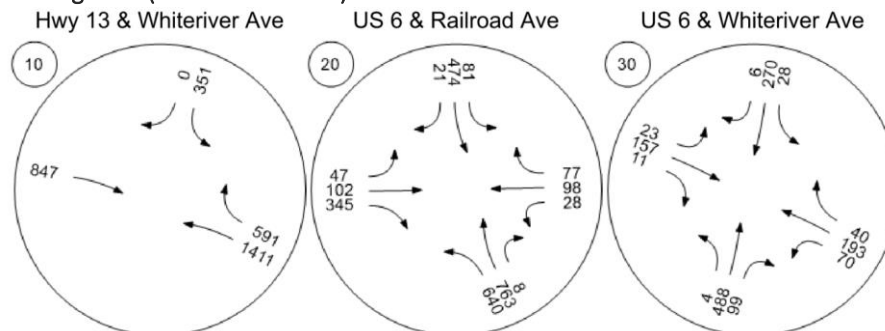
Figure 9 - Future 2045 Recreational / High Growth Peak Hour Traffic



Morning Peak (07:00 - 08:00 AM):



Evening Peak (05:00 - 06:00 PM):



TRAFFIC OPERATIONS

METHODOLOGY

Intersection level of service (LOS) analysis is based on the *Highway Capacity Manual (HCM)* methodology. Control delay thresholds for each level of service can be seen in **Table 4**. At intersections, LOS is a function of average delay per vehicle, where LOS “A” represents free-flow traffic and LOS “F” represents unacceptable delay. LOS “E” or worse is generally considered deficient. In the case of unsignalized intersections, the LOS is measured based on the worst approach delay observed at the intersection. Traffic operations analysis was completed for existing 2022 and future 2045 timeframes with each scenario evaluated for a 24-hour period with an emphasis on peak hour results. Traffic models were created and analyzed for the traffic operations using PTV VISSIM, which is a microsimulation program including geometry such as number of lanes, storage lengths, link distances, speed limits, traffic volumes, and signal timing parameters.

Table 4 - Intersection Delay and Level of Service Thresholds

LOS	Control Delay Per Vehicle (sec.)	
	Unsignalized Intersection	Signalized Intersection
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Existing signal timings were used for the 2022 existing conditions, while optimized timings were used for 2045 conditions. The results of the analysis are displayed as measures of effectiveness (MOE) reports. The primary MOEs that are used in the study are intersection level of service (LOS), hourly network delays, and total daily delay.

SCENARIOS

Four scenarios in addition to the No-Build condition were considered, with scenarios modeled for 2022, 2045, and 2045 Recreational / High Growth volumes as appropriate. “No-Build” refers to conditions under no geometric improvements and “Build” refers to scenarios with geometric improvements. The scenarios included:

- » No-Build: No geometric improvements with optimized signal timings at Railroad Avenue and US 6.
- » Build Scenario 1 (Build 1): This alternative includes the conversion of the intersection control at the US 6 and Whiteriver and Hwy 13 and Whiteriver intersections to a signalized intersection. No Lane configuration changes are expected with this scenario except for the NB Hwy 13 to Whiteriver Avenue movement providing a larger turning radius and more queuing space. Signal timing would be one controller for both the US 6 and Hwy 13 intersections with Whiteriver that would limit queuing in the spur road between the two. Failing operations would be expected during peak periods if signal was operating in flash mode however the two intersections would function as an all-way stop and still process traffic during off-peaks.
- » Build Scenario 2 (Build 2): This alternative includes the conversion of the intersection of US 6 and Whiteriver to a mini roundabout and the intersection control at the Hwy 13 and Whiteriver intersection to signalized (see **Figure 10**).
- » Build Scenario 3 (Build 3): This alternative includes the conversion of the US 6 and Whiteriver and Hwy 13 and Whiteriver intersections to a single roundabout with an eastbound bypass (see **Figure 11**).
- » Build Scenario 4 (Build 4): This alternative is the same as Build 3, with the addition of metering on the northwest-bound approach to address excessive queueing that results from projected increased traffic volumes.

Expansion of the park and ride facilities SW of the Railroad Avenue and US 6 intersection are expected over the next 25 years and a right-in right-out access is expected to be tied into Hwy 13 between US 6 and Whiteriver Avenue. Build Scenario 3 would best accommodate exiting park and ride traffic by allowing traffic to still reach destinations north on Whiteriver Avenue and east on US 6. Build Scenarios 1 and 2 would not allow for this movement and are more likely to increase congestion at the US 6 and Railroad Avenue intersection. Build 3 allows both the Hwy 13 and US 6 access to split exiting traffic in the PM Peak.

Figure 10 - Build Scenario 2 Concept



Figure 11 - Build Scenario 3 Concept



INTERSECTION LEVEL OF SERVICE RESULTS

The intersection level of service (LOS) results are shown in **Table 5**. Detailed traffic operation results are included in **Appendix D**. The Existing/No-Build and four build scenarios were modeled under 2022, 2045, and 2045 seasonal peak traffic volumes as appropriate. The 2045 seasonal peak volumes represent an expected 10% increase in traffic along Hwy 13 and Railroad Avenue during the annual peak recreation season. Traffic results for unsignalized intersections are shown with the total intersection LOS followed by the worst approach LOS in brackets.

Table 5 - Intersection Level of Service Results

2022 Existing	2022 Existing - TWSC		2022 Build 1 - Signal		2022 Build 2 – Mini RAB		2022 Build 3 - MLRAB	
Intersection	AM	PM	AM	PM	AM	PM	AM	PM
Hwy 13 and Whiteriver Ave	A [C]	F [F]	A	A	A	A	A	A
Railroad Ave and US 6	B	B	B	B	B	B	B	A
US 6 and Whiteriver Ave	F [F]	F [F]	B	B	C	F		

2045 Historic Low Growth	2045 No-Build - TWSC		2045 Build 1 - Signal		2045 Build 2 – Mini RAB		2045 Build 3 - MLRAB		2045 Build 4 – Metered MLRAB	
Intersection	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Hwy 13 and Whiteriver Ave	C [E]	F [F]	A	B	A [D]	A [F]	A	E	A	C
Railroad Ave and US 6	B	B	C	C	C	D	B	B	B	B
US 6 and Whiteriver Ave	F [F]	F [F]	B	B	F	F				

2045 Recreational / High Growth	2045 Build 1 - Signal		2045 Build 2 – Mini RAB		2045 Build 3 - MLRAB		2045 Build 4 – Metered MLRAB	
Intersection	AM	PM	AM	PM	AM	PM	AM	PM
Hwy 13 and Whiteriver Ave	A	E	A/E	E/F	A	F	A	F
Railroad Ave and US 6	E	E	F	F	E	C	E	C
US 6 and Whiteriver Ave	B	B	F	F				

Note: Values in brackets correspond to the worst approach LOS for side street stop intersections.

Intersection level of service results under 2022 traffic volumes show significant deficiencies in the existing configuration. While the signalized intersection of Railroad Ave and US 6 currently operates at an acceptable level of service at all times, the two stop-controlled intersections demonstrate unacceptable levels of service during the PM Peak hour, with US 6 and Whiteriver Ave also operating at unacceptable levels during the AM Peak hour due to backups from the southbound left movement at Hwy 13 and Whiteriver Avenue. Build Scenarios 1 and 3 are both expected to provide significant improvements to intersection level of service under current traffic volumes, while Build 2 yields only modest improvements.

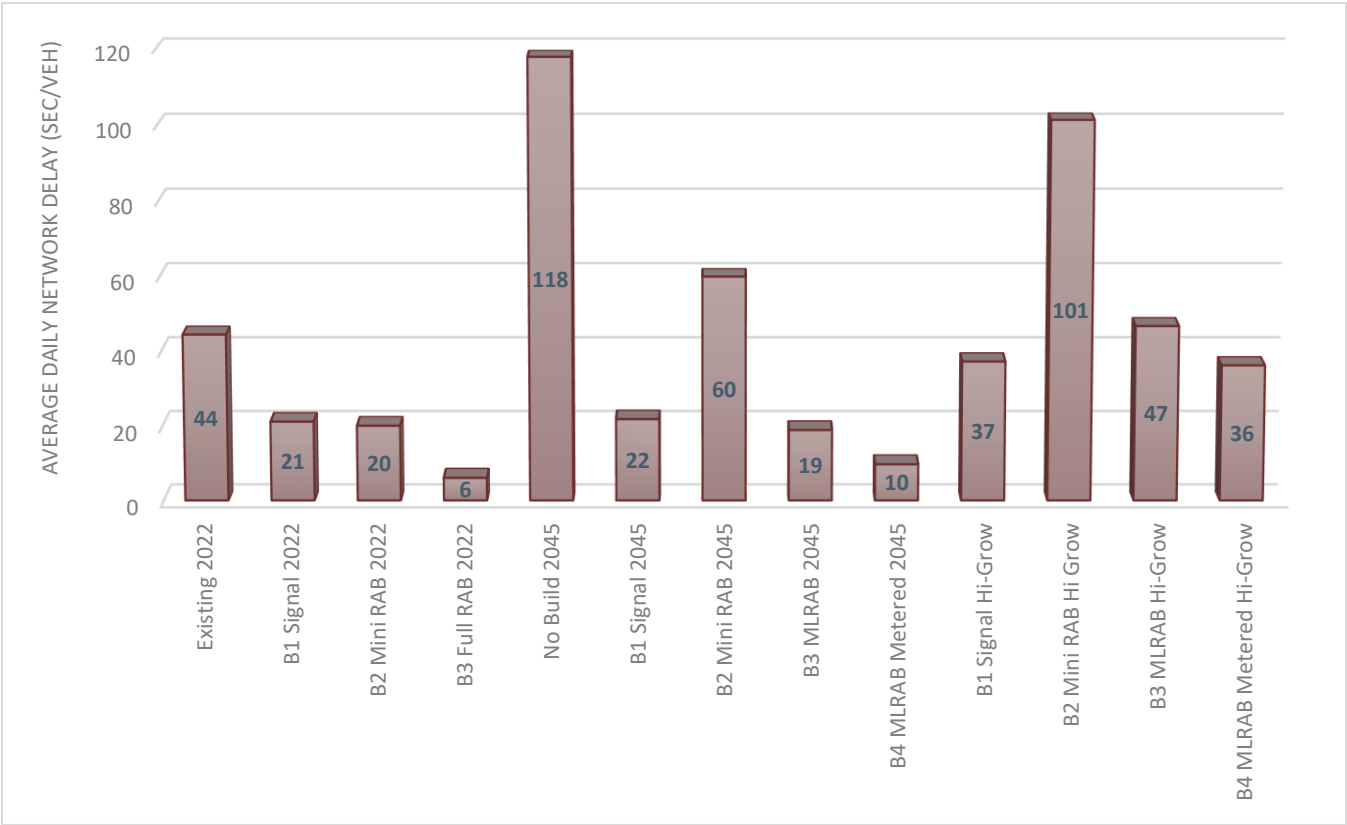
Intersection level of service results under projected 2045 Historical Low Growth peak traffic volumes show that Build 1 is able to accommodate the increased traffic very well during peak hours, while Builds 3 begin to show deficiencies during the PM Peak period. With the addition of the northwest bound approach metering, the LOS E is reduced to an acceptable LOS C during that PM Peak.

As an additional analysis for higher growth potential to the west of Railroad Avenue called for in Rifle's growth plan, the 2045 Recreational / High Growth analysis for Build conditions showed that Build 1 and Build 4 reached capacity from the additional traffic. These results show that although the multilane roundabout will reach capacity at Whiteriver Avenue, the traffic signal at Railroad Avenue will also need to be redesigned in the 20-year high growth scenario. While the PM Peak period results for the roundabout are about 30-50% worse than the signalized alternative, AM Peak and Off Peak results still show a benefit of the Multilane roundabout over the traffic signal option. 2045 Recreational / High Growth for the No Build Conditions were determined to be overcapacity and not realistic for comparison purposes.

NETWORK OPERATIONS

Network results are essential to understanding the overall experience of users and operations of all intersections in a typical full trip within the study area. **Figure 12** summarizes the network delay for the entire daily model while **Table 6** provides an hourly breakdown of network delay.

Figure 12 - Daily Network Average Vehicle Delay



Daily network results show that going from existing conditions to future No Build conditions is expected to cause an over 268 percent increase in average delay per vehicle throughout the study area. Much like what was seen in the level of service results, the Build 1 alternative provides a lower level of average delay that is only minorly impacted by an increase from 2022 to 2045 traffic volumes. Build 3 provides even lower levels of average delay, with a transition to metering (Build 4) allowing the full roundabout to maintain its advantage into 2045. With the High Growth 2045 forecasts, average delay increases for both Build 1 and Build 4 to where the average delay per vehicle in the network is over 35 seconds/vehicle and these increase to over 2.5-3 minutes during the PM Peak Hour.

The hourly network results in **Table 6** show how the multilane roundabout produces better network average vehicle delay in 2045 than the signal option, despite poorer level of service results during the PM Peak hour. This is because the roundabout’s higher delay at 17:00 is offset by much lower delay throughout the remainder of the day. While the PM Peak starts to fail for the Build 3 Multilane roundabout, installing metering in Build 4 provides similar operations results to Build 1 while minimizing the delay for all other time periods.

With the High Growth scenarios, all build alternatives are expected to see higher PM Peak congestion showing the need for additional lanes to be added on Hwy 13 for any of the scenarios. Only Build 4 during the High-Growth analysis period minimizes delay to lower than existing conditions for the majority of off-peak hours. For 20 of 24 hours during the day, Build 4 provides an operational benefit over both Build 1 and compared back to the existing delay. 2045 High-Growth delay for Build 4 is only 5-8% worse than the existing delay on the corridor for the remaining four hours in the 2045 High-Growth PM Peak Period. Regardless of the scenario, right-of-way should be maintained to allow for expansion to a 4-lane signalized roadway option through Railroad Avenue or a full 2x2 multilane roundabout to address long-term operational concerns. Realignment of Hwy 13 from the south to east leg of Railroad Avenue may also help address future long-term growth to the west.

Table 6 - Hourly Network Average Vehicle Delay

Delay (s/veh)	Existing 2022	B1 Signal 2022	B2 Mini RAB 2022	B3 Full RAB 2022	No Build 2045	B1 Signal 2045	B2 Mini RAB 2045	B3 MLRAB 2045	B4 MLRAB Metered 2045	B1 Signal Hi-Grow	B2 Mini RAB Hi Grow	B3 MLRAB Hi-Grow	B4 MLRAB Metered Hi-Grow
0:00	4.6	17.8	3.6	2.2	4.5	17.5	3.3	2.1	2.1	15.8	3.4	2.4	2.5
1:00	3.7	15.4	3.0	2.1	3.5	13.5	2.9	2.1	2.1	13.8	3.6	2.5	2.5
2:00	5.8	24.5	4.1	1.8	5.7	20.7	3.7	1.8	1.9	17.4	3.9	2.2	2.3
3:00	5.0	18.6	4.0	2.5	4.6	15.1	3.6	2.5	2.5	14.5	5.6	3.2	3.2
4:00	7.2	22.7	5.2	2.3	7.0	19.7	4.9	2.5	2.5	19.9	5.2	2.8	2.9
5:00	9.6	20.1	7.6	4.4	10.4	19.0	8.4	5.3	5.3	18.7	10.6	7.3	7.3
6:00	18.6	23.3	12.2	6.9	73.2	23.3	19.7	8.7	8.6	26.1	81.1	13.3	13.1
7:00	92.9	26.7	27.3	11.2	114.0	30.3	85.9	17.5	16.2	81.2	160.4	90.4	71.8
8:00	131.4	23.3	16.4	7.7	113.6	24.6	105.3	11.2	10.2	57.5	129.7	56.6	34.3
9:00	109.7	20.9	10.3	6.4	123.2	21.4	114.8	7.8	7.8	23.0	105.6	13.8	11.1
10:00	15.7	19.9	9.3	5.9	121.8	20.3	94.2	7.7	7.4	22.0	107.8	10.5	10.3
11:00	14.3	20.6	11.3	7.4	115.8	22.4	59.1	9.8	9.5	25.1	101.6	15.5	15.1
12:00	18.3	21.6	13.1	8.0	116.3	24.3	64.5	11.1	10.5	28.2	107.0	24.3	17.5
13:00	17.0	21.2	11.4	7.2	118.1	23.6	82.5	9.5	9.2	25.6	102.9	17.3	13.7
14:00	16.0	21.4	11.9	7.4	118.6	23.9	63.7	9.8	9.5	26.2	101.9	16.3	14.4
15:00	20.5	23.3	13.0	8.4	176.4	26.3	73.1	12.3	11.1	31.6	105.0	34.9	18.7
16:00	102.0	25.9	65.8	12.4	253.6	30.7	96.8	68.6	29.2	70.7	140.2	136.0	129.8
17:00	176.6	26.1	102.5	13.9	273.6	32.2	125.6	113.6	50.1	149.4	202.5	230.0	190.3
18:00	154.3	24.2	101.9	9.3	263.5	28.2	109.6	93.7	16.1	125.1	170.1	211.0	169.2
19:00	116.2	19.7	29.3	5.6	260.0	20.2	116.2	42.7	7.2	37.0	116.0	137.8	119.4
20:00	10.2	18.7	6.1	4.0	276.6	18.4	133.4	4.6	4.7	18.5	129.6	69.8	7.7
21:00	7.6	18.8	5.9	3.7	189.3	17.6	58.7	4.2	4.2	17.4	141.9	16.7	5.4
22:00	5.6	17.8	4.0	2.4	81.4	16.2	4.3	3.0	3.1	16.0	179.2	3.6	3.7
23:00	4.0	14.8	2.7	2.1	3.8	14.0	2.5	2.0	2.1	13.1	216.6	2.6	2.7
Average Daily Delay	44	21	20	6	118	22	60	19	10	37	101	47	36

SURROGATE SAFETY ASSESSMENT MODEL (SSAM)

To establish a baseline for future safety comparisons between alternatives, simulated vehicle conflicts were tabulated from VISSIM vehicle trajectory results using the Surrogate Safety Assessment Model (SSAM). SSAM uses VISSIM modeled vehicle trajectory information to analyze vehicle-to-vehicle interactions and identify conflict events and near-miss conflicts. This analysis considers vehicle speeds, deceleration characteristics, typical gap acceptance behavior, traffic volumes, and site-specific vehicle paths to quantify predicted conflicts for crossing, rear end, and merging crash types. It is important to note that simulated conflicts may not directly correlate to crashes, rather the tool is intended to identify conditions with a high potential for crashes and provide a percentage comparison between existing conditions and alternative concepts. Analysis was completed for the 2022 and 2045 low growth scenarios to use in the crash benefit analysis. The details of the SSAM analysis are presented in **Figure 13**, with calculated Crash Cost based on historical severity data show in **Table 7**.

Figure 13 - SSAM Daily Vehicular Conflicts

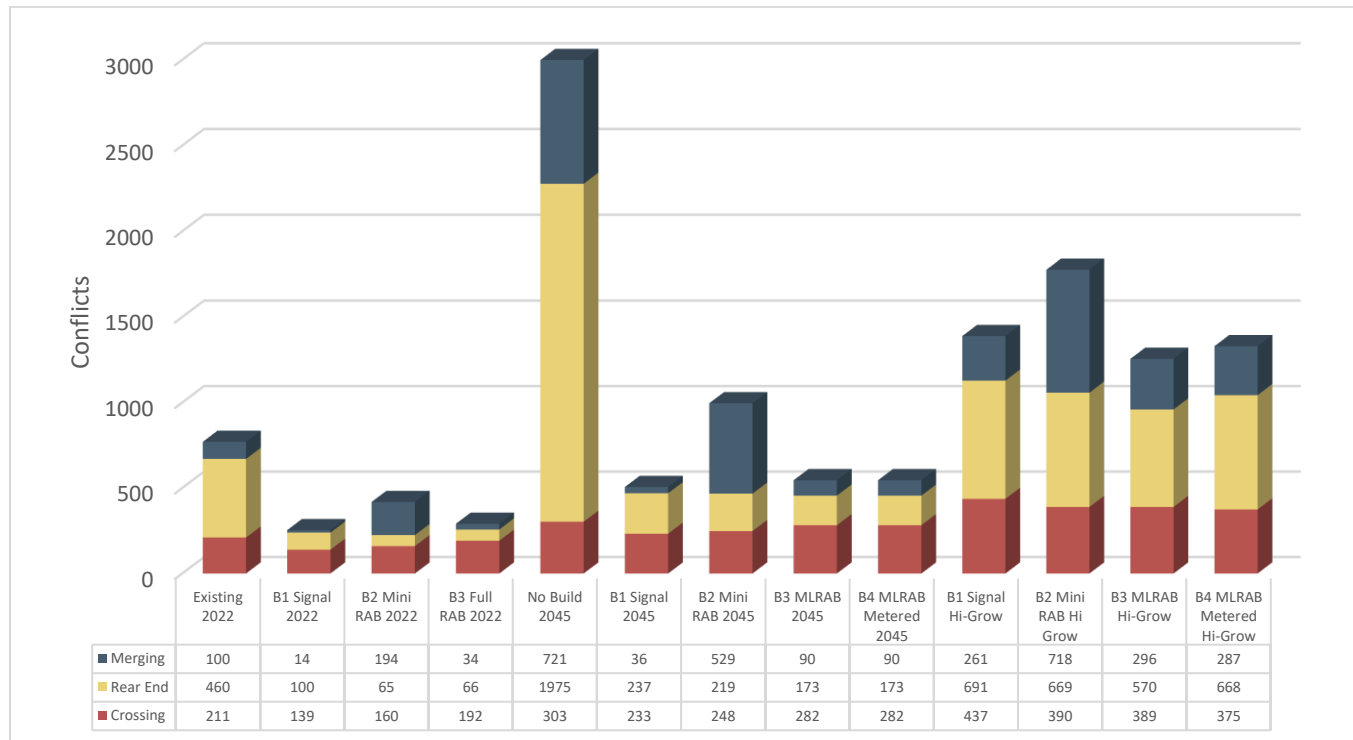


Table 7 - Expected Vehicular Crash Cost per Year

Year	Existing/No Build	Build 1 Signal	Build 2 Mini RAB	Build 3 Full RAB	Build 4 Full RAB Metered
2024	\$1.47M	\$0.47M	\$0.76M	\$0.82M	No Metering
2045 Low-Growth	\$4.11M	\$1.21M	\$1.37M	\$1.30M	\$1.30M
2045 Hi-Growth	Over Capacity	\$2.60M	\$2.54M	\$2.28M	\$2.37M

Results from the SSAM analysis show reduced vehicular conflicts in all build alternative scenarios, relative to the Existing/No Build conditions. The build conditions exhibit very similar predicted values for the three conflict types, with the exception being the significantly higher number of merging conflicts seen in the Build 2 Mini RAB option. Both crossing and rear end conflict types made up 93 percent of the existing crash cost. Vehicular crash cost per year is expected to be substantially lower under all build alternatives than in the Existing/No Build conditions for both the near-term and long-term. Crash reduction benefits range from 0.65-1.00 Million per year in 2022 and up to 2.9 million per year by 2045 Low-Growth before benefit to cost discounting. With Hi-Growth volumes for Build conditions, safety benefits are expected to still be roughly a 35-45% benefit compared to the capacity constrained Low-Growth No Build conditions with the roundabout options providing the lowest expected crash cost in the Hi-Growth options.

BENEFIT-COST ANALYSIS

Benefit-Cost Analysis (BCA) provides an indication of the economic desirability of an alternative by comparing the operations and safety benefits along with the assessment of other costs and impacts. Projects are considered cost-effective if the benefit-cost ratio is greater than 1.0. The larger the ratio number, the greater the benefits per unit cost. Total benefits for travel time and safety are also a good indication of the full benefit of an alternative.

A BCA based on USDOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs (SFY2022) was performed for each the three build alternatives. Vehicle miles traveled (VMT), vehicle hours traveled (VHT), and crash reduction savings using SSAM were quantified to show operational and safety benefits. Construction costs, maintenance costs, and remaining capital value were quantified to represent the total user costs for the project. A full list of assumptions and workbooks for the BCA analysis are included in **Appendix E**.

Table 8 - 20-Year BCA Analysis Results for 2023 Construction

Build Alternative	VHT Benefit	Safety Benefit	Total Benefit	Total Cost	Net Cost	Benefit / Cost Ratio
2045 Signal	\$71.4M	\$1.2M	\$72.7M	\$1.5M	\$1.1M	64
2045 Mini RAB	\$45.0M	\$1.1M	\$46.0M	\$2.5M	\$1.9M	24
2045 Full RAB	\$71.3M	\$0.9M	\$71.9M	\$6.0M	\$4.6M	16
2045 MLRAB Metered	\$77.5M	\$0.9M	\$78.4M	\$6.0M	\$4.6M	17

As seen in **Table 8**, the results of the BCA analysis show the conversion of the intersections of Whiteriver Avenue with Hwy 13 and US 6 to signal control to have the highest benefit-cost ratio at over 64:1. The conversion to signal control is expected to provide about \$72.7 million in benefit, with the total cost of the signal system and lane improvements expected to be about \$1.5 million. The Mini Roundabout option is expected to have less VHT benefit comparatively but increase the total cost of the project to \$2.5 million. The 2045 Multilane Roundabout with Metering maximizes the VHT benefits for the study area but also increases the total cost of the improvements to \$6.0 million. This represents an increased benefit of \$5.7 million over the fully signalized alternative, for an additional total cost of \$4.5 million still representing a benefit to the study area over the 20-year life of the project.

MULTIMODAL BENEFITS

Build options are expected to improve multimodal connections along Whiteriver Avenue by providing a crossing from north of US 6 to the existing multimodal sidewalk on the south side of Hwy 13. With Build 1 Signals, this movement would consist of a 3-stage crossing with 2 separate signal phases, and then a final RRFB crossing of the bypass lane. The Mini Roundabout would consist of a 4-stage crossing of two signal lane RAB approaches and two RRFB crossings with one being a two-lane section. The Multilane Roundabout would be a 3-stage crossing with two roundabout approach crossings with one being multilane with a final single lane RRFB crossing of the bypass lane. The Multilane Roundabout is expected to have the highest multimodal crossing safety by limiting speed of the conflicts, and by eliminating the SBL/NBL permissive left signalized conflict in Build 1.

SUMMARY

The recommended improvement for the Rifle Gateway Area is to convert the intersections of Whiteriver Avenue with Hwy 13 and US 6 into the Build 3 Multi-lane Roundabout, with the addition of metering on the northwest-bound approach to occur when warranted by increased traffic volumes in approximately 15 to 20 years. This will provide the best available combination of reduced daily network delay, improved safety, better Park and Ride Access, while increasing multimodal access through the addition of sidewalk connecting Whiteriver Avenue to existing multimodal facilities. While High Growth scenario results show the network breaking down during the PM Peak, expansion to a full 2x2 multilane roundabout in the future could provide necessary capacity in addition to future improvements at the Railroad Avenue and US 6 signalized intersection.

It is also noted that the Build 1 Signal alternative would also provide an overall network benefit to the project area with a high benefit to cost ratio. Build 1 comparatively to Build 2 would not be as multimodal focused, would not slow speeds, and would serve as less of a gateway intersection to the future Centennial Parkway development expected to the west. If the city is unable to identify funding for the Build 2 project, Build 1 improvements would serve as a valuable improvement to the study area and would provide future operations at an LOS E for the high growth peak.

APPENDIX A

EXISTING TRAFFIC DATA

APPENDIX B

WARRANT ANALYSIS

APPENDIX C

CRASH REPORTS

APPENDIX D

TRAFFIC OPERATIONS ANALYSIS RESULTS

APPENDIX E

BENEFIT-COST ANALYSIS

APPENDIX A

EXISTING TRAFFIC DATA

	Time	Ped / Bike	SB Right	SB Thru	SB Left	Ped / Bike	WB Right	WB Thru	WB Left	Ped / Bike	NB Right	NB Thru	NB Left	Ped / Bike	EB Right	EB Thru	EB Left		NB	SB	EB	WB	INT	PHF
		N Leg	SBR	SBT	SBL	E Leg	WBR	WBT	WBL	S Leg	NBR	NBT	NBL	W Leg	EBR	EBT	EBL							
3	00:00	0	0	0	3	1	15	16	0	0	0	0	0	0	0	10	0		0	3	10	31	44	0.79
7	01:00	0	0	0	3	1	10	17	0	0	0	0	0	0	0	14	0		0	3	14	27	44	0.73
11	02:00	0	0	0	9	0	6	8	0	0	0	0	0	0	0	6	0		0	9	6	14	29	0.73
15	03:00	0	0	0	11	1	3	9	0	0	0	0	0	0	0	19	0		0	11	19	12	42	0.81
19	04:00	0	0	0	55	0	16	18	0	0	0	0	0	0	0	54	0		0	55	54	34	143	0.72
23	05:00	0	0	0	171	2	44	62	0	0	0	0	0	0	0	255	0		0	171	255	106	532	0.73
27	06:00	0	0	0	286	0	124	155	0	0	0	0	0	0	0	393	0		0	286	393	279	958	0.85
31	07:00	0	0	0	338	0	276	305	0	0	0	0	0	0	0	558	0		0	338	558	581	1477	0.87
35	08:00	0	0	0	295	0	193	292	0	0	0	0	0	1	0	376	0		0	295	378	485	1158	0.83
39	09:00	0	0	0	201	1	153	266	0	0	0	0	0	0	0	338	0		0	201	339	419	959	0.87
43	10:00	0	0	0	196	1	193	286	0	0	0	0	0	1	0	338	0		0	196	338	479	1013	0.93
47	11:00	0	0	0	192	0	166	337	0	0	0	0	0	0	0	395	0		0	192	398	503	1093	0.89
51	12:00	0	0	0	211	0	220	407	0	0	0	0	0	0	0	390	0		0	211	390	627	1228	0.93
55	13:00	0	0	0	209	0	231	378	0	0	0	0	0	2	0	356	0		0	209	356	609	1174	0.95
59	14:00	0	0	0	178	0	218	391	0	0	0	0	0	2	0	391	0		0	178	391	609	1178	0.97
63	15:00	0	1	0	181	0	289	492	0	0	0	0	0	0	0	373	0		0	182	374	781	1337	0.99
67	16:00	0	0	0	277	0	348	636	0	0	0	0	0	0	0	519	0		0	277	520	984	1781	0.94
71	17:00	0	0	0	246	0	386	719	0	0	0	0	0	0	0	452	0		0	246	452	1105	1803	0.94
75	18:00	0	0	0	197	0	337	592	0	0	0	0	0	0	0	370	0		0	197	372	929	1498	0.88
79	19:00	0	0	0	127	0	196	354	0	0	0	0	0	0	0	248	0		0	127	248	550	925	0.79
83	20:00	1	0	0	88	0	173	197	0	0	0	0	0	0	0	165	0		0	88	165	370	623	0.80
87	21:00	1	0	0	71	0	88	122	0	0	0	0	0	0	0	131	0		0	71	131	210	412	0.84
91	22:00	1	0	0	32	0	71	103	0	0	0	0	0	0	0	54	0		0	32	54	174	260	0.76
95	23:00	0	0	0	4	0	27	36	0	0	0	0	0	0	0	22	0		0	4	22	63	89	0.67
	Total	3	1	0	3,581	7	3,783	6,198	0	0	0	0	0	6	0	6,227	0		0	3582	6237	9981	19800	
	Minor R%		0%				38%				#DIV/0!				0%				#DIV/0!	97.2%	100.3%	100.9%	99.9%	
																			Warrant	Warrant	Warrant	Warrant		
		Peds	SB Right	SB Thru	SB Left	Peds	WB Right	WB Thru	WB Left	Peds	NB Right	NB Thru	NB Left	Peds	EB Right	EB Thru	EB Left	Peak Start	PHF					
32	AM Peak	0	0	0	354	0	285	332	0	0	0	0	0	0	0	553	0	7:15	0.90					
50	MD Peak	0	0	0	203	0	223	420	0	0	0	0	0	0	0	407	0	11:45	0.95					
69	PM Peak	0	0	0	261	0	378	722	0	0	0	0	0	0	0	477	0	16:30	0.95					

	Time	Ped / Bike	SB Right	SB Thru	SB Left	Ped / Bike	WB Right	WB Thru	WB Left	Ped / Bike	NB Right	NB Thru	NB Left	Ped / Bike	EB Right	EB Thru	EB Left		NB	SB	EB	WB	INT	PHF
		N Leg	SBR	SBT	SBL	E Leg	WBR	WBT	WBL	S Leg	NBR	NBT	NBL	W Leg	EBR	EBT	EBL							
3	00:00	0	0	6	2	0	1	5	0	0	2	4	9	1	3	4	1		15	8	8	6	37	0.77
7	01:00	0	0	9	0	0	1	3	1	0	0	16	3	0	4	4	0		19	9	8	5	41	0.73
11	02:00	0	0	0	0	0	0	1	2	0	0	4	4	0	4	0	0		8	0	4	3	15	0.54
15	03:00	0	2	10	0	0	1	2	0	0	0	5	5	0	9	2	2		10	12	13	3	38	0.86
19	04:00	0	0	40	2	0	2	11	1	0	0	10	8	0	13	2	2		18	42	17	14	91	0.67
23	05:00	1	12	140	5	2	7	35	9	0	0	42	22	1	108	15	7		64	157	130	51	402	0.80
27	06:00	3	18	201	41	0	18	42	18	0	3	92	60	4	170	65	9		155	260	244	78	737	0.80
31	07:00	2	10	286	77	0	59	90	18	0	4	168	128	0	258	110	17		300	373	385	167	1225	0.88
35	08:00	0	14	205	46	0	59	71	23	0	5	194	91	0	144	47	19		290	265	210	153	918	0.92
39	09:00	0	8	209	29	0	38	46	17	0	5	179	86	0	112	39	12		270	246	163	101	780	0.92
43	10:00	0	12	213	19	0	33	40	12	0	4	188	92	1	114	24	12		284	244	150	85	763	0.93
47	11:00	1	22	221	36	0	44	47	17	0	5	221	110	0	150	49	24		336	279	223	108	946	0.88
51	12:00	0	25	214	32	0	52	58	23	0	3	268	143	1	147	46	25		414	271	218	133	1036	0.87
55	13:00	1	19	224	45	0	47	48	21	0	1	245	135	2	112	33	14		381	288	159	116	944	0.93
59	14:00	1	13	231	48	0	52	40	31	0	5	262	132	2	125	40	18		399	292	183	123	997	0.94
63	15:00	0	12	236	33	0	51	62	16	0	5	322	169	1	117	59	21		496	281	197	129	1103	0.94
67	16:00	9	20	313	42	0	45	87	34	0	8	407	214	2	176	72	19		629	375	267	166	1437	0.96
71	17:00	0	16	271	53	0	66	91	24	0	6	436	284	1	153	79	44		726	340	276	181	1523	0.92
75	18:00	7	17	208	30	0	45	54	24	0	11	346	240	4	139	51	22		597	255	212	123	1187	0.85
79	19:00	8	14	153	25	0	29	27	16	0	7	218	131	5	79	24	10		356	192	113	72	733	0.79
83	20:00	0	10	109	15	1	18	17	7	1	1	136	62	2	48	17	3		199	134	68	42	443	0.82
87	21:00	1	6	89	10	1	5	10	5	0	1	77	46	0	39	20	4		124	105	63	20	312	0.85
91	22:00	0	1	28	6	0	2	3	6	0	0	70	35	0	18	5	2		105	35	25	11	176	0.83
95	23:00	0	0	12	0	0	1	2	2	0	1	27	10	0	8	3	1		38	12	12	5	67	0.70
	Total	34	251	3,628	596	4	676	892	327	1	77	3,937	2,219	27	2,250	810	288		6233	4475	3348	1895	15951	
	Minor R%		6%				36%				1%				67%				100.2% Warrant	95.4% Warrant	99.8% Warrant	112.1% Warrant	99.6%	
		Peds	SB Right	SB Thru	SB Left	Peds	WB Right	WB Thru	WB Left	Peds	NB Right	NB Thru	NB Left	Peds	EB Right	EB Thru	EB Left	Peak Start	PHF					
32	AM Peak	1	16	274	72	0	64	94	29	0	5	189	136	0	247	96	17	7:15	0.89					
50	MD Peak	0	21	217	29	0	52	53	20	0	3	268	151	1	165	56	27	11:45	0.89					
71	PM Peak	0	16	271	53	0	66	91	24	0	6	436	284	1	153	79	44	17:00	0.92					

	Time	Ped / Bike	SB Right	SB Thru	SB Left	Ped / Bike	WB Right	WB Thru	WB Left	Ped / Bike	NB Right	NB Thru	NB Left	Ped / Bike	EB Right	EB Thru	EB Left		NB	SB	EB	WB	INT	PHF
		N Leg	SBR	SBT	SBL	E Leg	WBR	WBT	WBL	S Leg	NBR	NBT	NBL	W Leg	EBR	EBT	EBL							
3	00:00	0	0	1	0	0	0	6	2	1	2	13	1	0	0	6	1		16	1	7	8	32	0.73
7	01:00	0	0	2	0	0	0	4	1	1	1	8	1	0	0	4	0		10	2	4	5	21	0.75
11	02:00	0	0	7	1	0	0	0	2	0	3	2	0	0	0	0	0		5	8	0	2	15	0.63
15	03:00	0	1	6	0	0	2	4	1	0	2	1	0	0	4	1	0		3	7	5	7	22	0.61
19	04:00	0	2	46	1	0	0	10	5	0	1	14	2	0	4	4	2		17	49	10	15	91	0.78
23	05:00	0	1	133	5	0	2	24	17	0	14	30	0	0	17	14	1		44	139	32	43	258	0.69
27	06:00	0	7	214	33	0	6	41	36	0	70	49	5	0	29	124	2		124	254	155	83	616	0.77
31	07:00	0	10	262	54	0	12	49	49	0	108	59	10	0	19	216	7		177	326	242	110	855	0.94
35	08:00	0	4	237	36	0	18	103	46	0	69	91	6	0	14	125	5		166	277	144	167	754	0.78
39	09:00	0	2	141	15	0	22	84	42	0	45	111	5	0	8	49	7		161	158	64	148	531	0.97
43	10:00	0	2	134	17	0	34	73	45	0	48	141	5	1	11	58	13		194	153	82	152	581	0.91
47	11:00	0	4	153	17	0	27	92	53	0	65	172	3	0	10	94	14		240	174	118	172	704	0.90
51	12:00	0	5	156	21	0	40	91	52	0	69	146	5	1	10	73	9		220	182	92	183	677	0.95
55	13:00	0	2	151	18	0	24	99	55	0	58	161	1	1	6	68	6		220	171	80	178	649	0.98
59	14:00	0	1	142	22	0	30	87	50	0	56	154	4	0	8	85	5		214	165	98	167	644	0.95
63	15:00	0	2	149	24	0	33	106	42	0	44	231	5	0	10	73	14		280	175	97	181	733	0.94
67	16:00	0	2	167	31	0	51	151	52	0	70	283	5	0	8	124	11		358	200	143	254	955	0.95
71	17:00	0	6	157	27	0	39	121	67	0	87	290	4	0	11	105	22		381	190	138	227	936	0.94
75	18:00	2	6	123	25	0	26	82	47	0	67	236	9	0	9	62	17		312	154	88	155	709	0.91
79	19:00	0	3	94	14	0	19	63	29	0	33	157	4	0	6	45	11		194	111	62	111	478	0.73
83	20:00	0	2	68	8	0	11	28	17	0	43	127	3	0	3	29	5		173	78	37	56	344	0.80
87	21:00	1	0	57	5	0	3	10	17	0	12	75	2	0	1	29	5		89	62	35	30	216	0.79
91	22:00	0	0	21	2	0	2	3	9	0	14	54	3	0	2	7	5		71	23	14	14	122	0.76
95	23:00	0	1	3	2	0	1	3	0	0	8	18	1	0	1	3	0		27	6	4	4	41	0.68
	Total	3	63	2,624	378	0	402	1,334	736	2	989	2,623	84	3	191	1,398	162		3696	3065	1751	2472	10984	
	Minor R%		2%				16%				27%				11%				102.0%	98.1%	108.4%	94.4%	99.9%	
																			Warrant	Warrant	Warrant	Warrant		
		Peds	SB Right	SB Thru	SB Left	Peds	WB Right	WB Thru	WB Left	Peds	NB Right	NB Thru	NB Left	Peds	EB Right	EB Thru	EB Left	Peak Start	PHF					
30	AM Peak	0	10	264	55	0	12	50	50	0	109	60	10	0	19	219	7	6:45	0.95					
48	MD Peak	0	5	153	19	0	31	92	56	0	74	158	3	0	9	94	12	11:15	0.90					
68	PM Peak	0	1	168	27	0	49	138	54	0	85	308	5	0	10	115	17	16:15	0.97					

APPENDIX B

WARRANT ANALYSIS

Gateway and Traffic Improvements

Existing Conditions (2022)



City/County: Rifle, CO

Intersection: Hwy 13 & Whiteriver Avenue

Study Data	Date:	8/24/2022	Approach	Speed	Lanes	RT %
	Population < 10,000:	No	Major 1: EB Hwy 13	25	1	100%
	Existing Signal:	No	Major 3: WB Hwy 13	25	2	100%
	0.70 Factor Used:	No	Minor 2:	0	0	100%
	0.80 Factor Used:	No	Minor 4: SB Whiteriver Avenue	25	1	0%

Warrants Analysis	Time of Day	Major #1	Major #3	Total 1+3	Major 1A/1B 600/900	Minor #2	Minor #2 1A/1B 150/075	Minor #4	Minor #4 1A/1B 150/075	Both Met 1A/1B	Crash Warrant	MWSA Warrant
	6:00 - 7:00	372	273	645	X/	0	/	300	X/X	X/	X	X
	7:00 - 8:00	536	563	1099	X/X	0	/	355	X/X	X/X	X	X
	8:00 - 9:00	358	474	832	X/	0	/	310	X/X	X/	X	X
	9:00 - 10:00	327	414	741	X/	0	/	211	X/X	X/	X	X
	10:00 - 11:00	328	468	796	X/	0	/	206	X/X	X/	X	X
	11:00 - 12:00	373	491	864	X/	0	/	202	X/X	X/	X	X
	12:00 - 1:00	369	620	989	X/X	0	/	222	X/X	X/X	X	X
	1:00 - 2:00	346	599	945	X/X	0	/	219	X/X	X/X	X	X
	2:00 - 3:00	375	604	979	X/X	0	/	187	X/X	X/X	X	
	3:00 - 4:00	357	767	1124	X/X	0	/	191	X/X	X/X	X	X
	4:00 - 5:00	505	956	1461	X/X	0	/	291	X/X	X/X	X	X
	5:00 - 6:00	433	1084	1517	X/X	0	/	258	X/X	X/X	X	X
	6:00 - 7:00	357	910	1267	X/X	0	/	207	X/X	X/X	X	X
	7:00 - 8:00	240	539	779	X/	0	/	133	/X	/	X	
	8:00 - 9:00	159	366	525	/	0	/	92	/X	/		
	9:00 - 10:00	129	207	336	/	0	/	75	/	/		

Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 1a: Minimum Vehicular Volume	13	8	Met
	Warrant 1b: Interruption of Continuous Traffic	8	8	Met
	Warrant 2: Four-Hour Vehicular Volume	11	4	Met
	Warrant 7: Crash Experience	14	8	Met - Check Crash Rate
	Multi-way Stop Applications (MWSA)	12	8	Met

Gateway and Traffic Improvements

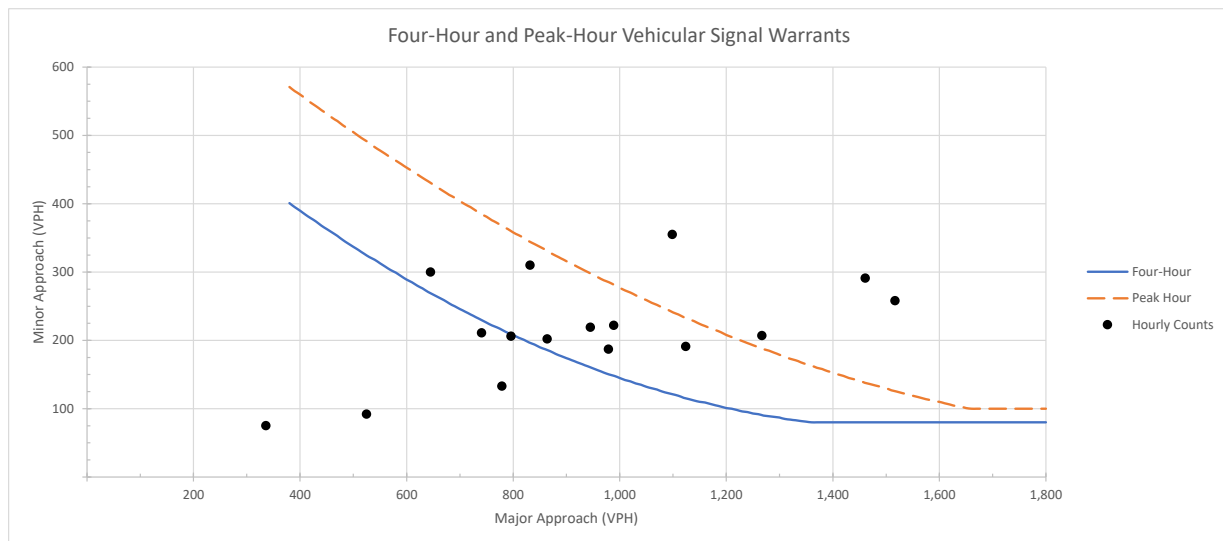
Existing Conditions (2022)



City/County: Rifle, CO

Intersection: Hwy 13 & Whiteriver Avenue

Study Data	Date:	8/24/2022	Approach	Speed	Lanes	RT %
	Population < 10,000:	No	Major 1: EB Hwy 13	25	1	100%
	Existing Signal:	No	Major 3: WB Hwy 13	25	2	100%
	0.70 Factor Used:	No	Minor 2:	0	0	100%
	0.80 Factor Used:	No	Minor 4: SB Whiteriver Avenue	25	1	0%



*Note: For data outside of the graph range, check the minor street volume against the lower thresholds

Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 2: Four-Hour Vehicular Volume	11	4	Met
	Warrant 3: Peak Hour	4	1	Met

Gateway and Traffic Improvements

Existing Conditions (2022)



City/County: Rifle, CO

Intersection: Railroad Avenue & US 6

Study Data	Date:	8/24/2022	Approach	Speed	Lanes	RT %
	Population < 10,000:	No	Major 1: NB Railroad Avenue	25	1	100%
	Existing Signal:	Yes	Major 3: SB Railroad Avenue	25	1	100%
	0.70 Factor Used:	No	Minor 2: EB US 6	25	1	100%
	0.80 Factor Used:	No	Minor 4: WB US 6	25	1	100%

Warrants Analysis	Time of Day	Major #1	Major #3	Total 1+3	Major 1A/1B 500/750	Minor #2 150/075	Minor #2 1A/1B 150/075	Minor #4 150/075	Minor #4 1A/1B 150/075	Both Met 1A/1B	Crash Warrant	MWSA Warrant
	6:00 - 7:00	149	268	417	/	239	X/X	78	/X	/	X	X
	7:00 - 8:00	287	388	675	X/	379	X/X	167	X/X	X/	X	X
	8:00 - 9:00	281	274	555	X/	203	X/X	153	X/X	X/	X	X
	9:00 - 10:00	261	252	513	X/	159	X/X	101	/X	X/	X	X
	10:00 - 11:00	275	248	523	X/	143	/X	85	/X	/	X	X
	11:00 - 12:00	325	286	611	X/	216	X/X	108	/X	X/	X	X
	12:00 - 1:00	400	277	677	X/	210	X/X	133	/X	X/	X	X
	1:00 - 2:00	368	297	665	X/	154	X/X	116	/X	X/	X	X
	2:00 - 3:00	386	302	688	X/	177	X/X	123	/X	X/	X	X
	3:00 - 4:00	479	288	767	X/X	195	X/X	129	/X	X/X	X	X
	4:00 - 5:00	608	383	991	X/X	261	X/X	166	X/X	X/X	X	X
	5:00 - 6:00	698	351	1049	X/X	273	X/X	181	X/X	X/X	X	X
	6:00 - 7:00	573	261	834	X/X	206	X/X	123	/X	X/X	X	X
	7:00 - 8:00	343	197	540	X/	109	/X	72	/	/		X
	8:00 - 9:00	193	137	330	/	66	/	42	/	/		
	9:00 - 10:00	119	107	226	/	63	/	20	/	/		

Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 1a: Minimum Vehicular Volume	11	8	Met
	Warrant 1b: Interruption of Continuous Traffic	4	8	Not Met
	Warrant 2: Four-Hour Vehicular Volume	7	4	Met
	Warrant 7: Crash Experience	13	8	Met - Check Crash Rate
	Multi-way Stop Applications (MWSA)	14	8	Met

Gateway and Traffic Improvements

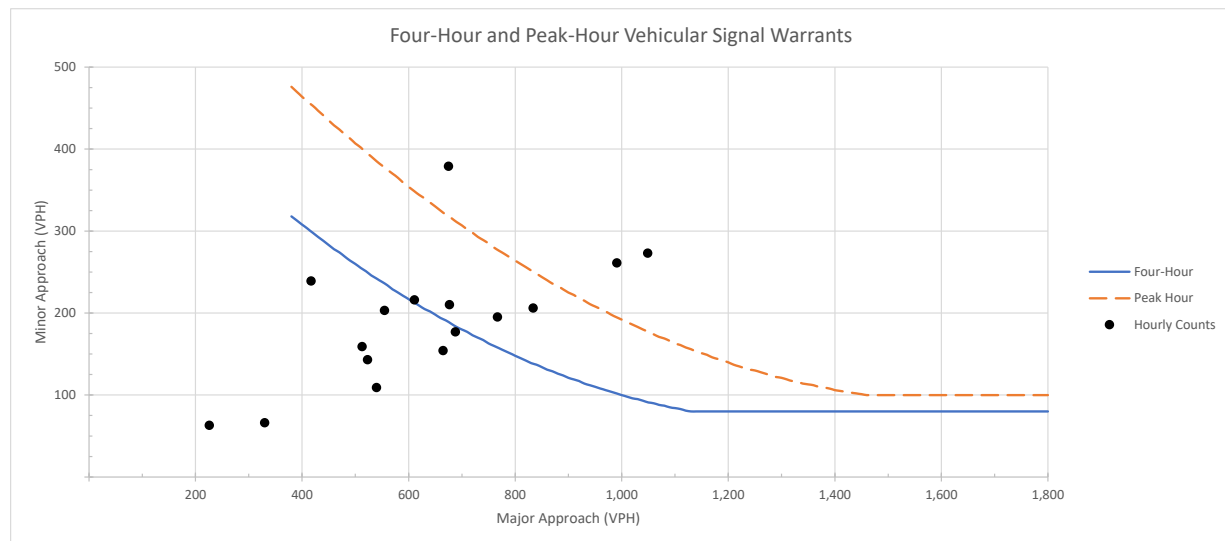
Existing Conditions (2022)



City/County: Rifle, CO

Intersection: Railroad Avenue & US 6

Study Data	Date:	8/24/2022	Approach	Speed	Lanes	RT %
	Population < 10,000:	No	Major 1: NB Railroad Avenue	25	1	100%
	Existing Signal:	Yes	Major 3: SB Railroad Avenue	25	1	100%
	0.70 Factor Used:	No	Minor 2: EB US 6	25	1	100%
	0.80 Factor Used:	No	Minor 4: WB US 6	25	1	100%



*Note: For data outside of the graph range, check the minor street volume against the lower thresholds

Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 2: Four-Hour Vehicular Volume	7	4	Met
	Warrant 3: Peak Hour	3	1	Met

Gateway and Traffic Improvements

Existing Conditions (2022)



City/County: Rifle, CO

Intersection: US 6 & Whiteriver Avenue

Study Data	Date:	8/24/2022	Approach	Speed	Lanes	RT %
	Population < 10,000:	No	Major 1: EB US 6	25	1	100%
	Existing Signal:	No	Major 3: WB US 6	25	1	100%
	0.70 Factor Used:	No	Minor 2: NB Whiteriver Avenue	25	1	100%
	0.80 Factor Used:	No	Minor 4: SB Whiteriver Avenue	25	1	100%

Warrants Analysis	Time of Day	Major #1	Major #3	Total 1+3	Major 1A/1B	Minor #2	Minor #2 1A/1B	Minor #4	Minor #4 1A/1B	Both Met 1A/1B	Crash Warrant	MWSA Warrant
					500/750		150/075		150/075			
	6:00 - 7:00	140	108	248	/	124	/X	275	X/X	/		
	7:00 - 8:00	248	208	456	/	276	X/X	351	X/X	/	X	X
	8:00 - 9:00	126	207	333	/	193	X/X	290	X/X	/		X
	9:00 - 10:00	94	158	252	/	153	X/X	178	X/X	/		
	10:00 - 11:00	59	157	216	/	193	X/X	169	X/X	/		
	11:00 - 12:00	115	181	296	/	166	X/X	160	X/X	/		
	12:00 - 1:00	104	215	319	/	220	X/X	186	X/X	/		X
	1:00 - 2:00	103	192	295	/	231	X/X	178	X/X	/		
2:00 - 3:00	121	198	319	/	218	X/X	152	X/X	/		X	
3:00 - 4:00	125	197	322	/	289	X/X	165	X/X	/		X	
4:00 - 5:00	157	262	419	/	348	X/X	264	X/X	/	X	X	
5:00 - 6:00	178	277	455	/	386	X/X	213	X/X	/	X	X	
6:00 - 7:00	116	181	297	/	337	X/X	182	X/X	/		X	
7:00 - 8:00	71	113	184	/	196	X/X	115	/X	/			
8:00 - 9:00	42	65	107	/	173	X/X	82	/X	/			
9:00 - 10:00	40	38	78	/	88	/X	62	/	/			

Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 1a: Minimum Vehicular Volume	0	8	Not Met
	Warrant 1b: Interruption of Continuous Traffic	0	8	Not Met
	Warrant 2: Four-Hour Vehicular Volume	3	4	Not Met
	Warrant 7: Crash Experience	3	8	Not Met
	Multi-way Stop Applications (MWSA)	8	8	Met

Gateway and Traffic Improvements

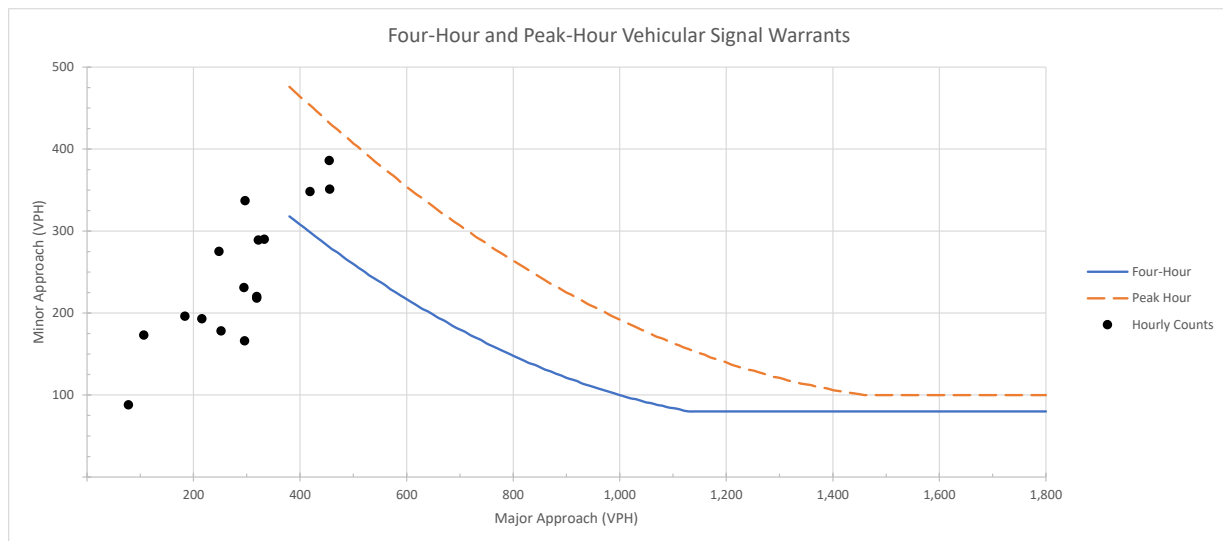
Existing Conditions (2022)



City/County: Rifle, CO

Intersection: US 6 & Whiteriver Avenue

Study Data	Date:	8/24/2022	Approach	Speed	Lanes	RT %
	Population < 10,000:	No	Major 1: EB US 6	25	1	100%
	Existing Signal:	No	Major 3: WB US 6	25	1	100%
	0.70 Factor Used:	No	Minor 2: NB Whiteriver Avenue	25	1	100%
	0.80 Factor Used:	No	Minor 4: SB Whiteriver Avenue	25	1	100%

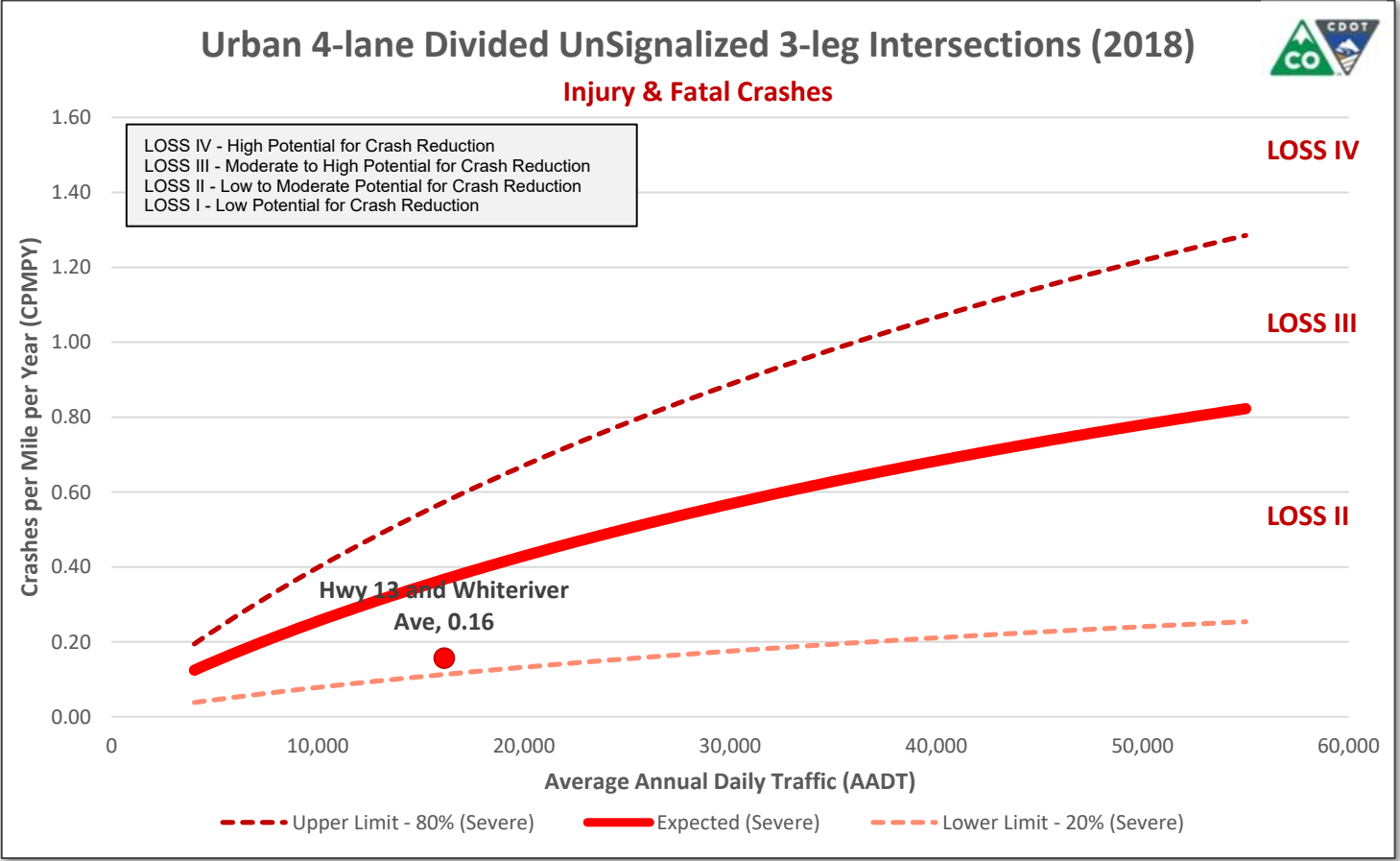
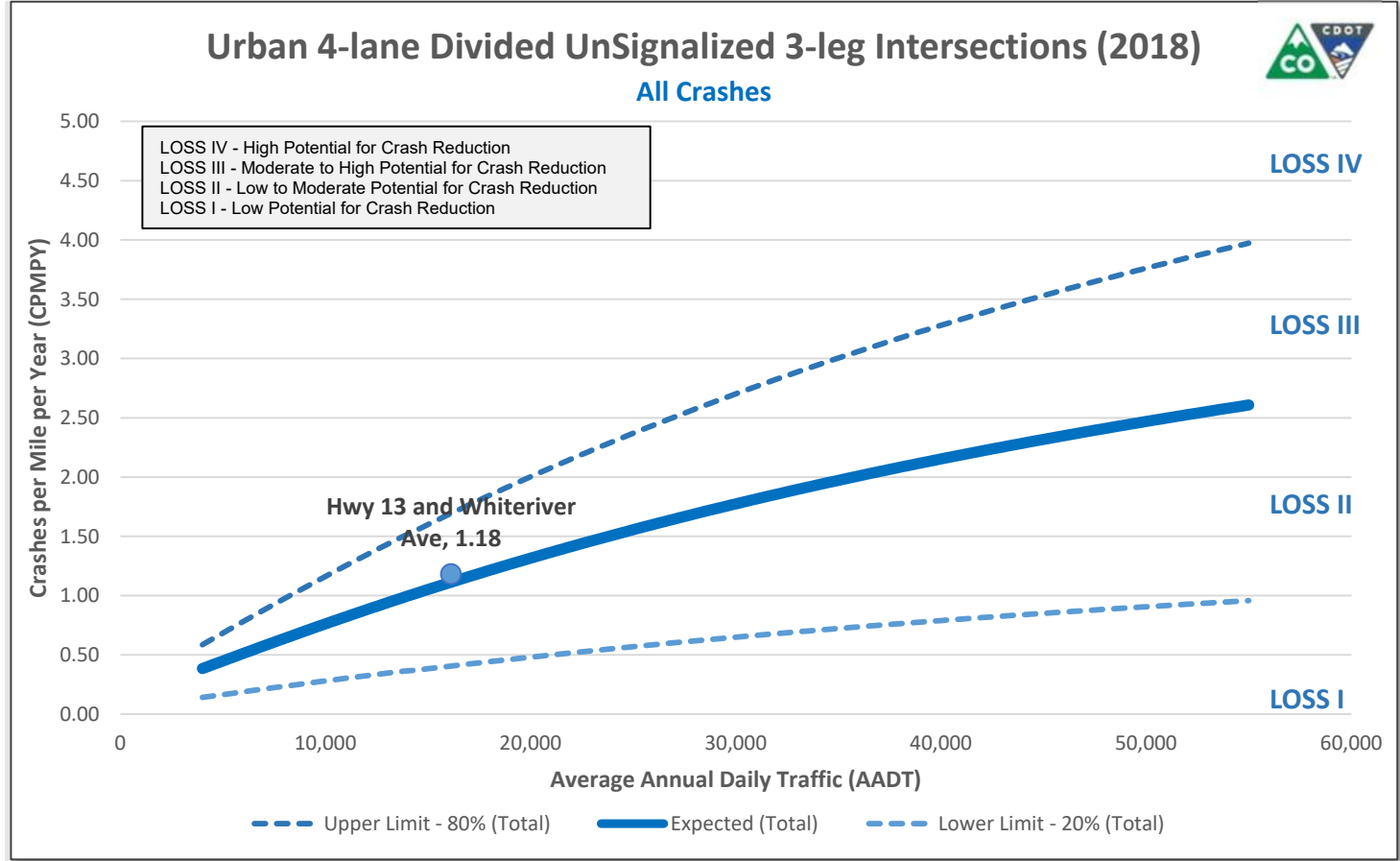


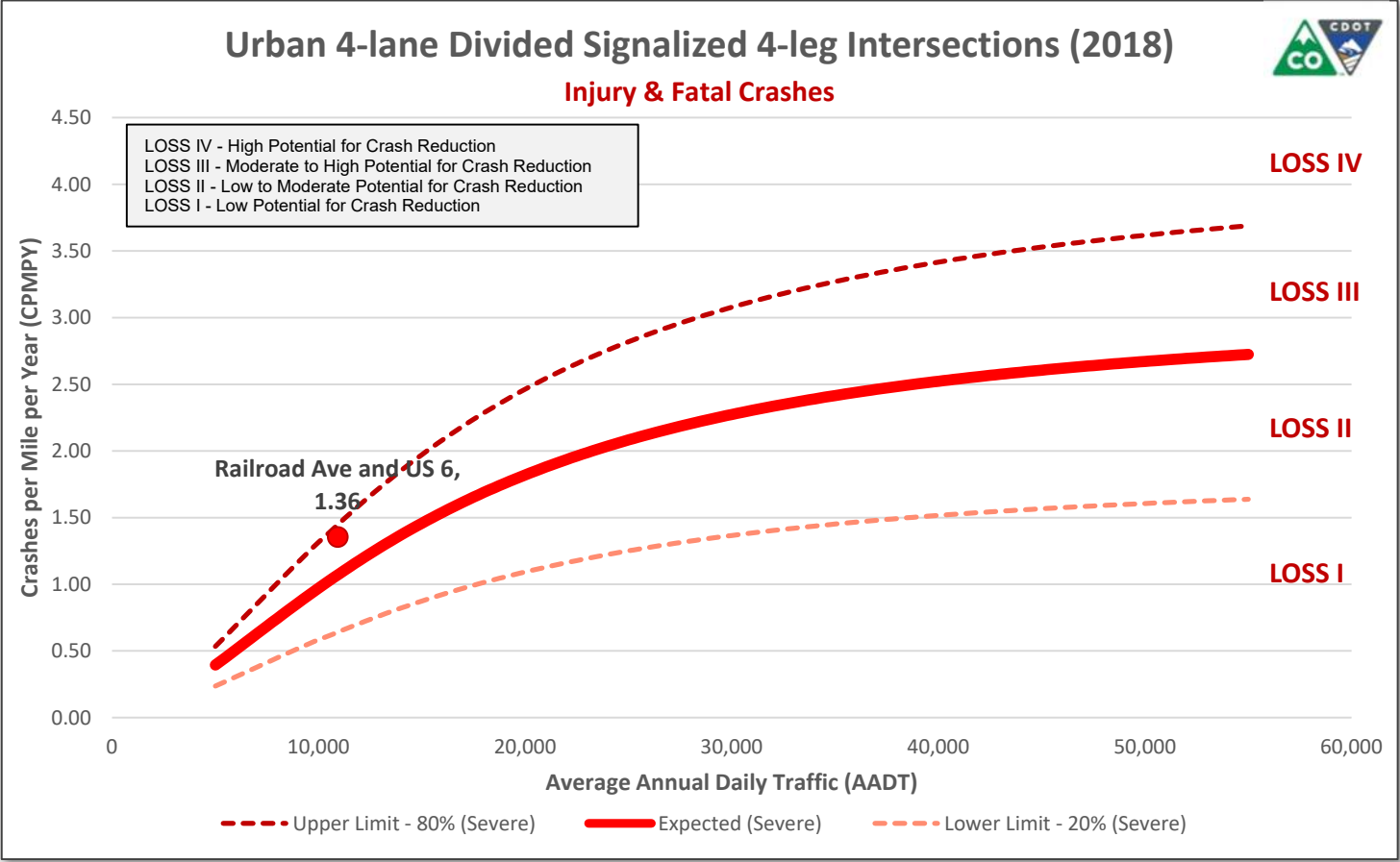
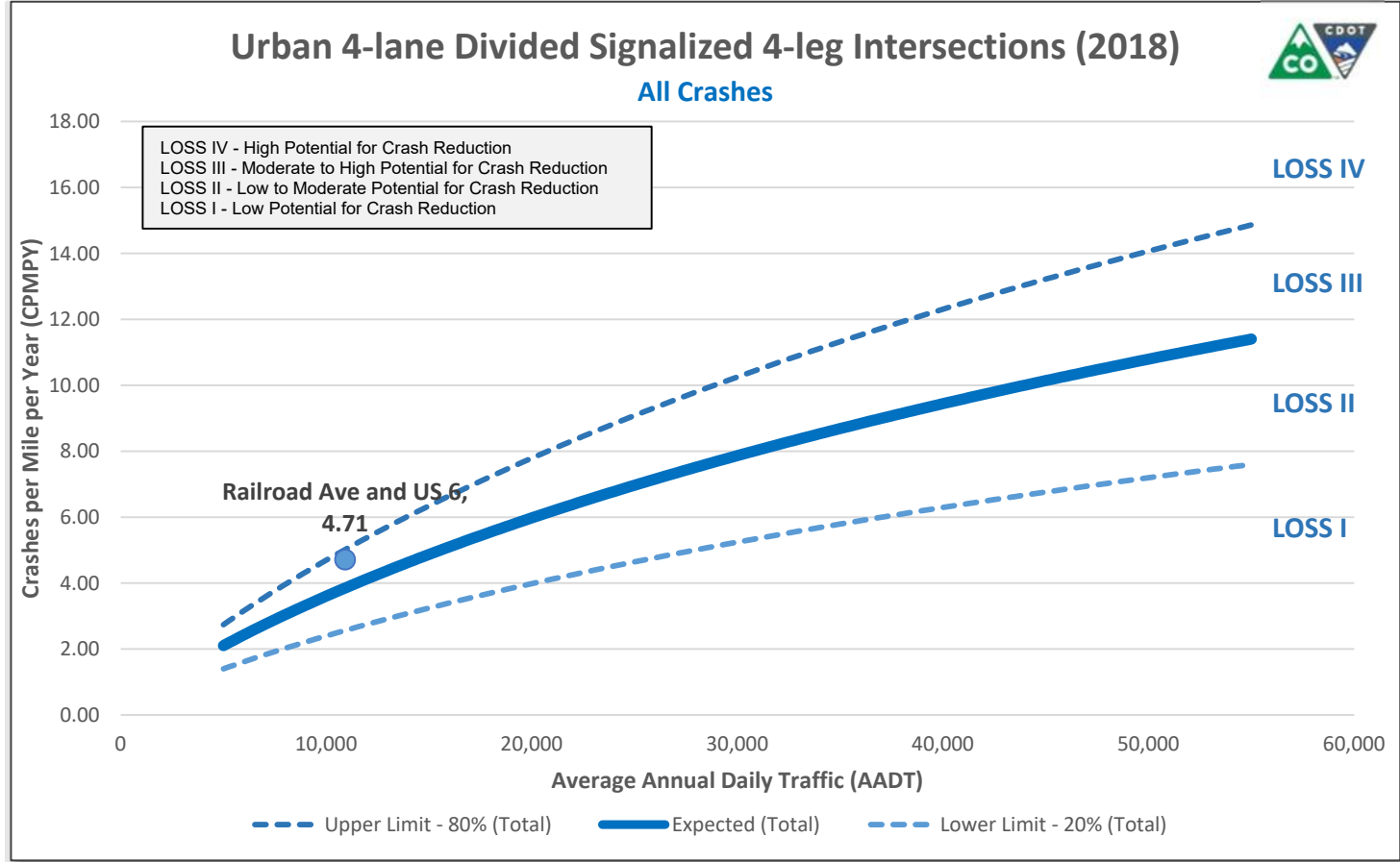
*Note: For data outside of the graph range, check the minor street volume against the lower thresholds

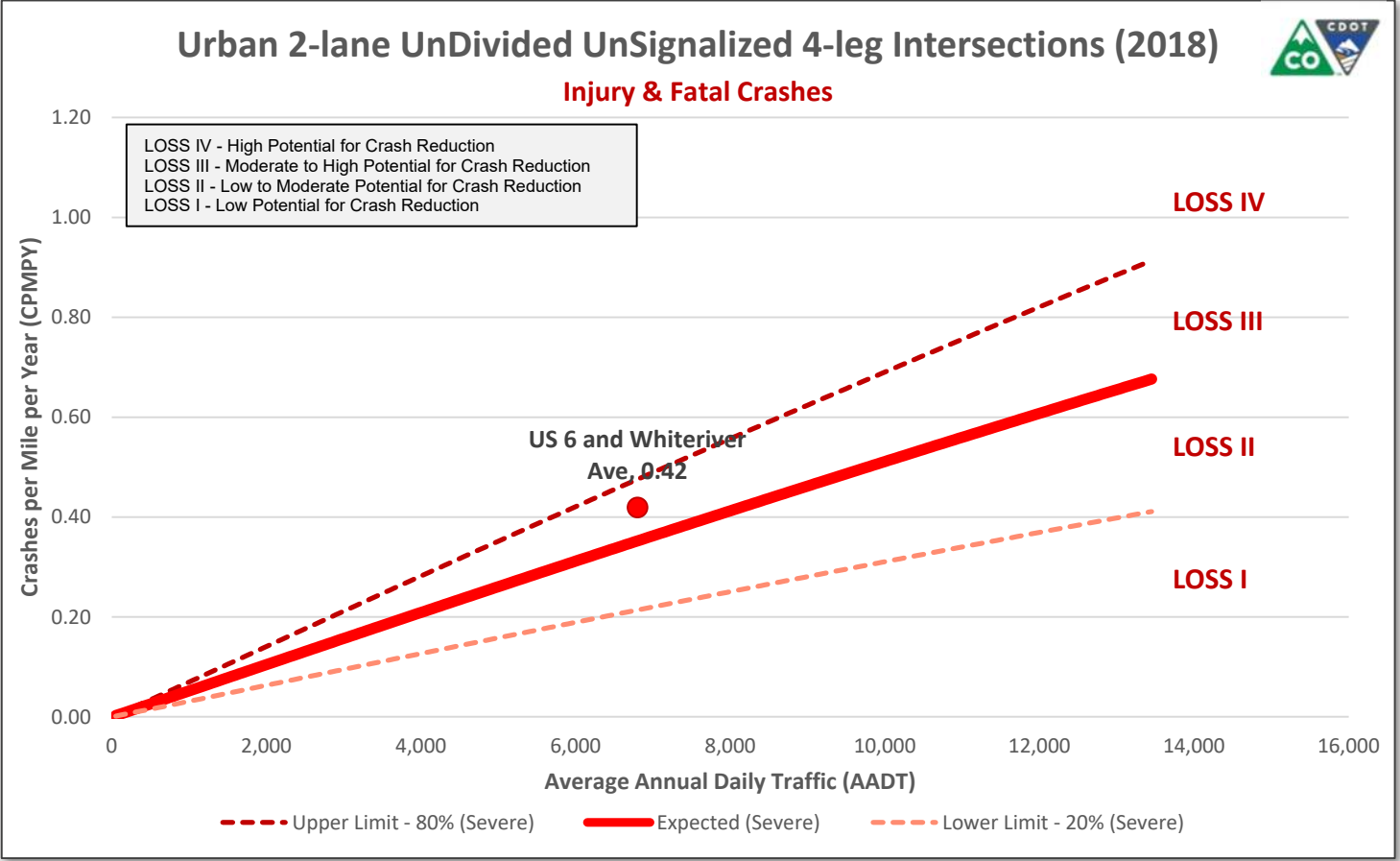
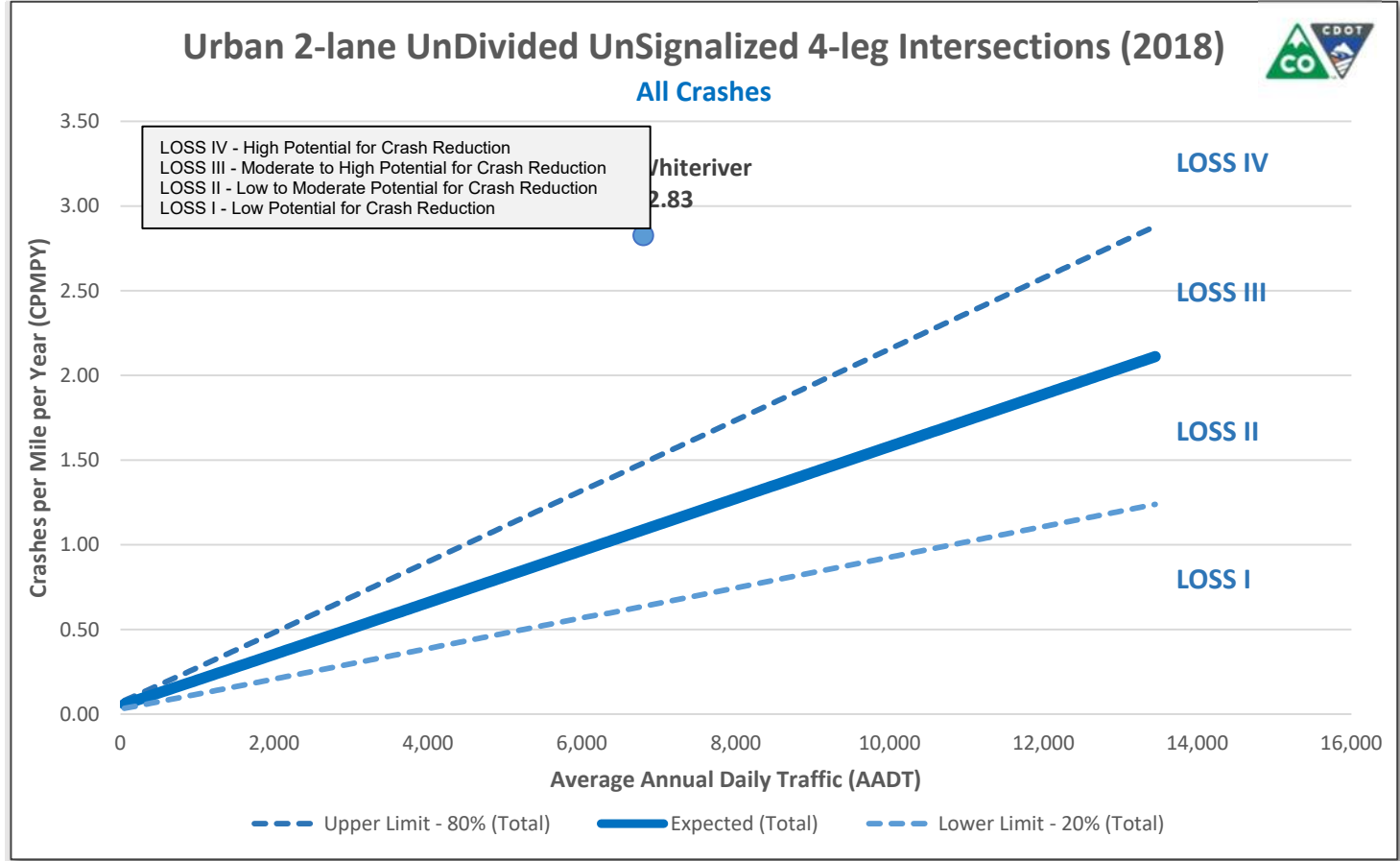
Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 2: Four-Hour Vehicular Volume	3	4	Not Met
	Warrant 3: Peak Hour	0	1	Not Met

APPENDIX C

CRASH REPORTS







APPENDIX D

TRAFFIC OPERATIONS ANALYSIS RESULTS

Gateway Improvements
Rifle, CO
2022_Existing_Weekday_24hour
VISSIM Arterial MOE Results

Start Time:
7:00



Hwy 13 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	268	27	137	16.9	C	16.9	C	5.8	A
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	525	0	0	0.6	A	0.6	A		
	Thru	10	282	0	0	0.1	A				
Westbound	Right	10	106	4	140	6.1	A	5.5	A		
	Right	10	174	4	140	13.7	B				

Target	Modeled	Difference
355	268	-87
0	0	0
536	525	-11
287	282	-5
276	174	-102

US 6 & Hwy 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	114	5	104	10.7	B	11.4	B	13.4	B						
	Thru	20	163	11	166	12.0	B										
	Right	20	4	16	189	6.2	A										
Southbound	Left	20	88	5	144	11.4	B	14.4	B			13.4	B				
	Thru	20	285	26	283	15.4	B										
	Right	20	9	38	313	11.4	B										
Eastbound	Left	20	15	1	49	14.1	B	14.3	B					13.4	B		
	Thru	20	134	26	279	17.5	B										
	Right	20	221	35	313	12.4	B										
Westbound	Left	20	18	1	47	15.6	B	12.7	B							13.4	B
	Thru	20	85	8	132	15.2	B										
	Right	20	53	9	160	7.7	A										

Target	Modeled	Difference
115	114	-1
168	163	-5
4	4	0
92	88	-4
286	285	-1
10	9	-1
15	15	0
132	134	2
232	221	-11
18	18	0
90	85	-5
59	53	-6

US 6 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	30	10	26	143	23.6	C	10.6	B	131.6	F						
	Thru	30	163	29	144	13.0	B										
	Right	30	106	7	131	5.7	A										
Southbound	Left	30	35	1045	1436	514.5	F	512.1	F			131.6	F				
	Thru	30	196	1047	1439	512.8	F										
	Right	30	6	1060	1451	475.7	F										
Eastbound	Left	30	7	0	11	1.1	A	0.4	A					131.6	F		
	Thru	30	199	0	0	0.3	A										
	Right	30	19	0	0	1.0	A										
Westbound	Left	30	54	1	52	4.0	A	1.3	A							131.6	F
	Thru	30	141	0	0	0.3	A										
	Right	30	11	0	0	0.7	A										

Target	Modeled	Difference
10	10	0
158	163	5
108	106	-2
54	35	-19
287	196	-91
10	6	-4
7	7	0
222	199	-23
19	19	0
49	54	5
147	141	-6
12	11	-1

VISSIM Hourly Network Results
2022_Existing_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	97.0	14.3	1774	1363	342295	181105	91
2	95.3	14.6	1797	1393	344463	179977	81
3	81.7	15.7	1735	1350	309848	150158	36
4	94.9	14.4	1729	1334	332700	174674	70
5	106.2	13.6	1805	1383	365798	202226	73
6	99.4	14.2	1743	1350	342823	183141	60
7	87.6	15.1	1728	1336	318571	160490	59
8	86.4	15.2	1712	1321	312170	155401	42
9	85.3	15.3	1725	1343	315879	157203	31
10	95	14.5	1707	1316	327335	171348	43
Avg	92.9	14.7	1746	1349	331188	171572	59
St Dev	8.8	0.8	34.8	24	20300	18614	21

Gateway Improvements
Rifle, CO
2022_Existing_Weekday_24hour
VISSIM Arterial MOE Results

Start Time:
17:00



Hwy 13 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	217	50	164	36.6	E	36.6	E	85.3	F
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	424	0	0	0.6	A	0.6	A		
Westbound	Thru	10	653	0	0	46.5	E	132.3	F		
	Right	10	76	838	1602	285.2	F				
	Right	10	262	838	1602	301.9	F				

Target	Modeled	Difference
258	217	-41
0	0	0
433	424	-9
698	653	-45
386	262	-124

US 6 & Hwy 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	241	16	280	11.9	B	11.7	B	14.2	B						
	Thru	20	404	30	421	11.6	B										
	Right	20	6	37	444	12.9	B										
Southbound	Left	20	62	3	75	14.3	B	15.3	B			14.2	B				
	Thru	20	268	26	269	15.7	B										
	Right	20	15	38	298	13.1	B										
Eastbound	Left	20	36	4	94	17.9	B	16.3	B					14.2	B		
	Thru	20	98	19	197	21.2	C										
	Right	20	130	24	236	12.1	B										
Westbound	Left	20	25	2	62	16.4	B	18.0	B							14.2	B
	Thru	20	88	14	141	22.1	C										
	Right	20	63	18	168	12.9	B										

Target	Modeled	Difference
256	241	-15
436	404	-32
6	6	0
64	62	-2
271	268	-3
16	15	-1
40	36	-4
95	98	3
138	130	-8
24	25	1
91	88	-3
66	63	-3

US 6 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	30	3	115	189	56.7	F	13.7	B	220.1	F						
	Thru	30	259	116	190	15.6	C										
	Right	30	76	45	159	5.5	A										
Southbound	Left	30	20	1374	1435	1213.8	F	1241.9	F			220.1	F				
	Thru	30	141	1377	1438	1246.0	F										
	Right	30	2	1389	1450	1232.9	F										
Eastbound	Left	30	20	0	23	1.5	A	0.7	A					220.1	F		
	Thru	30	136	0	0	0.3	A										
	Right	30	9	0	0	6.5	A										
Westbound	Left	30	67	2	75	10.2	B	2.8	A							220.1	F
	Thru	30	170	0	0	0.4	A										
	Right	30	42	0	0	0.9	A										

Target	Modeled	Difference
4	3	-1
295	259	-36
87	76	-11
27	20	-7
180	141	-39
6	2	-4
22	20	-2
145	136	-9
11	9	-2
67	67	0
171	170	-1
39	42	3

VISSIM Hourly Network Results
2022_Existing_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	177.4	9.6	2012	1557	583155	399977	183
2	142.3	11.4	2068	1600	505805	317660	125
3	222.2	8.3	2082	1608	698580	509345	123
4	166.8	10.2	1984	1539	542381	361279	109
5	127.7	12.1	2063	1579	468190	282138	160
6	161.3	10.5	2022	1549	531581	350433	151
7	193.2	9.1	2099	1631	643561	452385	123
8	218.3	8.3	1954	1506	655580	478576	192
9	165.5	10.3	2072	1592	557517	370574	82
10	191.1	9.1	2032	1564	616136	432539	66
Avg	176.6	9.9	2039	1573	580249	395491	131
St Dev	36.4	1.5	41.8	29	88623	87704	31

Gateway Improvements

Rifle, CO

Start Time:

2022_Build1Signals_Weekday_24hour 7:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	355	8	82	5.5	A	5.5	A	6.4	A
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	525	0	0	0.6	A	0.6	A		
Westbound	Thru	10	281	14	138	13.7	B	13.9	B		
	Right	10	173	1	115	14.3	B				

Target	Modeled	Difference
355	355	0
0	0	0
536	525	-11
287	281	-6
276	173	-103

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	114	4	122	8.0	A	6.3	A	18.9	B
	Thru	20	163	4	146	5.2	A				
	Right	20	4	6	169	3.8	A				
Southbound	Left	20	88	6	138	13.7	B	13.5	B		
	Thru	20	285	24	282	13.6	B				
	Right	20	9	34	311	8.8	A				
Eastbound	Left	20	15	2	49	24.4	C	28.2	C		
	Thru	20	134	61	396	34.4	C				
	Right	20	221	69	432	24.7	C				
Westbound	Left	20	18	4	58	38.5	D	32.6	C		
	Thru	20	87	27	186	37.8	D				
	Right	20	54	33	212	22.5	C				

Target	Modeled	Difference
115	114	-1
168	163	-5
4	4	0
92	88	-4
286	285	-1
10	9	-1
15	15	0
132	134	2
232	221	-11
18	18	0
90	87	-3
59	54	-5

US 6 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	10	22	126	11.0	B	6.2	A	16.8	B
	Thru	30	163	22	126	8.8	A				
	Right	30	106	1	69	1.7	A				
Southbound	Left	30	52	58	358	27.6	C	27.2	C		
	Thru	30	283	58	358	27.3	C				
	Right	30	9	71	379	20.5	C				
Eastbound	Left	30	7	0	23	11.4	B	11.0	B		
	Thru	30	196	13	166	11.2	B				
	Right	30	18	20	187	8.7	A				
Westbound	Left	30	54	12	113	42.1	D	20.1	C		
	Thru	30	141	10	138	12.9	B				
	Right	30	11	0	63	3.3	A				

Target	Modeled	Difference
10	10	0
158	163	5
108	106	-2
54	52	-2
287	283	-4
10	9	-1
7	7	0
222	196	-26
19	18	-1
49	54	5
147	141	-6
12	11	-1

VISSIM Hourly Network Results

2022_Build1Signals_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	26.8	23.1	1900	1445	225278	52562	0
2	27.8	23	1924	1472	230405	54757	2
3	25.4	23.4	1836	1401	215199	47845	0
4	26.5	23.1	1847	1407	219189	50631	0
5	26.3	23.2	1916	1453	225588	51853	0
6	27	23.1	1851	1413	220277	51321	0
7	25.6	23.3	1834	1400	216012	48555	0
8	27.1	23.1	1791	1371	214096	49762	0
9	26.9	23.1	1813	1391	216414	50437	0
10	28	22.9	1799	1371	215718	51593	0
Avg	26.7	23.1	1851	1413	219818	50932	0
St Dev	0.9	0.2	40.5	31	5958	2548	1

Gateway Improvements

Rifle, CO

Start Time:

2022_Build1Signals_Weekday_24hou 17:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	268	9	94	7.3	A	7.3	A	9.0	A
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	426	0	0	0.6	A	0.6	A		
Westbound	Thru	10	693	29	249	12.2	B	13.1	B		
	Right	10	298	6	202	15.3	B				

Target	Modeled	Difference
258	268	10
0	0	0
433	426	-7
698	693	-5
386	298	-88

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	254	10	267	8.4	A	6.2	A	16.1	B						
	Thru	20	431	11	285	5.0	A										
	Right	20	6	15	308	4.5	A										
Southbound	Left	20	62	6	137	20.2	C	17.0	B			16.1	B				
	Thru	20	269	28	281	16.5	B										
	Right	20	15	40	310	12.3	B										
Eastbound	Left	20	36	5	83	24.1	C	24.6	C					16.1	B		
	Thru	20	98	32	251	32.3	C										
	Right	20	130	37	290	18.9	B										
Westbound	Left	20	26	6	76	40.3	D	40.4	D							16.1	B
	Thru	20	89	37	196	47.2	D										
	Right	20	64	47	224	31.0	C										

Target	Modeled	Difference
256	254	-2
436	431	-5
6	6	0
64	62	-2
271	269	-2
16	15	-1
40	36	-4
95	98	3
138	130	-8
24	26	2
91	89	-2
66	64	-2

US 6 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	3	30	146	6.8	A	4.4	A	15.7	B
	Thru	30	295	30	146	5.4	A				
	Right	30	88	0	57	1.1	A				
Southbound	Left	30	27	39	248	29.9	C	29.4	C		
	Thru	30	191	39	248	29.7	C				
	Right	30	6	51	268	18.2	B				
Eastbound	Left	30	20	1	40	11.3	B	13.3	B		
	Thru	30	136	11	147	14.0	B				
	Right	30	9	17	168	6.9	A				
Westbound	Left	30	67	16	119	45.2	D	21.8	C		
	Thru	30	170	16	161	16.7	B				
	Right	30	42	2	86	5.4	A				

Target	Modeled	Difference
4	3	-1
295	295	0
87	88	1
27	27	0
180	191	11
6	6	0
22	20	-2
145	136	-9
11	9	-2
67	67	0
171	170	-1
39	42	3

VISSIM Hourly Network Results

2022_Build1Signals_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	25.3	23.5	2252	1714	262519	58744	0
2	26.9	23.2	2231	1695	263018	61629	0
3	25.9	23.4	2208	1673	257614	58595	0
4	25.5	23.4	2098	1595	245235	55315	0
5	26	23.3	2163	1645	253815	57891	0
6	25.1	23.6	2136	1618	246604	55342	0
7	26.5	23.3	2271	1735	268030	62246	0
8	27.4	23.1	2178	1663	259748	62057	0
9	26.4	23.3	2147	1637	252654	58355	0
10	26.2	23.3	2203	1668	257282	59358	0
Avg	26.1	23.4	2189	1664	256652	58953	0
St Dev	0.6	0.1	61.3	47	7315	2256	0

Gateway Improvements
Rifle, CO
2022_Build2MiniRAB_Weekday
VISSIM Arterial MOE Results

Start Time:
7:00



CO 13 & Whiteriver

(Two-Way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	351	67	202	19.8	C	19.8	C	5.6	A
Eastbound	Thru	10	525	0	0	0.6	A	0.6	A		
Westbound	Thru	10	282	0	0	0.1	A	1.3	A		
	Right	10	279	0	30	2.6	A				

Target	Modeled	Difference
355	351	-4
536	525	-11
287	282	-5
276	279	3

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	114	6	108	12.0	B	12.6	B	14.1	B						
	Thru	20	163	12	137	13.2	B										
	Right	20	4	17	160	7.7	A										
Southbound	Left	20	88	4	107	12.0	B	15.6	B			14.1	B				
	Thru	20	285	29	297	16.8	B										
	Right	20	9	42	326	11.9	B										
Eastbound	Left	20	15	1	48	14.6	B	14.3	B					14.1	B		
	Thru	20	134	25	275	17.8	B										
	Right	20	221	34	315	12.2	B										
Westbound	Left	20	18	1	45	16.8	B	12.8	B							14.1	B
	Thru	20	87	9	128	15.1	B										
	Right	20	55	10	155	7.7	A										

Target	Modeled	Difference
115	114	-1
168	163	-5
4	4	0
92	88	-4
286	285	-1
10	9	-1
15	15	0
132	134	2
232	221	-11
18	18	0
90	87	-3
59	55	-4

US 6 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	10	3	114	2.2	A	1.7	A	23.7	C
	Thru	30	163	3	114	2.0	A				
	Right	30	106	3	114	1.3	A				
Southbound	Left	30	51	126	513	52.1	F	54.2	F		
	Thru	30	280	126	513	54.6	F				
	Right	30	9	126	513	56.3	F				
Eastbound	Left	30	7	30	247	22.4	C	21.4	C		
	Thru	30	197	30	247	20.8	C				
	Right	30	19	30	247	27.6	D				
Westbound	Left	30	53	1	85	12.8	B	5.2	A		
	Thru	30	141	1	85	2.6	A				
	Right	30	11	1	85	1.8	A				

Target	Modeled	Difference
10	10	0
158	163	5
108	106	-2
54	51	-3
287	280	-7
10	9	-1
7	7	0
222	197	-25
19	19	0
49	53	4
147	141	-6
12	11	-1

VISSIM Hourly Network Results
2022_Build2MiniRAB_Weekday

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	29.0	22.6	1899	1447	230913	56840	0
2	36.8	21.3	1906	1468	248759	72408	2
3	22.4	24	1816	1403	210562	41919	0
4	31.2	22.1	1836	1408	229489	59606	0
5	40.9	20.5	1920	1460	256200	80695	0
6	31.7	22.1	1847	1419	230857	60233	0
7	24.8	23.4	1828	1403	215647	46786	0
8	19.8	24.5	1799	1376	202428	36380	0
9	18.2	24.9	1807	1393	201436	34126	0
10	18.6	24.7	1799	1375	200252	34394	0
Avg	27.3	23	1846	1415	222654	52339	0
St Dev	7.1	1.3	46.3	30	17909	14942	1

Gateway Improvements
Rifle, CO
2022_Build2MiniRAB_Weekday
VISSIM Arterial MOE Results

Start Time:
17:00



CO 13 & Whiteriver

(Two-Way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	221	103	259	42.2	E	42.2	E	6.5	A
Eastbound	Thru	10	423	0	0	0.6	A	0.6	A		
Westbound	Thru	10	695	0	0	0.3	A	1.5	A		
	Right	10	386	0	67	3.5	A				

Target	Modeled	Difference
258	221	-37
433	423	-10
698	695	-3
386	386	0

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	254	18	304	13.2	B	13.3	B	15.4	B						
	Thru	20	432	36	350	13.4	B										
	Right	20	6	45	374	11.1	B										
Southbound	Left	20	62	3	68	14.7	B	17.2	B			15.4	B				
	Thru	20	268	30	265	18.0	B										
	Right	20	15	43	295	13.1	B										
Eastbound	Left	20	36	4	85	19.6	B	17.1	B					15.4	B		
	Thru	20	97	20	207	22.3	C										
	Right	20	130	24	247	12.4	B										
Westbound	Left	20	25	3	69	19.2	B	17.6	B							15.4	B
	Thru	20	88	14	174	21.1	C										
	Right	20	63	16	186	12.2	B										

Target	Modeled	Difference
256	254	-2
436	432	-4
6	6	0
64	62	-2
271	268	-3
16	15	-1
40	36	-4
95	97	2
138	130	-8
24	25	1
91	88	-3
66	63	-3

US 6 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	30	3	4	120	2.3	A	1.7	A	180.0	F						
	Thru	30	295	4	120	1.9	A										
	Right	30	88	4	120	1.0	A										
Southbound	Left	30	22	1258	1400	991.9	F	984.5	F			180.0	F				
	Thru	30	145	1258	1400	982.0	F										
	Right	30	3	1258	1400	1053.0	F										
Eastbound	Left	30	20	52	324	47.8	E	48.6	E					180.0	F		
	Thru	30	136	52	324	47.2	E										
	Right	30	9	52	324	71.4	F										
Westbound	Left	30	66	4	151	41.0	E	13.4	B							180.0	F
	Thru	30	170	4	151	5.1	A										
	Right	30	42	4	151	3.7	A										

Target	Modeled	Difference
4	3	-1
295	295	0
87	88	1
27	22	-5
180	145	-35
6	3	-3
22	20	-2
145	136	-9
11	9	-2
67	66	-1
171	170	-1
39	42	3

VISSIM Hourly Network Results
2022_Build2MiniRAB_Weekday

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	105.1	13.6	2193	1680	444828	244445	47
2	92.4	14.6	2165	1661	408977	211147	23
3	108.4	13.4	2131	1623	437128	243401	102
4	109.3	13.3	2058	1572	425504	237729	51
5	108.7	13.4	2124	1622	437270	243336	33
6	108.3	13.4	2095	1597	428965	239535	46
7	107.7	13.5	2166	1672	447101	248364	93
8	107	13.5	2115	1625	435025	241286	76
9	98.7	14.1	2130	1630	415813	221590	0
10	79.4	15.7	2139	1631	373624	179262	20
Avg	102.5	13.8	2132	1631	425424	231009	49
St Dev	7.1	0.5	50.8	42	13991	14147	31

Gateway Improvements

Rifle, CO

Start Time:

2022_Build3FullRAB_Weekday_24hour 7:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northwestbound	Left	10	295	3	130	2.8	A	3.1	A	3.0	A						
	Thru	10	179	3	130	3.4	A										
	Right	10	86	2	72	3.7	A										
Southbound	Left	10	48	13	188	6.1	A	5.2	A			3.0	A				
	Thru	10	287	13	188	5.1	A										
	Right	10	0	12	188	0.0	A										
Eastbound	Left	10	6	3	115	4.8	A	1.6	A					3.0	A		
	Thru	10	172	3	115	4.5	A										
	Right	10	551	0	0	0.6	A										
Westbound	Left	10	68	2	117	5.3	A	3.9	A							3.0	A
	Thru	10	128	2	117	3.2	A										
	Right	10	10	2	117	2.7	A										

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	179	8	136	10.5	B	8.0	A	11.0	B
	Thru	20	242	7	142	6.1	A				
	Right	20	0	11	165	0.0	A				
Southbound	Left	20	0	0	0	0.0	A	14.6	B		
	Thru	20	375	33	302	14.7	B				
	Right	20	8	46	331	12.2	B				
Eastbound	Left	20	13	1	36	16.8	B	10.7	B		
	Thru	20	0	13	209	0.0	A				
	Right	20	357	29	248	10.5	B				
Westbound	Left	20	0	0	0	0.0	A	17.8	B		
	Thru	20	8	1	31	17.8	B				
	Right	20	0	0	58	0.0	A				

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	8	2	116	1.3	A	1.3	A	1.3	A
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

VISSIM Hourly Network Results

2022_Build3FullRAB_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	11.3	26	1912	1461	202101	22152	0
2	12.1	25.9	1925	1479	205368	23746	2
3	11.3	26	1827	1405	194700	21156	0
4	10.9	26.1	1842	1415	195617	20776	0
5	11.1	26.0	1915	1466	202753	21908	0
6	11.2	26	1850	1420	196935	21301	0
7	11.2	26	1834	1411	195240	21117	0
8	11.2	26.1	1797	1380	190529	20496	0
9	10.9	26.2	1810	1397	192212	20394	0
10	11	26.1	1792	1381	190729	20208	0
Avg	11.2	26	1850	1422	196618	21325	0
St Dev	0.5	0.1	45.9	33	4692	1149	1

Gateway Improvements

Rifle, CO

Start Time:

2022_Build3FullRAB_Weekday_24hour 17:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northwestbound	Left	10	711	7	194	4.1	A	4.2	A	6.0	A
	Thru	10	296	7	194	4.8	A				
	Right	10	71	0	44	2.5	A				
Southbound	Left	10	25	49	276	19.0	C	17.6	C		
	Thru	10	195	49	276	17.4	C				
	Right	10	0	48	276	0.0	A				
Eastbound	Left	10	19	1	66	2.7	A	1.0	A		
	Thru	10	106	1	66	2.6	A				
	Right	10	432	0	0	0.6	A				
Westbound	Left	10	90	23	226	18.0	C	14.3	B		
	Thru	10	149	23	226	12.7	B				
	Right	10	39	23	226	11.9	B				

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	313	12	214	8.3	A	6.2	A	8.4	A
	Thru	20	546	15	257	5.0	A				
	Right	20	0	19	280	0.0	A				
Southbound	Left	20	0	0	0	0.0	A	11.8	B		
	Thru	20	329	23	258	11.9	B				
	Right	20	15	34	287	10.3	B				
Eastbound	Left	20	38	5	74	22.9	C	10.6	B		
	Thru	20	0	5	121	0.0	A				
	Right	20	225	17	165	8.5	A				
Westbound	Left	20	0	0	0	0.0	A	25.9	C		
	Thru	20	5	1	30	25.9	C				
	Right	20	0	0	58	0.0	A				

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	5	19	205	7.4	A	7.4	A	7.4	A
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

VISSIM Hourly Network Results

2022_Build3FullRAB_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAOTOT (ALL)	DEMAND LATENT
1	15.2	24.9	2241	1723	249174	35215	0
2	14.6	25	2227	1705	245611	33327	0
3	13.3	25.4	2201	1689	239706	30052	0
4	12.1	25.6	2105	1610	226192	26121	0
5	12.2	25.6	2159	1659	233391	27243	0
6	12.2	25.7	2145	1642	229704	26956	0
7	19.7	23.9	2269	1750	263305	46354	0
8	13.8	25.3	2189	1681	239680	31289	0
9	13.3	25.4	2144	1653	234667	29453	0
10	12.7	25.6	2191	1681	236880	28622	0
Avg	13.9	25.2	2187	1679	239831	31463	0
St Dev	1.4	0.3	55.3	44	9261	3878	0

Gateway Improvements
Rifle, CO
2045_No Build_Weekday_24hour
VISSIM Arterial MOE Results

Start Time:
7:00



Hwy 13 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	242	40	156	25.8	D	25.8	D	21.1	C
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	743	0	0	1.0	A	1.0	A		
	Thru	10	427	0	0	0.6	A				
Westbound	Right	10	120	164	636	70.3	F	38.3	E		
	Right	10	257	164	636	85.9	F				

Target	Modeled	Difference
423	242	-181
0	0	0
761	743	-18
432	427	-5
384	377	-7

US 6 & Hwy 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	155	14	147	18.2	B	15.7	B	19.9	B
	Thru	20	267	22	205	14.3	B				
	Right	20	4	31	228	9.6	A				
Southbound	Left	20	114	10	284	18.3	B	20.8	C		
	Thru	20	465	75	544	21.4	C				
	Right	20	10	92	573	23.3	C				
Eastbound	Left	20	17	2	51	21.1	C	23.5	C		
	Thru	20	139	55	469	27.5	C				
	Right	20	259	67	493	21.5	C				
Westbound	Left	20	21	3	71	25.8	C	18.2	B		
	Thru	20	89	14	171	21.1	C				
	Right	20	63	17	198	11.7	B				

Target	Modeled	Difference
151	155	4
276	267	-9
5	4	-1
116	114	-2
470	465	-5
13	10	-3
17	17	0
141	139	-2
270	259	-11
21	21	0
96	89	-7
69	63	-6

US 6 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	9	91	185	30.1	D	12.1	B	171.6	F
	Thru	30	246	93	186	14.5	B				
	Right	30	119	39	162	5.9	A				
Southbound	Left	30	24	1364	1445	899.7	F	896.0	F		
	Thru	30	168	1367	1448	896.0	F				
	Right	30	4	1379	1460	874.4	F				
Eastbound	Left	30	8	0	6	0.8	A	0.5	A		
	Thru	30	227	0	6	0.3	A				
	Right	30	21	0	6	2.1	A				
Westbound	Left	30	54	1	68	6.1	A	1.7	A		
	Thru	30	161	0	0	0.4	A				
	Right	30	12	0	0	0.7	A				

Target	Modeled	Difference
10	9	-1
251	246	-5
123	119	-4
56	24	-32
352	168	-184
10	4	-6
7	8	1
235	227	-8
20	21	1
51	54	3
166	161	-5
12	12	0

VISSIM Hourly Network Results
2045_No Build_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	107.8	13.6	2228	1722	456377	253496	238
2	117.6	12.9	2215	1715	479566	277368	234
3	109.8	13.4	2213	1719	461326	258187	183
4	122.1	12.6	2184	1683	481557	282839	243
5	124.6	12.4	2250	1749	507226	300624	235
6	109.5	13.4	2193	1705	457479	256023	210
7	115.6	13.1	2183	1687	464889	265847	202
8	110.2	13.4	2207	1708	457680	256606	187
9	109.2	13.5	2197	1700	454049	253421	199
10	113.6	13.1	2261	1751	480365	273352	186
Avg	114	13.1	2213	1714	470051	267776	212
St Dev	7.4	0.5	24.1	24	20073	19154	25

Gateway Improvements
Rifle, CO
2045_No Build_Weekday_24hour
VISSIM Arterial MOE Results

Start Time:
17:00



Hwy 13 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	265	33	140	20.2	C	20.2	C	168.4	F
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	637	0	0	1.0	A	1.0	A		
Westbound	Thru	10	601	391	436	241.6	F	328.0	F		
	Right	10	52	1957	2047	473.5	F				
	Right	10	261	1957	2047	498.0	F				

Target	Modeled	Difference
308	265	-43
0	0	0
634	637	3
1061	601	-460
538	313	-225

US 6 & Hwy 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	183	28	512	17.9	B	15.0	B	18.5	B						
	Thru	20	412	45	653	13.8	B										
	Right	20	4	51	676	11.4	B										
Southbound	Left	20	82	8	226	20.7	C	19.5	B			18.5	B				
	Thru	20	447	63	498	19.4	B										
	Right	20	21	78	527	16.8	B										
Eastbound	Left	20	50	6	91	21.3	C	21.2	C					18.5	B		
	Thru	20	100	31	299	26.9	C										
	Right	20	160	39	320	17.5	B										
Westbound	Left	20	29	4	81	24.3	C	22.4	C							18.5	B
	Thru	20	92	20	192	26.8	C										
	Right	20	74	25	213	16.1	B										

Target	Modeled	Difference
337	183	-154
716	412	-304
8	4	-4
81	82	1
445	447	2
21	21	0
47	50	3
102	100	-2
161	160	-1
28	29	1
98	92	-6
77	74	-3

US 6 & Whiteriver Ave

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	4	123	192	49.2	E	14.7	B	190.5	F
	Thru	30	258	124	193	16.1	C				
	Right	30	52	39	165	5.3	A				
Southbound	Left	30	22	1373	1437	900.0	F	889.5	F		
	Thru	30	185	1375	1439	888.6	F				
	Right	30	3	1388	1452	869.5	F				
Eastbound	Left	30	23	0	27	1.9	A	0.6	A		
	Thru	30	153	0	0	0.2	A				
	Right	30	11	0	0	3.8	A				
Westbound	Left	30	70	2	68	8.0	A	2.3	A		
	Thru	30	190	0	0	0.5	A				
	Right	30	38	0	0	0.9	A				

Target	Modeled	Difference
4	4	0
435	258	-177
99	52	-47
28	22	-6
227	185	-42
6	3	-3
23	23	0
157	153	-4
11	11	0
70	70	0
193	190	-3
40	38	-2

VISSIM Hourly Network Results
2045_No Build_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	284.2	6.7	2215	1680	896547	697698	1841
2	260.7	7.2	2344	1777	888090	678075	1735
3	274.5	7	2282	1731	894844	689724	1714
4	272	7	2276	1737	894753	688938	1786
5	277.2	6.8	2280	1715	904173	700215	1791
6	266.7	7.2	2351	1786	899088	688089	1691
7	266.3	7.1	2307	1746	886248	679807	1709
8	268.4	7.1	2307	1762	895895	687265	1660
9	278.6	6.8	2244	1691	892631	692298	1796
10	287.6	6.7	2192	1670	897439	700100	1777
Avg	273.6	7	2280	1729	894971	690221	1750
St Dev	8.6	0.2	45.7	35	5746	8699	50

Gateway Improvements
Rifle, CO

Start Time:

2045_Build1Signals_Weekday_24hour 7:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	416	8	118	5.2	A	5.2	A	7.4	A
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	742	0	0	1.0	A	1.0	A		
	Thru	10	427	24	183	16.1	B				
Westbound	Right	10	122	5	235	3.6	A	14.3	B		
	Right	10	262	5	235	16.4	B				

Target	Modeled	Difference
423	416	-7
0	0	0
761	742	-19
432	427	-5
384	384	0

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	156	9	187	12.6	B	7.8	A	23.0	C
	Thru	20	266	7	235	5.0	A				
	Right	20	3	8	258	2.9	A				
Southbound	Left	20	113	21	369	29.2	C	25.1	C		
	Thru	20	462	90	620	24.2	C				
	Right	20	10	107	650	20.2	C				
Eastbound	Left	20	17	2	53	28.3	C	31.0	C		
	Thru	20	140	77	500	36.0	D				
	Right	20	260	92	539	28.6	C				
Westbound	Left	20	21	4	62	36.0	D	33.6	C		
	Thru	20	92	31	181	39.0	D				
	Right	20	65	38	206	25.1	C				

Target	Modeled	Difference
151	156	5
276	266	-10
5	3	-2
116	113	-3
470	462	-8
13	10	-3
17	17	0
141	140	-1
270	260	-10
21	21	0
96	92	-4
69	65	-4

US 6 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	10	31	131	10.1	B	5.1	A	16.8	B
	Thru	30	252	31	131	6.4	A				
	Right	30	122	1	78	1.9	A				
Southbound	Left	30	52	69	413	28.0	C	27.1	C		
	Thru	30	341	69	413	27.0	C				
	Right	30	9	82	433	25.2	C				
Eastbound	Left	30	8	0	26	11.8	B	14.8	B		
	Thru	30	227	21	214	15.2	B				
	Right	30	21	30	236	12.0	B				
Westbound	Left	30	54	12	120	43.1	D	20.7	C		
	Thru	30	161	13	160	14.4	B				
	Right	30	12	0	67	4.2	A				

Target	Modeled	Difference
10	10	0
251	252	1
123	122	-1
56	52	-4
352	341	-11
10	9	-1
7	8	1
235	227	-8
20	21	1
51	54	3
166	161	-5
12	12	0

VISSIM Hourly Network Results

2045_Build1Signals_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	29.5	22.6	2467	1876	298390	74694	0
2	32.2	22.1	2444	1866	304505	81582	0
3	28.7	22.8	2421	1854	293355	71775	0
4	30	22.5	2412	1836	294463	75051	1
5	30.8	22.3	2487	1891	304957	78795	0
6	30.5	22.4	2413	1850	297605	76448	1
7	29.5	22.6	2379	1821	290168	72485	0
8	31.1	22.3	2398	1833	295482	76876	0
9	29.7	22.5	2390	1829	292099	73414	0
10	31.4	22.2	2471	1890	306532	80443	0
Avg	30.3	22.4	2428	1855	297756	76156	0
St Dev	1.3	0.3	31.3	21	5443	3831	0

Gateway Improvements
Rifle, CO

Start Time:

2045_Build1Signals_Weekday_24hour

17:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	309	12	122	8.1	A	8.1	A	11.2	B
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	638	0	0	1.1	A	1.1	A		
Westbound	Thru	10	1061	59	445	15.6	B	15.8	B		
	Right	10	101	17	344	6.8	A				
	Right	10	434	18	343	18.3	B				

Target	Modeled	Difference
308	309	1
0	0	0
634	638	4
1061	1061	0
538	535	-3

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	325	34	540	16.9	B	11.4	B	21.2	C						
	Thru	20	728	44	593	9.0	A										
	Right	20	8	52	616	11.5	B										
Southbound	Left	20	83	21	436	45.0	D	29.0	C			21.2	C				
	Thru	20	449	91	534	26.4	C										
	Right	20	21	109	563	21.6	C										
Eastbound	Left	20	50	7	100	26.0	C	25.7	C					21.2	C		
	Thru	20	101	38	309	31.5	C										
	Right	20	160	48	347	21.9	C										
Westbound	Left	20	30	7	83	42.7	D	44.7	D							21.2	C
	Thru	20	95	45	229	51.4	D										
	Right	20	74	58	256	37.0	D										

Target	Modeled	Difference
337	325	-12
716	728	12
8	8	0
81	83	2
445	449	4
21	21	0
47	50	3
102	101	-1
161	160	-1
28	30	2
98	95	-3
77	74	-3

US 6 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	5	37	141	3.1	A	3.2	A	16.2	B
	Thru	30	429	37	141	3.7	A				
	Right	30	101	0	56	1.0	A				
Southbound	Left	30	28	56	314	36.4	D	34.6	C		
	Thru	30	228	56	314	34.6	C				
	Right	30	5	69	335	24.4	C				
Eastbound	Left	30	24	2	40	14.7	B	17.0	B		
	Thru	30	156	16	181	17.8	B				
	Right	30	11	25	203	10.3	B				
Westbound	Left	30	70	16	117	41.8	D	23.0	C		
	Thru	30	190	21	196	19.2	B				
	Right	30	38	2	95	7.6	A				

Target	Modeled	Difference
4	5	1
435	429	-6
99	101	2
28	28	0
227	228	1
6	5	-1
23	24	1
157	156	-1
11	11	0
70	70	0
193	190	-3
40	38	-2

VISSIM Hourly Network Results

2045_Build1Signals_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	32.6	22.1	3042	2308	375534	102015	0
2	31.5	22.3	2922	2228	359519	95268	0
3	32.3	22.2	3006	2285	370785	99786	0
4	31.6	22.3	3000	2281	368040	97646	0
5	32.9	22.0	2999	2268	371133	101720	0
6	32.8	22	3016	2284	373090	102299	0
7	31.8	22.3	3009	2288	370062	98540	0
8	31.6	22.3	3039	2314	373977	99504	0
9	30.9	22.4	3043	2304	370405	96985	0
10	34.2	21.8	3049	2322	382851	107696	0
Avg	32.2	22.2	3013	2288	371539	100146	0
St Dev	0.6	0.1	43.9	29	5942	2848	0

Gateway Improvements

Rifle, CO

Start Time:

2045_Build2MiniRAB_Weekday_24h 7:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	311	89	234	27.4	D	27.4	D	5.9	A
Eastbound	Thru	10	742	0	0	1.0	A	1.0	A		
Westbound	Thru	10	427	0	0	0.2	A	2.1	A		
	Right	10	385	1	115	4.2	A				

Target	Modeled	Difference
423	311	-112
761	742	-19
432	427	-5
384	385	1

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	155	15	181	19.6	B	16.6	B	20.9	C
	Thru	20	267	24	231	15.0	B				
	Right	20	4	32	254	11.2	B				
Southbound	Left	20	114	9	286	19.0	B	21.7	C		
	Thru	20	465	79	621	22.3	C				
	Right	20	10	96	650	20.5	C				
Eastbound	Left	20	17	2	56	22.4	C	25.5	C		
	Thru	20	139	60	471	29.9	C				
	Right	20	259	73	511	23.4	C				
Westbound	Left	20	21	3	64	24.3	C	17.4	B		
	Thru	20	91	14	182	20.5	C				
	Right	20	64	16	200	10.8	B				

Target	Modeled	Difference
151	155	4
276	267	-9
5	4	-1
116	114	-2
470	465	-5
13	10	-3
17	17	0
141	139	-2
270	259	-11
21	21	0
96	91	-5
69	64	-5

US 6 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	10	7	122	2.6	A	2.1	A	126.4	F
	Thru	30	253	7	122	2.3	A				
	Right	30	122	7	122	1.5	A				
Southbound	Left	30	36	1092	1405	469.5	F	465.7	F		
	Thru	30	237	1092	1405	464.3	F				
	Right	30	6	1092	1405	500.3	F				
Eastbound	Left	30	8	84	393	62.4	F	48.3	E		
	Thru	30	226	84	393	46.8	E				
	Right	30	21	84	393	58.7	F				
Westbound	Left	30	54	2	111	21.6	C	7.8	A		
	Thru	30	161	2	111	3.6	A				
	Right	30	12	2	111	2.6	A				

Target	Modeled	Difference
10	10	0
251	253	2
123	122	-1
56	36	-20
352	237	-115
10	6	-4
7	8	1
235	226	-9
20	21	1
51	54	3
166	161	-5
12	12	0

VISSIM Hourly Network Results

2045_Build2MiniRAB_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	87.2	15.1	2338	1794	428446	213879	100
2	89.4	14.9	2311	1787	433140	219020	85
3	78.1	15.9	2326	1800	407485	191559	52
4	90.9	14.7	2263	1745	426538	217333	114
5	92.1	14.6	2362	1818	447359	229428	86
6	89.3	14.9	2280	1773	429264	216648	81
7	85	15.3	2269	1755	413434	202990	77
8	84.3	15.4	2270	1762	412314	201611	78
9	81	15.6	2270	1757	405089	194341	78
10	82	15.5	2358	1821	422600	203983	70
Avg	85.9	15.2	2305	1781	422567	209079	82
St Dev	5.6	0.5	36.9	27	14341	13943	23

West Main Street

City of Montrose

Start Time:

2045_Build2MiniRAB_Weekday_24hr 17:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	138	124	285	72.0	F	72.0	F	7.6	A
Eastbound	Thru	10	624	0	0	1.1	A	1.1	A		
Westbound	Thru	10	1060	5	252	2.0	A	4.5	A		
	Right	10	535	13	366	9.6	A				

Target	Modeled	Difference
308	138	-170
634	624	-10
1061	1060	-1
538	535	-3

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	325	99	591	29.3	C	25.7	C	41.7	D						
	Thru	20	726	139	593	24.0	C										
	Right	20	8	153	616	31.8	C										
Southbound	Left	20	80	134	814	81.3	F	51.0	D			41.7	D				
	Thru	20	440	140	850	46.2	D										
	Right	20	20	157	879	35.1	D										
Eastbound	Left	20	49	8	96	80.1	F	90.5	F					41.7	D		
	Thru	20	97	200	926	100.8	F										
	Right	20	154	206	948	87.3	F										
Westbound	Left	20	29	4	67	29.0	C	28.1	C							41.7	D
	Thru	20	93	26	222	32.6	C										
	Right	20	73	32	237	22.0	C										

Target	Modeled	Difference
337	325	-12
716	726	10
8	8	0
81	80	-1
445	440	-5
21	20	-1
47	49	2
102	97	-5
161	154	-7
28	29	1
98	93	-5
77	73	-4

US 6 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	5	14	131	3.8	A	2.1	A	206.2	F
	Thru	30	430	14	131	2.3	A				
	Right	30	101	14	131	1.2	A				
Southbound	Left	30	7	1355	1390	2481.1	F	2534.0	F		
	Thru	30	60	1355	1390	2538.4	F				
	Right	30	1	1355	1390	2636.7	F				
Eastbound	Left	30	22	268	574	203.6	F	213.3	F		
	Thru	30	143	268	574	213.6	F				
	Right	30	10	268	574	231.0	F				
Westbound	Left	30	69	36	393	95.3	F	36.8	E		
	Thru	30	189	36	393	19.5	C				
	Right	30	38	36	393	16.8	C				

Target	Modeled	Difference
4	5	1
435	430	-5
99	101	2
28	7	-21
227	60	-167
6	1	-5
23	22	-1
157	143	-14
11	10	-1
70	69	-1
193	189	-4
40	38	-2

VISSIM Hourly Network Results

2045_Build2MiniRAB_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	115.9	12.9	2822	2182	608658	350184	349
2	176.1	9.8	2614	2035	750990	509958	381
3	99.3	14.1	2806	2160	550204	294136	457
4	114.3	13.1	2735	2118	583556	332733	425
5	128.6	12.2	2807	2149	635485	379813	406
6	128.7	12.1	2710	2099	623124	374414	461
7	123.6	12.4	2793	2147	623114	368312	405
8	133.5	11.9	2828	2175	656568	398491	435
9	106.1	13.6	2854	2178	577533	318937	329
10	129.7	12.1	2854	2196	652502	391962	380
Avg	125.6	12.4	2782	2144	626173	371894	403
St Dev	29.4	1.6	86.7	57	76746	82409	41

Gateway Improvements
Rifle, CO

Start Time:

2045_Build3FullRAB_Weekday_24hour 7:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northwestbound	Left	10	430	8	197	4.0	A	4.6	A	4.4	A						
	Thru	10	248	8	197	5.3	A										
	Right	10	132	3	112	5.1	A										
Southbound	Left	10	55	56	417	8.6	A	8.8	A			4.4	A				
	Thru	10	337	56	417	8.8	A										
	Right	10	0	55	417	0.0	A										
Eastbound	Left	10	7	6	153	7.2	A	2.2	A					4.4	A		
	Thru	10	217	6	153	6.5	A										
	Right	10	749	0	0	0.9	A										
Westbound	Left	10	73	4	121	7.2	A	5.3	A							4.4	A
	Thru	10	142	4	121	4.4	A										
	Right	10	12	4	121	4.8	A										

Target	Modeled	Difference
437	430	-7
251	248	-3
128	132	4
56	55	-1
352	337	-15
0	0	0
7	7	0
230	217	-13
760	749	-11
72	73	1
145	142	-3
12	12	0

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	232	23	233	19.1	B	11.7	B	16.2	B						
	Thru	20	337	12	208	6.6	A										
	Right	20	0	17	231	0.0	A										
Southbound	Left	20	0	0	0	0.0	A	18.7	B			16.2	B				
	Thru	20	575	76	541	18.7	B										
	Right	20	14	92	570	18.7	B										
Eastbound	Left	20	16	2	50	25.5	C	18.7	B					16.2	B		
	Thru	20	0	33	354	0.0	A										
	Right	20	400	55	392	18.4	B										
Westbound	Left	20	0	0	0	0.0	A	22.3	C							16.2	B
	Thru	20	8	1	28	22.3	C										
	Right	20	0	0	56	0.0	A										

Target	Modeled	Difference
247	232	-15
345	337	-8
0	0	0
0	0	0
586	575	-11
13	14	1
17	16	-1
0	0	0
411	400	-11
0	0	0
10	8	-2
0	0	0

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	8	26	345	5.4	A	5.4	A	5.4	A
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

Target	Modeled	Difference
10	8	-2
0	0	0

VISSIM Hourly Network Results

2045_Build3FullRAB_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	19.8	24	2460	1884	282195	50188	0
2	18.8	24.3	2451	1882	278634	47516	0
3	17.4	24.5	2426	1858	273428	43664	0
4	15.5	24.9	2420	1848	267042	38652	1
5	18.1	24.4	2481	1904	280905	46194	0
6	16	24.8	2404	1856	269011	40097	1
7	16.9	24.7	2385	1836	267820	41531	0
8	16.3	24.9	2395	1844	267056	40261	0
9	17.7	24.5	2383	1838	270497	43712	0
10	18.1	24.4	2480	1901	280874	46295	0
Avg	17.5	24.5	2429	1865	273746	43811	0
St Dev	1.6	0.3	25.0	22	6230	4372	0

Gateway Improvements
Rifle, CO

Start Time:

2045_Build3FullRAB_Weekday_24hour 17:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northwestbound	Left	10	1056	54	551	11.0	B	11.1	B	40.0	E
	Thru	10	434	54	551	12.6	B				
	Right	10	106	1	66	6.2	A				
Southbound	Left	10	15	1378	1436	71.3	F	69.2	F		
	Thru	10	119	1378	1436	68.9	F				
	Right	10	0	1378	1436	0.0	A				
Eastbound	Left	10	22	1	64	2.4	A	1.2	A		
	Thru	10	147	1	64	2.4	A				
	Right	10	625	0	0	0.9	A				
Westbound	Left	10	83	751	1387	331.9	F	324.1	F		
	Thru	10	141	751	1387	322.4	F				
	Right	10	33	751	1387	311.7	F				

Target	Modeled	Difference
1057	1056	-1
435	434	-1
107	106	-1
28	15	-13
227	119	-108
0	0	0
23	22	-1
149	147	-2
617	625	8
98	83	-15
165	141	-24
40	33	-7

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	406	42	406	17.3	B	9.8	A	12.3	B
	Thru	20	785	32	427	5.9	A				
	Right	20	0	37	450	0.0	A				
Southbound	Left	20	0	0	0	0.0	A	15.1	B		
	Thru	20	531	54	473	15.2	B				
	Right	20	20	67	503	13.0	B				
Eastbound	Left	20	48	9	99	33.0	C	16.6	B		
	Thru	20	0	12	212	0.0	A				
	Right	20	264	29	251	13.6	B				
Westbound	Left	20	0	0	0	0.0	A	30.3	C		
	Thru	20	2	0	21	30.3	C				
	Right	20	0	0	45	0.0	A				

Target	Modeled	Difference
435	406	-29
793	785	-8
0	0	0
0	0	0
526	531	5
21	20	-1
47	48	1
0	0	0
263	264	1
0	0	0
6	2	-4
0	0	0

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	2	1306	1364	1298.5	F	1298.5	F	1298.5	F
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!	1298.5	F

Target	Modeled	Difference
6	2	-4
0	0	0

VISSIM Hourly Network Results

2045_Build3FullRAB_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	107.5	13.3	2856	2220	601589	326628	198
2	94.7	14.2	2786	2161	547197	279673	201
3	113.7	12.9	2847	2207	617370	343993	159
4	113.4	12.9	2827	2184	611323	340593	183
5	126.6	12.0	2868	2203	659232	386572	145
6	102	13.7	2843	2202	579657	307023	181
7	117.3	12.6	2853	2199	630388	357796	180
8	93.2	14.4	2880	2231	559705	283218	217
9	137.3	11.5	2854	2210	692511	418841	209
10	130.1	11.9	2841	2210	669609	396648	213
Avg	113.6	12.9	2846	2203	616858	344099	189
St Dev	11.6	0.8	32.1	23	40186	38412	24

Gateway Improvements

Rifle, CO

Start Time:

2045_Build3FullRABMeter_Weekday_2 7:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northwestbound	Left	10	431	10	172	5.0	A	5.3	A	4.1	A						
	Thru	10	249	10	172	6.0	A										
	Right	10	132	3	90	4.9	A										
Southbound	Left	10	55	27	289	6.3	A	6.6	A			4.1	A				
	Thru	10	338	27	289	6.6	A										
	Right	10	0	26	289	0.0	A										
Eastbound	Left	10	7	6	139	6.8	A	2.0	A					4.1	A		
	Thru	10	216	6	139	5.8	A										
	Right	10	748	0	0	0.9	A										
Westbound	Left	10	73	3	129	6.1	A	4.7	A							4.1	A
	Thru	10	142	3	129	4.1	A										
	Right	10	12	3	129	4.5	A										

Target	Modeled	Difference
437	431	-6
251	249	-2
128	132	4
56	55	-1
352	338	-14
0	0	0
7	7	0
230	216	-14
760	748	-12
72	73	1
145	142	-3
12	12	0

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	232	23	227	19.0	B	12.0	B	16.2	B						
	Thru	20	337	14	231	7.2	A										
	Right	20	0	18	254	0.0	A										
Southbound	Left	20	0	0	0	0.0	A	18.6	B			16.2	B				
	Thru	20	576	76	564	18.6	B										
	Right	20	14	92	593	20.2	C										
Eastbound	Left	20	16	2	42	22.2	C	18.4	B					16.2	B		
	Thru	20	0	33	370	0.0	A										
	Right	20	400	55	409	18.3	B										
Westbound	Left	20	0	0	0	0.0	A	24.6	C							16.2	B
	Thru	20	8	1	29	24.6	C										
	Right	20	0	0	56	0.0	A										

Target	Modeled	Difference
247	232	-15
345	337	-8
0	0	0
0	0	0
586	576	-10
13	14	1
17	16	-1
0	0	0
411	400	-11
0	0	0
10	8	-2
0	0	0

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	9	8	217	2.1	A	2.1	A	2.1	A
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

Target	Modeled	Difference
10	9	-1
0	0	0

VISSIM Hourly Network Results

2045_Build3FullRABMeter_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	17.1	24.6	2462	1884	275186	43204	0
2	16.6	24.8	2448	1881	273131	42037	0
3	16.2	24.7	2426	1859	270503	40592	0
4	14.5	25.1	2422	1848	264694	36200	1
5	17.4	24.5	2485	1905	279449	44471	0
6	14.8	25.1	2400	1856	265929	37024	1
7	15.6	25	2383	1835	264646	38358	0
8	15.7	25	2393	1843	265610	38781	0
9	15.9	24.9	2395	1840	266523	39414	0
10	18.1	24.4	2483	1902	281159	46241	0
Avg	16.2	24.8	2430	1865	270683	40632	0
St Dev	1.1	0.2	26.1	22	5495	3191	0

Gateway Improvements

Rifle, CO

Start Time:

2045_Build3FullRABMeter_Weekday_2 17:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northwestbound	Left	10	1051	205	896	30.6	D	29.7	D	22.5	C
	Thru	10	432	205	896	30.4	D				
	Right	10	105	1	73	17.7	C				
Southbound	Left	10	28	485	997	35.0	D	32.9	D		
	Thru	10	217	485	997	32.7	D				
	Right	10	0	485	997	0.0	A				
Eastbound	Left	10	22	3	111	4.7	A	1.7	A		
	Thru	10	148	3	111	4.4	A				
	Right	10	624	0	0	1.0	A				
Westbound	Left	10	97	66	393	33.2	D	31.1	D		
	Thru	10	162	66	393	30.0	D				
	Right	10	38	66	393	30.3	D				

Target	Modeled	Difference
1057	1051	-6
435	432	-3
107	105	-2
28	28	0
227	217	-10
0	0	0
23	22	-1
149	148	-1
617	624	7
98	97	-1
165	162	-3
40	38	-2

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	416	52	473	19.2	B	10.7	B	13.0	B						
	Thru	20	792	36	483	6.2	A										
	Right	20	0	41	506	0.0	A										
Southbound	Left	20	0	0	0	0.0	A	15.7	B			13.0	B				
	Thru	20	531	57	466	15.8	B										
	Right	20	20	70	495	14.0	B										
Eastbound	Left	20	48	9	94	31.6	C	16.5	B					13.0	B		
	Thru	20	0	12	218	0.0	A										
	Right	20	263	29	256	13.7	B										
Westbound	Left	20	0	0	0	0.0	A	37.9	D							13.0	B
	Thru	20	6	1	30	37.9	D										
	Right	20	0	0	57	0.0	A										

Target	Modeled	Difference
435	416	-19
793	792	-1
0	0	0
0	0	0
526	531	5
21	20	-1
47	48	1
0	0	0
263	263	0
0	0	0
6	6	0
0	0	0

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	6	415	926	208.1	F	208.1	F	208.1	F
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!	208.1	F

Target	Modeled	Difference
6	6	0
0	0	0

VISSIM Hourly Network Results

2045_Build3FullRABMeter_Weekday_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	49.0	19	2998	2319	440589	152710	0
2	31	21.7	2919	2252	373247	94130	0
3	47.1	19.2	2984	2300	430792	145523	0
4	40.2	20.2	2971	2283	407219	123860	0
5	56.9	17.9	3011	2297	461641	176942	0
6	37.4	20.7	2972	2291	399332	115815	0
7	47.7	19.1	2980	2291	432734	148466	0
8	41.8	20	3033	2333	420520	131043	0
9	103.8	13.5	3013	2324	619020	330836	0
10	46	19.3	3018	2337	435162	145595	0
Avg	50.1	19.1	2990	2303	442026	156492	0
St Dev	9.8	1.4	35.5	25	33864	31273	0

West Main Street
City of Montrose
2045 HiGrowth_Build1Signals_Recreat 7:00
VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	479	10	142	5.5	A	5.5	A	8.2	A
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	993	0	0	1.0	A	1.0	A		
Westbound	Thru	10	584	38	275	17.7	B	17.8	B		
	Right	10	301	9	268	17.8	B				

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	292	74	347	41.0	D	23.8	C	78.0	E						
	Thru	20	283	9	253	6.3	A										
	Right	20	4	14	245	1.9	A										
Southbound	Left	20	113	71	680	41.6	D	42.8	D			78.0	E				
	Thru	20	491	212	878	43.1	D										
	Right	20	11	234	907	42.3	D										
Eastbound	Left	20	15	2	55	162.3	F	178.8	F					78.0	E		
	Thru	20	117	1511	1953	184.4	F										
	Right	20	482	1549	1992	178.0	F										
Westbound	Left	20	21	3	66	29.2	C	28.7	C							78.0	E
	Thru	20	93	26	209	33.4	C										
	Right	20	66	34	236	21.8	C										

US 6 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	30	10	34	144	11.6	B	4.7	A	17.4	B
	Thru	30	291	34	144	5.7	A				
	Right	30	118	1	69	1.7	A				
Southbound	Left	30	53	90	518	31.8	C	28.7	C		
	Thru	30	406	90	518	28.3	C				
	Right	30	11	104	538	26.0	C				
Eastbound	Left	30	8	0	26	8.8	A	13.5	B		
	Thru	30	205	17	188	14.0	B				
	Right	30	20	25	209	10.3	B				
Westbound	Left	30	54	13	118	44.6	D	21.9	C		
	Thru	30	161	14	166	15.5	B				
	Right	30	12	0	68	5.0	A				

VISSIM Hourly Network Results

2045 HiGrowth_Build1Signals_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	81.9	15.7	2958	2308	530236	256237	97
2	82.4	15.7	2882	2251	517436	250742	64
3	80.3	15.9	2907	2272	514807	245496	129
4	75.7	16.3	2972	2320	512706	237150	49
5	85.5	15.4	2886	2258	529659	260818	154
6	72.9	16.6	2925	2286	496064	224714	31
7	83.5	15.5	2819	2194	508258	247229	102
8	86.8	15.2	2818	2207	521100	258904	87
9	80.2	15.9	2879	2247	510354	243065	114
10	82.3	15.6	2949	2306	530837	256647	81
Avg	81.2	15.8	2900	2265	517146	248100	91
St Dev	3.6	0.3	41.6	31	8368	9245	44

West Main Street
City of Montrose Start Time:
2045 HiGrowth_Build1Signals_Recreat 17:00
VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	343	12	124	7.3	A	7.3	A	77.3	E
	Right	10	0	0	0	0.0	A				
Eastbound	Thru	10	868	0	0	1.2	A	1.2	A		
Westbound	Thru	10	1167	1620	2046	149.9	F	134.4	F		
	Right	10	411	1425	2035	90.6	F				

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	528	503	702	113.4	F	67.3	E	78.1	E						
	Thru	20	621	357	689	28.6	C										
	Right	20	6	371	712	18.3	B										
Southbound	Left	20	86	627	1151	144.8	F	148.7	F			78.1	E				
	Thru	20	497	831	1234	149.5	F										
	Right	20	20	860	1263	144.4	F										
Eastbound	Left	20	48	7	168	30.5	C	35.3	D					78.1	E		
	Thru	20	109	111	647	43.6	D										
	Right	20	342	128	686	33.3	C										
Westbound	Left	20	30	5	67	31.6	C	34.4	C							78.1	E
	Thru	20	94	34	231	39.3	D										
	Right	20	74	44	256	29.4	C										

US 6 & Whiteriver

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	30	3	28	142	2.7	A	2.9	A	16.1	B						
	Thru	30	408	28	142	3.3	A										
	Right	30	83	0	63	0.9	A										
Southbound	Left	30	27	63	327	34.9	C	33.8	C			16.1	B				
	Thru	30	261	63	327	33.9	C										
	Right	30	5	76	348	25.4	C										
Eastbound	Left	30	25	1	50	7.0	A	12.3	B					16.1	B		
	Thru	30	164	12	170	13.1	B										
	Right	30	12	18	191	13.1	B										
Westbound	Left	30	70	16	116	42.4	D	23.1	C							16.1	B
	Thru	30	190	21	205	19.0	B										
	Right	30	38	3	95	8.5	A										

VISSIM Hourly Network Results

2045 HiGrowth_Build1Signals_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	155.1	10.8	3384	2615	873782	564356	362
2	143.6	11.4	3435	2657	838364	525894	118
3	171.2	10.1	3307	2549	910773	609456	423
4	120.5	12.7	3384	2651	749513	437176	216
5	122.5	12.6	3402	2658	759817	445950	212
6	152.1	10.9	3247	2531	833414	534893	370
7	162.8	10.5	3301	2560	876486	574402	346
8	153.5	10.9	3315	2582	852442	547750	272
9	172.9	10.0	3326	2571	923885	619994	411
10	140	11.6	3365	2626	814472	505485	347
Avg	149.4	11.2	3347	2600	843295	536536	308
St Dev	21.6	1.1	47.0	47	70448	74647	124

West Main Street
City of Montrose Start Time:
2045 HiGrowth_Build2MiniRAB_Recre 7:00
VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	246	106	248	37.4	E	37.4	E	5.3	A
Eastbound	Thru	10	994	0	0	1.1	A	1.1	A		
Westbound	Thru	10	616	0	0	0.3	A	1.5	A		
	Right	10	390	1	86	3.5	A				

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	283	76	391	40.1	D	29.1	C	82.2	F
	Thru	20	324	46	372	19.8	B				
	Right	20	6	56	395	16.9	B				
Southbound	Left	20	88	17	504	43.4	D	46.4	D		
	Thru	20	499	229	878	47.2	D				
	Right	20	30	251	907	41.9	D				
Eastbound	Left	20	12	2	38	175.2	F	192.8	F		
	Thru	20	99	1455	1959	204.5	F				
	Right	20	458	1493	1999	190.7	F				
Westbound	Left	20	37	7	82	38.1	D	28.1	C		
	Thru	20	81	17	158	28.8	C				
	Right	20	35	19	183	15.9	B				

US 6 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	30	10	4	125	2.2	A	1.4	A	203.4	F						
	Thru	30	214	4	125	1.7	A										
	Right	30	166	4	125	1.0	A										
Southbound	Left	30	9	1350	1405	1343.7	F	1220.1	F			203.4	F				
	Thru	30	132	1350	1405	1211.1	F										
	Right	30	1	1350	1405	1306.6	F										
Eastbound	Left	30	2	103	419	70.6	F	84.6	F					203.4	F		
	Thru	30	147	103	419	80.0	F										
	Right	30	41	103	419	101.6	F										
Westbound	Left	30	73	2	114	36.1	E	14.0	B							203.4	F
	Thru	30	143	2	114	3.7	A										
	Right	30	11	2	114	1.8	A										

VISSIM Hourly Network Results

2045 HiGrowth_Build2MiniRAB_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	166.9	10.5	2542	2026	694875	456223	594
2	161	10.7	2505	1990	667176	433215	487
3	160.2	10.8	2575	2056	685681	443841	479
4	150.7	11.2	2603	2068	664751	421016	478
5	173.4	10.2	2529	2018	712022	473694	550
6	152.1	11.1	2577	2058	665117	422707	412
7	164.4	10.6	2483	1981	673241	439527	454
8	158.3	10.9	2493	1997	662055	426819	398
9	155	11.0	2533	2020	662023	423537	482
10	162.2	10.6	2573	2061	699108	455695	460
Avg	160.4	10.8	2541	2028	678605	439627	479
St Dev	8.4	0.4	38.6	31	19722	20390	52



CO 13 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Left	10	223	109	268	41.8	E	41.8	E	48.0	E
Eastbound	Thru	10	896	0	0	1.3	A	1.3	A		
Westbound	Thru	10	1329	935	1911	74.8	F	70.5	F		
	Right	10	586	649	1880	60.8	F				

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	529	371	678	89.1	F	53.4	D	109.5	F						
	Thru	20	781	255	665	29.5	C										
	Right	20	9	268	689	27.2	C										
Southbound	Left	20	60	299	1053	149.6	F	108.1	F			109.5	F				
	Thru	20	510	485	1193	103.3	F										
	Right	20	22	511	1222	105.9	F										
Eastbound	Left	20	19	4	63	281.6	F	304.3	F					109.5	F		
	Thru	20	87	1555	1923	313.5	F										
	Right	20	345	1594	1963	303.2	F										
Westbound	Left	20	43	11	102	48.1	D	41.9	D							109.5	F
	Thru	20	96	37	277	45.4	D										
	Right	20	53	43	280	30.5	C										

US 6 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	30	6	14	132	3.4	A	2.1	A	246.0	F						
	Thru	30	493	14	132	2.2	A										
	Right	30	87	14	132	1.2	A										
Southbound	Left	30	18	1345	1406	1471.6	F	1445.4	F			246.0	F				
	Thru	30	158	1345	1406	1441.8	F										
	Right	30	1	1345	1406	1538.8	F										
Eastbound	Left	30	12	238	566	216.8	F	223.6	F					246.0	F		
	Thru	30	140	238	566	221.2	F										
	Right	30	8	238	566	275.1	F										
Westbound	Left	30	57	30	304	62.8	F	25.2	D							246.0	F
	Thru	30	188	30	304	16.6	C										
	Right	30	53	30	304	15.3	C										

VISSIM Hourly Network Results

2045 HiGrowth_Build2MiniRAB_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	189.6	9.5	3550	2774	1056698	729545	1455
2	156	10.9	3417	2674	885173	571045	1422
3	232.6	8.1	3457	2694	1199869	881667	1518
4	181.5	9.7	3406	2684	994447	678805	1436
5	195.9	9.2	3392	2660	1043450	729957	1563
6	177.3	9.8	3419	2691	985647	669041	1371
7	185.9	9.5	3427	2668	1007546	693558	1531
8	261.4	7.4	3203	2505	1223963	928842	1651
9	206.8	8.9	3524	2769	1115441	789427	1366
10	238.2	8	3398	2676	1206544	891554	1491
Avg	202.5	9.1	3419	2680	1071878	756344	1480
St Dev	27.7	1.0	63.8	45	113812	112021	60

Gateway Improvements

Rifle, CO

2045 HiGrowth_Build3FullRAB_Recreatic

VISSIM Arterial MOE Results

Start Time:

7:00



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northwestbound	Left	10	599	13	211	5.3	A	5.3	A	5.6	A
	Thru	10	271	13	211	5.6	A				
	Right	10	133	3	92	4.7	A				
Southbound	Left	10	55	622	1293	16.1	C	15.4	C		
	Thru	10	359	622	1293	15.2	C				
	Right	10	0	621	1293	0.0	A				
Eastbound	Left	10	4	7	134	4.7	A	2.1	A		
	Thru	10	211	7	134	7.0	A				
	Right	10	998	0	0	1.0	A				
Westbound	Left	10	73	7	151	10.0	A	7.3	A		
	Thru	10	142	7	151	6.1	A				
	Right	10	11	7	151	6.6	A				

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northbound	Left	20	362	100	492	41.3	D	26.4	C	75.1	E						
	Thru	20	370	40	453	11.9	B										
	Right	20	0	48	476	0.0	A										
Southbound	Left	20	0	0	0	0.0	A	45.9	D			75.1	E				
	Thru	20	607	237	954	45.9	D										
	Right	20	14	260	983	42.9	D										
Eastbound	Left	20	16	3	46	159.6	F	161.9	F					75.1	E		
	Thru	20	0	1313	1958	0.0	A										
	Right	20	610	1350	1997	162.0	F										
Westbound	Left	20	0	0	0	0.0	A	28.8	C							75.1	E
	Thru	20	11	2	41	28.8	C										
	Right	20	0	1	69	0.0	A										

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	11	556	1221	138.0	F	138.0	F	138.0	F
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

VISSIM Hourly Network Results

2045 HiGrowth_Build3FullRAB_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	104.6	13.6	2880	2273	600094	321556	135
2	82.7	15.4	2865	2254	527099	251861	58
3	98.1	14.1	2877	2273	579455	301409	114
4	93.3	14.5	2919	2295	571260	290060	69
5	84.1	15.2	2893	2268	536423	258460	130
6	79.6	15.6	2886	2275	524415	246004	18
7	100.4	14	2822	2236	574397	301397	51
8	83	15.4	2854	2261	530061	253070	1
9	86.8	15.0	2881	2280	548102	268138	49
10	91.7	14.6	2918	2301	568291	285908	78
Avg	90.4	14.7	2880	2272	555960	277786	70
St Dev	9.3	0.8	20.6	15	30455	29297	35

Gateway Improvements

Rifle, CO

2045 HiGrowth_Build3FullRAB_Recreatic 17:00

VISSIM Arterial MOE Results

Start Time:



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northwestbound	Left	10	1269	1583	2047	111.9	F	106.1	F	128.9	F						
	Thru	10	429	1583	2047	93.3	F										
	Right	10	91	1	77	85.5	F										
Southbound	Left	10	5	1382	1418	268.5	F	214.0	F			128.9	F				
	Thru	10	42	1382	1418	207.6	F										
	Right	10	0	1382	1418	0.0	A										
Eastbound	Left	10	26	0	45	2.2	A	1.2	A					128.9	F		
	Thru	10	148	0	45	1.6	A										
	Right	10	844	0	0	1.1	A										
Westbound	Left	10	54	1584	1663	1170.5	F	1171.2	F							128.9	F
	Thru	10	81	1584	1663	1173.2	F										
	Right	10	25	1584	1663	1166.1	F										

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS		
Northbound	Left	20	604	334	861	54.1	D	32.3	C	33.8	C		
	Thru	20	742	179	843	14.6	B						
	Right	20	0	189	866	0.0	A						
Southbound	Left	20	0	0	0	0.0	A	41.4	D				
	Thru	20	567	188	881	41.4	D						
	Right	20	23	209	910	39.9	D						
Eastbound	Left	20	48	12	110	44.4	D	28.8	C				
	Thru	20	0	68	548	0.0	A						
	Right	20	450	94	586	27.2	C						
Westbound	Left	20	0	0	0	0.0	A	#DIV/0!	#DIV/0!				
	Thru	20	0	0	4	35.7	D						
	Right	20	0	0	10	0.0	A						

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	0	1310	1346	3346.5	F	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

VISSIM Hourly Network Results

2045 HiGrowth_Build3FullRAB_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAOTOT (ALL)	DEMAND LATENT
1	245.7	7.8	3051	2429	1126572	828689	873
2	227.2	8.2	3069	2442	1070172	770537	747
3	233.8	8	3100	2451	1099740	798322	813
4	238.7	8	2993	2407	1089217	794776	863
5	216.3	8.6	3106	2473	1041756	738487	724
6	213.3	8.6	3121	2484	1035727	730844	792
7	230.9	8.2	3104	2484	1092846	788338	769
8	233.6	8.1	3064	2452	1090461	790050	838
9	236.4	8.0	3077	2440	1099083	799515	944
10	223.9	8.3	3093	2473	1068282	765793	934
Avg	230	8.2	3078	2453	1081386	780535	830
St Dev	11.2	0.3	45.5	25	31828	33718	67

Gateway Improvements

Rifle, CO

2045 HiGrowth_Build3FullRABMeter_Re

VISSIM Arterial MOE Results

Start Time:

7:00



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northwestbound	Left	10	599	24	281	7.9	A	7.6	A	5.7	A
	Thru	10	271	24	281	8.3	A				
	Right	10	133	3	98	5.0	A				
Southbound	Left	10	60	118	590	11.4	B	10.6	B		
	Thru	10	393	118	590	10.4	B				
	Right	10	0	117	590	0.0	A				
Eastbound	Left	10	4	7	146	6.1	A	2.1	A		
	Thru	10	211	7	146	7.0	A				
	Right	10	999	0	0	1.0	A				
Westbound	Left	10	73	6	160	8.8	A	6.4	A		
	Thru	10	142	6	160	5.2	A				
	Right	10	11	6	160	5.3	A				

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	365	101	496	41.8	D	27.0	C	75.3	E
	Thru	20	372	40	435	12.5	B				
	Right	20	0	48	458	0.0	A				
Southbound	Left	20	0	0	0	0.0	A	46.3	D		
	Thru	20	603	242	980	46.4	D				
	Right	20	14	264	1010	40.5	D				
Eastbound	Left	20	16	3	51	161.0	F	161.3	F		
	Thru	20	0	1313	1965	0.0	A				
	Right	20	612	1350	2004	161.3	F				
Westbound	Left	20	0	0	0	0.0	A	33.2	C		
	Thru	20	12	2	34	33.2	C				
	Right	20	0	1	61	0.0	A				

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	12	73	518	16.3	C	16.3	C	16.3	C
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

VISSIM Hourly Network Results

2045 HiGrowth_Build3FullRABMeter_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELTOT (ALL)	DEMAND LATENT
1	80.3	15.6	2956	2326	536004	250768	86
2	75.3	16.1	2874	2259	505666	229752	52
3	76	16.1	2913	2298	515001	233745	109
4	63.1	17.3	2978	2337	485140	198501	37
5	79.2	15.7	2905	2282	523130	243349	131
6	57.3	18	2938	2300	458979	177242	16
7	73	16.4	2860	2257	494934	219225	49
8	70.1	16.7	2877	2270	490909	212565	21
9	66.6	17.0	2936	2307	489252	205635	50
10	77.4	15.9	2947	2316	525873	241377	77
Avg	71.8	16.5	2918	2295	502489	221216	63
St Dev	6.9	0.7	41.6	32	19143	20052	39

Gateway Improvements

Rifle, CO

Start Time:

2045 HiGrowth_Build3FullRABMeter_Re 17:00

VISSIM Arterial MOE Results



CO 13 & Whiteriver

(Roundabout)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS						
Northwestbound	Left	10	1136	1823	2036	160.8	F	155.0	F	91.8	F						
	Thru	10	385	1823	2036	143.9	F										
	Right	10	80	1	69	125.2	F										
Southbound	Left	10	17	1367	1427	61.4	F	59.5	F			91.8	F				
	Thru	10	167	1367	1427	59.3	F										
	Right	10	0	1367	1427	0.0	A										
Eastbound	Left	10	26	3	106	4.7	A	1.6	A					91.8	F		
	Thru	10	149	3	106	4.1	A										
	Right	10	843	0	0	1.1	A										
Westbound	Left	10	98	186	668	80.6	F	80.2	F							91.8	F
	Thru	10	166	186	668	80.0	F										
	Right	10	39	186	668	79.9	F										

US 6 & CO 13

(Signal)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Northbound	Left	20	585	298	863	54.6	D	32.9	C	33.7	C
	Thru	20	717	121	791	15.2	B				
	Right	20	0	130	814	0.0	A				
Southbound	Left	20	0	0	0	0.0	A	39.6	D		
	Thru	20	568	182	866	39.6	D				
	Right	20	23	203	895	40.6	D				
Eastbound	Left	20	48	11	111	42.2	D	28.6	C		
	Thru	20	0	68	511	0.0	A				
	Right	20	450	94	550	27.1	C				
Westbound	Left	20	0	0	0	0.0	A	59.6	E		
	Thru	20	3	1	27	59.6	E				
	Right	20	0	0	50	0.0	A				

US 6 & Whiteriver

(Two-way Stop)

	Direction	Node	Volume	Avg Queue	Max Queue	Movement Delay	Movement LOS	Approach Delay	Approach LOS	Intersection Delay	Intersection LOS
Southbound	Right	30	3	1295	1355	1176.0	F	1176.0	F	1176.0	F
Eastbound	Right	30	0	0	0	0.0	A	#DIV/0!	#DIV/0!		

VISSIM Hourly Network Results

2045 HiGrowth_Build3FullRABMeter_Recreation_24hour

	Avg Delay (s)	Avg Speed (MPH)	Vehicles	Distance (mi)	TRAVTMTOT (ALL)	DELAYTOT (ALL)	DEMAND LATENT
1	185.6	9.5	3202	2508	950594	641521	665
2	177.2	9.8	3206	2501	921561	613942	545
3	187.3	9.4	3189	2492	952274	644612	633
4	188.1	9.4	3176	2506	957426	649338	539
5	182.4	9.6	3215	2522	943448	632113	541
6	175.6	9.8	3219	2524	923747	612922	615
7	191.1	9.4	3196	2521	967774	657244	586
8	185.6	9.5	3155	2474	941355	636714	631
9	234.8	8.0	3086	2420	1083924	784997	942
10	195.1	9.2	3144	2490	976470	670472	841
Avg	190.3	9.4	3179	2496	961857	654388	654
St Dev	4.4	0.2	15.3	11	14057	13998	60

APPENDIX E

BENEFIT-COST ANALYSIS



Project Name:	Rifle Gateway Build 1 Signal Alternative	Summary of Results	Weekday
BCA Base Year:	2020	Net Cost of Project (\$M)	\$1.13
BCA Future Year:	2045	Present Value of Benefits (\$M)	\$72.65
		Net Present Value (\$M)	\$71.52
		Benefit / Cost Ratio:	64.02

	Year	PRESENT VALUE OF USER BENEFITS			Present Value of Total User Benefits (\$)	PRESENT VALUE OF USER Costs			Present Value of Total User Costs (\$)
		VHTBenefits	VMT Benefits	Crash Reduction Savings		Construction Costs	Maintenance Costs	Remaining Capital Value	
2023	-					\$1,224,447	\$0	\$0	\$ 1,224,447
2024	1	\$3,520,259	\$703	\$97,358	\$ 3,618,320	\$0	\$801	\$0	\$ 801
2025	2	\$3,645,400	\$514	\$92,186	\$ 3,738,099	\$0	\$749	\$0	\$ 749
2026	3	\$3,739,102	\$346	\$87,273	\$ 3,826,721	\$0	\$700	\$0	\$ 700
2027	4	\$3,804,941	\$198	\$82,609	\$ 3,887,748	\$0	\$654	\$0	\$ 654
2028	5	\$3,846,164	\$68	\$78,182	\$ 3,924,413	\$0	\$611	\$0	\$ 611
2029	6	\$3,865,708	-\$46	\$73,980	\$ 3,939,642	\$0	\$571	\$0	\$ 571
2030	7	\$3,866,234	-\$145	\$69,993	\$ 3,936,082	\$0	\$534	\$0	\$ 534
2031	8	\$3,850,146	-\$231	\$66,212	\$ 3,916,127	\$0	\$499	\$0	\$ 499
2032	9	\$3,819,617	-\$306	\$62,626	\$ 3,881,936	\$0	\$466	\$0	\$ 466
2033	10	\$3,776,604	-\$369	\$59,225	\$ 3,835,459	\$0	\$436	\$0	\$ 436
2034	11	\$3,722,871	-\$423	\$56,001	\$ 3,778,449	\$0	\$407	\$0	\$ 407
2035	12	\$3,660,006	-\$468	\$52,946	\$ 3,712,484	\$0	\$381	\$0	\$ 381
2036	13	\$3,589,432	-\$506	\$50,051	\$ 3,638,977	\$0	\$356	\$0	\$ 356
2037	14	\$3,512,428	-\$536	\$47,308	\$ 3,559,200	\$0	\$332	\$0	\$ 332
2038	15	\$3,430,138	-\$561	\$44,710	\$ 3,474,287	\$0	\$311	\$0	\$ 311
2039	16	\$3,343,581	-\$580	\$42,249	\$ 3,385,250	\$0	\$290	\$0	\$ 290
2040	17	\$3,253,670	-\$594	\$39,919	\$ 3,292,995	\$0	\$271	\$0	\$ 271
2041	18	\$3,161,212	-\$604	\$37,713	\$ 3,198,321	\$0	\$254	\$0	\$ 254
2042	19	\$3,066,927	-\$610	\$35,624	\$ 3,101,941	\$0	\$237	\$0	\$ 237
2043	20	\$2,971,448	-\$612	\$33,648	\$ 3,004,484	\$0	\$221	-\$98,723	\$ (98,502)
Total for Project Life		\$71,445,886	-\$4,763	\$1,209,812	\$72,650,936	\$1,224,447	\$9,080	-\$98,723	\$1,134,804

Project Name:	Rifle Gateway Build 1 Signal Alternative
BCA Base Year:	2020
BCA Future Year:	2045

ANALYSIS TIMEFRAME

Years of Construction		Base	Build
First Year of Construction		2023	2023
Duration of Construction		1	1
Length of B/C Analysis Period		22	years
Benefit-cost First Year of Benefit:		2024	
Benefit-cost Final Year of Analysis/Year of Remaining Capital Value:		2045	
Length of Traffic Analysis Period		24	years
First Year of Traffic Analysis:		2022	
Final Year of Traffic Analysis:		2045	
Network Daily Traffic		Base	Build
Existing AADT	2020	23,866	23,866
Year of Opening AADT	2024	25,259	25,259
Future AADT	2045	32,571	32,571

NETWORK ASSUMPTIONS

*Based on PTV VISSIM models for

Truck Percentage				Base	Build
		Percent Autos		97.8%	97.8%
		Percent Trucks		2.2%	2.2%
Average Vehicle Occupancy Ratios				Base	Build
		Automobile		1.67	1.67
		Truck		1.00	1.00
Traffic - Daily VMT and VHT				Base	Build
Year	1	Daily Vehicle Miles Traveled (VMT)	2022	18,085	18,080
Year	24	Daily Vehicle Miles Traveled (VMT)	2045	24,648	24,660
Year	1	Daily Vehicle Hours Traveled (VHT)	2022	1,084	752
Year	24	Daily Vehicle Hours Traveled (VHT)	2045	2,434	1,046

GLOBAL ASSUMPTIONS AND FACTORS

*Based on SFY2022 USDOT Recommended Standard Values (March 2022)

General Economic Parameters		2020	
Year of Analysis		2020	
Number of Days in a Year (Assumed)		365	
Real Discount Rate		7.0%	
Costs per Hour		Value	Units
Automobile		\$17.80	\$/hr
Truck		\$32.00	\$/hr
Costs per Mile		Value	Units
Automobile		\$0.45	\$/mile
Truck		\$0.94	\$/mile
Composite Cost per Hour		\$29.78	\$/hr
Composite Cost per Mile		\$0.76	\$/mile

CRASH ANALYSIS CALCULATIONS

*Based on Surrogate Safety Assessment Model (SSAM) Conflict Analysis with PTV VISSIM Trajectories.

USDOT Crash Costs		5	# of Years		
	Value	# of Crashes (Crossing)	# of Crashes (Rear End)	# of Crashes (Lane Change)	Total Crashes
Fatal	\$11,600,000				0
Injury Type A	\$554,800				0
Injury Type B	\$151,100	2			2
Injury Type C	\$77,200	6	4		10
Property damage only	\$4,600	22	11	6	39
Build Crash Reduction 2024		34%	78%	86%	67%
Build Crash Reduction 2045		23%	88%	95%	83%



Remaining Capital Value

	Base Cost	Remaining Useful Life (Yr)	Build Cost	Remaining Useful Life (Yr)
		20		20
Mobilization and Engineering	\$0	0%	\$300,000	0%
Right of Way	\$0	88%	\$0	88%
Major Structures	\$0	74%	\$0	74%
Removal	\$0	0%	\$150,000	0%
Grading and Drainage	\$0	67%	\$300,000	67%
Sub-Base and Base	\$0	56%	\$300,000	56%
Surface	\$0	22%	\$450,000	22%

Base	\$0	\$0		
Build			\$1,500,000	\$468,000

Maintenance Costs

	Roadway Facility	Total Roadway Length (lane-mi)	Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
20%Base	Trunk Highway	1.3	\$ 10,500.00	\$ 13,650.00
	County Highway		\$ 8,000.00	\$ -
				\$ -
10%				
20%			Annual Maintenance Costs: \$ 13,650.00	
20%	30%Build	New Roadway Facility	Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
		Trunk Highway	\$ 10,500.00	\$ 14,700.00
		County Highway	\$ 8,000.00	\$ -
				\$ -
			Annual Maintenance Costs: \$ 14,700.00	

Construction Calculations

Year		Present Value of Capital Cost		Present Value of Maintenance Cost		Present Value of Remaining Capital Value		Present Value of Net Annual Costs (\$)
		Base	Build	Base	Build	Base	Build	
2023	-	\$0	\$1,224,447	\$0	\$0	\$0	\$0	\$1,224,447
2024	1	\$0	\$0	\$10,414	\$11,215	\$0	\$0	\$801
2025	2	\$0	\$0	\$9,732	\$10,481	\$0	\$0	\$749
2026	3	\$0	\$0	\$9,096	\$9,795	\$0	\$0	\$700
2027	4	\$0	\$0	\$8,501	\$9,154	\$0	\$0	\$654
2028	5	\$0	\$0	\$7,944	\$8,556	\$0	\$0	\$611
2029	6	\$0	\$0	\$7,425	\$7,996	\$0	\$0	\$571
2030	7	\$0	\$0	\$6,939	\$7,473	\$0	\$0	\$534
2031	8	\$0	\$0	\$6,485	\$6,984	\$0	\$0	\$499
2032	9	\$0	\$0	\$6,061	\$6,527	\$0	\$0	\$466
2033	10	\$0	\$0	\$5,664	\$6,100	\$0	\$0	\$436
2034	11	\$0	\$0	\$5,294	\$5,701	\$0	\$0	\$407
2035	12	\$0	\$0	\$4,947	\$5,328	\$0	\$0	\$381
2036	13	\$0	\$0	\$4,624	\$4,979	\$0	\$0	\$356
2037	14	\$0	\$0	\$4,321	\$4,654	\$0	\$0	\$332
2038	15	\$0	\$0	\$4,039	\$4,349	\$0	\$0	\$311
2039	16	\$0	\$0	\$3,774	\$4,065	\$0	\$0	\$290
2040	17	\$0	\$0	\$3,527	\$3,799	\$0	\$0	\$271
2041	18	\$0	\$0	\$3,297	\$3,550	\$0	\$0	\$254
2042	19	\$0	\$0	\$3,081	\$3,318	\$0	\$0	\$237
2043	20	\$0	\$0	\$2,879	\$3,101	\$0	\$98,723	-\$98,502

Total Project Life Benefit	\$0	\$1,224,447	\$118,043	\$127,124	\$0	\$98,723	\$1,134,804
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Benefit Cost Analysis Workbook



VHT Calcs

	Year	VHT			Constant Benefit (\$)	Present Value of Savings (\$)	
		Base (hrs)	Build (hrs)	Benefit (hrs)			
First year of traffic analysis	2023	417220.0	278994.0	138226.0	\$4,115,821	\$3,359,736	
First year of benefit-cost analysis	2024	438642.7	283674.4	154968.3	\$4,614,342	\$3,520,259	
	2025	460065.5	288354.8	171710.7	\$5,112,863	\$3,645,400	
	2026	481488.2	293035.2	188453.1	\$5,611,383	\$3,739,102	
	2027	502911.0	297715.5	205195.4	\$6,109,904	\$3,804,941	
	2028	524333.7	302395.9	221937.8	\$6,608,425	\$3,846,164	
	2029	545756.4	307076.3	238680.1	\$7,106,946	\$3,865,708	
	2030	567179.2	311756.7	255422.5	\$7,605,467	\$3,866,234	
	2031	588601.9	316437.1	272164.8	\$8,103,988	\$3,850,146	
	2032	610024.6	321117.5	288907.2	\$8,602,508	\$3,819,617	
	2033	631447.4	325797.8	305649.5	\$9,101,029	\$3,776,604	
	2034	652870.1	330478.2	322391.9	\$9,599,550	\$3,722,871	
	2035	674292.9	335158.6	339134.2	\$10,098,071	\$3,660,006	
	2036	695715.6	339839.0	355876.6	\$10,596,592	\$3,589,432	
	2037	717138.3	344519.4	372619.0	\$11,095,113	\$3,512,428	
	2038	738561.1	349199.8	389361.3	\$11,593,633	\$3,430,138	
	2039	759983.8	353880.1	406103.7	\$12,092,154	\$3,343,581	
	2040	781406.5	358560.5	422846.0	\$12,590,675	\$3,253,670	
	2041	802829.3	363240.9	439588.4	\$13,089,196	\$3,161,212	
	2042	824252.0	367921.3	456330.7	\$13,587,717	\$3,066,927	
	Last year of benefit-cost and traffic analysis	2043	845674.8	372601.7	473073.1	\$14,086,238	\$2,971,448
		Total Project Life Benefit			6280414.3	\$187,005,792	\$71,445,886

VMT Calcs

	Year	VMT			Constant Benefit (\$)	Present Value of Savings (\$)	
		Base (miles)	Build (miles)	Benefit (miles)			
First year of traffic analysis	2023	6,705,073	6,703,587	1,486	\$1,123	\$916	
First year of benefit-cost analysis	2024	6,809,223	6,808,003	1,219	\$921	\$703	
	2025	6,913,373	6,912,420	953	\$720	\$514	
	2026	7,017,523	7,016,836	687	\$519	\$346	
	2027	7,121,673	7,121,253	421	\$318	\$198	
	2028	7,225,823	7,225,669	154	\$117	\$68	
	2029	7,329,973	7,330,085	-112	-\$85	-\$46	
	2030	7,434,123	7,434,502	-378	-\$286	-\$145	
	2031	7,538,273	7,538,918	-645	-\$487	-\$231	
	2032	7,642,423	7,643,334	-911	-\$688	-\$306	
	2033	7,746,573	7,747,751	-1,177	-\$890	-\$369	
	2034	7,850,723	7,852,167	-1,443	-\$1,091	-\$423	
	2035	7,954,873	7,956,583	-1,710	-\$1,292	-\$468	
	2036	8,059,024	8,061,000	-1,976	-\$1,493	-\$506	
	2037	8,163,174	8,165,416	-2,242	-\$1,694	-\$536	
	2038	8,267,324	8,269,832	-2,509	-\$1,896	-\$561	
	2039	8,371,474	8,374,249	-2,775	-\$2,097	-\$580	
	2040	8,475,624	8,478,665	-3,041	-\$2,298	-\$594	
	2041	8,579,774	8,583,081	-3,308	-\$2,499	-\$604	
	2042	8,683,924	8,687,498	-3,574	-\$2,701	-\$610	
	Last year of benefit-cost and traffic analysis	2043	8,788,074	8,791,914	-3,840	-\$2,902	-\$612
		Total Project Life Benefit			-26,207	-\$19,803	-\$4,763



Crash Data

Crash Analysis		2022		2045	
		Base	Build	Base	Build
Corridor AADT		23,866	23,866	32,571	32,571
Reduction			63%		74%
Crash Severity (5 year data)	Fatal	0	0.0	0.0	0.0
	A	0	0.0	0.0	0.0
	B	2	1.3	2.7	2.1
	C	10	4.8	13.6	7.0
	PDO	39	12.9	53.2	9.0
		Base		Build	
2022		10.2	\$ 250,720	3.8	\$ 126,460
2045		13.9	\$ 342,169	3.6	\$ 179,303

Crash Values (\$ per crash)	
\$	11,600,000
\$	554,800
\$	151,100
\$	77,200
\$	4,600

Crash Calculations

Year	Base		Build		Constant Benefit (\$)	Present Value of Savings (\$)
	Annual Forecast		Annual Forecast			
	Number of Crashes	Estimated Cost	Number of Crashes	Estimated Cost		
2023	10.4	\$254,696	3.8	\$ 128,758	\$ 125,938	\$ 102,803
2024	10.5	\$258,672	3.8	\$ 131,055	\$ 127,617	\$ 97,358
2025	10.7	\$262,648	3.8	\$ 133,353	\$ 129,295	\$ 92,186
2026	10.8	\$266,624	3.8	\$ 135,650	\$ 130,974	\$ 87,273
2027	11.0	\$270,600	3.8	\$ 137,948	\$ 132,652	\$ 82,609
2028	11.2	\$274,576	3.8	\$ 140,246	\$ 134,331	\$ 78,182
2029	11.3	\$278,552	3.8	\$ 142,543	\$ 136,009	\$ 73,980
2030	11.5	\$282,528	3.7	\$ 144,841	\$ 137,688	\$ 69,993
2031	11.7	\$286,504	3.7	\$ 147,138	\$ 139,366	\$ 66,212
2032	11.8	\$290,480	3.7	\$ 149,436	\$ 141,045	\$ 62,626
2033	12.0	\$294,456	3.7	\$ 151,733	\$ 142,723	\$ 59,225
2034	12.1	\$298,432	3.7	\$ 154,031	\$ 144,402	\$ 56,001
2035	12.3	\$302,408	3.7	\$ 156,328	\$ 146,080	\$ 52,946
2036	12.5	\$306,385	3.7	\$ 158,626	\$ 147,759	\$ 50,051
2037	12.6	\$310,361	3.7	\$ 160,923	\$ 149,437	\$ 47,308
2038	12.8	\$314,337	3.7	\$ 163,221	\$ 151,116	\$ 44,710
2039	12.9	\$318,313	3.7	\$ 165,518	\$ 152,794	\$ 42,249
2040	13.1	\$322,289	3.7	\$ 167,816	\$ 154,473	\$ 39,919
2041	13.3	\$326,265	3.7	\$ 170,113	\$ 156,151	\$ 37,713
2042	13.4	\$330,241	3.6	\$ 172,411	\$ 157,830	\$ 35,624
2043	13.6	\$334,217	3.6	\$ 174,708	\$ 159,508	\$ 33,648
Total Project Life Benefit					\$ 2,871,250	\$ 1,209,812



Project Name:	Rifle Gateway Build 2 MiniRAB Alternative	Summary of Results	Weekday
BCA Base Year:	2020	Net Cost of Project (\$M)	\$1.90
BCA Future Year:	2045	Present Value of Benefits (\$M)	\$45.96
		Net Present Value (\$M)	\$44.06
		Benefit / Cost Ratio:	24.15

	Year	PRESENT VALUE OF USER BENEFITS			Present Value of Total User Benefits (\$)	PRESENT VALUE OF USER Costs			Present Value of Total User Costs (\$)
		VHTBenefits	VMT Benefits	Crash Reduction Savings		Construction Costs	Maintenance Costs	Remaining Capital Value	
2023	-					\$2,040,745	\$0	\$0	\$ 2,040,745
2024	1	\$2,514,622	-\$9,546	\$83,732	\$ 2,588,808	\$0	\$2,403	\$0	\$ 2,403
2025	2	\$2,536,373	-\$9,114	\$79,465	\$ 2,606,724	\$0	\$2,246	\$0	\$ 2,246
2026	3	\$2,544,516	-\$8,698	\$75,398	\$ 2,611,216	\$0	\$2,099	\$0	\$ 2,099
2027	4	\$2,540,738	-\$8,297	\$71,524	\$ 2,603,964	\$0	\$1,962	\$0	\$ 1,962
2028	5	\$2,526,564	-\$7,911	\$67,833	\$ 2,586,485	\$0	\$1,833	\$0	\$ 1,833
2029	6	\$2,503,370	-\$7,541	\$64,319	\$ 2,560,149	\$0	\$1,713	\$0	\$ 1,713
2030	7	\$2,472,398	-\$7,185	\$60,975	\$ 2,526,189	\$0	\$1,601	\$0	\$ 1,601
2031	8	\$2,434,765	-\$6,843	\$57,793	\$ 2,485,715	\$0	\$1,497	\$0	\$ 1,497
2032	9	\$2,391,474	-\$6,515	\$54,766	\$ 2,439,725	\$0	\$1,399	\$0	\$ 1,399
2033	10	\$2,343,426	-\$6,201	\$51,889	\$ 2,389,114	\$0	\$1,307	\$0	\$ 1,307
2034	11	\$2,291,431	-\$5,900	\$49,153	\$ 2,334,683	\$0	\$1,222	\$0	\$ 1,222
2035	12	\$2,236,208	-\$5,612	\$46,553	\$ 2,277,149	\$0	\$1,142	\$0	\$ 1,142
2036	13	\$2,178,405	-\$5,336	\$44,083	\$ 2,217,151	\$0	\$1,067	\$0	\$ 1,067
2037	14	\$2,118,593	-\$5,073	\$41,737	\$ 2,155,257	\$0	\$997	\$0	\$ 997
2038	15	\$2,057,284	-\$4,821	\$39,509	\$ 2,091,972	\$0	\$932	\$0	\$ 932
2039	16	\$1,994,930	-\$4,580	\$37,394	\$ 2,027,744	\$0	\$871	\$0	\$ 871
2040	17	\$1,931,929	-\$4,350	\$35,386	\$ 1,962,966	\$0	\$814	\$0	\$ 814
2041	18	\$1,868,634	-\$4,131	\$33,482	\$ 1,897,985	\$0	\$761	\$0	\$ 761
2042	19	\$1,805,351	-\$3,922	\$31,675	\$ 1,833,105	\$0	\$711	\$0	\$ 711
2043	20	\$1,742,351	-\$3,722	\$29,961	\$ 1,768,590	\$0	\$664	-\$164,539	\$ (163,874)
Total for Project Life		\$45,033,364	-\$125,298	\$1,056,625	\$45,964,691	\$2,040,745	\$27,241	-\$164,539	\$1,903,447



Project Name:	Rifle Gateway Build 2 MiniRAB Alternative
BCA Base Year:	2020
BCA Future Year:	2045

ANALYSIS TIMEFRAME

Years of Construction		Base	Build
First Year of Construction		2023	2023
Duration of Construction		1	1
Length of B/C Analysis Period		22	years
Benefit-cost First Year of Benefit:		2024	
Benefit-cost Final Year of Analysis/Year of Remaining Capital Value:		2045	
Length of Traffic Analysis Period		24	years
First Year of Traffic Analysis:		2022	
Final Year of Traffic Analysis:		2045	
Network Daily Traffic		Base	Build
Existing AADT	2020	23,866	23,866
Year of Opening AADT	2024	25,259	25,259
Future AADT	2045	32,571	32,571

NETWORK ASSUMPTIONS

*Based on PTV VISSIM models for

Truck Percentage				Base	Build
Percent Autos				97.8%	97.8%
Percent Trucks				2.2%	2.2%
Average Vehicle Occupancy Ratios				Base	Build
Automobile				1.67	1.67
Truck				1.00	1.00
Traffic - Daily VMT and VHT				Base	Build
Year	1	Daily Vehicle Miles Traveled (VMT)	2022	18,085	18,128
Year	24	Daily Vehicle Miles Traveled (VMT)	2045	24,648	24,714
Year	1	Daily Vehicle Hours Traveled (VHT)	2022	1,084	829
Year	24	Daily Vehicle Hours Traveled (VHT)	2045	2,434	1,626

GLOBAL ASSUMPTIONS AND FACTORS

*Based on SFY2022 USDOT Recommended Standard Values (March 2022)

General Economic Parameters			
	Year of Analysis	2020	
	Number of Days in a Year (Assumed)	365	
	Real Discount Rate	7.0%	
Costs per Hour		Value	Units
	Automobile	\$17.80	\$/hr
	Truck	\$32.00	\$/hr
Costs per Mile		Value	Units
	Automobile	\$0.45	\$/mile
	Truck	\$0.94	\$/mile
Composite Cost per Hour		\$29.78	\$/hr
Composite Cost per Mile		\$0.76	\$/mile

CRASH ANALYSIS CALCULATIONS

*Based on Surrogate Safety Assessment Model (SSAM) Conflict Analysis with PTV VISSIM Trajectories.

USDOT Crash Costs			5	# of Years	
	Value	# of Crashes (Crossing)	# of Crashes (Rear End)	# of Crashes (Lane Change)	Total Crashes
Fatal	\$11,600,000				0
Injury Type A	\$554,800				0
Injury Type B	\$151,100	2			2
Injury Type C	\$77,200	6	4		10
Property damage only	\$4,600	22	11	6	39
Build Crash Reduction 2024		24%	86%	-94%	46%
Build Crash Reduction 2045		18%	89%	27%	67%



Remaining Capital Value

	Base Cost	Remaining Useful Life (Yr)	Build Cost	Remaining Useful Life (Yr)
		20		20
Mobilization and Engineering	\$0	0%	\$500,000	0%
Right of Way	\$0	88%	\$0	88%
Major Structures	\$0	74%	\$0	74%
Removal	\$0	0%	\$250,000	0%
Grading and Drainage	\$0	67%	\$500,000	67%
Sub-Base and Base	\$0	56%	\$500,000	56%
Surface	\$0	22%	\$750,000	22%

Base	\$0	\$0		
Build			\$2,500,000	\$780,000

Maintenance Costs

	Roadway Facility	Total Roadway Length (lane-mi)	Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
20% Base	Trunk Highway	1.3	\$ 10,500.00	\$ 13,650.00
	County Highway		\$ 8,000.00	\$ -
				\$ -
10% 20% 20% 30%			Annual Maintenance Costs: \$ 13,650.00	
	New Roadway Facility	Total Roadway Length (lane-mi)	Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
	Trunk Highway	1.6	\$ 10,500.00	\$ 16,800.00
	County Highway		\$ 8,000.00	\$ -
				\$ -
		Annual Maintenance Costs: \$ 16,800.00		

Construction Calculations

Year		Present Value of Capital Cost		Present Value of Maintenance Cost		Present Value of Remaining Capital Value		Present Value of Net Annual Costs (\$)
		Base	Build	Base	Build	Base	Build	
2023	-	\$0	\$2,040,745	\$0	\$0	\$0	\$0	\$2,040,745
2024	1	\$0	\$0	\$10,414	\$12,817	\$0	\$0	\$2,403
2025	2	\$0	\$0	\$9,732	\$11,978	\$0	\$0	\$2,246
2026	3	\$0	\$0	\$9,096	\$11,195	\$0	\$0	\$2,099
2027	4	\$0	\$0	\$8,501	\$10,462	\$0	\$0	\$1,962
2028	5	\$0	\$0	\$7,944	\$9,778	\$0	\$0	\$1,833
2029	6	\$0	\$0	\$7,425	\$9,138	\$0	\$0	\$1,713
2030	7	\$0	\$0	\$6,939	\$8,540	\$0	\$0	\$1,601
2031	8	\$0	\$0	\$6,485	\$7,982	\$0	\$0	\$1,497
2032	9	\$0	\$0	\$6,061	\$7,459	\$0	\$0	\$1,399
2033	10	\$0	\$0	\$5,664	\$6,971	\$0	\$0	\$1,307
2034	11	\$0	\$0	\$5,294	\$6,515	\$0	\$0	\$1,222
2035	12	\$0	\$0	\$4,947	\$6,089	\$0	\$0	\$1,142
2036	13	\$0	\$0	\$4,624	\$5,691	\$0	\$0	\$1,067
2037	14	\$0	\$0	\$4,321	\$5,318	\$0	\$0	\$997
2038	15	\$0	\$0	\$4,039	\$4,971	\$0	\$0	\$932
2039	16	\$0	\$0	\$3,774	\$4,645	\$0	\$0	\$871
2040	17	\$0	\$0	\$3,527	\$4,341	\$0	\$0	\$814
2041	18	\$0	\$0	\$3,297	\$4,057	\$0	\$0	\$761
2042	19	\$0	\$0	\$3,081	\$3,792	\$0	\$0	\$711
2043	20	\$0	\$0	\$2,879	\$3,544	\$0	\$164,539	-\$163,874
Total Project Life Benefit		\$0	\$2,040,745	\$118,043	\$145,284	\$0	\$164,539	\$1,903,447

Benefit Cost Analysis Workbook



VHT Calcs

	Year	VHT			Constant Benefit (\$)	Present Value of Savings (\$)
		Base (hrs)	Build (hrs)	Benefit (hrs)		
First year of traffic analysis	2023	417220.0	315295.1	101924.9	\$3,034,920	\$2,477,398
First year of benefit-cost analysis	2024	438642.7	327944.4	110698.3	\$3,296,157	\$2,514,622
	2025	460065.5	340593.7	119471.8	\$3,557,395	\$2,536,373
	2026	481488.2	353243.0	128245.2	\$3,818,632	\$2,544,516
	2027	502911.0	365892.4	137018.6	\$4,079,870	\$2,540,738
	2028	524333.7	378541.7	145792.0	\$4,341,107	\$2,526,564
	2029	545756.4	391191.0	154565.4	\$4,602,345	\$2,503,370
	2030	567179.2	403840.3	163338.8	\$4,863,582	\$2,472,398
	2031	588601.9	416489.6	172112.3	\$5,124,819	\$2,434,765
	2032	610024.6	429139.0	180885.7	\$5,386,057	\$2,391,474
	2033	631447.4	441788.3	189659.1	\$5,647,294	\$2,343,426
	2034	652870.1	454437.6	198432.5	\$5,908,532	\$2,291,431
	2035	674292.9	467086.9	207205.9	\$6,169,769	\$2,236,208
	2036	695715.6	479736.3	215979.3	\$6,431,007	\$2,178,405
	2037	717138.3	492385.6	224752.8	\$6,692,244	\$2,118,593
	2038	738561.1	505034.9	233526.2	\$6,953,482	\$2,057,284
	2039	759983.8	517684.2	242299.6	\$7,214,719	\$1,994,930
	2040	781406.5	530333.5	251073.0	\$7,475,957	\$1,931,929
	2041	802829.3	542982.9	259846.4	\$7,737,194	\$1,868,634
	2042	824252.0	555632.2	268619.8	\$7,998,432	\$1,805,351
Last year of benefit-cost and traffic analysis	2043	845674.8	568281.5	277393.3	\$8,259,669	\$1,742,351
Total Project Life Benefit				3880916.0	\$115,558,264	\$45,033,364

VMT Calcs

	Year	VMT			Constant Benefit (\$)	Present Value of Savings (\$)
		Base (miles)	Build (miles)	Benefit (miles)		
First year of traffic analysis	2023	6,705,073	6,721,275	-16,202	-\$12,243	-\$9,994
First year of benefit-cost analysis	2024	6,809,223	6,825,782	-16,559	-\$12,513	-\$9,546
	2025	6,913,373	6,930,290	-16,917	-\$12,783	-\$9,114
	2026	7,017,523	7,034,797	-17,274	-\$13,053	-\$8,698
	2027	7,121,673	7,139,305	-17,632	-\$13,323	-\$8,297
	2028	7,225,823	7,243,812	-17,989	-\$13,593	-\$7,911
	2029	7,329,973	7,348,319	-18,346	-\$13,863	-\$7,541
	2030	7,434,123	7,452,827	-18,704	-\$14,133	-\$7,185
	2031	7,538,273	7,557,334	-19,061	-\$14,403	-\$6,843
	2032	7,642,423	7,661,842	-19,418	-\$14,674	-\$6,515
	2033	7,746,573	7,766,349	-19,776	-\$14,944	-\$6,201
	2034	7,850,723	7,870,857	-20,133	-\$15,214	-\$5,900
	2035	7,954,873	7,975,364	-20,491	-\$15,484	-\$5,612
	2036	8,059,024	8,079,872	-20,848	-\$15,754	-\$5,336
	2037	8,163,174	8,184,379	-21,205	-\$16,024	-\$5,073
	2038	8,267,324	8,288,886	-21,563	-\$16,294	-\$4,821
	2039	8,371,474	8,393,394	-21,920	-\$16,564	-\$4,580
	2040	8,475,624	8,497,901	-22,278	-\$16,834	-\$4,350
	2041	8,579,774	8,602,409	-22,635	-\$17,104	-\$4,131
	2042	8,683,924	8,706,916	-22,992	-\$17,374	-\$3,922
Last year of benefit-cost and traffic analysis	2043	8,788,074	8,811,424	-23,350	-\$17,644	-\$3,722
Total Project Life Benefit				-399,091	-\$301,572	-\$125,298



Crash Data

Crash Analysis		2022		2045	
		Base	Build	Base	Build
Corridor AADT		23,866	23,866	32,571	32,571
Reduction			46%		61%
Crash Severity (5 year data)	Fatal	0	0.0	0.0	0.0
	A	0	0.0	0.0	0.0
	B	2	1.5	2.7	2.2
	C	10	5.1	13.6	7.3
	PDO	39	21.1	53.2	17.6
		Base		Build	
2022		10.2	\$ 250,720	5.5	\$ 144,362
2045		13.9	\$ 342,169	5.4	\$ 196,741

Crash Values (\$ per crash)	
\$	11,600,000
\$	554,800
\$	151,100
\$	77,200
\$	4,600

Crash Calculations

Year	Base		Build		Constant Benefit (\$)	Present Value of Savings (\$)
	Annual Forecast		Annual Forecast			
	Number of Crashes	Estimated Cost	Number of Crashes	Estimated Cost		
2023	10.4	\$254,696	5.5	\$ 146,640	\$ 108,056	\$ 88,206
2024	10.5	\$258,672	5.5	\$ 148,917	\$ 109,755	\$ 83,732
2025	10.7	\$262,648	5.5	\$ 151,194	\$ 111,454	\$ 79,465
2026	10.8	\$266,624	5.5	\$ 153,472	\$ 113,152	\$ 75,398
2027	11.0	\$270,600	5.5	\$ 155,749	\$ 114,851	\$ 71,524
2028	11.2	\$274,576	5.5	\$ 158,026	\$ 116,550	\$ 67,833
2029	11.3	\$278,552	5.5	\$ 160,304	\$ 118,249	\$ 64,319
2030	11.5	\$282,528	5.5	\$ 162,581	\$ 119,947	\$ 60,975
2031	11.7	\$286,504	5.5	\$ 164,858	\$ 121,646	\$ 57,793
2032	11.8	\$290,480	5.5	\$ 167,136	\$ 123,345	\$ 54,766
2033	12.0	\$294,456	5.5	\$ 169,413	\$ 125,043	\$ 51,889
2034	12.1	\$298,432	5.5	\$ 171,690	\$ 126,742	\$ 49,153
2035	12.3	\$302,408	5.5	\$ 173,968	\$ 128,441	\$ 46,553
2036	12.5	\$306,385	5.5	\$ 176,245	\$ 130,139	\$ 44,083
2037	12.6	\$310,361	5.5	\$ 178,522	\$ 131,838	\$ 41,737
2038	12.8	\$314,337	5.5	\$ 180,800	\$ 133,537	\$ 39,509
2039	12.9	\$318,313	5.5	\$ 183,077	\$ 135,236	\$ 37,394
2040	13.1	\$322,289	5.4	\$ 185,354	\$ 136,934	\$ 35,386
2041	13.3	\$326,265	5.4	\$ 187,632	\$ 138,633	\$ 33,482
2042	13.4	\$330,241	5.4	\$ 189,909	\$ 140,332	\$ 31,675
2043	13.6	\$334,217	5.4	\$ 192,186	\$ 142,030	\$ 29,961
Total Project Life Benefit					\$ 2,517,854	\$ 1,056,625



Project Name:	Rifle Gateway Build 3 FullRAB Alternative	Summary of Results	Weekday
BCA Base Year:	2020	Net Cost of Project (\$M)	\$4.55
BCA Future Year:	2045	Present Value of Benefits (\$M)	\$71.88
		Net Present Value (\$M)	\$67.33
		Benefit / Cost Ratio:	15.80

	Year	PRESENT VALUE OF USER BENEFITS			Present Value of Total User Benefits (\$)	PRESENT VALUE OF USER Costs			Present Value of Total User Costs (\$)
		VHTBenefits	VMT Benefits	Crash Reduction Savings		Construction Costs	Maintenance Costs	Remaining Capital Value	
2023	-					\$4,897,787	\$0	\$0	\$ 4,897,787
2024	1	\$3,984,515	-\$27,737	\$70,811	\$ 4,027,588	\$0	\$4,005	\$0	\$ 4,005
2025	2	\$4,018,641	-\$26,548	\$67,491	\$ 4,059,584	\$0	\$3,743	\$0	\$ 3,743
2026	3	\$4,031,249	-\$25,396	\$64,302	\$ 4,070,155	\$0	\$3,498	\$0	\$ 3,498
2027	4	\$4,025,008	-\$24,281	\$61,242	\$ 4,061,969	\$0	\$3,269	\$0	\$ 3,269
2028	5	\$4,002,331	-\$23,203	\$58,307	\$ 4,037,435	\$0	\$3,056	\$0	\$ 3,056
2029	6	\$3,965,394	-\$22,162	\$55,494	\$ 3,998,726	\$0	\$2,856	\$0	\$ 2,856
2030	7	\$3,916,161	-\$21,158	\$52,799	\$ 3,947,802	\$0	\$2,669	\$0	\$ 2,669
2031	8	\$3,856,398	-\$20,191	\$50,220	\$ 3,886,427	\$0	\$2,494	\$0	\$ 2,494
2032	9	\$3,787,694	-\$19,260	\$47,752	\$ 3,816,186	\$0	\$2,331	\$0	\$ 2,331
2033	10	\$3,711,475	-\$18,364	\$45,392	\$ 3,738,503	\$0	\$2,179	\$0	\$ 2,179
2034	11	\$3,629,017	-\$17,503	\$43,136	\$ 3,654,651	\$0	\$2,036	\$0	\$ 2,036
2035	12	\$3,541,464	-\$16,676	\$40,981	\$ 3,565,770	\$0	\$1,903	\$0	\$ 1,903
2036	13	\$3,449,835	-\$15,882	\$38,924	\$ 3,472,877	\$0	\$1,778	\$0	\$ 1,778
2037	14	\$3,355,037	-\$15,121	\$36,960	\$ 3,376,877	\$0	\$1,662	\$0	\$ 1,662
2038	15	\$3,257,878	-\$14,391	\$35,087	\$ 3,278,574	\$0	\$1,553	\$0	\$ 1,553
2039	16	\$3,159,073	-\$13,692	\$33,301	\$ 3,178,681	\$0	\$1,452	\$0	\$ 1,452
2040	17	\$3,059,252	-\$13,023	\$31,598	\$ 3,077,827	\$0	\$1,357	\$0	\$ 1,357
2041	18	\$2,958,972	-\$12,383	\$29,975	\$ 2,976,564	\$0	\$1,268	\$0	\$ 1,268
2042	19	\$2,858,719	-\$11,771	\$28,430	\$ 2,875,378	\$0	\$1,185	\$0	\$ 1,185
2043	20	\$2,758,919	-\$11,186	\$26,958	\$ 2,774,691	\$0	\$1,107	-\$394,893	\$ (393,785)
Total for Project Life		\$71,327,033	-\$369,927	\$919,157	\$71,876,263	\$4,897,787	\$45,401	-\$394,893	\$4,548,296



Project Name:	Rifle Gateway Build 3 FullRAB Alternative
BCA Base Year:	2020
BCA Future Year:	2045

ANALYSIS TIMEFRAME

Years of Construction		Base	Build
First Year of Construction		2023	2023
Duration of Construction		1	1
Length of B/C Analysis Period		22	years
Benefit-cost First Year of Benefit:		2024	
Benefit-cost Final Year of Analysis/Year of Remaining Capital Value:		2045	
Length of Traffic Analysis Period		24	years
First Year of Traffic Analysis:		2022	
Final Year of Traffic Analysis:		2045	
Network Daily Traffic		Base	Build
Existing AADT	2020	23,866	23,866
Year of Opening AADT	2024	25,259	25,259
Future AADT	2045	32,571	32,571

NETWORK ASSUMPTIONS

*Based on PTV VISSIM models for

Truck Percentage				Base	Build
		Percent Autos		97.8%	97.8%
		Percent Trucks		2.2%	2.2%
Average Vehicle Occupancy Ratios				Base	Build
		Automobile		1.67	1.67
		Truck		1.00	1.00
Traffic - Daily VMT and VHT				Base	Build
Year	1	Daily Vehicle Miles Traveled (VMT)	2022	18,085	18,210
Year	24	Daily Vehicle Miles Traveled (VMT)	2045	24,648	24,846
Year	1	Daily Vehicle Hours Traveled (VHT)	2022	1,084	680
Year	24	Daily Vehicle Hours Traveled (VHT)	2045	2,434	1,155

GLOBAL ASSUMPTIONS AND FACTORS

*Based on SFY2022 USDOT Recommended Standard Values (March 2022)

General Economic Parameters		2020	
Year of Analysis		365	
Number of Days in a Year (Assumed)		7.0%	
Real Discount Rate			
Costs per Hour		Value	Units
Automobile		\$17.80	\$/hr
Truck		\$32.00	\$/hr
Costs per Mile		Value	Units
Automobile		\$0.45	\$/mile
Truck		\$0.94	\$/mile
Composite Cost per Hour		\$29.78	\$/hr
Composite Cost per Mile		\$0.76	\$/mile

CRASH ANALYSIS CALCULATIONS

*Based on Surrogate Safety Assessment Model (SSAM) Conflict Analysis with PTV VISSIM Trajectories.

USDOT Crash Costs		5	# of Years		
	Value	# of Crashes (Crossing)	# of Crashes (Rear End)	# of Crashes (Lane Change)	Total Crashes
Fatal	\$11,600,000				0
Injury Type A	\$554,800				0
Injury Type B	\$151,100	2			2
Injury Type C	\$77,200	6	4		10
Property damage only	\$4,600	22	11	6	39
Build Crash Reduction 2024		9%	86%	66%	62%
Build Crash Reduction 2045		7%	91%	87%	82%



Remaining Capital Value

	Base Cost	Remaining Useful Life (Yr)	Build Cost	Remaining Useful Life (Yr)
		20		20
Mobilization and Engineering	\$0	0%	\$1,200,000	0%
Right of Way	\$0	88%	\$0	88%
Major Structures	\$0	74%	\$0	74%
Removal	\$0	0%	\$600,000	0%
Grading and Drainage	\$0	67%	\$1,200,000	67%
Sub-Base and Base	\$0	56%	\$1,200,000	56%
Surface	\$0	22%	\$1,800,000	22%

Base	\$0	\$0		
Build			\$6,000,000	\$1,872,000

Maintenance Costs

	Roadway Facility	Total Roadway Length (lane-mi)	Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
20%Base	Trunk Highway	1.3	\$ 10,500.00	\$ 13,650.00
	County Highway		\$ 8,000.00	\$ -
				\$ -
10%				
20%			Annual Maintenance Costs: \$ 13,650.00	
20%	30%Build	New Roadway Facility	Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
		Trunk Highway	\$ 10,500.00	\$ 18,900.00
		County Highway	\$ 8,000.00	\$ -
				\$ -
			Annual Maintenance Costs: \$ 18,900.00	

Construction Calculations

Year		Present Value of Capital Cost		Present Value of Maintenance Cost		Present Value of Remaining Capital Value		Present Value of Net Annual Costs (\$)
		Base	Build	Base	Build	Base	Build	
2023	-	\$0	\$4,897,787	\$0	\$0	\$0	\$0	\$4,897,787
2024	1	\$0	\$0	\$10,414	\$14,419	\$0	\$0	\$4,005
2025	2	\$0	\$0	\$9,732	\$13,475	\$0	\$0	\$3,743
2026	3	\$0	\$0	\$9,096	\$12,594	\$0	\$0	\$3,498
2027	4	\$0	\$0	\$8,501	\$11,770	\$0	\$0	\$3,269
2028	5	\$0	\$0	\$7,944	\$11,000	\$0	\$0	\$3,056
2029	6	\$0	\$0	\$7,425	\$10,280	\$0	\$0	\$2,856
2030	7	\$0	\$0	\$6,939	\$9,608	\$0	\$0	\$2,669
2031	8	\$0	\$0	\$6,485	\$8,979	\$0	\$0	\$2,494
2032	9	\$0	\$0	\$6,061	\$8,392	\$0	\$0	\$2,331
2033	10	\$0	\$0	\$5,664	\$7,843	\$0	\$0	\$2,179
2034	11	\$0	\$0	\$5,294	\$7,330	\$0	\$0	\$2,036
2035	12	\$0	\$0	\$4,947	\$6,850	\$0	\$0	\$1,903
2036	13	\$0	\$0	\$4,624	\$6,402	\$0	\$0	\$1,778
2037	14	\$0	\$0	\$4,321	\$5,983	\$0	\$0	\$1,662
2038	15	\$0	\$0	\$4,039	\$5,592	\$0	\$0	\$1,553
2039	16	\$0	\$0	\$3,774	\$5,226	\$0	\$0	\$1,452
2040	17	\$0	\$0	\$3,527	\$4,884	\$0	\$0	\$1,357
2041	18	\$0	\$0	\$3,297	\$4,565	\$0	\$0	\$1,268
2042	19	\$0	\$0	\$3,081	\$4,266	\$0	\$0	\$1,185
2043	20	\$0	\$0	\$2,879	\$3,987	\$0	\$394,893	-\$393,785

Total Project Life Benefit	\$0	\$4,897,787	\$118,043	\$163,445	\$0	\$394,893	\$4,548,296
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Benefit Cost Analysis Workbook



VHT Calcs

	Year	VHT			Constant Benefit (\$)	Present Value of Savings (\$)	
		Base (hrs)	Build (hrs)	Benefit (hrs)			
First year of traffic analysis	2023	417220.0	255700.1	161519.9	\$4,809,420	\$3,925,919	
First year of benefit-cost analysis	2024	438642.7	263237.0	175405.7	\$5,222,886	\$3,984,515	
	2025	460065.5	270773.9	189291.6	\$5,636,352	\$4,018,641	
	2026	481488.2	278310.8	203177.5	\$6,049,818	\$4,031,249	
	2027	502911.0	285847.6	217063.3	\$6,463,284	\$4,025,008	
	2028	524333.7	293384.5	230949.2	\$6,876,750	\$4,002,331	
	2029	545756.4	300921.4	244835.1	\$7,290,216	\$3,965,394	
	2030	567179.2	308458.2	258720.9	\$7,703,681	\$3,916,161	
	2031	588601.9	315995.1	272606.8	\$8,117,147	\$3,856,398	
	2032	610024.6	323532.0	286492.7	\$8,530,613	\$3,787,694	
	2033	631447.4	331068.9	300378.5	\$8,944,079	\$3,711,475	
	2034	652870.1	338605.7	314264.4	\$9,357,545	\$3,629,017	
	2035	674292.9	346142.6	328150.2	\$9,771,011	\$3,541,464	
	2036	695715.6	353679.5	342036.1	\$10,184,477	\$3,449,835	
	2037	717138.3	361216.4	355922.0	\$10,597,943	\$3,355,037	
	2038	738561.1	368753.2	369807.8	\$11,011,409	\$3,257,878	
	2039	759983.8	376290.1	383693.7	\$11,424,875	\$3,159,073	
	2040	781406.5	383827.0	397579.6	\$11,838,340	\$3,059,252	
	2041	802829.3	391363.9	411465.4	\$12,251,806	\$2,958,972	
	2042	824252.0	398900.7	425351.3	\$12,665,272	\$2,858,719	
	Last year of benefit-cost and traffic analysis	2043	845674.8	406437.6	439237.2	\$13,078,738	\$2,758,919
		Total Project Life Benefit			6146429.0	\$183,016,242	\$71,327,033

Year	VMT			Constant Benefit (\$)	Present Value of Savings (\$)
	Base (miles)	Build (miles)	Benefit (miles)		
2023	6,705,073	6,752,027	-46,954	-\$35,481	-\$28,963
2024	6,809,223	6,857,338	-48,115	-\$36,358	-\$27,737
2025	6,913,373	6,962,649	-49,276	-\$37,235	-\$26,548
2026	7,017,523	7,067,960	-50,437	-\$38,113	-\$25,396
2027	7,121,673	7,173,271	-51,598	-\$38,990	-\$24,281
2028	7,225,823	7,278,582	-52,759	-\$39,867	-\$23,203
2029	7,329,973	7,383,893	-53,920	-\$40,745	-\$22,162
2030	7,434,123	7,489,204	-55,081	-\$41,622	-\$21,158
2031	7,538,273	7,594,515	-56,242	-\$42,499	-\$20,191
2032	7,642,423	7,699,826	-57,403	-\$43,376	-\$19,260
2033	7,746,573	7,805,137	-58,564	-\$44,254	-\$18,364
2034	7,850,723	7,910,449	-59,725	-\$45,131	-\$17,503
2035	7,954,873	8,015,760	-60,886	-\$46,008	-\$16,676
2036	8,059,024	8,121,071	-62,047	-\$46,886	-\$15,882
2037	8,163,174	8,226,382	-63,208	-\$47,763	-\$15,121
2038	8,267,324	8,331,693	-64,369	-\$48,640	-\$14,391
2039	8,371,474	8,437,004	-65,530	-\$49,518	-\$13,692
2040	8,475,624	8,542,315	-66,691	-\$50,395	-\$13,023
2041	8,579,774	8,647,626	-67,852	-\$51,272	-\$12,383
2042	8,683,924	8,752,937	-69,013	-\$52,150	-\$11,771
2043	8,788,074	8,858,248	-70,174	-\$53,027	-\$11,186
Total Project Life Benefit			-1,182,892	-\$893,849	-\$369,927



Crash Data

Crash Analysis		2022		2045	
		Base	Build	Base	Build
Corridor AADT		23,866	23,866	32,571	32,571
Reduction			56%		71%
Crash Severity (5 year data)	Fatal	0	0.0	0.0	0.0
	A	0	0.0	0.0	0.0
	B	2	1.8	2.7	2.5
	C	10	6.0	13.6	8.1
	PDO	39	14.8	53.2	9.6
		Base		Build	
2022		10.2	\$ 250,720	4.5	\$ 161,584
2045		13.9	\$ 342,169	4.0	\$ 210,691

Crash Values (\$ per crash)	
\$	11,600,000
\$	554,800
\$	151,100
\$	77,200
\$	4,600

Crash Calculations

Year	Base		Build		Constant Benefit (\$)	Present Value of Savings (\$)
	Annual Forecast		Annual Forecast			
	Number of Crashes	Estimated Cost	Number of Crashes	Estimated Cost		
2023	10.4	\$254,696	4.5	\$ 163,719	\$ 90,977	\$ 74,265
2024	10.5	\$258,672	4.5	\$ 165,854	\$ 92,818	\$ 70,811
2025	10.7	\$262,648	4.5	\$ 167,989	\$ 94,659	\$ 67,491
2026	10.8	\$266,624	4.4	\$ 170,124	\$ 96,500	\$ 64,302
2027	11.0	\$270,600	4.4	\$ 172,259	\$ 98,341	\$ 61,242
2028	11.2	\$274,576	4.4	\$ 174,394	\$ 100,182	\$ 58,307
2029	11.3	\$278,552	4.4	\$ 176,529	\$ 102,023	\$ 55,494
2030	11.5	\$282,528	4.4	\$ 178,664	\$ 103,864	\$ 52,799
2031	11.7	\$286,504	4.3	\$ 180,800	\$ 105,705	\$ 50,220
2032	11.8	\$290,480	4.3	\$ 182,935	\$ 107,546	\$ 47,752
2033	12.0	\$294,456	4.3	\$ 185,070	\$ 109,387	\$ 45,392
2034	12.1	\$298,432	4.3	\$ 187,205	\$ 111,228	\$ 43,136
2035	12.3	\$302,408	4.3	\$ 189,340	\$ 113,069	\$ 40,981
2036	12.5	\$306,385	4.2	\$ 191,475	\$ 114,909	\$ 38,924
2037	12.6	\$310,361	4.2	\$ 193,610	\$ 116,750	\$ 36,960
2038	12.8	\$314,337	4.2	\$ 195,745	\$ 118,591	\$ 35,087
2039	12.9	\$318,313	4.2	\$ 197,880	\$ 120,432	\$ 33,301
2040	13.1	\$322,289	4.2	\$ 200,015	\$ 122,273	\$ 31,598
2041	13.3	\$326,265	4.1	\$ 202,151	\$ 124,114	\$ 29,975
2042	13.4	\$330,241	4.1	\$ 204,286	\$ 125,955	\$ 28,430
2043	13.6	\$334,217	4.1	\$ 206,421	\$ 127,796	\$ 26,958
Total Project Life Benefit					\$ 2,206,143	\$ 919,157

First year of traffic analysis
First year of benefit-cost analysis

Last year of benefit-cost and traffic analysis



Project Name:	Rifle Gateway Build 3 FullRAB Alternative	Summary of Results	Weekday
BCA Base Year:	2020	Net Cost of Project (\$M)	\$4.55
BCA Future Year:	2045	Present Value of Benefits (\$M)	\$78.03
		Net Present Value (\$M)	\$73.49
		Benefit / Cost Ratio:	17.16

	Year	PRESENT VALUE OF USER BENEFITS			Present Value of Total User Benefits (\$)	PRESENT VALUE OF USER Costs			Present Value of Total User Costs (\$)
		VHTBenefits	VMT Benefits	Crash Reduction Savings		Construction Costs	Maintenance Costs	Remaining Capital Value	
2023	-					\$4,897,787	\$0	\$0	\$ 4,897,787
2024	1	\$4,101,145	-\$27,744	\$70,811	\$ 4,144,211	\$0	\$4,005	\$0	\$ 4,005
2025	2	\$4,182,141	-\$26,557	\$67,491	\$ 4,223,074	\$0	\$3,743	\$0	\$ 3,743
2026	3	\$4,234,987	-\$25,408	\$64,302	\$ 4,273,882	\$0	\$3,498	\$0	\$ 3,498
2027	4	\$4,263,020	-\$24,294	\$61,242	\$ 4,299,967	\$0	\$3,269	\$0	\$ 3,269
2028	5	\$4,269,260	-\$23,218	\$58,307	\$ 4,304,348	\$0	\$3,056	\$0	\$ 3,056
2029	6	\$4,256,438	-\$22,179	\$55,494	\$ 4,289,753	\$0	\$2,856	\$0	\$ 2,856
2030	7	\$4,227,022	-\$21,176	\$52,799	\$ 4,258,645	\$0	\$2,669	\$0	\$ 2,669
2031	8	\$4,183,238	-\$20,209	\$50,220	\$ 4,213,248	\$0	\$2,494	\$0	\$ 2,494
2032	9	\$4,127,092	-\$19,279	\$47,752	\$ 4,155,565	\$0	\$2,331	\$0	\$ 2,331
2033	10	\$4,060,389	-\$18,383	\$45,392	\$ 4,087,397	\$0	\$2,179	\$0	\$ 2,179
2034	11	\$3,984,749	-\$17,523	\$43,136	\$ 4,010,362	\$0	\$2,036	\$0	\$ 2,036
2035	12	\$3,901,629	-\$16,696	\$40,981	\$ 3,925,914	\$0	\$1,903	\$0	\$ 1,903
2036	13	\$3,812,330	-\$15,902	\$38,924	\$ 3,835,351	\$0	\$1,778	\$0	\$ 1,778
2037	14	\$3,718,016	-\$15,141	\$36,960	\$ 3,739,835	\$0	\$1,662	\$0	\$ 1,662
2038	15	\$3,619,727	-\$14,411	\$35,087	\$ 3,640,402	\$0	\$1,553	\$0	\$ 1,553
2039	16	\$3,518,385	-\$13,712	\$33,301	\$ 3,537,973	\$0	\$1,452	\$0	\$ 1,452
2040	17	\$3,414,811	-\$13,043	\$31,598	\$ 3,433,366	\$0	\$1,357	\$0	\$ 1,357
2041	18	\$3,309,730	-\$12,403	\$29,975	\$ 3,327,303	\$0	\$1,268	\$0	\$ 1,268
2042	19	\$3,203,784	-\$11,790	\$28,430	\$ 3,220,423	\$0	\$1,185	\$0	\$ 1,185
2043	20	\$3,097,535	-\$11,205	\$26,958	\$ 3,113,288	\$0	\$1,107	-\$394,893	\$ (393,785)
Total for Project Life		\$77,485,427	-\$370,275	\$919,157	\$78,034,310	\$4,897,787	\$45,401	-\$394,893	\$4,548,296



Project Name:	Rifle Gateway Build 3 FullRAB Alternative
BCA Base Year:	2020
BCA Future Year:	2045

ANALYSIS TIMEFRAME

Years of Construction		Base	Build
First Year of Construction		2023	2023
Duration of Construction		1	1
Length of B/C Analysis Period		22	years
Benefit-cost First Year of Benefit:		2024	
Benefit-cost Final Year of Analysis/Year of Remaining Capital Value:		2045	
Length of Traffic Analysis Period		24	years
First Year of Traffic Analysis:		2022	
Final Year of Traffic Analysis:		2045	
Network Daily Traffic		Base	Build
Existing AADT	2020	23,866	23,866
Year of Opening AADT	2024	25,259	25,259
Future AADT	2045	32,571	32,571

NETWORK ASSUMPTIONS

*Based on PTV VISSIM models for

Truck Percentage				Base	Build
		Percent Autos		97.8%	97.8%
		Percent Trucks		2.2%	2.2%
Average Vehicle Occupancy Ratios				Base	Build
		Automobile		1.67	1.67
		Truck		1.00	1.00
Traffic - Daily VMT and VHT				Base	Build
Year	1	Daily Vehicle Miles Traveled (VMT)	2022	18,085	18,210
Year	24	Daily Vehicle Miles Traveled (VMT)	2045	24,648	24,847
Year	1	Daily Vehicle Hours Traveled (VHT)	2022	1,084	680
Year	24	Daily Vehicle Hours Traveled (VHT)	2045	2,434	993

GLOBAL ASSUMPTIONS AND FACTORS

*Based on SFY2022 USDOT Recommended Standard Values (March 2022)

General Economic Parameters		2020	
Year of Analysis		2020	
Number of Days in a Year (Assumed)		365	
Real Discount Rate		7.0%	
Costs per Hour		Value	Units
Automobile		\$17.80	\$/hr
Truck		\$32.00	\$/hr
Costs per Mile		Value	Units
Automobile		\$0.45	\$/mile
Truck		\$0.94	\$/mile
Composite Cost per Hour		\$29.78	\$/hr
Composite Cost per Mile		\$0.76	\$/mile

CRASH ANALYSIS CALCULATIONS

*Based on Surrogate Safety Assessment Model (SSAM) Conflict Analysis with PTV VISSIM Trajectories.

USDOT Crash Costs			5	# of Years	
	Value	# of Crashes (Crossing)	# of Crashes (Rear End)	# of Crashes (Lane Change)	Total Crashes
Fatal	\$11,600,000				0
Injury Type A	\$554,800				0
Injury Type B	\$151,100	2			2
Injury Type C	\$77,200	6	4		10
Property damage only	\$4,600	22	11	6	39
	Build Crash Reduction 2024	9%	86%	66%	62%
	Build Crash Reduction 2045	7%	91%	87%	82%



Remaining Capital Value

	Base Cost	Remaining Useful Life (Yr)	Build Cost	Remaining Useful Life (Yr)
		20		20
Mobilization and Engineering	\$0	0%	\$1,200,000	0%
Right of Way	\$0	88%	\$0	88%
Major Structures	\$0	74%	\$0	74%
Removal	\$0	0%	\$600,000	0%
Grading and Drainage	\$0	67%	\$1,200,000	67%
Sub-Base and Base	\$0	56%	\$1,200,000	56%
Surface	\$0	22%	\$1,800,000	22%

Base	\$0	\$0		
Build			\$6,000,000	\$1,872,000

Maintenance Costs

	Roadway Facility	Total Roadway Length (lane-mi)	Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
20%Base	Trunk Highway	1.3	\$ 10,500.00	\$ 13,650.00
	County Highway		\$ 8,000.00	\$ -
				\$ -
10%				
20%			Annual Maintenance Costs: \$ 13,650.00	
20%	30%Build	New Roadway Facility	Total Roadway Length (lane-mi)	
			Annual Maintenance	
			Cost Per Lane-Mi (\$)	Total (\$)
		Trunk Highway	\$ 10,500.00	\$ 18,900.00
		County Highway	\$ 8,000.00	\$ -
				\$ -
			Annual Maintenance Costs: \$ 18,900.00	

Construction Calculations

Year		Present Value of Capital Cost		Present Value of Maintenance Cost		Present Value of Remaining Capital Value		Present Value of Net Annual Costs (\$)
		Base	Build	Base	Build	Base	Build	
2023	-	\$0	\$4,897,787	\$0	\$0	\$0	\$0	\$4,897,787
2024	1	\$0	\$0	\$10,414	\$14,419	\$0	\$0	\$4,005
2025	2	\$0	\$0	\$9,732	\$13,475	\$0	\$0	\$3,743
2026	3	\$0	\$0	\$9,096	\$12,594	\$0	\$0	\$3,498
2027	4	\$0	\$0	\$8,501	\$11,770	\$0	\$0	\$3,269
2028	5	\$0	\$0	\$7,944	\$11,000	\$0	\$0	\$3,056
2029	6	\$0	\$0	\$7,425	\$10,280	\$0	\$0	\$2,856
2030	7	\$0	\$0	\$6,939	\$9,608	\$0	\$0	\$2,669
2031	8	\$0	\$0	\$6,485	\$8,979	\$0	\$0	\$2,494
2032	9	\$0	\$0	\$6,061	\$8,392	\$0	\$0	\$2,331
2033	10	\$0	\$0	\$5,664	\$7,843	\$0	\$0	\$2,179
2034	11	\$0	\$0	\$5,294	\$7,330	\$0	\$0	\$2,036
2035	12	\$0	\$0	\$4,947	\$6,850	\$0	\$0	\$1,903
2036	13	\$0	\$0	\$4,624	\$6,402	\$0	\$0	\$1,778
2037	14	\$0	\$0	\$4,321	\$5,983	\$0	\$0	\$1,662
2038	15	\$0	\$0	\$4,039	\$5,592	\$0	\$0	\$1,553
2039	16	\$0	\$0	\$3,774	\$5,226	\$0	\$0	\$1,452
2040	17	\$0	\$0	\$3,527	\$4,884	\$0	\$0	\$1,357
2041	18	\$0	\$0	\$3,297	\$4,565	\$0	\$0	\$1,268
2042	19	\$0	\$0	\$3,081	\$4,266	\$0	\$0	\$1,185
2043	20	\$0	\$0	\$2,879	\$3,987	\$0	\$394,893	-\$393,785
Total Project Life Benefit		\$0	\$4,897,787	\$118,043	\$163,445	\$0	\$394,893	\$4,548,296

Benefit Cost Analysis Workbook



VHT Calcs

	Year	VHT			Constant Benefit (\$)	Present Value of Savings (\$)
		Base (hrs)	Build (hrs)	Benefit (hrs)		
First year of traffic analysis	2023	417220.0	253133.0	164087.0	\$4,885,859	\$3,988,316
First year of benefit-cost analysis	2024	438642.7	258102.7	180540.0	\$5,375,764	\$4,101,145
	2025	460065.5	263072.5	196993.0	\$5,865,669	\$4,182,141
	2026	481488.2	268042.2	213446.0	\$6,355,573	\$4,234,987
	2027	502911.0	273012.0	229899.0	\$6,845,478	\$4,263,020
	2028	524333.7	277981.7	246352.0	\$7,335,383	\$4,269,260
	2029	545756.4	282951.5	262805.0	\$7,825,288	\$4,256,438
	2030	567179.2	287921.2	279258.0	\$8,315,193	\$4,227,022
	2031	588601.9	292891.0	295710.9	\$8,805,098	\$4,183,238
	2032	610024.6	297860.7	312163.9	\$9,295,002	\$4,127,092
	2033	631447.4	302830.4	328616.9	\$9,784,907	\$4,060,389
	2034	652870.1	307800.2	345069.9	\$10,274,812	\$3,984,749
	2035	674292.9	312769.9	361522.9	\$10,764,717	\$3,901,629
	2036	695715.6	317739.7	377975.9	\$11,254,622	\$3,812,330
	2037	717138.3	322709.4	394428.9	\$11,744,526	\$3,718,016
	2038	738561.1	327679.2	410881.9	\$12,234,431	\$3,619,727
	2039	759983.8	332648.9	427334.9	\$12,724,336	\$3,518,385
	2040	781406.5	337618.7	443787.9	\$13,214,241	\$3,414,811
	2041	802829.3	342588.4	460240.9	\$13,704,146	\$3,309,730
	2042	824252.0	347558.1	476693.9	\$14,194,050	\$3,203,784
Last year of benefit-cost and traffic analysis	2043	845674.8	352527.9	493146.9	\$14,683,955	\$3,097,535
Total Project Life Benefit				6736868.7	\$200,597,191	\$77,485,427

	Year	VMT			Constant Benefit (\$)	Present Value of Savings (\$)
		Base (miles)	Build (miles)	Benefit (miles)		
First year of traffic analysis	2023	6,705,073	6,752,032	-46,960	-\$35,485	-\$28,966
First year of benefit-cost analysis	2024	6,809,223	6,857,349	-48,126	-\$36,367	-\$27,744
	2025	6,913,373	6,962,666	-49,293	-\$37,248	-\$26,557
	2026	7,017,523	7,067,983	-50,460	-\$38,130	-\$25,408
	2027	7,121,673	7,173,300	-51,627	-\$39,011	-\$24,294
	2028	7,225,823	7,278,616	-52,793	-\$39,893	-\$23,218
	2029	7,329,973	7,383,933	-53,960	-\$40,775	-\$22,179
	2030	7,434,123	7,489,250	-55,127	-\$41,656	-\$21,176
	2031	7,538,273	7,594,567	-56,293	-\$42,538	-\$20,209
	2032	7,642,423	7,699,884	-57,460	-\$43,420	-\$19,279
	2033	7,746,573	7,805,200	-58,627	-\$44,301	-\$18,383
	2034	7,850,723	7,910,517	-59,794	-\$45,183	-\$17,523
	2035	7,954,873	8,015,834	-60,960	-\$46,065	-\$16,696
	2036	8,059,024	8,121,151	-62,127	-\$46,946	-\$15,902
	2037	8,163,174	8,226,467	-63,294	-\$47,828	-\$15,141
	2038	8,267,324	8,331,784	-64,461	-\$48,709	-\$14,411
	2039	8,371,474	8,437,101	-65,627	-\$49,591	-\$13,712
	2040	8,475,624	8,542,418	-66,794	-\$50,473	-\$13,043
	2041	8,579,774	8,647,735	-67,961	-\$51,354	-\$12,403
	2042	8,683,924	8,753,051	-69,128	-\$52,236	-\$11,790
Last year of benefit-cost and traffic analysis	2043	8,788,074	8,858,368	-70,294	-\$53,118	-\$11,205
Total Project Life Benefit				-1,184,206	-\$894,842	-\$370,275



Crash Data

Crash Analysis		2022		2045	
		Base	Build	Base	Build
Corridor AADT		23,866	23,866	32,571	32,571
Reduction			56%		71%
Crash Severity (5 year data)	Fatal	0	0.0	0.0	0.0
	A	0	0.0	0.0	0.0
	B	2	1.8	2.7	2.5
	C	10	6.0	13.6	8.1
	PDO	39	14.8	53.2	9.6
		Base		Build	
2022		10.2	\$ 250,720	4.5	\$ 161,584
2045		13.9	\$ 342,169	4.0	\$ 210,691

Crash Values (\$ per crash)	
\$	11,600,000
\$	554,800
\$	151,100
\$	77,200
\$	4,600

Crash Calculations

Year	Base		Build		Constant Benefit (\$)	Present Value of Savings (\$)
	Annual Forecast		Annual Forecast			
	Number of Crashes	Estimated Cost	Number of Crashes	Estimated Cost		
2023	10.4	\$254,696	4.5	\$ 163,719	\$ 90,977	\$ 74,265
2024	10.5	\$258,672	4.5	\$ 165,854	\$ 92,818	\$ 70,811
2025	10.7	\$262,648	4.5	\$ 167,989	\$ 94,659	\$ 67,491
2026	10.8	\$266,624	4.4	\$ 170,124	\$ 96,500	\$ 64,302
2027	11.0	\$270,600	4.4	\$ 172,259	\$ 98,341	\$ 61,242
2028	11.2	\$274,576	4.4	\$ 174,394	\$ 100,182	\$ 58,307
2029	11.3	\$278,552	4.4	\$ 176,529	\$ 102,023	\$ 55,494
2030	11.5	\$282,528	4.4	\$ 178,664	\$ 103,864	\$ 52,799
2031	11.7	\$286,504	4.3	\$ 180,800	\$ 105,705	\$ 50,220
2032	11.8	\$290,480	4.3	\$ 182,935	\$ 107,546	\$ 47,752
2033	12.0	\$294,456	4.3	\$ 185,070	\$ 109,387	\$ 45,392
2034	12.1	\$298,432	4.3	\$ 187,205	\$ 111,228	\$ 43,136
2035	12.3	\$302,408	4.3	\$ 189,340	\$ 113,069	\$ 40,981
2036	12.5	\$306,385	4.2	\$ 191,475	\$ 114,909	\$ 38,924
2037	12.6	\$310,361	4.2	\$ 193,610	\$ 116,750	\$ 36,960
2038	12.8	\$314,337	4.2	\$ 195,745	\$ 118,591	\$ 35,087
2039	12.9	\$318,313	4.2	\$ 197,880	\$ 120,432	\$ 33,301
2040	13.1	\$322,289	4.2	\$ 200,015	\$ 122,273	\$ 31,598
2041	13.3	\$326,265	4.1	\$ 202,151	\$ 124,114	\$ 29,975
2042	13.4	\$330,241	4.1	\$ 204,286	\$ 125,955	\$ 28,430
2043	13.6	\$334,217	4.1	\$ 206,421	\$ 127,796	\$ 26,958
Total Project Life Benefit					\$ 2,206,143	\$ 919,157

PUBLIC WORKS



TO: Tommy Klein and City Council
FROM: Craig Spaulding
DATE: September 15, 2022
RE: Gateway Intersection Improvements

Based on the 2009 Gateway Report, Crash Data and Traffic Reports, improvements to the intersection of Whiteriver Avenue, Highway 6, First Street and Highway 13 are needed. Three improvements were analyzed and two found to be feasible. One option is a signal and the other is a multilane roundabout. Below is a discussion comparing the two.

Both the Roundabout and Signal show great improvements to the 2022 traffic levels. After the development of South Rifle and infill promoted by the current comprehensive plan the signal has a better level of service than the roundabout. With 2022 traffic volumes peak and average delays will be better with the roundabout than the signal but with 2045 traffic levels the signal will have lower traffic delays. Based on the KLJ Surrogate Safety Assessment Model (SSAM) the signalized intersection will have less traffic conflicts with current and future traffic conditions. The roundabout will reduce traffic speeds which when coupled with flashing beacon and good visibility should show better improvement for pedestrians than the signal. This is primarily because of the permissive left turn at the signal. This is a very low use turning movement but still could create conflicts. The signal serves detours for accidents and construction better because it remains with two road intersections. If there is construction or an accident traffic can use one or the other. The roundabout would be more likely to block all traffic into town in the case of a crash or construction. These findings are tabulated below and discussed in greater detail in the KLJ traffic report.

	2022			2045		
	Existing Intersection	Signalized Intersection	Roundabout	Existing Intersection	Signalized Intersection	Roundabout
Level of Service	F	B	B	F	E	F
Peak Vehicle Delay	176.6	26.1	13.9	273.6	149.4	230 (190.3 metered)
Average Vehicle Delay	44	21	6	118	37	47(36 metered)
SSAM	771	253	292	2349	506	545
Safety Benefit					\$ 1,200,000.00	\$ 900,000.00
Cost		\$ 1,500,000.00	\$ 6,000,000.00		\$ 1,500,000.00	\$ 6,000,000.00
Multimodal Benefits		left turn conflict	slower speeds		left turn conflict	slower speeds
Maintenance /Detour		multiple intersections if crash or construction	if there is construction on or a crash there is no access		multiple intersections if crash or construction	if there is construction or a crash there is no access

Recommendation

Based on data from the KLJ report the roundabout shows comparable but better results with 2022 traffic and worse results with increased traffic. Both a roundabout and signal are major investments and should last at a minimum the lifespan of the road surface. In this case we would use concrete pavement for both which last a minimum of 40 years. Based on this, the roundabout would be at a LOS F when only halfway through its physical lifecycle. Another concern for the roundabout is the ability to detour during construction or an accident. A roundabout has a much higher potential to block traffic entirely in the case of an accident or road construction. The cost of the roundabout is \$4,500,000 greater than the signalized intersection. Because the roundabout is almost equal to the signal with todays traffic and worse with future traffic it does not justify such a large cost difference. For these reasons it is my recommendation that the Gateway Intersection be improved with at signal.



Agenda Item #b.

Agenda Item Name:

Budget Workshop #2 - 2023 Budget

Presenter:

Scott Rust, Finance Director

Item Description:

Budget Workshop #2 - 2023 Budget

Recommended Action:

N/A

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

N/A

Notification Requirements:

N/A

Prepared By:

Scott Rust, Finance Director

Attachments:

1. City of Rifle 2023 Budget Workshop #2 SR

City of Rifle 2023 Budget Workshop #2

Proprietary Funds (310-620)



9/21/2022

2023 Budgeted Funds

Governmental

- Major
 - 100 – General Fund
 - 201 – Street Improvement
 - 206 – Capital Improvement
 - 210 – Parks & Rec
- Non-Major
 - 202 – Conservation Trust
 - 204 – Visitor Improvement
 - 205 – DDA
 - 207 – Tourism & Industry
 - 208 – Urban Renewal
 - 401 – Cemetery Perpetual Care

Proprietary

- Enterprise
 - 310 – Water
 - 320 – Waste Water
 - 330 – Sanitation
- Internal Service Funds
 - 610 – Fleet
 - 620 – IT

Budget Methodology

- Revenue budgeted very conservatively
 - Inflation (6-10%)
 - Aggressive federal monetary policy
 - Recession
- Budget Priorities
 - Debt Service Requirements
 - Maintain Service Levels (Day to Day Operations)
 - Necessary Capital Projects
 - Expansion of Services & “Nice to Have” Projects

Critical Management Decisions

- Expansion of Sales & Use Tax Audits by Revenue Recovery Group (RRG)
 - Focus on online retailers
- Invest in positions with longer time horizons to maximize yield (4.5%) while maintaining sufficient cash flow
- Reward/look after existing staff (New Pay Plan)
- Continue with S2 and pursue grants
 - Current projects
 - Infrastructure
- Focus on properly maintaining assets
- Closely monitor the Street Improvement Fund

Critical Management Decisions

- Remedy underfunding of IT Internal Service Fund
 - Allocation to Departments insufficient
 - Devices recounted in 2023
 - Impact: Increases to all departments
 - Ex: PD \$224,622 to \$351,750 (+56.59%)
- Fleet Philosophy
 - Continue Lease program with Enterprise Fleet
 - Supply chain issues continue
 - Benefits realized in 3 years
 - Trade-in
 - Not adding mechanic

Employee Compensation: New Pay Plan Impact

2022 Budget – Pre Pay Plan

- FT Salary & Wage:
 - \$ 6,421,265
- Insurance:
 - \$ 1,441,179
- Retirement:
 - 401A: \$ 427,214
 - 457: \$ 117,743

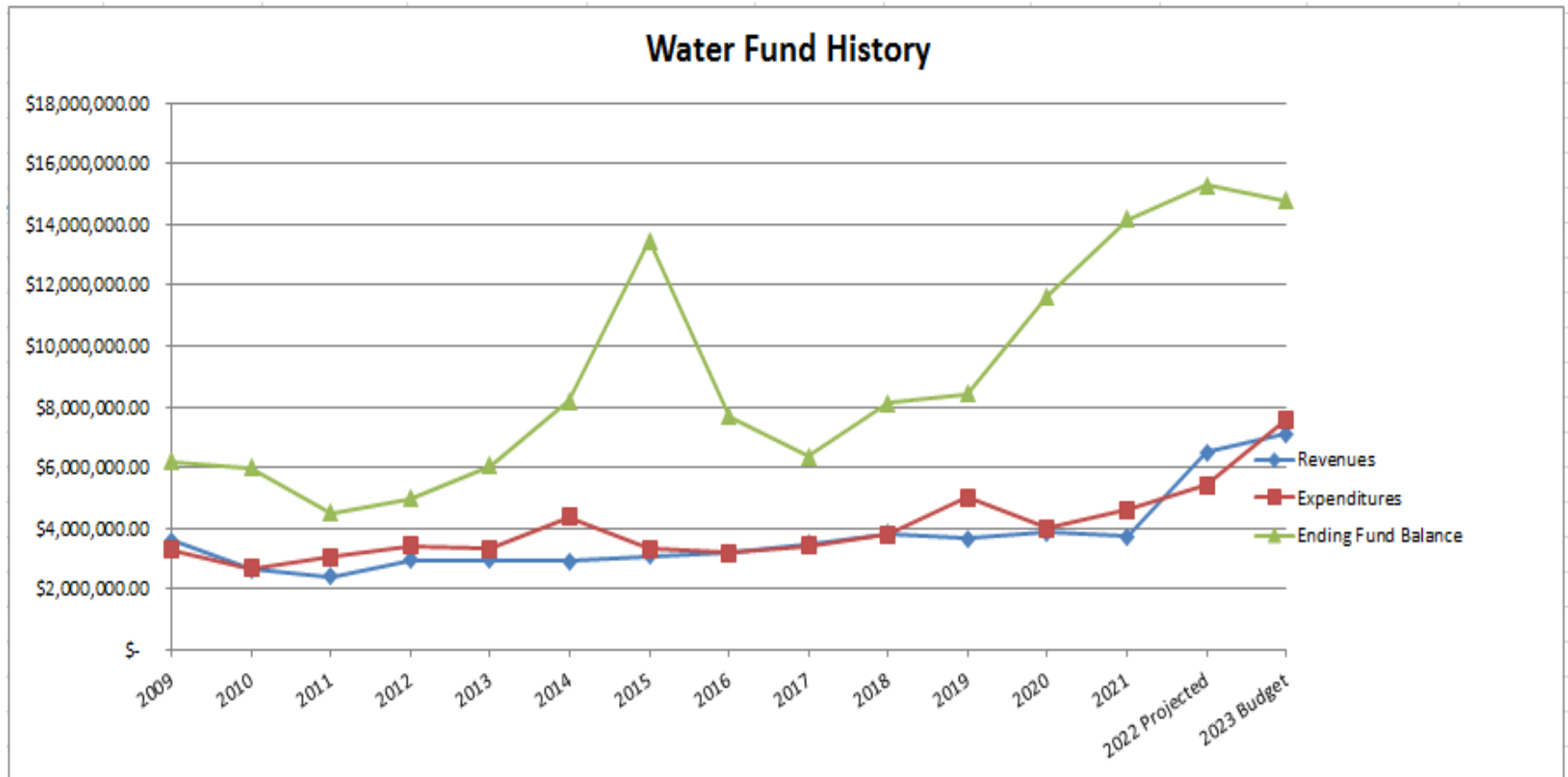
2022 TOTAL PAYROLL BUDGET
\$ 10,352,653

2023 Budget – Post Pay Plan

- FT Salary & Wage:
 - \$7,051,371 (+9.81%)
- Insurance:
 - \$1,514,778 (+5.11%)
- Retirement:
 - 401A: \$ 470,711 (+10.18%)
 - 457: \$ 208,411 (+77.01%)

2023 TOTAL PAYROLL BUDGET
\$ 11,194,201 (+8.13%)

Water Fund History



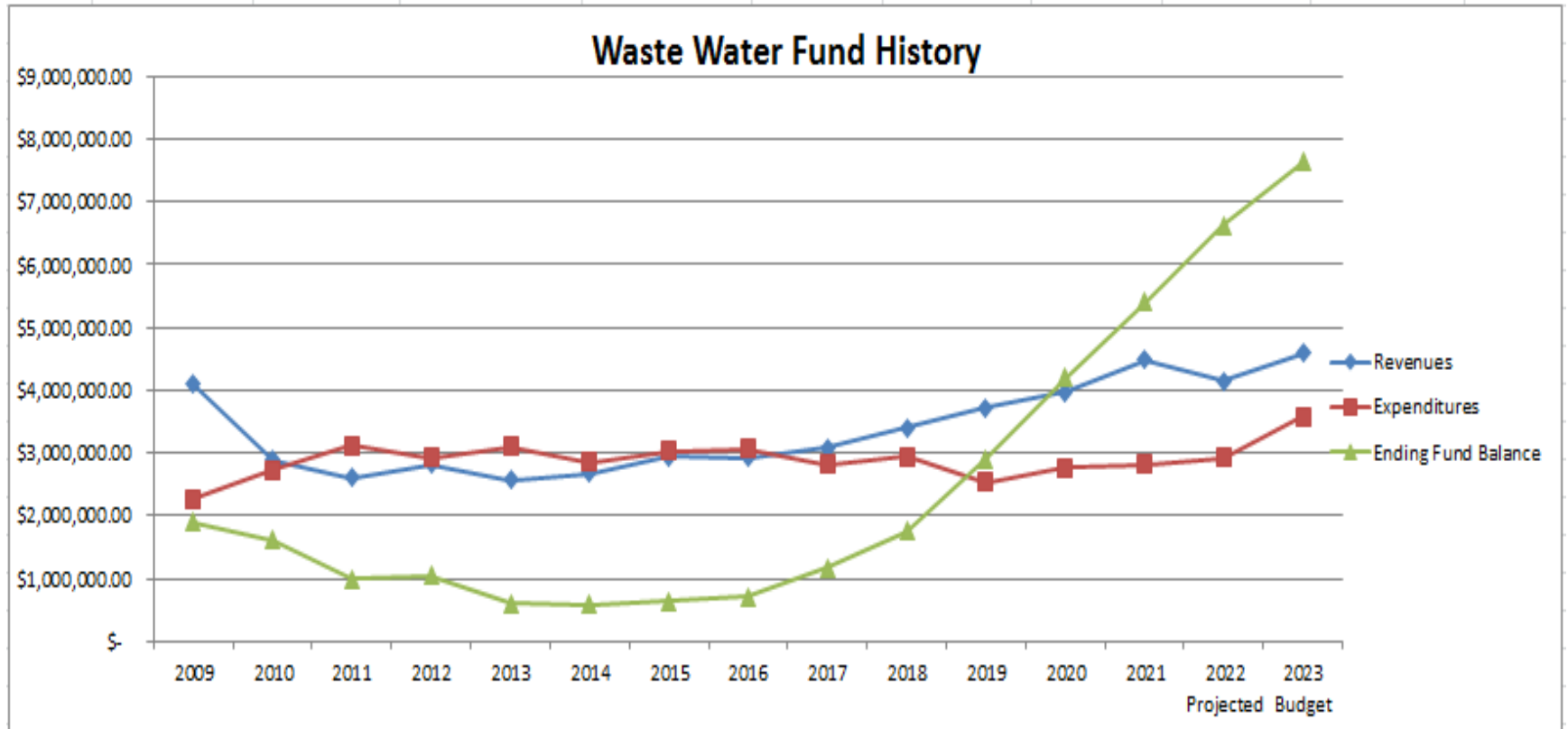
Water Fund – Revenue

- User Fees
 - 2.5% increase (\$3,677,188) per study
- System Improvement Fees anticipated to decrease (-33%)
- Sales Tax at 4% over PY Budget (\$2,136,451)
- Water Tank Surcharge Flat
- Grant Revenue to offset cost of Water related Park & Ride Exp

Water Fund – Major Expenditures

- Payroll increase \$122,817 (+13.31%)
- Penwell Project delayed
 - Line assessment 2023 (x-ray of line plant to tank \$75K)
- Airport Tank Construction Continues
 - 60% of Project expected to Carry forward (\$2M)
- \$200K for pump – raw water station
- \$250K West 4th Street
- Debt Service
 - 2012 A & B CWRPD Loans (Payoff in 2035)
 - 2015 COP (Payoff 2036)

Waste Water Fund History



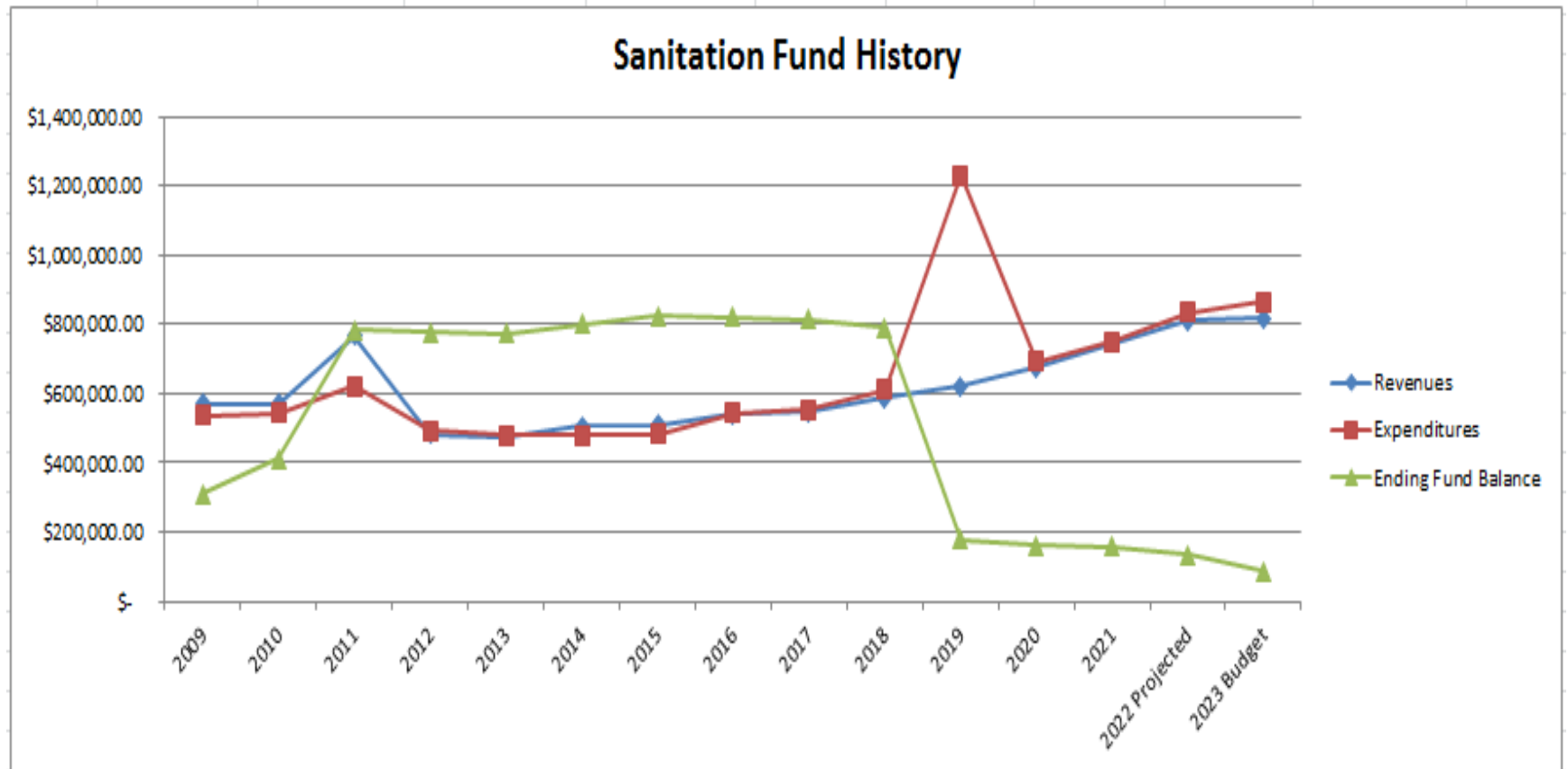
Waste Water Revenue

- User Fees
 - 4.2% increase (\$4,160,331) per study
- Grant Revenue to offset cost of Waste Water related Park & Ride Exp

Waste Water Major Expenditures

- Payroll increase \$116,556 (+18.49%)
- \$100K - Dump Truck for bio-solid hauling
- \$50K – Closure of old compost site (Caca Loco)
- Debt Service
 - 2007A CWRPDA Loan (Payoff 2029)

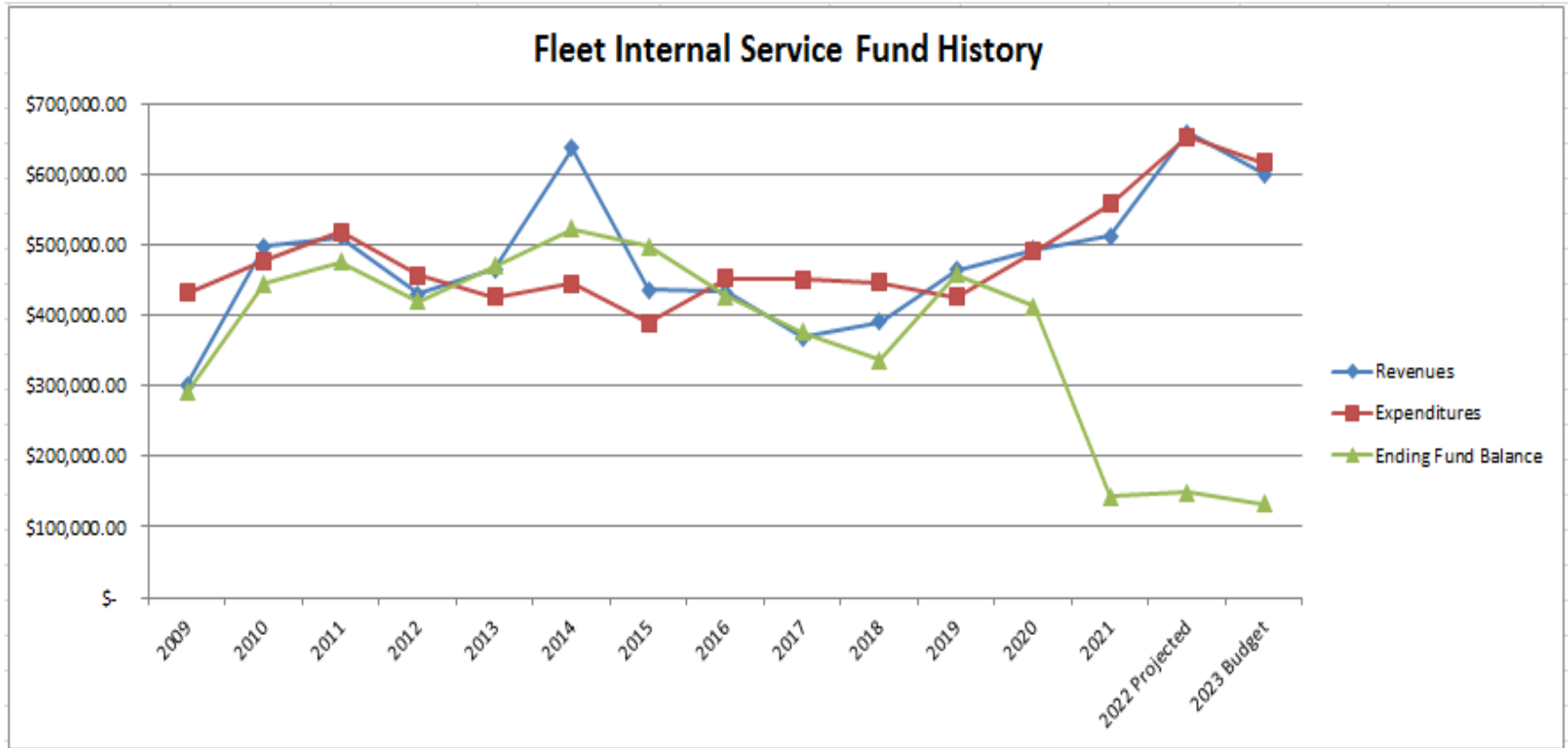
Sanitation Fund History



Sanitation Fund Overview

- Expenditures
 - 20% of staff member salary (17K)
 - Spring Clean UP (\$25K)
 - Mountain Waste Contract (\$780K)
- Rate increase in coming year should be considered
 - Deficit spending has occurred from 2017 forward
 - New rate should cover staff and contract costs

Fleet Internal Service Fund History



Fleet Fund Revenue

- Fleet Maintenance Allocation = \$450,000

Fleet Allocation						
Amount to be Allocated	\$	450,000.00				
Budget Number	Budget Name	GL Acct	GL Acct Name	VEU's	% allocation	Total BDGT 2023
100-4132	Administration	100-4132-400-810	Fleet Maintenance Allocation	6	1.6032064128%	\$ 7,214.43
100-4195	Grounds and Facilities	100-4195-400-810	Fleet Maintenance Allocation	14	3.7408149633%	\$ 16,833.67
100-4199	Community TV	100-4199-400-810	Fleet Maintenance Allocation	3	0.8016032064%	\$ 3,607.21
100-4210	Police	100-4210-400-810	Fleet Maintenance Allocation	52.75	14.0948563794%	\$ 63,426.85
100-4240	Building Inspection	100-4240-400-810	Fleet Maintenance Allocation	2	0.5344021376%	\$ 2,404.81
100-4310	Public Works	100-4310-400-810	Fleet Maintenance Allocation	169	45.1569806279%	\$ 203,206.41
100-4514	Senior Center	100-4514-400-810	Fleet Maintenance Allocation	5.25	1.4028056112%	\$ 6,312.63
210-4512	Parks and Rec - Recreation Ops	210-4512-400-810	Fleet Maintenance Allocation	10.25	2.7388109552%	\$ 12,324.65
210-4521	Parks and Rec - Parks Ops	210-4521-400-810	Fleet Maintenance Allocation	50.5	13.4936539746%	\$ 60,721.44
310-4331	Water Fund Operational Expense	310-4331-400-810	Fleet Maintenance Allocation	32.5	8.6840347361%	\$ 39,078.16
320-4325	Waste Water Operational Expense	320-4325-400-810	Fleet Maintenance Allocation	25	6.6800267201%	\$ 30,060.12
620-4192	IT Fund Operational Expense	620-4192-400-810	Fleet Maintenance Allocation	4	1.0688042752%	\$ 4,809.62
610-3000	Fleet Fund Revenue	610-3000-348-010	Interdept. Maintenance Alloc			\$ (450,000.00)
			Totals/Check Figure	374.25	100.000000000000%	-

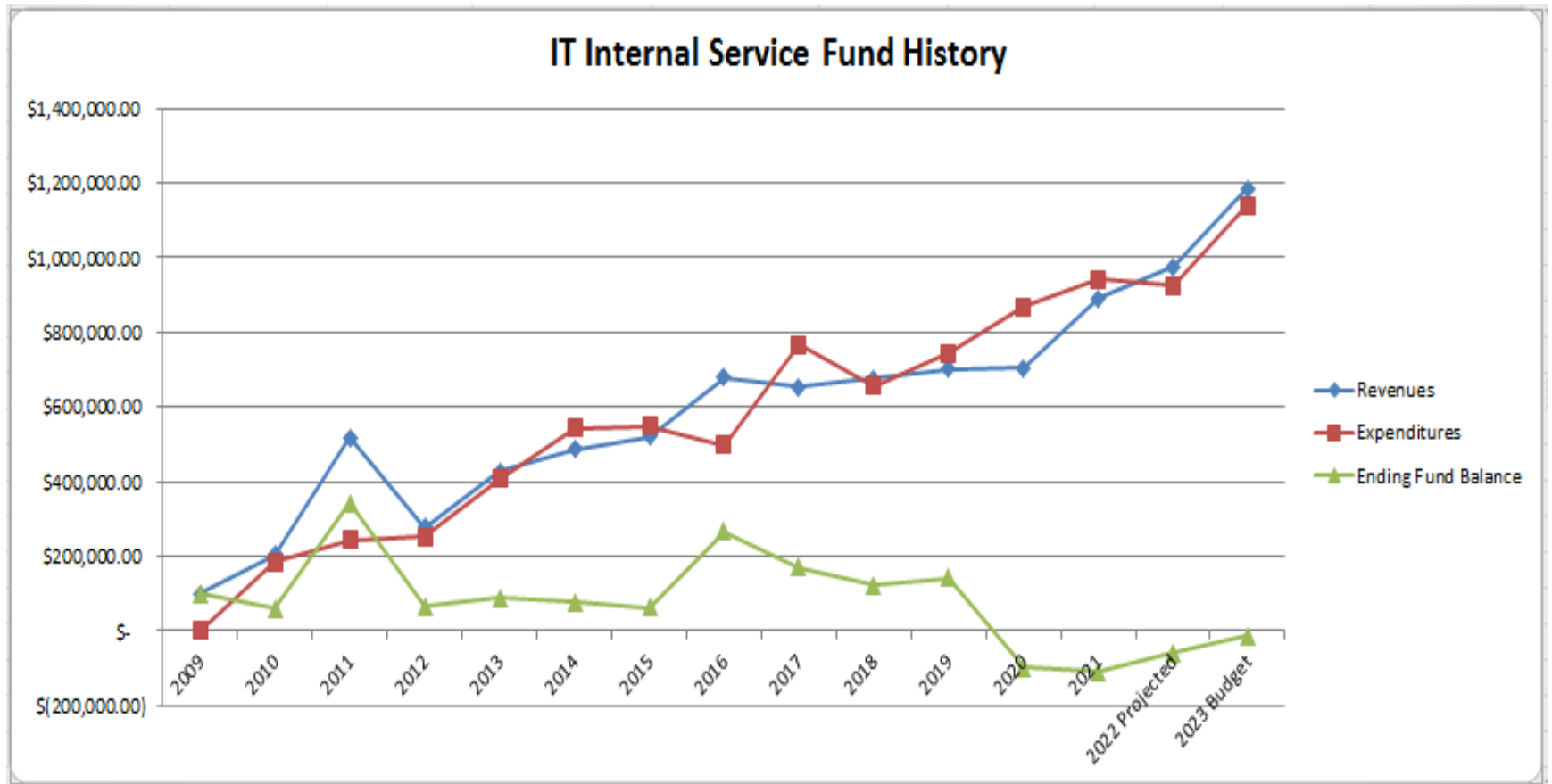
- Fleet Debt Repayment = \$147,625

Fleet Allocation - Debt						
Amount to be Allocated	\$	147,625.00				
Budget Number	Budget Name	GL Acct	GL Acct Name			Total 2023
210-4521	Parks and Rec - Parks Ops	210-4521-400-860	Fleet Debt Service Princ		\$ 7,250.00	
100-4210	Police	100-4210-400-860	Fleet Debt Service Princ		\$ 25,000.00	
100-4310	Public Works	100-4310-400-860	Fleet Debt Service Princ		\$ 115,375.00	
610-3000	Fleet Fund Revenue	610-3000-348-011	Interdepartmental Capital Reve			\$ (147,625.00)
			Totals/Check Figure		\$ 147,625.00	\$ (147,625.00)

Fleet Fund Major Expenditures

- Used Grader approx. \$150K
- Expecting increases:
 - Supplies
 - Diesel Fuel
 - Gasoline
 - Tires
- Continuing transition towards fully leased fleet vs owned

IT Internal Service Fund History



IT Fund Revenue

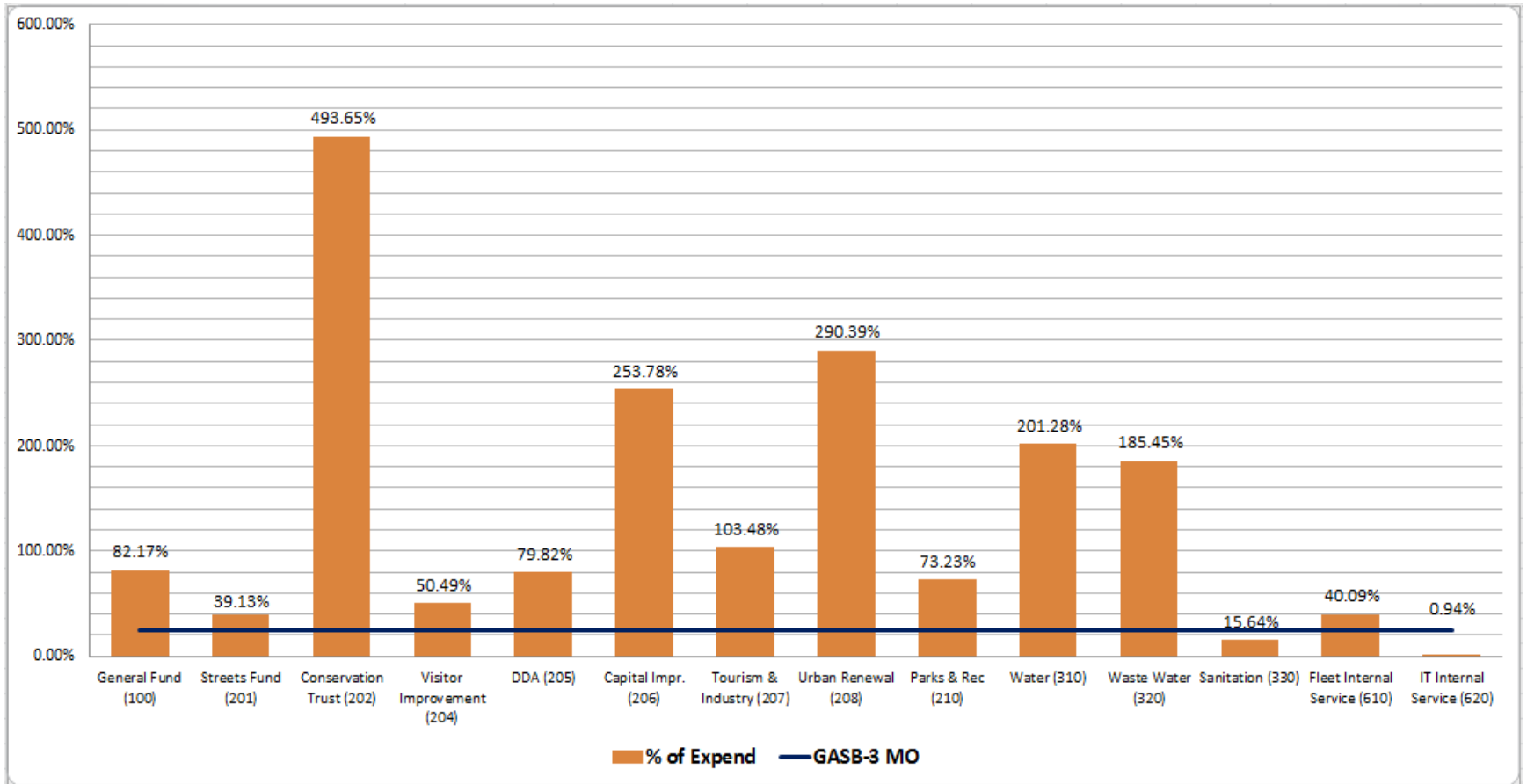
- IT Maintenance Allocation = \$1,185,063 (+15%)

IT ALLOCATION						
Amount to be Allocated	\$	1,185,068.82				
Budget Number	Budget Name	GL Acct	GL Acct Name	Devices	% allocation	Total Budget 2023
100-4111	Mayor and City Council	100-4111-400-820	I.T. Maintenance	14	2.78884462151%	\$ 33,049.73
100-4121	Municipal Court	100-4121-400-820	I.T. Maintenance	14	2.78884462151%	\$ 33,049.73
100-4132	Administration	100-4132-400-820	I.T. Maintenance	26	5.17928286853%	\$ 61,378.07
100-4151	Finance	100-4151-400-820	I.T. Maintenance	19	3.78486055777%	\$ 44,853.20
100-4191	Planning and Zoning	100-4191-400-820	I.T. Maintenance	23	4.58167330677%	\$ 54,295.98
100-4195	Grounds and Facilities	100-4195-400-820	I.T. Maintenance	6	1.19521912351%	\$ 14,164.17
100-4199	Community TV	100-4199-400-820	I.T. Maintenance	9	1.79282868526%	\$ 21,246.25
100-4210	Police	100-4210-400-820	I.T. Maintenance	149	29.68127490040%	\$ 351,743.54
100-4240	Building Inspection	100-4240-400-820	I.T. Maintenance	4	0.79681274900%	\$ 9,442.78
100-4310	Public Works	100-4310-400-820	I.T. Maintenance	22	4.38247011952%	\$ 51,935.29
100-4310	Public Works	100-4310-400-820	I.T. Maintenance	29	5.77689243028%	\$ 68,460.15
100-4514	Senior Center	100-4514-400-820	I.T. Maintenance	10	1.99203187251%	\$ 23,606.95
207-4650	Tourism and Industry Fund Operational Expense	207-4650-400-820	I.T. Maintenance	23	4.58167330677%	\$ 54,295.98
210-4512	Parks and Rec - Recreation Ops	210-4512-400-820	I.T. Maintenance	28.5	5.67729083665%	\$ 67,279.80
210-4513	Parks and Rec - Pool Ops	210-4513-400-820	I.T. Maintenance	12	2.39043824701%	\$ 28,328.34
210-4521	Parks and Rec - Parks Ops	210-4521-400-820	I.T. Maintenance	35.5	7.07171314741%	\$ 83,804.67
310-4331	Water Fund Operational Expense	310-4331-400-820	I.T. Maintenance	33.2	6.61354581673%	\$ 78,375.07
310-4331	Water Fund Operational Expense	310-4331-400-820	I.T. Maintenance	13	2.58964143426%	\$ 30,689.03
320-4325	Waste Water Operational Expense	320-4325-400-820	I.T. Maintenance	26.2	5.21912350598%	\$ 61,850.21
330-4320	Sanitation Fund Operational Expense	330-4320-400-820	I.T. Maintenance	0.6	0.11952191235%	\$ 1,416.42
610-4196	Fleet Fund Operational Expense	610-4196-400-820	I.T. Maintenance	5	0.99601593625%	\$ 11,803.47
620-3000	IT Fund Revenue	620-3000-348-010	Interdepartmental Sales & Serv			\$ (1,185,068.82)
			Totals/Check Figure	502	100.00000000000%	-

IT Fund Major Expenditures

- Capital Projects = \$189K
 - Backup Modernization \$48K
 - East/West Firewall \$38K
 - ClearPass Network Security \$25K
 - Verkada Cameras \$58K
 - Thin Clients \$20K

Minimum Reserve Ratio's





Agenda Item #c.

Agenda Item Name:

Discuss Colorado FAMLI Program

Presenter:

Danielle Hogan, HR Manager

Item Description:

Discuss Colorado FAMLI Program

Recommended Action:

Staff recommends approving the resolution in the regular meeting and opting out of the FAMLI program at this time. If the City of Rifle opts out, employees can opt in to the state FAMLI program at the same cost (.45% of their annual salary) and will receive the full benefit offered. Employees who opt in are responsible for paying the premium to the state program. The City will not make payroll deductions.

Fiscal Impact:

Minimum of .45% of gross annual wages, upto 1.2% of gross annual wages

Operational Impact:

Participation in FAMLI will require additional staff time from the Human Resources and Finance Departments to manage the administrative work related to FAMLI

Prior Board Motions:

N/A

Background Information:

In November 2020, 57% of voters approved Proposition 118, allowing for the implementation of a state-run Paid Family and Medical Leave Insurance (FAMLI) program.

Executive Summary:

The Colorado Paid Family Medical Leave Insurance program (FAMLI) is not mandatory for local governments. The option to participate or opt out of the program must be approved by a vote of the governing board (City Council). If the City of Rifle opts out, employees can opt in to the state FAMLI program at the same cost, .45% of their annual salary, and will receive the full benefit offered. Employees who opt in are responsible for paying the premium to the state program. The City will not make payroll deductions.

Notification Requirements:

Public Notice of Meeting and notifying employees of the Council's vote within 30 days. The notification to employees has occurred.

Prepared By:

Misty Williams, City Clerk

Attachments:

1. CO FAMLI Presentation 9.21.22

Colorado's Paid Family Medical Leave Insurance (FAMLI) Program – Rifle Consider Opting Out of Coverage

Council Workshop ~ September 21, 2022

What is CO FAMLI?

- Created through Statewide voters' approval of Proposition 118 in 2020, the Colorado Family and Medical Leave Insurance (CO FAMLI) program is state-run and *“exists to ensure all Colorado workers have access to paid leave”*
- CO FAMLI program provides most CO employees with 12 weeks of paid leave to take care of themselves or a family member and an additional 4 weeks for complications with childbirth and pregnancy
- Premium collection and remittance will begin in 2023 and leave benefit would begin in 2024
- CO FAMLI differs from federal FMLA in that it provides *paid* leave, based on an employee's weekly wage; further, CO FAMLI's benefits depend on time employed within Colorado and not time at a particular employer. CO FAMLI and federal FMLA will often run concurrently.
- The beginning premium for CO FAMLI is .9% of an employee's wages, split 50/50 between the employee (0.45%) and employer (0.45%); by law, this can increase to up to 1.2% of wages,
- The maximum benefit via family is \$1,100 a week and \$13,200 annually

CO FAMLI and Municipalities

- Participation in FAMLI is automatic for municipalities unless they formally opt out through a vote by the governing body
- Opting out is not permanent and the decision can be reconsidered at anytime
- Participation is required for a minimum of 3 years if we do not opt out
- Employees can take part in FAMLI even if their municipality declines to participate, they are still only required to pay 50% of their premium and are eligible to receive the full benefit
- CO FAMLI is different than the Colorado Healthy Families and Healthy Workplaces Act (HFWA) which began in 2021 offering paid sick leave to all employees; seasonal, part-time and full-time

CO FAMLI and City Employees

- The purpose of the CO FAMLI leave is to ensure that CO workers have access to paid leave
- The City offers employees above average paid leave benefits
- Sick leave accrues each pay period, total annual accrual for FT employees is 12 days per year, with a maximum accrual balance of 480 hours (PT, 9 days annually and seasonal 1 hr/30 hours worked)
- Employees also have access to a “sick leave bank” which is available to assist employees in the event of a catastrophic illness or injury and the employee does not have needed paid leave available

Considerations & Recommendations

- CML surveyed CO municipalities and currently the majority of municipalities (64) have chosen to opt out or are planning to opt out at this time. Only 2 municipalities currently opting in & 13 municipalities are undecided
- If the City Council does not opt out of FAMLI, every City employee will have deductions made from their pay for this program beginning in 2023, regardless of whether they believe participating is the right choice for their family, given the cost and other time off benefits the City provides. (If the City becomes a covered employer participation is NOT optional for employees)
- If the City Council opts out, City employees would retain the option to participate in FAMLI if they choose to. These employees would receive the full benefit from FAMLI at the same premium cost 0.45% of annual wages to the employee, regardless of whether the City becomes a covered employer or not

Staff is recommending at this time the City fully opt out of participating in the FAMLI Program.

Employees are still able to opt in, participating in the program individually and would receive the full benefit.



Agenda Item #5.a.

Agenda Item Name:

Consider Vacating a Portion of Whiteriver Avenue Right-of-Way at 236 East 1st Street - Ordinance No. 18, Series of 2022 - 2nd Reading

Presenter:

Patrick Waller, Planning Director

Item Description:

Right Of Way Vacation

Recommended Action:

Move to approve - Ordinance No. 18, Series of 2022 - on second reading

Fiscal Impact:

N/A

Operational Impact:

The right-of-way adjustment will move both a fire hydrant and a City built retaining wall onto the right-of-way.

Prior Board Motions:

1st Reading approved at September 7, 2022, City Council meeting.

Background Information:

The City of Rifle has previously installed a retaining wall and a fire hydrant on the applicant's property.

Executive Summary:

City Staff previously worked with the property owner at 236 East 1st Street to install a retaining wall. As part of that work, it was planned to adjust the City right of way and the applicant's property boundary to straighten the existing right of way and to ensure the retaining wall and the existing fire hydrant were located within City right of way.

Notification Requirements:

No additional notice required.

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Staff Memo and Exhibits - ROW Vacation Whiteriver Avenue - 236 East 1st Street

2. Ordinance No. 18-ROW Vacation-236 E 1st Street
3. 20220907-Quit Claim Deed

DEPARTMENT OF PLANNING & DEVELOPMENT

202 Railroad Avenue, Rifle, CO 81650

Phone: 970-665-6491



MEMORANDUM

TO: Honorable Mayor and City Council
FROM: Patrick Waller, Planning Director
DATE: September 7, 2022
SUBJECT: Right-of-way Vacation
LOCATION: 236 East 1st Street
APPLICANT: Michael Langhorne

REQUEST: Vacate a portion of Whiteriver Avenue to straighten the existing Right-of-Way (ROW), and to locate a City built retaining wall and fire hydrant within City ROW.

BACKGROUND

City Staff previously worked with the property owner at 236 East 1st Street to install a retaining wall. As part of that work, it was planned to adjust the City ROW and the applicant's property boundary to straighten the existing ROW and to ensure the retaining wall and the existing fire hydrant were located within City ROW.



DEPARTMENT OF PLANNING & DEVELOPMENT

202 Railroad Avenue, Rifle, CO 81650

Phone: 970-665-6491

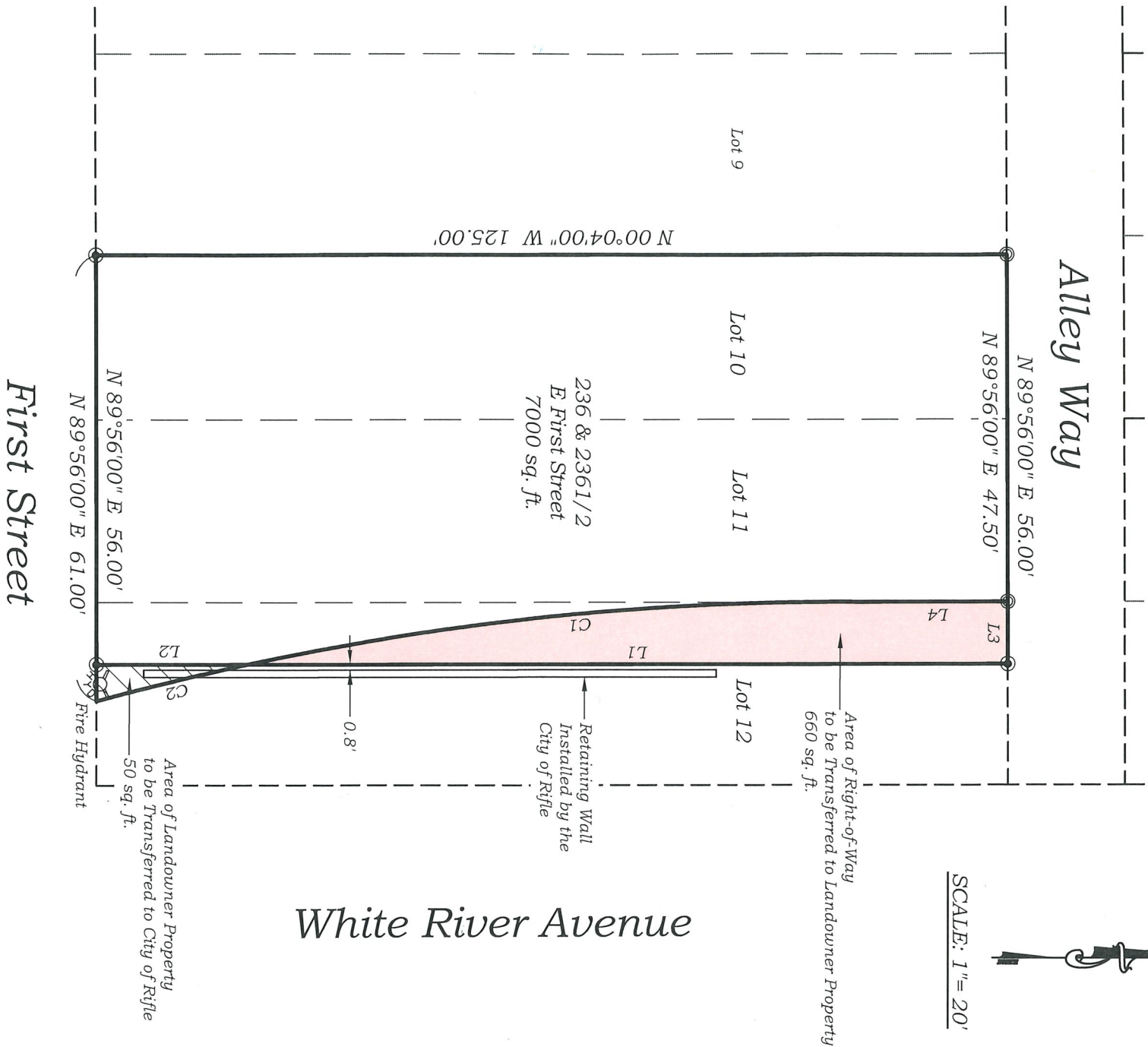
**STAFF COMMENTS**

Public Works Staff has reviewed the proposal and has no concerns. Based on the survey provided by the applicant, there are no utility easements that are impacted. City water and wastewater lines will not be impacted and there is no change to property access. There is no room on this property or the property to the north for installation of a sidewalk.

RECOMMENDATION

Staff recommends that the City Council approve the ROW vacation request.

Alley Way



LEGEND

Found #5 Rebar 
Set 18" #5 Rebar and
1-1/4" Orange Plastic Cap
Stamped "PROP CORNER PLS 36572" 

LINE	BEARING	DISTANCE
L1	N 00°04'00" W	104.33'
L2	N 00°04'00" W	20.67'
L3	S 89°56'00" W	8.50'
L4	S 00°04'00" E	19.30'

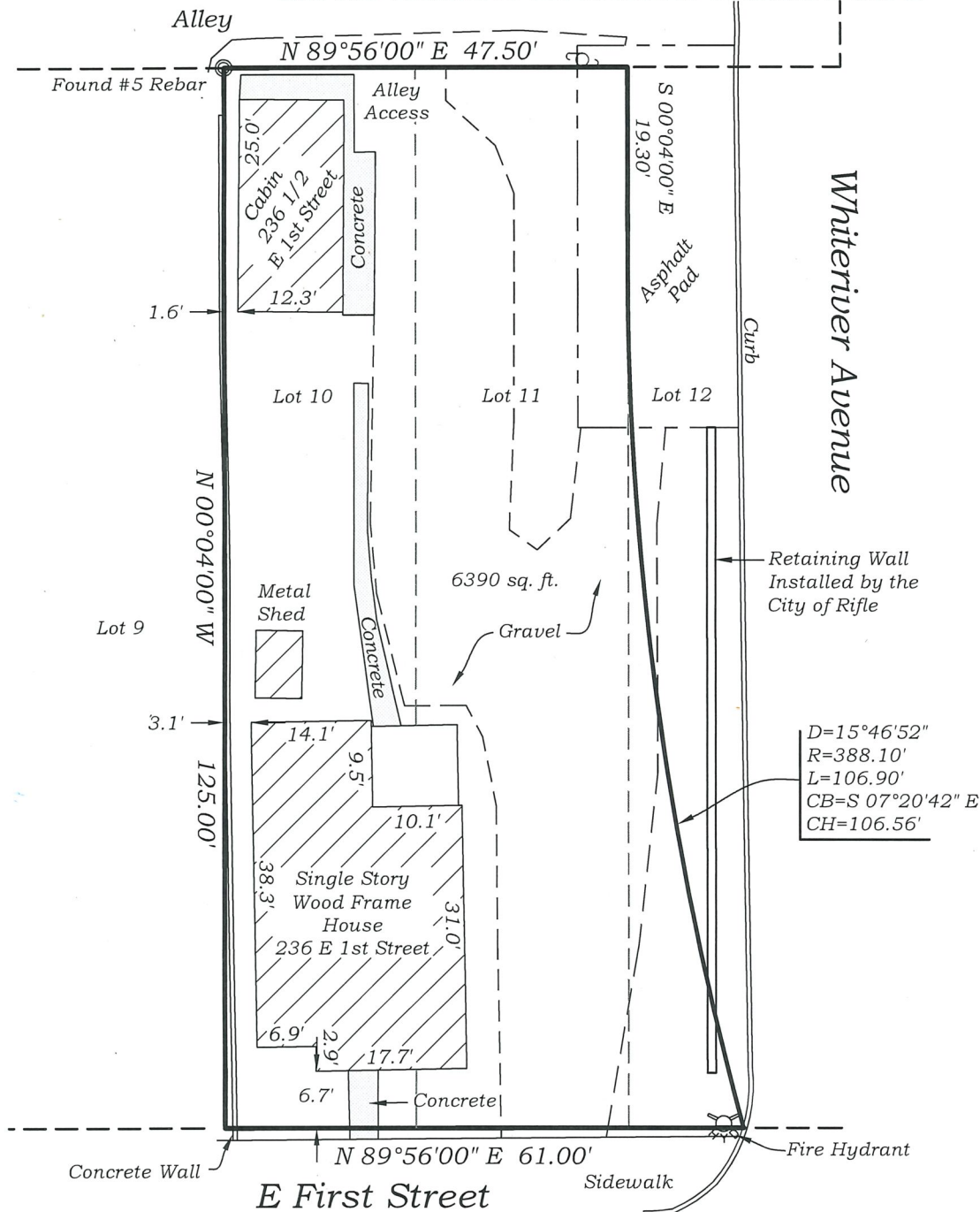
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	388.10'	85.63'	85.45'	S 05°46'31" E	12°38'29"
C2	388.10'	21.27'	21.27'	S 13°39'57" E	3°08'23"

136 East Third Street
Rifle, Colorado 81650
Ph. (970) 625-1330
Fax (970) 625-2773



DATE: AUGUST 30, 2022
JOB NO: 236 E 1ST

IMPROVEMENT LOCATION CERTIFICATE



NOTE: THIS PROPERTY IS SUBJECT TO RESERVATIONS, RESTRICTIONS, COVENANTS AND EASEMENTS OF RECORD OR IN PLACE.

PROPERTY DESCRIPTION

ALL OF LOTS 10, 11 AND 12,
EXCEPT THAT PORTION OF LOTS 11 AND 12 CONVEYED TO THE TOWN OF RIFLE BY DEED RECORDED APRIL 2, 1932
IN BOOK 159 AT PAGE 362
BLOCK D TOWN (NOW CITY) OF RIFLE

IMPROVEMENT LOCATION CERTIFICATE

I HEREBY CERTIFY THAT THIS IMPROVEMENT LOCATION CERTIFICATE WAS PREPARED FOR COMMONWEALTH TITLE COMPANY AND CARLA NOHEMI DELGADO, THAT IT IS NOT A LAND SURVEY PLAT OR AN IMPROVEMENT SURVEY PLAT, AND THAT IT IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OF FENCE, BUILDING, OR OTHER FUTURE IMPROVEMENT LINES. THIS CERTIFICATE IS VALID ONLY FOR USE BY COMMONWEALTH TITLE COMPANY AND CARLA NOHEMI DELGADO AND DESCRIBES THE PARCELS APPEARANCE ON AUGUST 19, 2022.

I FURTHER CERTIFY THAT THE IMPROVEMENTS ON THE ABOVE DESCRIBED PARCEL ON THIS DATE, AUGUST 19, 2022, EXCEPT UTILITY CONNECTIONS, ARE ENTIRELY WITHIN THE BOUNDARIES OF THE PARCEL, EXCEPT AS SHOWN, THAT THERE ARE NO ENCROACHMENTS UPON THE DESCRIBED PREMISES BY IMPROVEMENTS ON ANY ADJOINING PREMISES, EXCEPT AS INDICATED, AND THAT THERE IS NO APPARENT EVIDENCE OR SIGN OF ANY EASEMENT CROSSING OR BURDENING ANY PART OF SAID PARCEL, EXCEPT AS NOTED.

Michael J. Langhorne

MICHAEL J. LANGHORNE COLORADO REGISTRATION NO. 36572
FOR AND ON BEHALF OF
BOOKCLIFF SURVEY SERVICES INC.

136 East Third Street
Rifle, Colorado 81650
Ph. (970) 625-1330
Fax (970) 625-2773

BOOKCLIFF
Survey Services, Inc.

DATE: AUGUST 19, 2022

JOB NO: LANG 236

**CITY OF RIFLE, COLORADO
ORDINANCE NO. 18
SERIES OF 2022**

AN ORDINANCE OF THE CITY OF RIFLE, COLORADO, APPROVING THE
VACATION OF A PORTION OF RIGHT OF WAY ADJACENT TO 236 EAST
1ST STREET IN THE CITY.

WHEREAS, Michael Langhorne (hereinafter “Owner”) owns certain real property located at 236 East 1st Street within the City of Rifle (hereinafter the “Property”); and

WHEREAS, Owner filed a Petition with the City of Rifle, Colorado, requesting that it vacate a portion of the White River Avenue right-of-way adjacent to the Property as depicted on Exhibit A attached hereto and incorporated herein by this reference (hereinafter “right-of-way vacation”); and

WHEREAS, the City constructed improvements to Whiteriver Avenue that included a retaining wall after which the right-of-way vacation serves no public transportation purpose; and

WHEREAS, the City installed a fire hydrant on the southeast corner of the Property and Owner is willing to convey that area also shown on Exhibit A (the “Fire Hydrant Area”) to the City to square off the Property; and

WHEREAS, the City shall not vacate any easement, right-of-way or roadway if doing so would jeopardize the rights of the public, or any public utility; however, in this case, the proposed right-of-way vacation would not jeopardize the public, any public utility, or deny any owner of access to their property; and

WHEREAS, pursuant to C.R.S. §43-2-303(1)(a), the City Council may vacate any roadway or part thereof located within the corporate limits of the City subject to any provision of the City Charter, the Constitution and the Statutes of the State of Colorado; and

WHEREAS, the City Council finds and determines that the right-of-way vacation is not presently needed for transportation purposes nor will it need to be used by the City or the public.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF RIFLE, COLORADO, ORDAINS THAT:

1. Incorporation. The Rifle City Council adopts the foregoing recitals and conclusions as facts and determinations and incorporates them by reference as if set forth in full herein.

2. Vacation and Merger. The right-of-way adjacent to the Property as shown on Exhibit A is hereby vacated, and this vacated right-of-way shall merge with the adjacent property as provided by C.R.S. §42-3-302.

3. Recordation. The right-of-way vacation provided for herein shall not become effective until this Ordinance is recorded with the Office of the Clerk and Recorder of Garfield County by the City.

4. Acceptance of Fire Hydrant Area. The City Council hereby accepts the conveyance of the Fire Hydrant Area from Owner to the City which will occur by separate quit claim deed and recorded with the Office of the Clerk and Recorder of Garfield County by the City.

5. Waiver of Defects. In executing this document, Owner waives all objections it may have over the final disposition of the right-of-way vacation and its merger pursuant to state statute, defects, if any, in the form of this document, the formalities for execution, or over the procedure, substance, and form of the ordinances or resolutions adopting this document.

INTRODUCED on September 7, 2022, read by title, passed on first reading without amendment, and ordered published as required by the Charter.

INTRODUCED a second time at a regular meeting of the Council of the City of Rifle, Colorado, held on September 21, 2022, passed without amendment, approved and ordered published in full as required by Charter.

Dated this ____ day of _____, 2022.

CITY OF RIFLE, COLORADO

By: _____
Mayor

ATTEST:

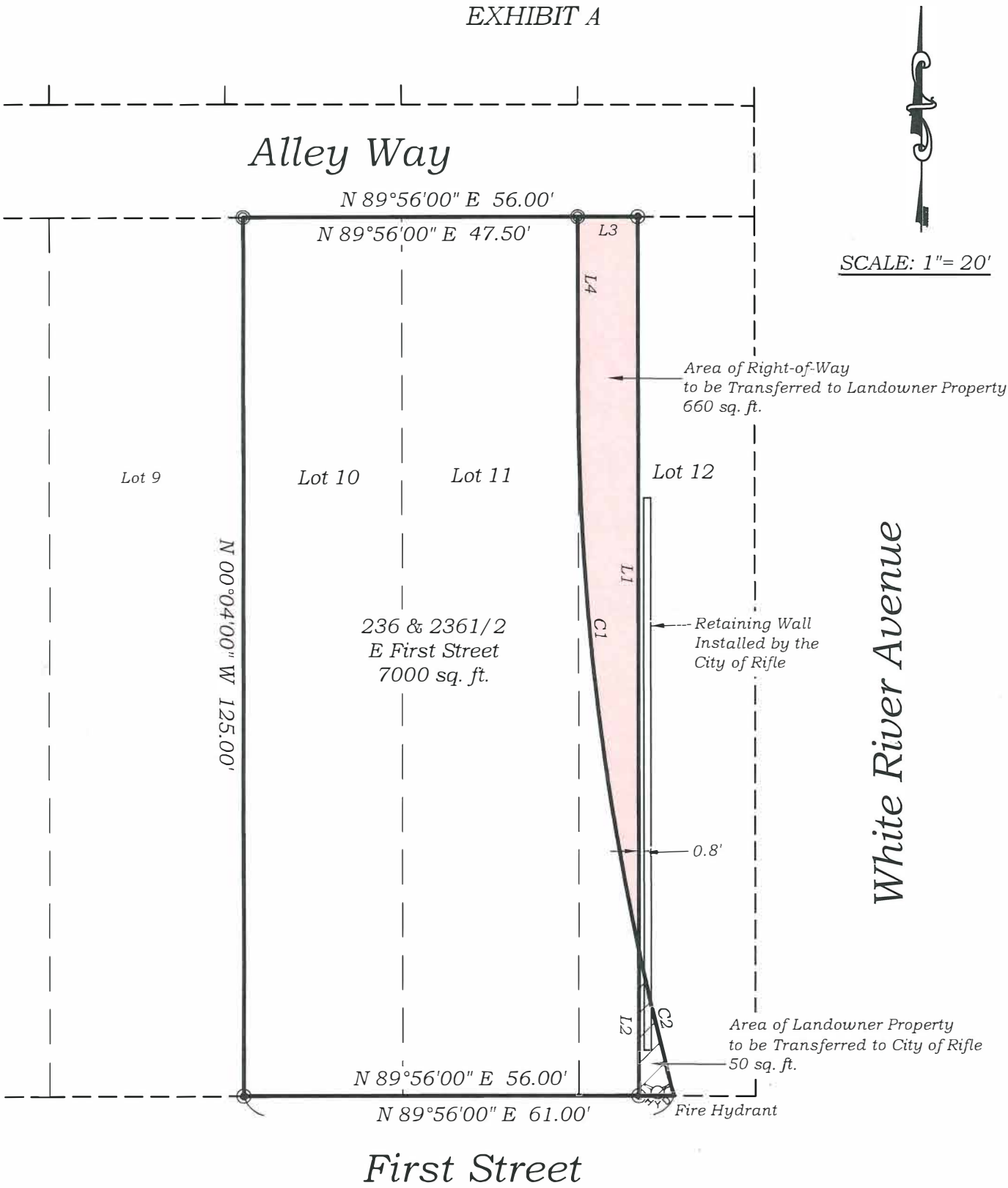
City Clerk

OWNER:

Michael Langhorne

EXHIBIT A

EXHIBIT A



LEGEND

Found #5 Rebar Ⓞ

Set 18" #5 Rebar and
1-1/4" Orange Plastic Cap
Stamped "PROP CORNER PLS 36572" ●

LINE	BEARING	DISTANCE
L1	N 00°04'00" W	104.33'
L2	N 00°04'00" W	20.67'
L3	S 89°56'00" W	8.50'
L4	S 00°04'00" E	19.30'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	388.10'	85.63'	85.45'	S 05°46'31" E	12°38'29"
C2	388.10'	21.27'	21.27'	S 13°39'57" E	3°08'23"

136 East Third Street
Rifle, Colorado 81650
Ph. (970) 625-1330
Fax (970) 625-2773

BOOKCLIFF
Survey Services, Inc.

DATE: AUGUST 30, 2022

JOB NO: 236 E 1ST

QUIT CLAIM DEED

THIS DEED is made this ____ day of _____, 2022 between MICHAEL LANGHORNE (“Grantor”) and the CITY OF RIFLE, COLORADO whose address is 202 Railroad Ave. Rifle, Colorado 81650 (“Grantee”).

WITNESS, that the Grantor, for and in consideration of the sum of TEN DOLLARS, the receipt and sufficiency of which is hereby acknowledged, does hereby remise, release, sell and QUITCLAIM unto the Grantee, and the Grantee’s heirs and assigns, forever, all the right, title, interest, claim and demand which the Grantor has in and to the following described property located in Garfield County, Colorado:

That area shown on Exhibit A attached hereto and incorporated herein by this reference labelled “Area of Right-of-Way to be Transferred to City of Rifle 50 sq. ft.” (the “Property”).

TOGETHER WITH AND INCLUDING any and all associated appurtenances;

TO HAVE AND TO HOLD the same, together with all and singular the appurtenances and privileges thereunto belonging, or in anywise thereunto appertaining, and all the estate, right, title, interest and claim whatsoever of the Grantor, either in law or equity, to the only proper use, benefit and behoof of the Grantee, and the Grantee’s heirs and assigns, forever.

IN WITNESS WHEREOF, the Grantor has executed this deed on the date set forth above.

GRANTOR:

By: _____
Michael Langhorne

STATE OF COLORADO)
) ss.
COUNTY OF GARFIELD)

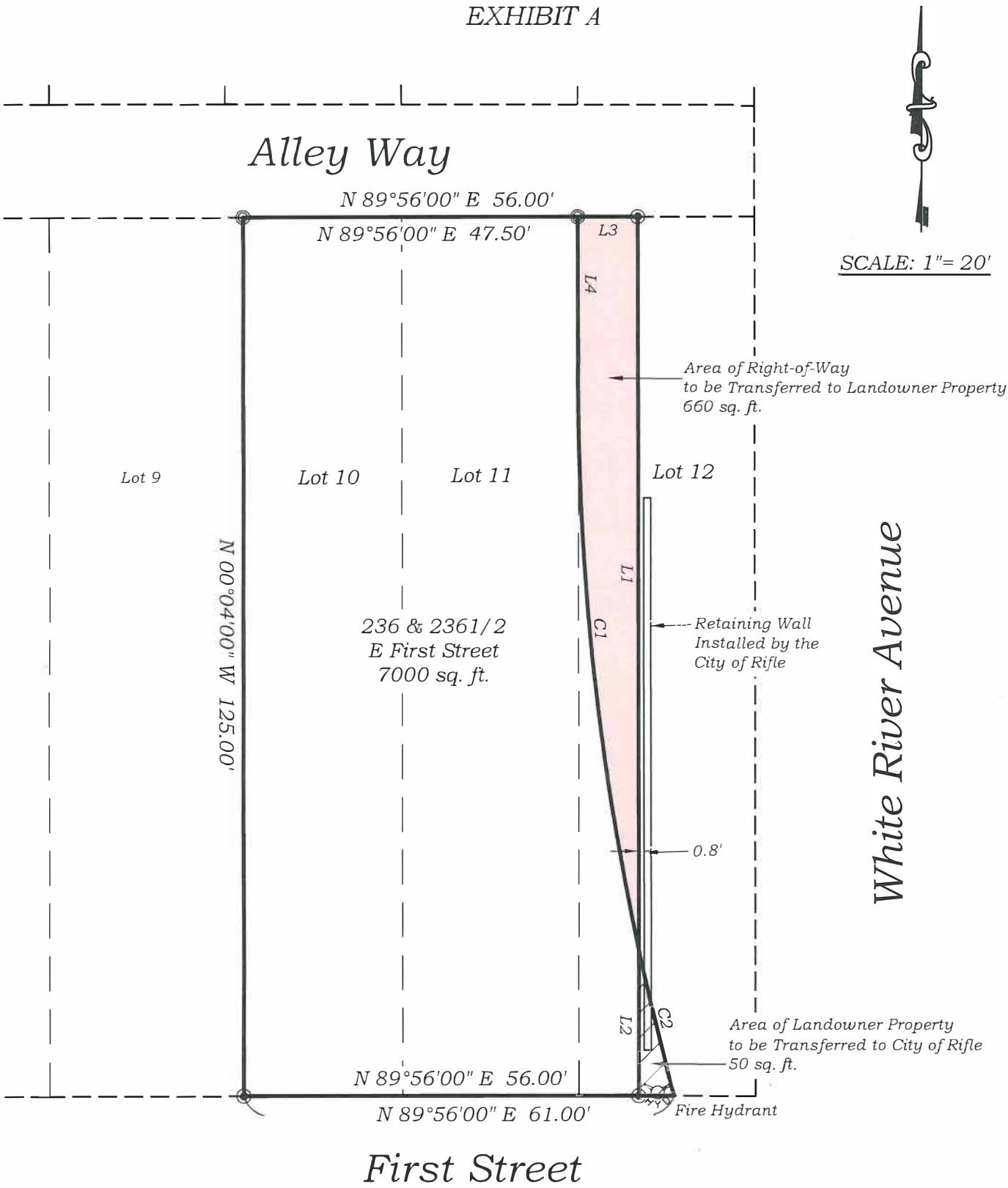
The foregoing instrument was acknowledged before me this ____ day of _____, 2022, by Michael Langhorne.

Witness my hand and official seal.

My commission expires:

Notary Public

EXHIBIT A



LEGEND

Found #5 Rebar Ⓞ

Set 18" #5 Rebar and
1-1/4" Orange Plastic Cap
Stamped "PROP CORNER PLS 36572" ●

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Rifle, Colorado 81650
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Fax (970) 625-2773



BOOKCLIFF
Survey Services, Inc.

DATE: AUGUST 30, 2022
JOB NO: 236 E 1ST



Agenda Item #5.b.

Agenda Item Name:

Consider Approval to Purchase a 2021 Ford F-550 chassis (for medium-duty snowplow)

Presenter:

Brian Prunty, Public Works Director

Item Description:

Approval of Purchase Request for 2021 Ford F-550 to Enterprise Fleet Management previously approved under Purchase Order No. 1699 to Berthod Motors, Inc.

Recommended Action:

Move to approve a Purchase Request for a 2021 Ford F-550 medium-duty snowplow chassis from Enterprise Fleet Management in the amount of \$54,787.72.

Fiscal Impact:

The Invoice for this purchase was issued for the amount of \$48,261.00. I am now seeking an additional \$6,526.72 to complete this purchase. While the original Purchase Order was rescinded, this new Purchase Request for \$54,787.72 takes its place.

Operational Impact:

N/A

Prior Board Motions:

Verbal approval to proceed with the purchase following my notification in a Council meeting that Berthod Motors had canceled our order for a Dodge 5500, but had been provided an opportunity to purchase a Ford F-550 (same specs) via Enterprise Fleet Management (EFM). Council was made aware that the Ford unit would be approximately \$6000 more than the Dodge, but our intent was to negotiate a lease/purchase agreement with EFM.

Background Information:

When City Council originally approved the purchase and configuration of a medium-duty snowplow, it was thought that we would purchase, outright, the chassis from one vendor and the up-fit from another; vendors were sought and Purchase Orders issued. After the cancellation of the chassis built by Dodge, we were forced to find another chassis. Enterprise Fleet Management (EFM) found a chassis for us and we agreed to purchase it. This allowed acquisition of the vehicle with an unsettled agreement for the lease arrangement.

Executive Summary:

The confusion and upheaval in the auto industry caused by COVID-19 cannot be understated. What was to be a 2021 purchase of a medium-duty snowplow is just now playing out. Lack of materials, electronic parts, and

labor wreaked havoc on the industry and consumers. That brought us to this point. Completion of this transaction will fulfill the Council's original intent to improve the snow handling of Public Works and replace wornout equipment. Approval of this request will advance those initiatives.

Notification Requirements:

N/A

Prepared By:

Brian Prunty, Public Works Director

Attachments:

1. Memo - TKlein re Purch Req for the 2021 Ford F-550_bgp
2. Purch Req - EFM - 2021 Ford F-550_bgp
3. PO 1699 - Berthod Motors - 5500 Dodge



TO: Tommy Klein, City Manager
FROM: Brian Prunty, Public Works Director
CC: Scott Rust, Finance Director
DATE: September 13, 2022
RE: Purchase Request for 2021 Ford F-550 Chassis

Due to the weird construct of the auto industry for acquisition, paying for a vehicle that has been in the works for a year and a half only adds to that strangeness. We were originally approved to purchase a Dodge chassis from Berthod Motors in Glenwood Springs, but the upheaval in the auto industry undid that and Dodge canceled our order. From there we were able to find a 2021 Ford F-550 on a lot through Enterprise Fleet management (EFM). This truck along with our purchase of an upfit from Kois Bros. for configuration into a medium-duty snowplow has finally come to past.

The difficulty of this request is because it is technically unfunded. The purchase order (see attached) originally approved was to Berthod Motors, but it was rescinded after the cancellation of our order. While the budget was now unencumbered by the Purchase Order, we were left without the purchasing power it afforded. The thought was that since EFM had stepped up that our Lease Contract with them would fill the gap and we would deal with how it would be billed to the City when the time came. Council's notion all along was to simply buy the truck, but EFM's business model made that difficult and it was thought that we would have a small amount in a lease agreement. In recent discussions with EFM, it now apparent that we can simply pay the full price on Invoice.

The only catch at this point is the difference between the original purchase request amount (\$48,261) and the purchase request attached, which is \$6,526.72. This would be an overage to the original the original cost. I ask that the entire amount be paid for via Budget line 610-4900-400-742. With balance saved from this year's purchases (\$18,089.00) and \$36,698.72 from the fund, it can be paid for in full. We have a revised purchasing policy that shapes the way ahead. Scott advised securing an invoice from EFM and they have agreed to do for the entire amount. I ask for your approval of this Purchase Request for \$54,787.72.

Attachments.

BGP





**CITY OF RIFLE
PURCHASE REQUEST**

1.	Vendor Name	NEW: W-9 attached ☐
	Enterprise Fleet Management, Inc.	

2.	Vendor Address
	7201 S. Fulton St.
	Centennial, CO 80112-3725

3.	For the Purchase of (description)
	2021 Ford F-550 Chassis

4.	Amount Requested	Amount Budgeted	Finance Director Verified Funds Avail.
	\$54,787.72	\$48,261.00	

5.	Dept. Name	General Ledger Acct #
	Fleet	610-4900-400-742

6.	Type of Purchase
	Capital Construction
	Capital Construction – Change Order
x	Capital Equipment
	Plant Equipment
	Materials, supplies, non-profession/technical services (includes computer/software maint.)
	Professional Services
	Utilities (includes equipment installation)
	Land, easements, ROW

7.	Purchasing Process Required
	Cooperative Purchasing
	Open Market
	Comparative Pricing
	Request for Proposal (attach bid tab)
	Formal Bid (attach bid tab and advertisement) - Sourcewell Contract No. 060618-EFM
x	Single Source (attach an explanation)

8.	Authorization Required
x	City Manager City of Rifle Sourcewell Membership No. 69942
x	City Council

9.	Signatures		
	Position	Signature	Date
	Department Director	<i>Brian Prunty</i>	9/13/2022
	City Manager		
	City Council Approval (meeting date)		
10.	Purchase Order # assigned by Finance		

General summary of purchasing ordinance (Section 4, Art. III)

TYPE OF CONTRACT	ESTIMATED AMOUNT	PROCESS	Purchase Order? Purchase Request?	CITY COUNCIL APPROVAL REQUIRED?
Capital Construction	< \$5,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO	Yes if over \$20,000 or for any amount from Capital Fund.
	\$5,000-\$20,000	Comparative Pricing (solicit quotes from 3) vendors/suppliers)	Purchase Request	
	\$20,001-\$100,000	Competitive Bid (see Code Sec 4-3-40)		
	> \$100,000	Bonded Competitive Bid		
Capital Construction Change orders	< = 10% of approved contract	When total change orders to date are < 10% - Dept Head or City Manager Approval	Purchase Request	Yes if total change orders to date are greater than 10%
	> 10% of approved contract			
Capital Equipment	< \$5,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO	Yes if over \$20,000 or for any amount from Capital Fund.
	\$5,000-\$20,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
	> \$20,000	Competitive Bid (see Code Sec 4-3-40)		
Plant Equipment Replacement (purchases necessary for replacement of existing equipment that is component part of any water, wastewater, or physical plant)	< \$7,500	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$75,000
	\$7,500-\$75,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
	>\$75,000	Competitive Bid (see Code Sec 4-3-40)		
Materials, Supplies, Non- Professional Services and Technical Services (including software/hardware maintenance technical services)	< \$10,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$20,000
	>\$10,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
Professional Services (note- process for appointed positions such as auditor, attorney, engineer, or municipal judge to be determined by Council)	< \$25,000	Open Market (informal evaluation by purchasing agent)	All - Purchase Request	Yes if anticipated to exceed \$25,000 per year to a single vendor
	> = \$25,000	Written requests for written proposals must be sent to at least 3 firms or individuals		
Utilities including installation of equipment (purchases to secure utility services such as natural gas, electricity, local telephone, water, or sewer)	any amount	Single Source (negotiations, where appropriate, after good faith determination that only one viable source exists in relevant supply area - keep records for one year)	> \$5,000 - PO >= \$5,000 - Purchase Request	No
Real Property Interest (including easements and rights of way)	any amount	Single Source (see above)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$5,000.



City of Rifle
202 Railroad Ave.
Rifle CO 81650
Phone (970)665-6446

Purchase Order No. 1699

4/22/2021

PURCHASE ORDER

Vendor:

BERTHOD MOTORS INC
P.O. BOX 759
GLENWOOD SPRINGS CO 81602-0759

SHIP TO:

CITY OF RIFLE

202 RAILROAD AVENUE
PO BOX 1908
RIFLE CO 81650

Activity No	GL Account No	Description	Unit Price	Amount
0	610-4900-400-742	DODGE 5500 MEDIUM DUTY	48,261.00	48,261.00

Subtotal	48,261.00
Shipping & Handling	
TOTAL	48,261.00

Payment Details

☐ Check
☐ Cash
☐ Account No.
☐ Wire Transfer

Name _____

CC # _____

Shipping Date



Agenda Item #5.c.

Agenda Item Name:

Consider Minutes of the September 7, 2022, Regular Meeting

Presenter:

Misty Williams, City Clerk

Item Description:

Consider Minutes of the September 7, 2022, Regular Meeting

Recommended Action:

Move to approve the minutes of the September 7, 2022, City Council Regular Meeting

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Minutes of the September 7, 2022, Regular Meeting

Notification Requirements:

N/A

Prepared By:

Misty Williams, City Clerk

Attachments:

1. 09.07.2022 DRAFT Minutes



RIFLE CITY COUNCIL

REGULAR MEETING

September 7, 2022
7:00 p.m.
202 Railroad Avenue, Rifle, CO

CALL TO ORDER & ROLL CALL

A regular meeting of the Rifle City Council was called to order at 7:00 p.m. by Mayor Ed Green.

Present at Roll Call:

Mayor Ed Green, Council Clint Hostettler, Councilor Alicia Gresley, Councilor Sean Strode, Councilor Chris Bornholdt and Councilor Joe Carpenter.

Councilor Sean Strode moved to excuse Councilor Chris Bornholdt; seconded by Councilor Alicia Gresley.

Roll Call: Yes - Joe Carpenter, Alicia Gresley, Ed Green, Brian Condie, Clint Hostettler, and Sean Strode.

No - None.

Others Present:

City Manager Tommy Klein, City Clerk Misty Williams, City Attorney Jim Neu, Rifle Community Television (RCTV) Salvador Tovar-Guzman, Finance Director Scott Rust, Chief of Police Debra Funston, Planning Director Patrick Waller, Public Works Director Brian Prunty, City Engineer Craig Spaulding, Parks and Recreation Director Tom Whitmore, Assistant Parks and Recreation Director Austin Rickstrew and Michael Langhorne.

PUBLIC COMMENT

No public comment was heard.

CONSENT AGENDA – CONSIDER APPROVING THE FOLLOWING ITEMS:

- A. Consider Minutes of the August 17, 2022, Regular Meeting
- B. Consider Minutes of the August 25, 2022, Special Meeting
- C. Consider Intergovernmental Agreement with Garfield County Clerk & Recorder for Election Services
- D. Consider Liquor License Renewal for Rolling Fork Grill, LLC dba Brickhouse Pizzeria
- E. Consider Liquor License Renewal for Coloradough, LLC dba Sweet Coloradough
- F. Consider Professional Services Agreement with Timothy Graves for City Prosecution Services

Councilor Clint Hostettler moved to approve Consent Agenda Items A, B, C, D, E, and F; seconded by Councilor Sean Strode.

Roll Call: Yes - Ed Green, Brian Condie, Clint Hostettler, Alicia Gresley, Joe Carpenter, and Sean Strode.

No – None.

PRESENTATION

Receive Presentation from Youth Zone

Postponed to September 21, 2022, Regular Council Meeting.

REGULAR AGENDA

Consider Vacating a Portion of Whiteriver Avenue Right-of-Way at 236 East 1st Street - Ordinance No. 18, Series of 2022

Planning Director Patrick Waller presented request to consider vacating a portion of Whiteriver Avenue Right-of-Way at 236 East 1st Street – Ordinance No. 18, Series of 2022. Applicant Michael Langhorne was present. Vacating a portion of Whiteriver Avenue will allow to straighten the existing ROW and to locate a City built retaining wall and fire hydrant within City ROW. Public Works staff has reviewed the proposal and has no concerns. No Utility Easements, Water or Wastewater lines will be impacted. Staff recommends approval of the ROW vacating request.

Applicant Michael Langhorne answered questions for Council.

AN ORDINANCE OF THE CITY OF RIFLE, COLORADO, APPROVING THE VACATION OF A PORTION OF RIGHT OF WAY ADJACENT TO 236 EAST 1ST STREET IN THE CITY.

Councilor Clint Hostettler moved to approve Ordinance No. 18, Series of 2022 on 1st reading as presented and order it to be published as required by charter; seconded by Councilor Joe Carpenter.

Roll Call: Yes - Sean Strode, Brian Condie, Joe Carpenter, Clint Hostettler, Alicia Gresley and Ed Green.

No – None.

Consider Approval of a Revocable License to Encroach for 1783 Anvil View Drive

Planning Director Patrick Waller presented request to consider approval of a Revocable License to Encroach for 1783 Anvil View Drive. The applicants, Russell and Cathy Marsh have been working with Planning Staff to complete a Lot Line Adjustment application to move the existing lot line between two properties owned by the applicant. 1783 Anvil View Avenue is developed with an existing single-family residence and the adjacent property (also owned by the applicant), 1795 Anvil View is not developed. As part of Staff's review, it was determined that an existing shed is encroaching on City of Rifle property that was reserved for the Raynard Ditch. The shed was constructed prior to the applicant purchasing the property. The applicant also has a fence and landscaping improvements that are encroaching onto City property. To address the encroachment issue, Staff recommends that Council approve a revocable license to encroach for the shed and the fence on City property. The encroachment has been reviewed by both Planning Staff and Parks and Recreation Staff. Based on the topography of the parcel neither department noted an issue with granting the encroachment and no impact to the Raynard Ditch Trail is anticipated.

Councilor Clint Hostettler moved to approve a revocable license to encroach for 1783 Anvil View Drive; seconded by Councilor Alicia Gresley.

Roll Call: Yes - Brian Condie, Ed Green, Alicia Gresley, Sean Strode, Joe Carpenter and Clint Hostettler.

No – None.

Consider Declaring Antennas as Surplus

City Manager Tommy Klein presented request to declare the antennas located at the old water plant as surplus. The antennas were purchased over 20 years ago are no longer in use. Plan is to sell them as is or dispose of them according to code.

City Manager Tommy Klein answered questions for Council.

Councilor Sean Strode moved to declare two antennas at the old water plant as surplus & to be disposed of by the City Manager per Rifle City Code Sec. 4-3-130; seconded by Councilor Clint Hostettler.

Roll Call: Yes - Ed Green, Sean Strode, Alicia Gresley, Brian Condie, Clint Hostettler, and Joe Carpenter.

No – None.

Consider Approval of Landscape Architect Firm for Birch Property Master Plan

Parks and Recreation Director Tom Whitmore presented request for approval of the Landscape Architect Firm for Birch Property Master Plan. The direction from City Council in 2021 was to pursue a playground for the future park on the Birch property. It was decided that it would be best to conduct master planning for the park parcel in order to establish the optimal location for a playground. A playground is the primary component of the 1st phase of this park. Request for Proposals were issued and three firms submitted proposals. The Park and Recreation Advisory Board (PRAB) reviewed proposals on the August 29th, 2022 meeting and voted unanimously to recommend City Council the Design Concepts proposal for the Birch Property Master Plan.

Councilor Clint Hostettler moved to approve design concepts in the amount of \$44, 727.00 for Birch Property Master Plan; seconded by Councilor Sean Strode.

Roll Call: Yes - Ed Green, Clint Hostettler, Alicia Gresley, Brian Condie, Joe Carpenter and Sean Strode.

No – None.

Consider Approval of Purchase Request for Street Lights on West Second Street

City Engineer Craig Spaulding and Public Works Director Brian Prunty presented purchase request for Street Lights on West Second Street. Two bids were received. The street lights would be for two intersections providing nine globe style street lights. The lighting improvements to this street will improve functionality, safety and aesthetics combined with the intent of the Second Street Project. Staff recommends approval of Street Light improvements on West Second Street.

Councilor Clint Hostettler moved to approve purchase request in the amount of \$45,000.00 to CED New Castle for Street Lights on West Second Street; seconded by Councilor Alicia Gresley.

Roll Call: Yes - Alicia Gresley, Sean Strode, Brian Condie, Clint Hostettler, Ed Green and Joe Carpenter.

No – None.

Consider Approval of Landmark EPC, LLC for the Design and Management of Whiteriver Avenue, Morrow Drive and Tripp Drive

City Engineer Craig Spaulding and Public Works Director Brian Prunty presented request for approval of Landmark EPC, LLC for the Design and Management of Whitrivier Avenue, Morrow Drive and Tripp Drive. The three roads encompassed in the design are all within the CIP and Maintenance plan. Due to the similar design scope of the three roads, they were placed in one RFQ to be designed in 2023. Bank settlement is seen on Morrow Drive, Whiteriver Avenue and Tripp Drive. This settlement was analyzed by Kumar and recommendations for improvements were made. The improvements require structural and geotechnical expertise so all improvements were advertised under the same design contract. The design services were advertised publicly and one bid was received. Staff recommends that Landmark is awarded the design of Morrow Drive, Whitreiver Avenue and Tripp Drive.

Civil Engineer Craig Spaulding and Public Works Director Brian Prunty answered questions for Council.

Councilor Clint Hostettler moved to approve Landmark EPC, LLC for the design & management of Whiteriver Avenue, Morrow Drive and Tripp Drive in the amount of \$374,585.00; seconded by Councilor Sean Strode.

Roll Call: Yes - Clint Hostettler, Brian Condie, Sean Strode, Joe Carpenter, Alicia Gresley and Ed Green.

No – None.

Consider Approval of Colorado River Engineering, Inc. for the Design and Management of Railroad Avenue from 5th Street to 9th Street

City Engineer Craig Spaulding and Public Works Director Brian Prunty presented request for approval of CRE Engineering, Inc. for the Design and Management of Railroad Avenue from 5th Street to 9th Street. Rutted asphalt in front of the middle school, water main breaks, and traffic signal faults are seen on this arterial corridor. This has placed this roadway as the project for 2024 in the CIP and Maintenance Plan. The City of Rifle intends to replace failed asphalt, upgrade sidewalks to ADA/PROWAG conformance, install street lights, improve traffic signals, rehabilitate the sanitary sewer and replace the existing waterline. The design services were advertised publicly and two bids were received. Staff recommends approval of CRE Engineering, Inc. for the Design and Management of Railroad Avenue from 5th Street to 9th Street as new infrastructure will increase the reliability of City utilities and roadways.

Civil Engineer Craig Spaulding and Public Works Director Brian Prunty answered questions for Council.

Councilor Alicia Gresley moved to approve CRE Engineering, Inc. for the design and management of Railroad Avenue from 5th Street to 9th Street in the amount of \$280,539.00; seconded by Councilor Alicia Gresley.

Roll Call: Yes - Ed Green, Alicia Gresley, Sean Strode, Joe Carpenter, Brian Condie, and Clint Hostettler.

No – None.

Consider Approval of Landmark EPC, LLC for the Design and Management of the 5th Street and Ute Avenue Improvements

City Engineer Craig Spaulding and Public Works Director Brian Prunty presented request for

approval of Landmark EPC, LLC for the Design and Management of the 5th Street and Ute Avenue Improvements. The purpose of the project is to rebuild a failed road, install new waterline, replace old sewer manholes, and provide continuous ADA sidewalk path. The design is planned to take place from 2022-2023 which includes review of CCTV footage provided by City of Rifle in 2023. There will likely be a sanitary sewer rehabilitation project in 2024 and the waterline and road work in 5th and Ute will take place in 2025. This project was advertised publicly and two bids were received. Staff recommends approval of Landmark EPC, LLC for the Design and Management of the 5th Street and Ute Avenue Improvements as it will increase reliability of City infrastructure in this entire neighborhood.

Civil Engineer Craig Spaulding and Public Works Director Brian Prunty answered questions for Council.

Councilor Clint Hostettler moved to approve Landmark EPC, LLC for the design and management of the 5th Street and Ute Avenue improvements in the amount of \$193,283.00; seconded by Councilor Joe Carpenter.

Roll Call: Yes - Brian Condie, Joe Carpenter, Alicia Gresley, Ed Green, Clint Hostettler, and Sean Strode.

No – None.

Consider Approval for the Purchase of a Bobcat Track-Steer

Public Works Director Brian Prunty and Operations and Maintenance Supervisor Colton Secary presented request to approve purchase of a Bobcat Track-Steer. Our current Bobcat track-steer at 13 years old has reached the end of it reliable life. This is a vital piece of equipment to our daily operations. Staff recommends purchase of a Bobcat Track-Steer loader as this will result in more work efficiency, less down time and less fuel consumption.

Public Works Director Brian Prunty and O&M Supervisor Colton Secary answered questions for Council.

Councilor Alicia Gresley moved to approve the purchase of a new Bobcat Track-Steer loader from Bobcat of the Rockies in the amount of \$83, 385.00; seconded by Councilor Brian Condie.

Roll Call: Yes - Joe Carpenter, Alicia Gresley, Ed Green, Brian Condie, Clint Hostettler and Sean Strode.

No – None.

Report to City Manager

Reports were heard from City Manager Tommy Klein, City Clerk Misty Williams, Public Works Director Brian Prunty, and Civil Engineer Craig Spaulding.

Comments from Mayor and Council

Comments were heard from Alicia Gresley, Sean Strode, and Brian Condie.

Adjournment

Meeting adjourned at 8:17 p.m.

Misty Williams
City Clerk

Ed Green
Mayor



Agenda Item #7.a.

Agenda Item Name:

Recognize Tom Whitmore for 27 Years of Service to the City of Rifle

Presenter:

Austin Rickstrew

Item Description:

Recognize Tom Whitmore for 27 Years of Service to the City of Rifle

Recommended Action:

No action necessary

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Tom first came to Rifle in 1984 when he was hired as an Agriculture Education instructor at Rifle High School. After ten successful years in education, he chose to make a change and began a career in Parks and Recreation, as Parks Supervisor, in October of 1995. At that time, he was one of 4 employees at Rifle Parks and Recreation. Over his career with the City, Tom advanced from Parks Supervisor to Parks Superintendent in charge of Parks and Facilities maintenance, to Parks Director, and then to Parks and Recreation Director. Tom has been responsible for the construction of sports fields, parks, picnic shelters, playgrounds, the Parks Maintenance Facility, the Art Dague Pool Renovation Project, resulting in the new Rifle Metro Pool, and the City Hall Remodel phases 1, 2, and 3.

Tom will be retiring from his position on October 12, 2022.

Notification Requirements:

N/A

Prepared By:

Misty Williams, City Clerk

Attachments:

None



Agenda Item #7.b.

Agenda Item Name:

Receive Presentation from YouthZone

Presenter:

Jami Hayes

Item Description:

Receive Presentation from YouthZone

Recommended Action:

No action necessary

Fiscal Impact:

TBD

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

YouthZone requests time with City Council to present an update on their work in our community. The funding they receive is critical to the work that they do and they'd like Council members to have updated information on their activities and current impact on the community.

Executive Summary:

N/A

Notification Requirements:

N/A

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Rifle Presentation 2022.2023
2. Rifle Data Sheet
3. Garfield County Data Sheet



YouthZone Presentation

Rifle, Colorado



youthzone

Mission

YouthZone provides comprehensive assessment and advocacy to inspire healthy relationships between youth, families, and communities.

Vision

Hopeful Youth, Strong Families, & Safe Communities

Core Values

Inspire with Integrity, No judgements, Stewardship and believe in Possibilities, Inclusiveness, Restoration and Encouragement



Goals and Outcomes

- To Intervene with youth who exhibit risky, disruptive or criminal juvenile behaviors YouthZone:
 - Provide youth tools and resources to **reduce risk** and elevate success
 - Support entire family unit and promote **healthier family** relationships
 - Support **mental health** through coaching, counseling and education
 - Intervene with **substance** use through intervention, education and counseling
 - Heal communities through **restorative processes**
- 

YouthZone

Screening for Positive Youth Development

**Evidence Based: Statistically to be sensitive to program effectiveness, completion, and client recidivism. 60 questions, of which seven are identifying and demographic, quality of their Screening answers, assets and risks. 7th-grade reading level and takes about 15 minutes to complete.*

The YouthZone Survey Measures the following five domains

Substance Use

Optimism and Problem Solving

School and Community Involvement

Delinquency and Aggression

Self-Deprecation

Programs & Services

Youth Services

Assessments – Youth and Family
Youth Advocacy - Case Management
Counseling – Individual
Substance Use Counseling & Education
Restorative Justice
Victim/Offender Mediation
Teen Groups
Useful Public Service
Deferred Sentencing Programs through Courts
Diversion
Life Skills Classes
Youth Coaching
CYDC Detention Screening 9th District

Parent Support

Parent Consultation
Parent Education
Family Mediation

Online Referral Form

www.youthzone.com



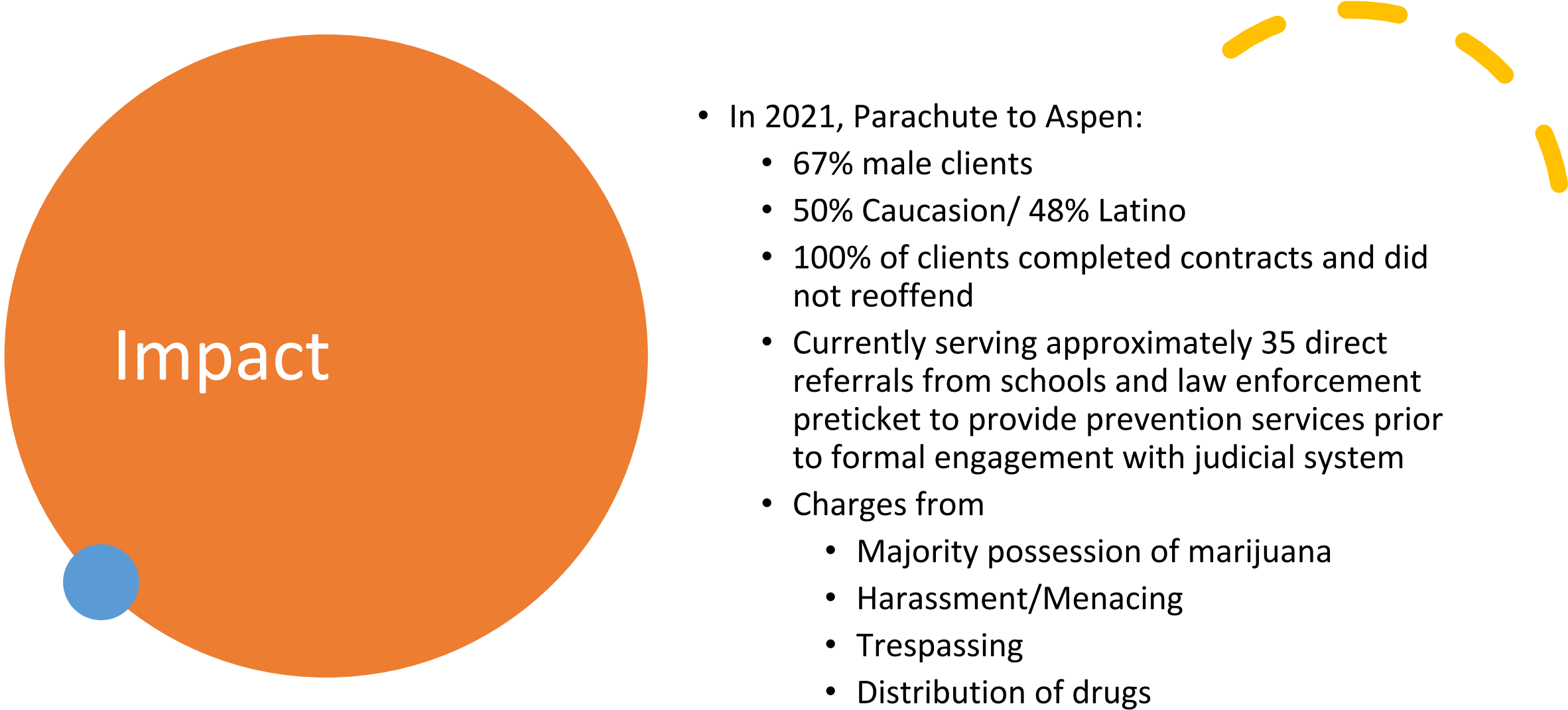
Cost of Services

- \$150 fee per family to initiate services
- Average overall cost per youth is \$2,000
- In 2021, YouthZone provided Diversion services to 43 youth
- App. 600 youth + 2000 family members per year
- Anticipated numbers stable in 2022



Focus on Barriers

- YouthZone utilizes grants in order to subsidize or **eliminate the cost** for families if payment is a barrier
- YouthZone has satellite offices from Parachute to Aspen for our staff to travel into our communities and provide services to **eliminate the challenge of transportation**
- YouthZone has bilingual staff and **24/7 interpretation services** to provide services in the preferred language of the family



Impact

- In 2021, Parachute to Aspen:
 - 67% male clients
 - 50% Caucasian/ 48% Latino
 - 100% of clients completed contracts and did not reoffend
 - Currently serving approximately 35 direct referrals from schools and law enforcement preticket to provide prevention services prior to formal engagement with judicial system
- Charges from
 - Majority possession of marijuana
 - Harassment/Menacing
 - Trespassing
 - Distribution of drugs

Garfield County

282

Average number of
Youth Served
Annually

1385

Individuals
Impacted Every
Year

\$2,000

Average Cost to
Serve One
Youth

Rifle (40% of all Garfield County Referrals)

100

Average number of
Youth Served
Annually

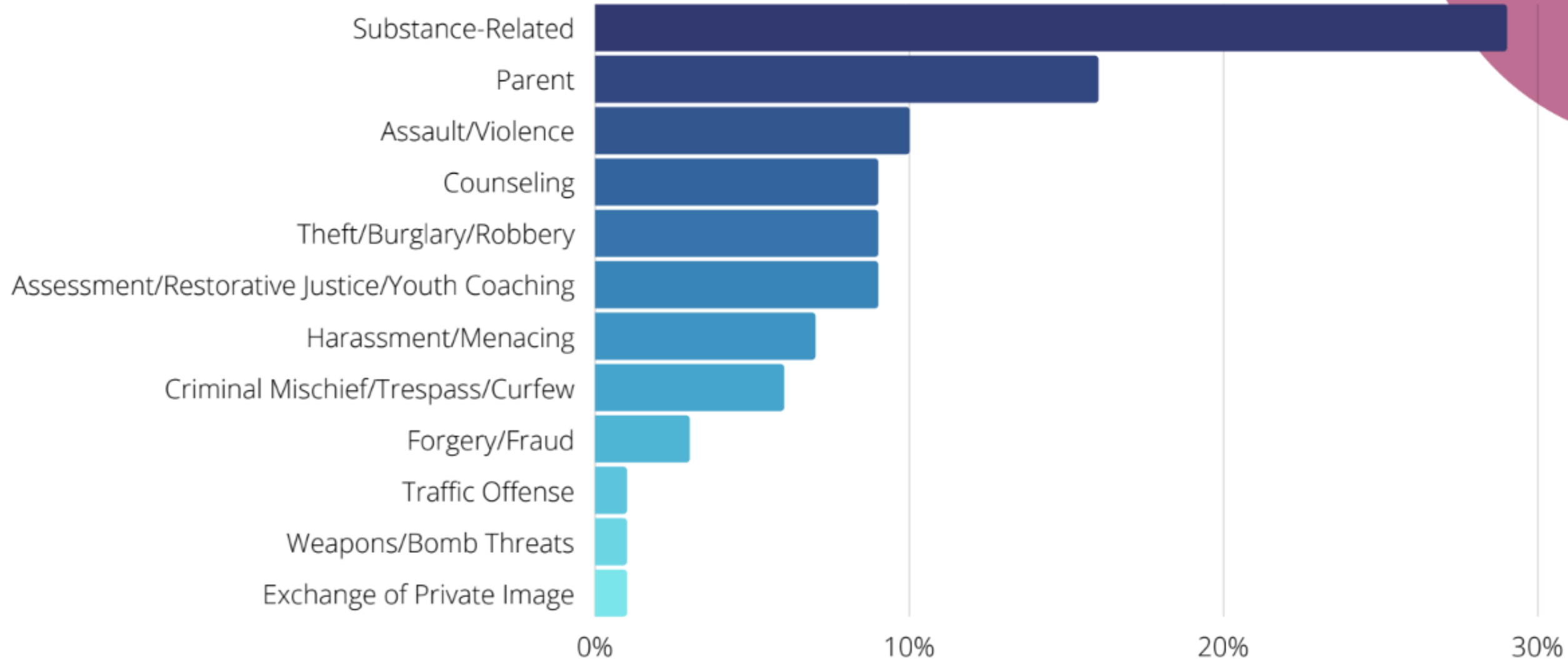
405

Individuals
Impacted Every
Year

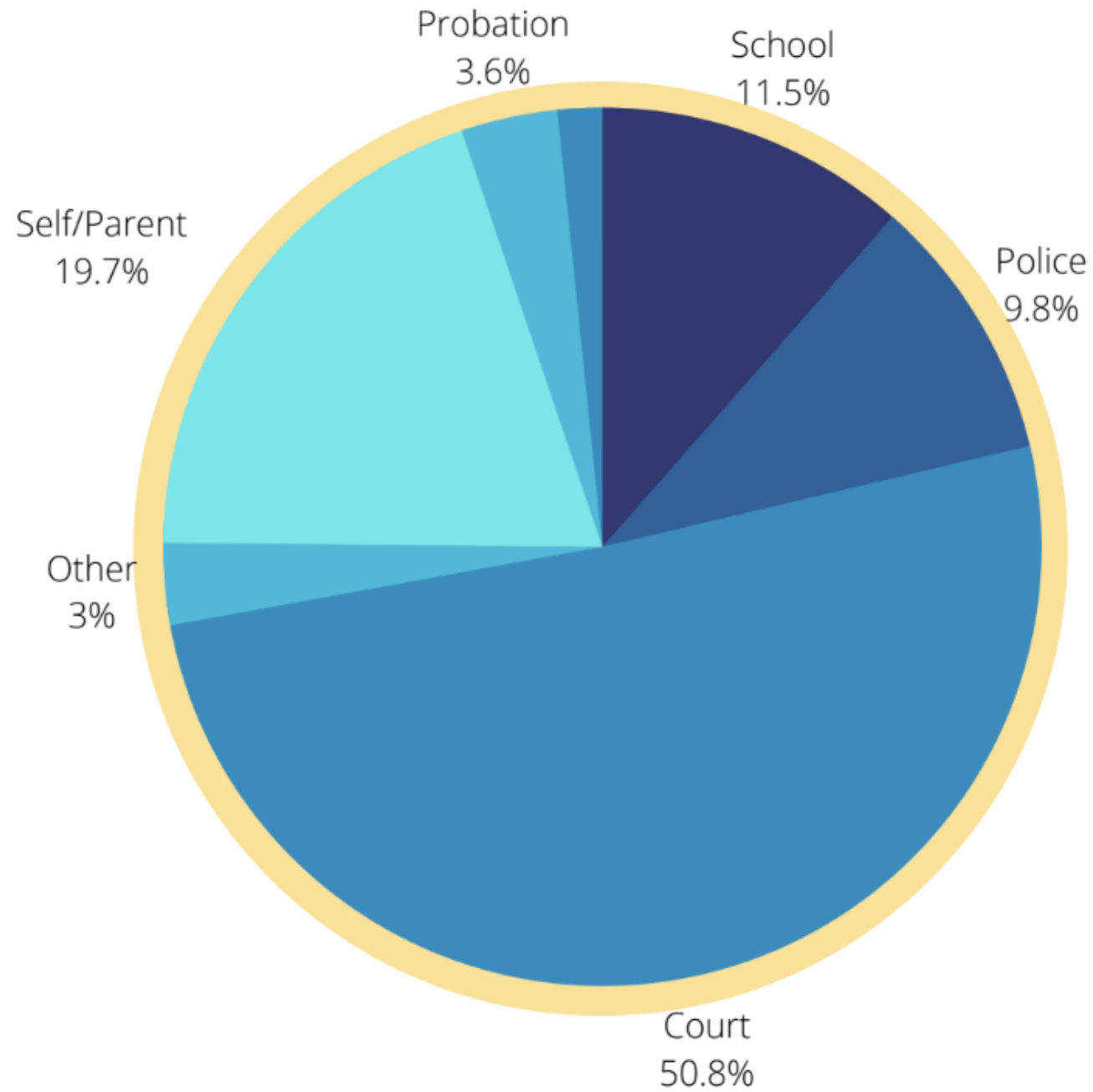
\$2,000

Average Cost to
Serve One
Youth

REASONS FOR REFERRAL



REFERRAL SOURCES





**Hopeful Youth
Strong Families
Safe Communities**

YOUTHZONE RIFLE, CO

Quick Facts

100

Average number of
Youth Served
Annually

405

Individuals
Impacted Every
Year

\$2,000

Average Cost to
Serve One
Youth

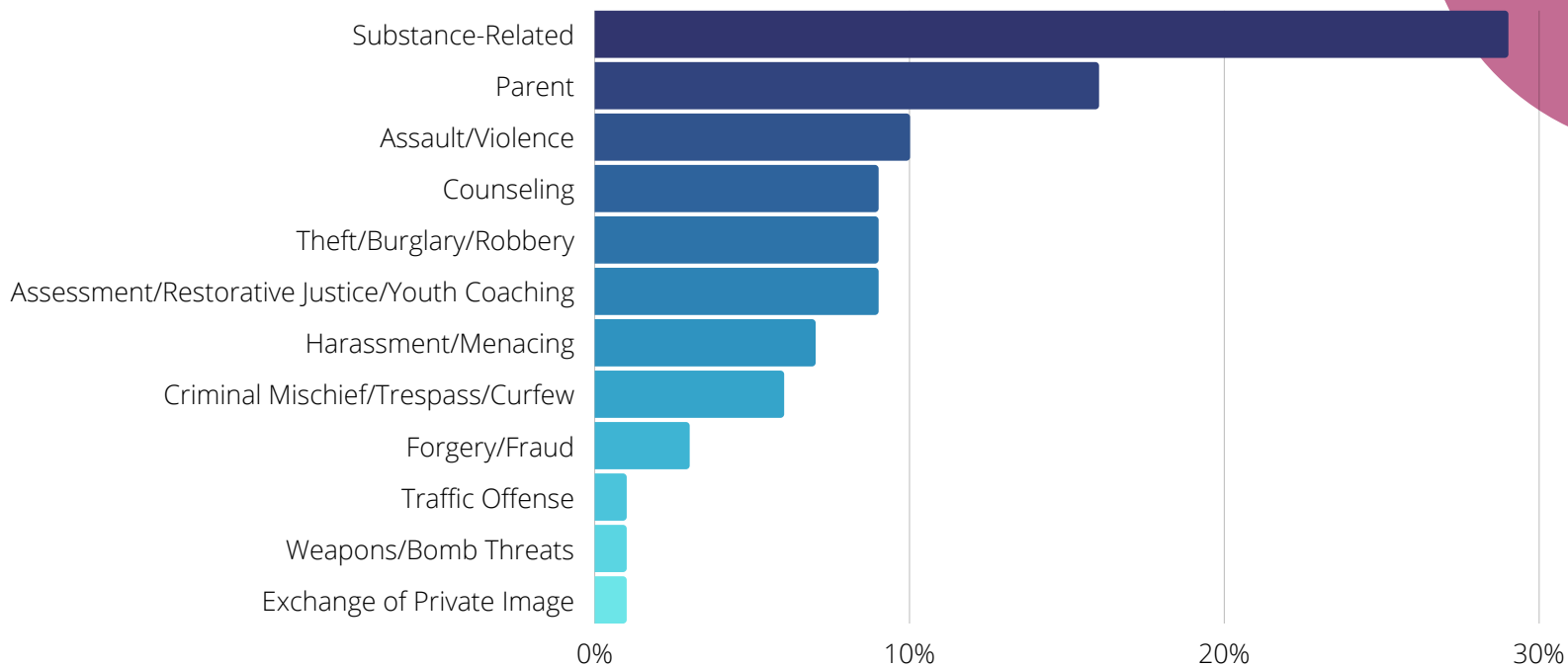
SERVICES

**Case Management
Counseling
Restorative Justice**

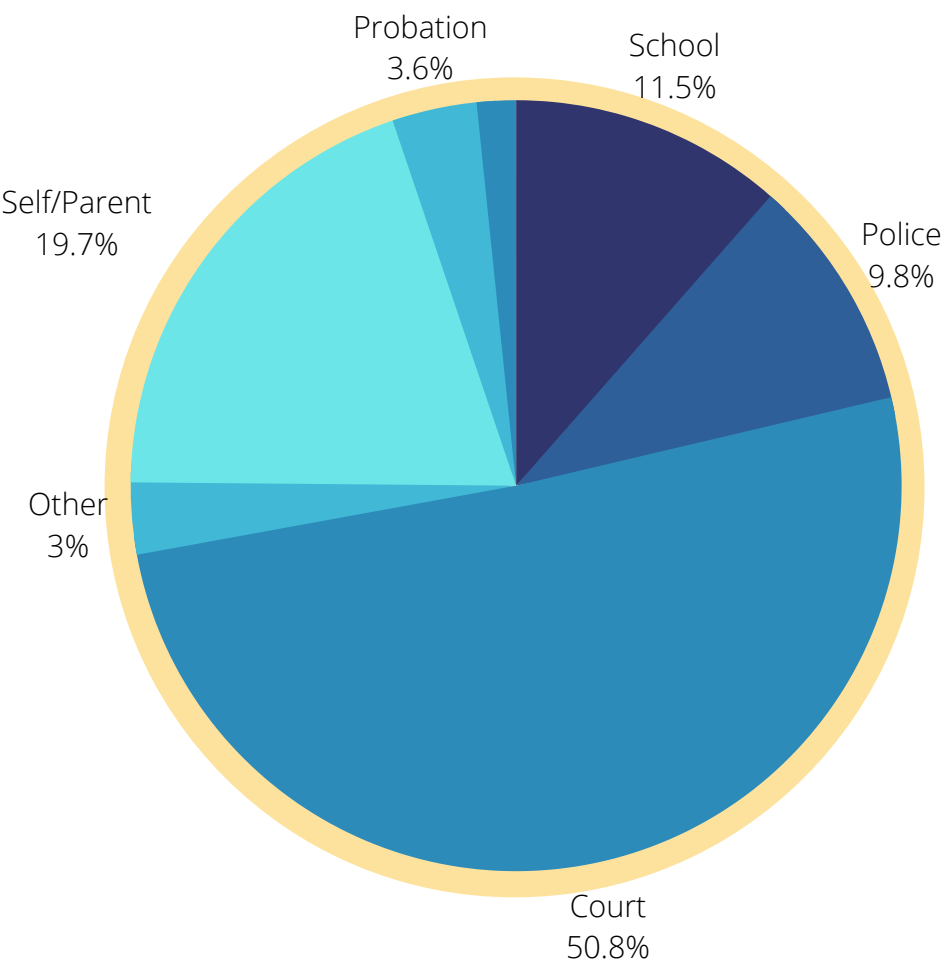
**Youth Coaching
Substance Use Education
Substance Use
Intervention**

**Life Skills Groups
LGBTQ+ Support
Parent Consultation**

REASONS FOR REFERRAL



REFERRAL SOURCES



YouthZone helps **young people, parents, and families** working through **trauma, struggling with substance use, and experiencing emotional stress.**

Each *YouthZone* client is provided with a **comprehensive, evidence-based assessment and program** developed to meet **individual** needs and provide the tools necessary for life-long **success.**



**Hopeful Youth
Strong Families
Safe Communities**

YOUTHZONE GARFIELD COUNTY

Quick Facts

282

Average number of
Youth Served
Annually

1385

Individuals
Impacted Every
Year

\$2,000

Average Cost to
Serve One
Youth

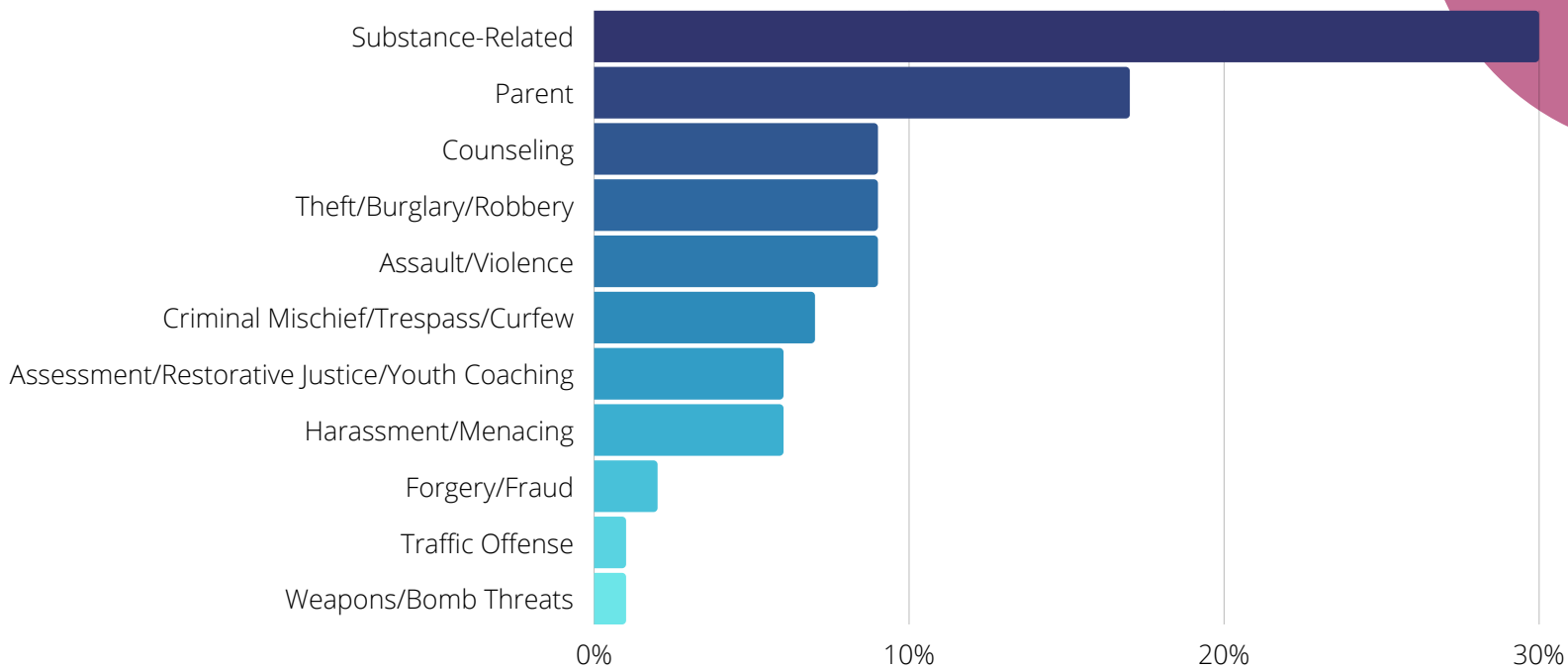
SERVICES

**Case Management
Counseling
Restorative Justice**

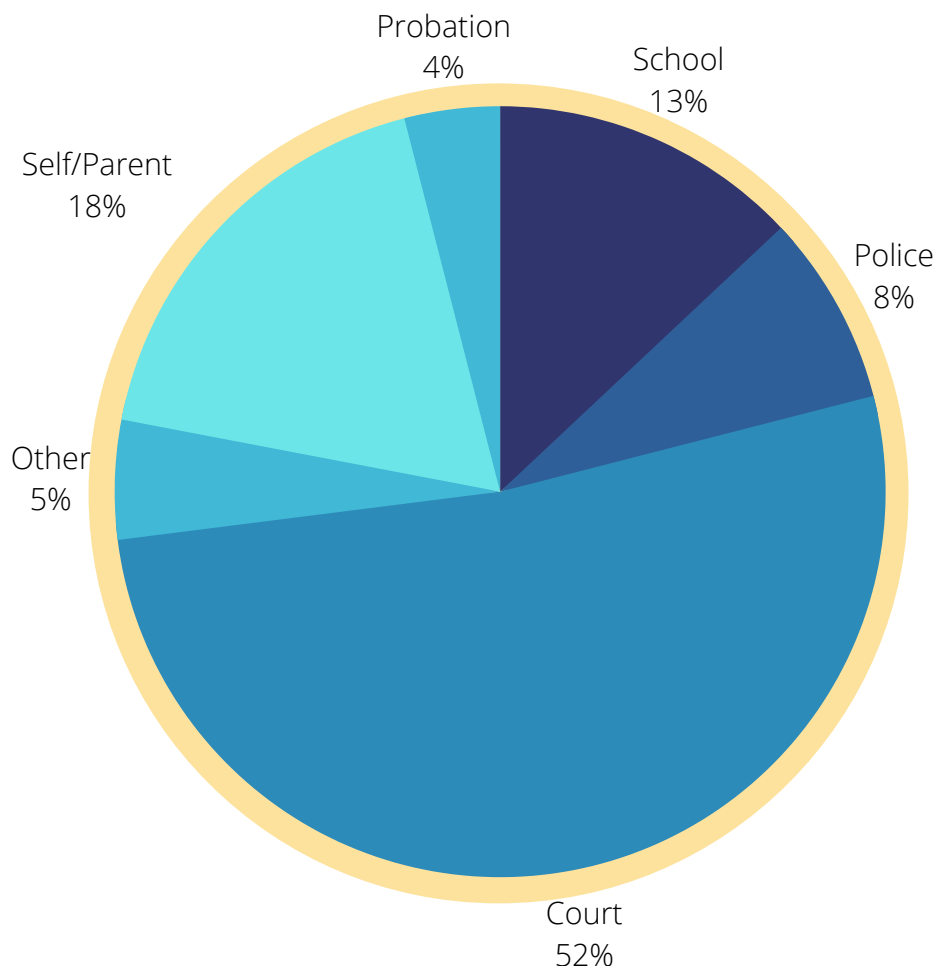
**Youth Coaching
Substance Use Education
Substance Use
Intervention**

**Life Skills Groups
LGBTQ+ Support
Parent Consultation**

REASONS FOR REFERRAL



REFERRAL SOURCES



YouthZone helps **young people, parents, and families** working through **trauma, struggling with substance use, and experiencing emotional stress.**

Each *YouthZone* client is provided with a **comprehensive, evidence-based assessment and program** developed to meet **individual** needs and provide the tools necessary for life-long **success.**



Agenda Item #7.c.

Agenda Item Name:

Receive Presentation Regarding Island Outreach and Engagement Project Results

Presenter:

Patrick Waller, Planning Director

Item Description:

Receive Presentation Regarding Island Outreach and Engagement Project Results

Recommended Action:

N/A

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

N/A

Background Information:

The City of Rifle purchased the "Island" property in late 2021. In this initial stage of development of the island, staff brought on a consultant to complete a public outreach and visioning process.

Executive Summary:

Project Resource Studio partnered with Applegate Group to complete a outreach and visioning process for the recently purchased "Island" property. This presentation will address the outreach process, results, public input, and potential next steps for the property.

Notification Requirements:

N/A

Prepared By:

Patrick Waller, Planning Director

Attachments:

1. Rifle Island Visioning Outreach Summary Presentation_091522_Final
2. Appendix A1 Survey Name Suggestions

3. Appendix A2 Survey Comments
4. Appendix B_Vision Flyer

THE CITY OF RIFLE

COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

ISLAND VISIONING AND PUBLIC ENGAGEMENT SUMMARY

SEPTEMBER 21, 2022





THE CITY OF RIFLE
COMMUNITY VISION PROCESS
FOR THE RIFLE ISLAND

Please help us give the Island a name, suggest away!

- blue creek
- canyon river
- creek river
- evergreen creek
- my island
- water creek

THE CITY OF RIFLE

COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND



Gather ***community input*** on recreational preferences



Develop a ***community vision*** for the Island



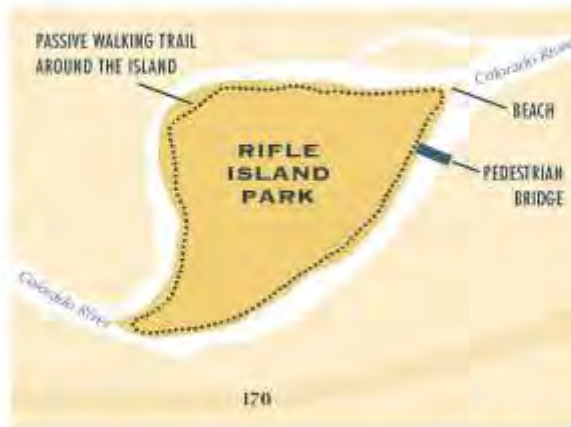
Identify development options and project expenses, impacts associated with them



Build a ***framework to explore the next planning stages***

RIFLE ISLAND PARK

A RIVER EXPERIENCE FOR ALL



A UNIQUE ISLAND PARK:

The City of Rifle envisions this community recreational asset to be used for refuge, outdoor activity, and discovery. The island is a blank canvas allowing a greater connection to nature, the Colorado River, and adventure connected by one trail that circles the island and a footbridge from nearby land access. The Rifle Island Park will be inclusive of people from different cultures, age groups, and interests.

WORDS THAT DESCRIBE THE RIFLE ISLAND PARK:

CONNECTION TO NATURE

tread
lightly

Unique water park

**a landing place for rafting,
boating, and fishing**

**Inclusive access to the
Colorado River**

passive walking trail around the island

RIVER EXPERIENCE VIA A WALKING BRIDGE

A quiet and seasonal park

connection to community

USE GOALS:

- The community will be actively engaged in shaping a long-term vision
- Principles related to sustainability will be integrated into the operational approach: social, economic, environmental, and leadership sustainability
- Our focus for the next five years will be on island connections, funding sources (grants), and development options surrounding more costly goals, e.g., White Water Park

COMMUNITY VISION PROCESS
FOR THE RIFLE ISLAND

THE CITY OF RIFLE

COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

Presentation Summary

- Island Advisory Group Meetings
- Survey Results & Pop-up Events
- Parks and Recreation Advisory Board Meetings
- Development Options
- Project Phasing
- Technical Considerations
- Vision Summary

Island Advisory Group Members

Patrick	Waller	City of Rifle-Planning Director
Kim	Burner	City of Rifle-Main Street Mngr./GRIT
Hannah	Popp	City of Rifle-Planner
Tommy	Klein	City of Rifle-City Manager
Craig	Spaulding	City of Rifle-Engineering
Austin	Rickstew	CITY of Rifle-Recreation Manager
Kelley	Kevin	City of Rifle-Parks & Rec Advisory Board Chair
Alicia	Gresley	City of Rifle-City Council Member
Tyler	Kelly	Rifle Regional Economic Development Corp
Nathan	Lindquest	Colorado Department of Transportation
Erik	Villasenior	Rifle Area Mountain Biking Association
Helen	Rogers	DDA
Alan	Czepinski	BLM
Paula	Stepp	Middle Colorado River Watershed
Jennifer	Brown	Middle Colorado River Watershed
Garrick	Frontella	Greater Rifle Improvement Team (GRIT)
Dunia	Alcerro	Hispanics in Leadership
Bud	Tymczyszyn	Aspen Valley Land Trust (AVLT)
Gary	Miller	Community Member at Large
Matt	Farrar	Community Member at Large
Josh	Bassett	Community Member at Large
Genie	Ulshofer	Community Member at Large
Chuck	Caron	adjacent land owner
Bill	Lee	adjacent land owner
Scott	Brydleson	adjacent land owner
Eric	Rudd	land owner - south of rest area road
Michelle	Petrucchi	land owner - south of rest area road
Richard	Deming	land owner - south of rest area road
Chelsea	Cline	land owner - south of rest area road



Island Advisory Group: Research Summary



Advisory Group Meeting #1 | 5/25/22
Four Maps were presented:

- Land Ownership and Transportation Overview*
- Water Rights Overview
- Floodplain Hazard Zone Overview
- Wetlands Overview

****Preferred Access Option (Green first choice, yellow second choice)***

Island Advisory Group: Vision and Use Summary

Advisory Group Meeting #1 | 5/25/22

Collection of vision for usage from attendees, the three top preferences

Top Preferences

RECREATION

Pedestrian access
Bike access
Water park & features

CONSERVATION

Animals and birds

CONNECTION Downtown w/ river

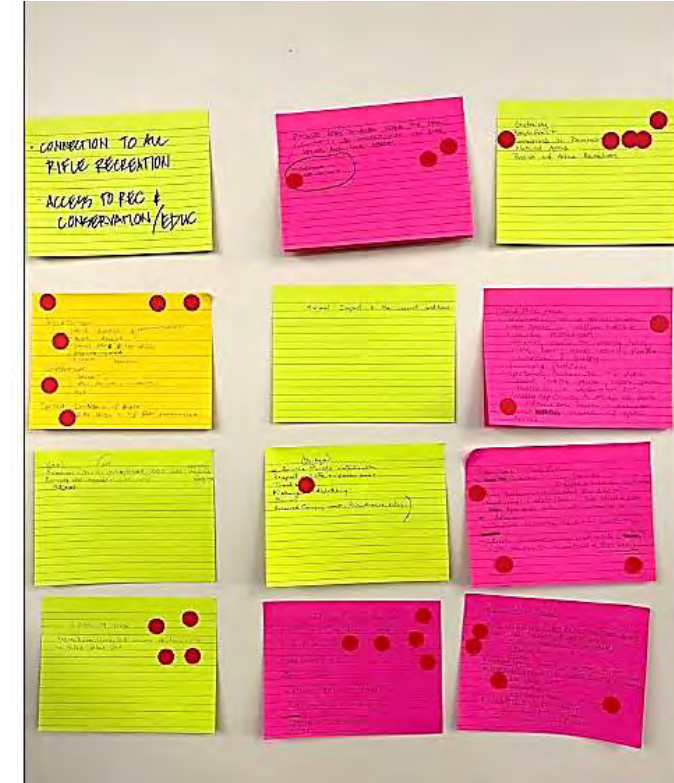
Rifle w/ Rec amenities

Secondary Preferences

Gateway
Beachfront
Connection to Downtown
Natural Areas
Passive and Active Recreation

Other Preferences

Mountain Bike/Hiking trails
Fishing Access
Bird Watching
Boat Dock
Nature Tours & Programs
Connecting w/ other trails



Island Advisory Group: Access Points

Option 1 | *Potential Bridge Span: 170ft*

Impacted Entities: private landowners, railroad, CDOT

Pros

- Shortest bridge span
- Short access path
- Wetland permitting unlikely
- Close to downtown Rifle

Cons

- Floodplain permitting
- Railroad crossing conflict
- Private landowner conflict
- Potential water right infrastructure conflicts

Option 3 | *Potential Bridge Span: 260ft*

Impacted Entities: CDOT

Pros

- Avoids conflict with private landowners
- Avoids conflict with railroad
- Short access path
- Connects with existing parking lot

Cons

- Floodplain permitting
- Wetlands permitting likely
- 2nd longest bridge span
- Far from downtown

Option 2 | *Potential Bridge Span: 340 ft*

Impacted Entities: private

Pros

- Avoids conflict with railroad
- Wetland permitting unlikely
- Close to downtown Rifle
- Connects with existing parking lot

Cons

- Floodplain permitting
- Private landowner conflict
- Longest bridge span
- Long access path

Option 3 | *Potential Bridge Span: 200ft*

Impacted Entities: CDOT

Pros

- Avoids conflict with private landowners
- Avoids conflict with railroad
- 2nd shortest bridge span
- Connects with existing parking lot

Cons

- Floodplain permitting
- Wetlands permitting likely
- Long access path
- Far from downtown

Advisory Group Meeting #2 | 7/27/22 Meeting Agenda:

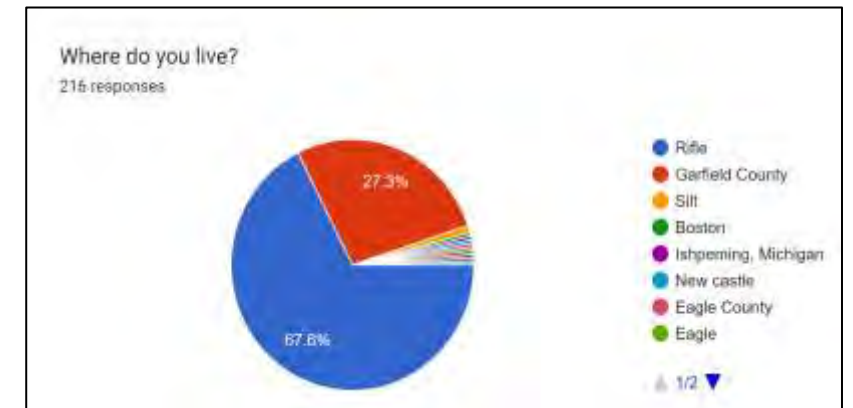
- Update on Parks and Recreation Advisory Board Meetings
- Review Survey Results
- Development Options
- Rifle Island Vision Draft
- Next Steps

Survey Responses

English: 216 | Spanish: 9 (see Appendix A)

Promotions included a newspaper article, English and Spanish flyers, and table tents around Rifle businesses (both sides of I-70), the City's Facebook page, Nextdoor, Spanish language social sites (via Advisory Group member), and pop-ups. www.rifleco.org/944/River-Island---Community-Visioning-Engage

- 94.9% of survey participants live in Rifle or Garfield County
- Survey was open from June 6 – July 27

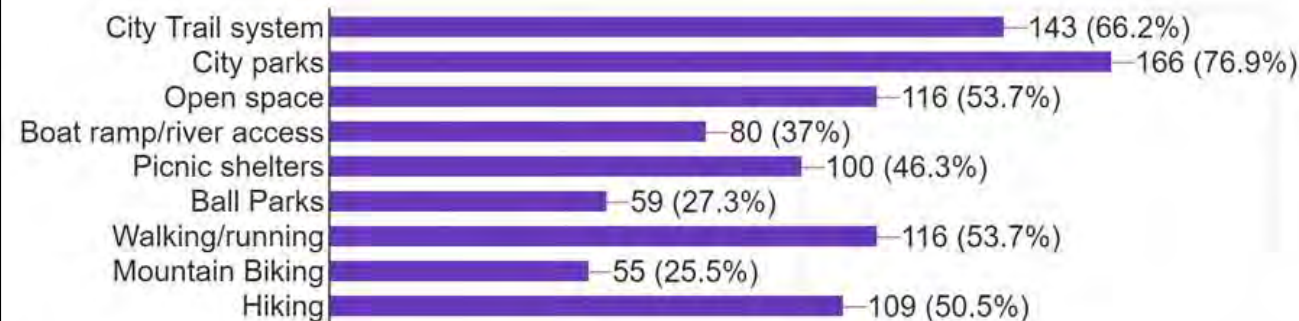


Please help us give the Island a name 76 responses:
(Appendix A1)

Survey Responses

What types of City of Rifle parks and recreational activities do you currently participate in and use?

216 responses



CITY TRAILS 66.2%

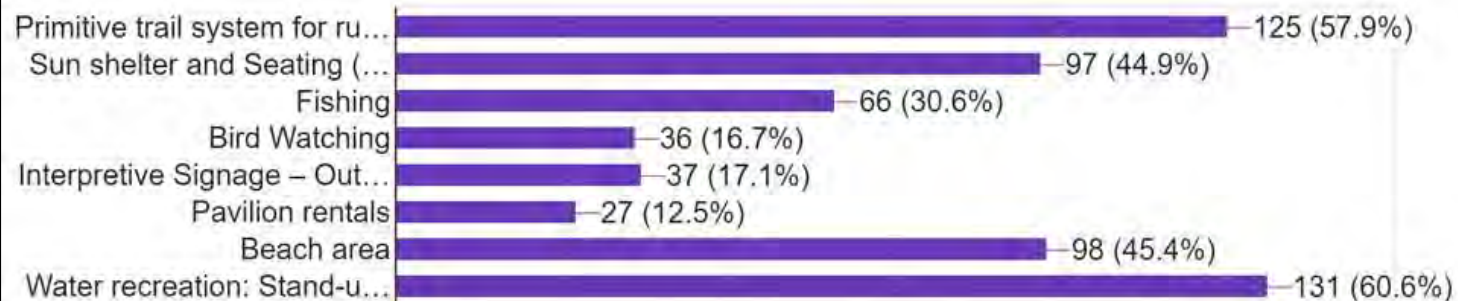
CITY PARKS 76.9%

OPEN SPACE 53.7%

WALKING/RUNNING 53.7%

The recreational opportunities at the Rifle Island will be phased according to the funding and programming priorities. Please choose your top three recreational priorities:

216 responses



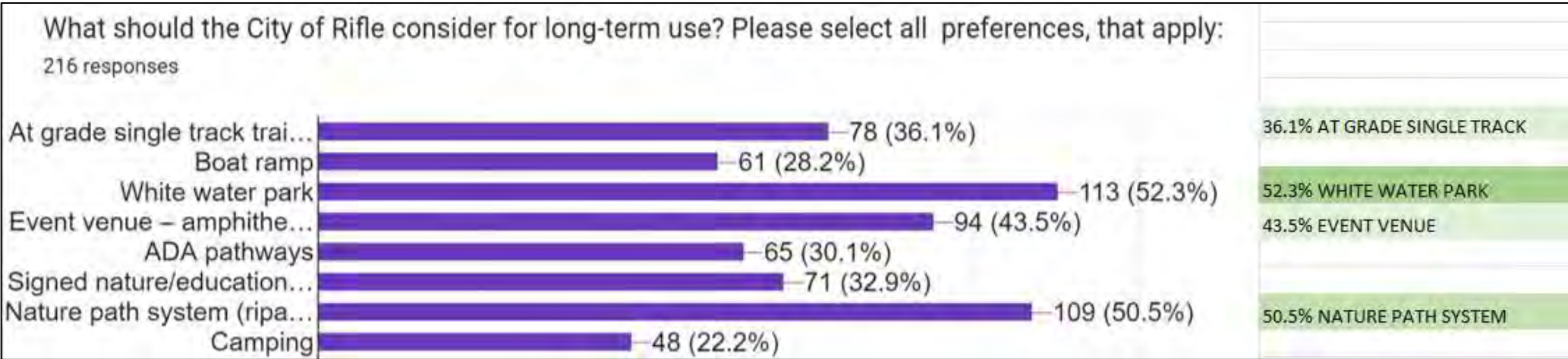
57.9% PRIMITIVE TRAIL SYSTEM

44.9% SUN SHELTER & SEATING

45.8% BEACH AREA

60.7% WATER REC

Survey Responses

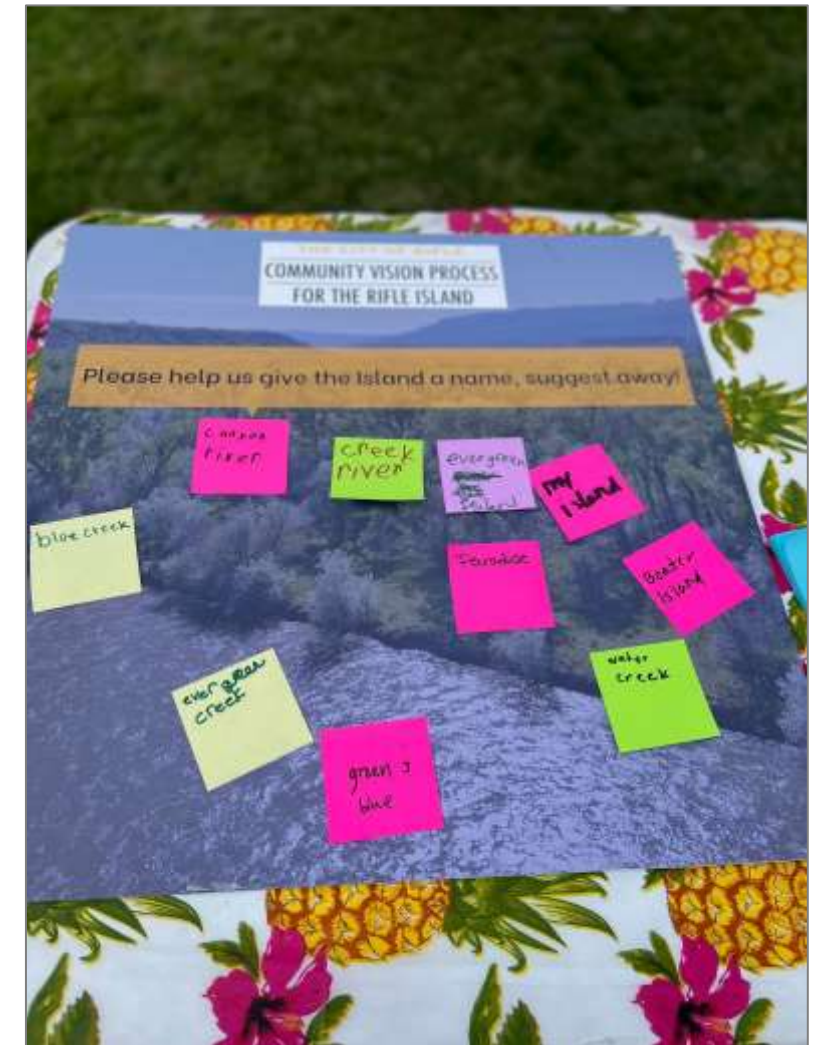


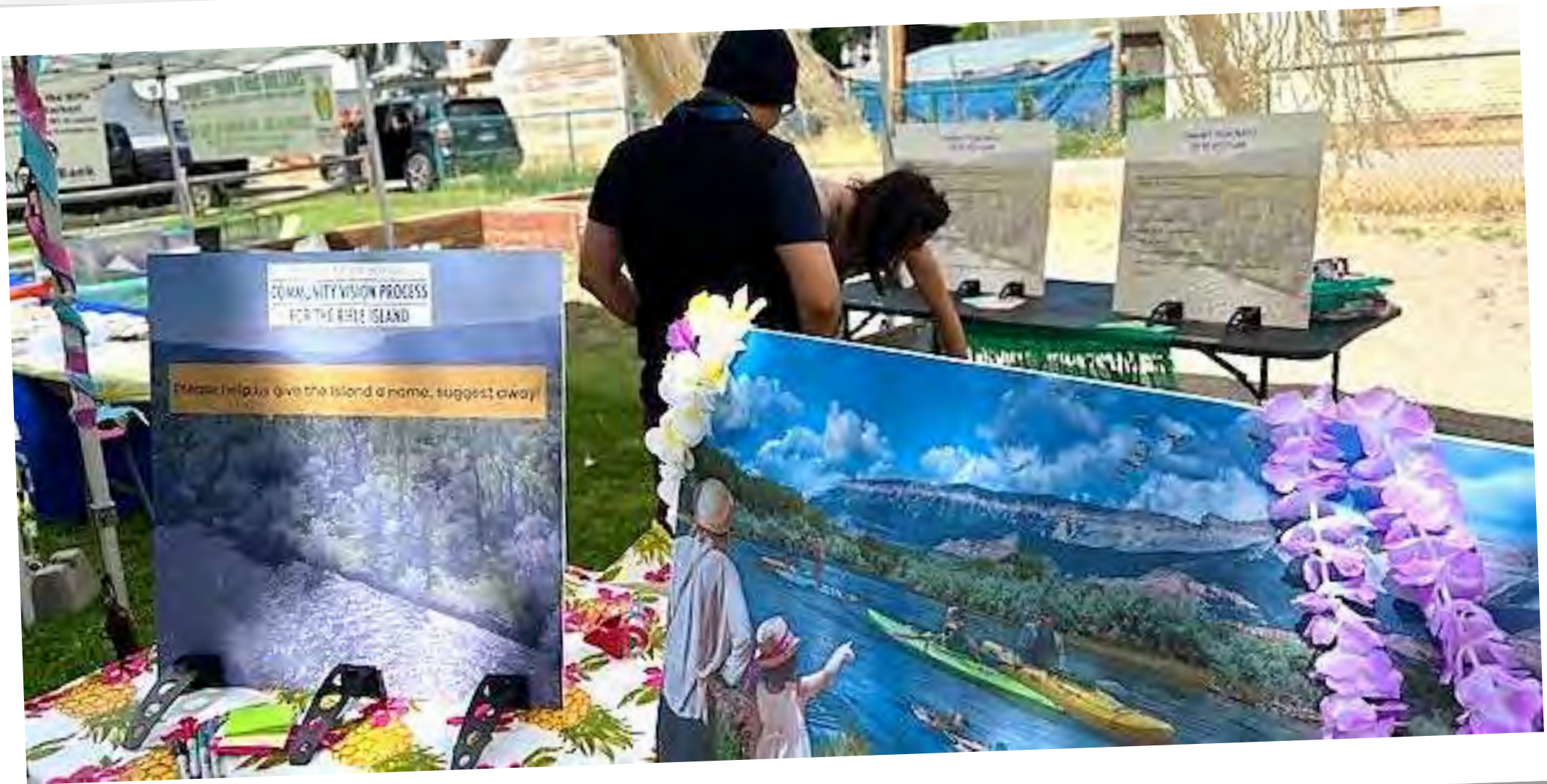
Is there anything else we should consider? 99 responses: see Appendix A2

Outreach Events

POP-UP EVENTS: Community education, outreach and information gathering

- Farmers Market: 6/24 (70 + people)
- July 3 Celebration: 7/3 (50+ people)
- Boat Ramp: 7/9 (~12)
- Walmart: 7/12 (~12)





Parks and Recreation Advisory Board Meetings Summary

Meeting 1: June 29

Meeting 2: July 11

- Reviewed the project's mission, public process, scope, and due diligence boards
- Development options, short-term and long-term planning, and recreational uses were also reviewed
- No formal recommendation on the direction of the island development was made
- The Island should be unique from other parks
- Further planning scopes should include proactive engagement with the board
- Discussed passion and committee formation should the water park concept advance
- Financial and long-term operational expenses considered

An aerial photograph of a river winding through a landscape. In the foreground, a wide, shallow section of the river is filled with light-colored rocks and gravel. To the left of this section is a dense area of green trees and shrubs. The river continues into the middle ground, where it curves to the right. On the left bank of this curve is a small, irregularly shaped island covered in green vegetation. The right bank is a mix of dry grass and some shrubs. In the background, a range of mountains stretches across the horizon under a clear blue sky.

RIFLE ISLAND DEVELOPMENT OPTION 1

Maintain island for open space. Create a beach area that is only accessible via the Colorado River.

Little to no development on the island. Keep the island generally as-is with no access or structures. Public access would be only via the Colorado River. Clear any existing structures, trash, and shrubs as needed. Focus on enhancing riparian vegetation, wildlife habitat improvement, fishery enhancement, and invasive species removal.

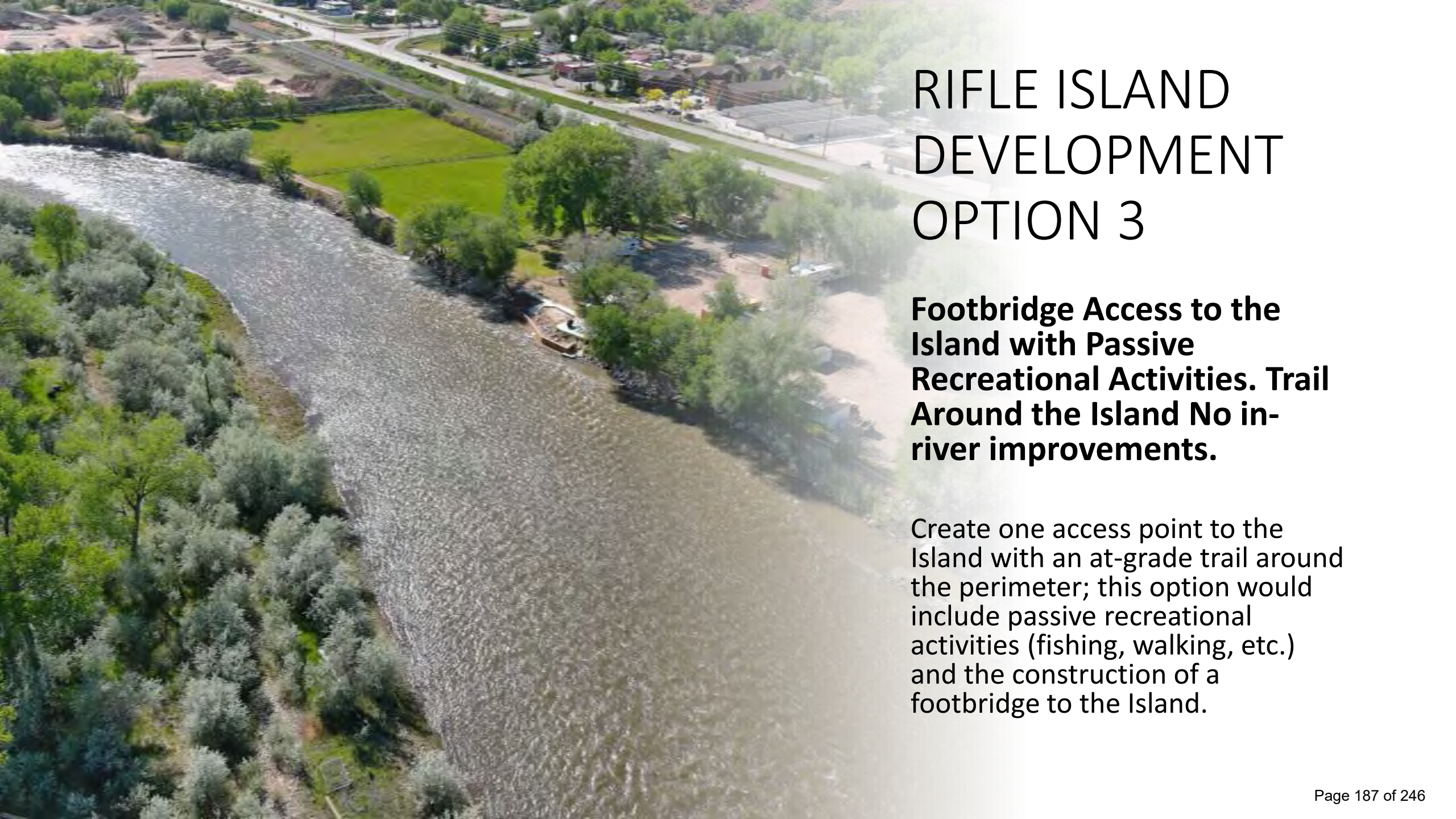
This option received no support from the Island Advisory Group.

An aerial photograph showing a wide river flowing through a landscape. In the foreground, there is a dense thicket of green and greyish vegetation. The river curves through the middle ground, with a small town or village visible on the opposite bank. In the background, a range of brown, rocky mountains stretches across the horizon under a clear blue sky with some light clouds.

RIFLE ISLAND DEVELOPMENT OPTION 2

Seasonal Alternative Access

Create one access point to the Island with an at-grade trail around the perimeter; this option would include passive recreational activities (fishing, walking, etc.) and the construction of a footbridge to the Island.

An aerial photograph showing a wide river with a rocky, light-colored bed. The left bank is densely lined with green trees and shrubs. The right bank features a mix of green grass, trees, and some residential or commercial buildings in the distance. A road runs parallel to the river on the right side. The overall scene is bright and clear.

RIFLE ISLAND DEVELOPMENT OPTION 3

Footbridge Access to the Island with Passive Recreational Activities. Trail Around the Island No in-river improvements.

Create one access point to the Island with an at-grade trail around the perimeter; this option would include passive recreational activities (fishing, walking, etc.) and the construction of a footbridge to the Island.

An aerial photograph showing a wide river flowing through a landscape. The left bank is densely covered with green trees and shrubs. The right bank is a mix of green and dry, brownish vegetation. In the background, a range of mountains is visible under a blue sky with some clouds.

RIFLE ISLAND DEVELOPMENT OPTION 4

Footbridge Access to the Island with Active Recreational Activities Colorado River Water Park [Phased Project]

Create one or two access points to the Island with a more extensive recreational use list, including the incorporation of a water park. This option also includes water recreational activities (riverbank development) and the construction of one footbridge to the Island with a possibility of a second access point in the future. Other facilities could include a simple event pavilion or gazebo, picnic areas, traditional park amenities such as open spaces to laze about, a volleyball court, and a horseshoe area. Educational signage could also be a good fit within this development option.



Project Phasing

- Ideal operational needs, staff requirements and on-going expenses

Master planning process

- Phase 1 – Island Clean up
- Phase 2 – Planning
- Phase 3 – Island Access – Footbridge
- Phase 4 – Rifle Island Park Mater Plan developed with water park

Technical Planning Considerations

Depending on the final design, floodplain permitting will be required regardless if it is a no-rise certification or a complete CLOMR/LOMR permitting process. No-rise certification is the most straightforward course of action if the design qualifies.

River levels should be considered when locating a trail for the island. This could be handled with a formal Engineering Site Investigation during later design phases which should also characterize other aspects of the site pertinent to final design.

Based on feedback at the meetings, some agreement with CDOT will likely have to be drafted for the use of the parking spaces at the rest stop. If CDOT is not willing to let island users use the existing lot, another parking facility would need to be explored.

Technical Planning Considerations

Formalize the boat ramp stakeholders/group as the project progresses to benefit from the synergies. Utilize the existing Rifle Island Advisory Group.

Preliminary mapping indicated some wetlands in the area, which would require Section 404 permitting through the Army Corps of Engineers and possible wetland replacement if impacted. The need for permitting specific to Wetlands would have to be verified with a wetland inventory from a wetland's expert. Infrastructure could also be designed to avoid wetlands altogether. No option is insurmountable, but something to consider as options are pursued further.

Regardless of wetland impacts, future actions will likely impact 'Waters of the US' thus requiring either an Individual or Nation Wide Section 404 Permit through the Army Corps of Engineers depending on the nature of the project.

Items that need further consideration

- Operating Cost Feasibility Analysis
Seasonal, Staffing Considerations
- Funding opportunities and partners
- Ongoing City Council feedback
- Procure a consultant for creation of a Master Plan

Rifle Island Park Vision in Summary



Unique river park for Rifle community

- Desire to continue planning process and engagement
- Phased approach
- Include planning in strategic initiatives

END

Rifle River Park: Concepts Map

January, 2020

Project Background: While the City of Rifle has made many impactful investments in the downtown area over the years, the downtown and community at large have never been meaningfully connected to one of the community's most substantial assets--the river. Located between the river and the 170 corridor, the Rifle River Park area presents the City with a prime opportunity to better connect the community with the river and its surrounding natural assets.

Developed through a series of interactive stakeholder worksessions, this concept map highlights key concepts for possible future improvements. As opportunities to better connect to and improve the Rifle River Park area arise in the future, this concept map is meant to help guide conversations around how this area supports the needs and interests of all members of the community

Island Park Area

With no current bridges or connections, the Island Park area has been identified as an important natural resource to preserve as open space and wildlife habitat.

Concepts & Ideas:

- Preserved natural open space
- Wildlife habitat and riparian area restoration
- Primitive trails for walking, hiking, birding
- Fishing access
- Potential area for trail connection and foot bridge to connect river park to downtown

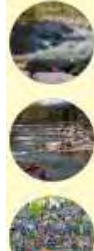


Whitewater Zone

The Whitewater Zone has been identified as a prime location for a recreational whitewater park with man-made river features.

Concepts & Ideas:

- Whitewater park
- Installation of man-made waves, holes, eddies, other whitewater features
- Kayak slalom course
- Walking path with benches and water access
- Viewing areas & gathering spaces



Flatwater & Family Zone

Featuring a newer boat ramp, beaches, and trails, the Flatwater and Family Zone has been identified as a prime location for trails, picnic spaces, and safe, comfortable river access for people of all ages.

- Beaches, picnic areas, and spaces for family-friendly gathering
- Calm eddies for swimming & safe river play
- Access for tubing, paddle boarding, & flat water floating
- Trails and walking path
- Restoration and preservation of forested and natural areas
- Play areas for kids including natural features
- Dog walking / dog park
- Fishing access



Development Zone

Current privately owned parcels have been identified as a prime area for future development, business growth, and housing.

Concepts & Ideas:

- Future space for housing & businesses
- Possible dining & active space near the river & bridge
- Balance future development with park & open space
- Community & gathering space
- Swap truck parking to be closer to I-70



THE CITY OF RIFLE

COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

APPENDIX A21 | RIFLE VISION OUTREACH SUMMARY | name suggestions

Please help us give the Island a name, suggest away! 76 responses

1. Rifle Island
2. Rifle Island Park
3. Paradise Island
4. Anvil Island
5. Rifle island park
6. isle rifle
7. Fiddler's Island
8. South Island or SoRi Island (South Rifle Island)
9. Columbine
10. Maxfield Island Park
11. The Island of Dr. Moreau - Those who break the law must go to the House of Pain. Just kidding. I got nothin'.
12. Adventure Island
13. Rifle River Island
14. It should reflect Rifle- Anvil Isle?
15. Isla Ospray
16. Rifle Respite
17. Colorado Island
18. Rifle Island Adventure(s)
19. Sky Island
20. Rifle Island
21. Rifle River Park or Rifle Island Park (fits continuity-wise with the existing 'Rifle Mountain Park' and 'Rifle Falls State Park')
22. Anvil View Island,
23. Whistle Pig Island
24. Ricochet Ridge
25. River's surprise
26. Butterfly Island
27. Colorado River park
28. River Forks
29. Ute Crossing
30. Riff Island
31. Sunset Island
32. Sunset Island
33. Fish island
34. Pie In The Sky
35. Wonder Island
36. Boondoggle Island
37. What is the UTE word for island?

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COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

38. West Slope Island
39. Rifle Cove
40. Alcatraz
41. River Island Park
42. Treasure Island of Rifle
43. Rifle Riverside Adventure Park
44. Rifle River Valley Park
45. River island
46. Rifle River Park
47. Pistol Island
48. Maxwell Island
49. Rifle Island Park (RIP)
50. Patriot Island
51. Confluence Island
52. Maybe a connection to Native American heritage in the area or a natural resource on the island.
53. Rifle Island park
54. winchester island
55. Rifle's Folly
56. Rifle Shores, 99 Acres Isle, Rifle Melting Pot Island
57. Rifle Island, or Island Rifle, or Isle of Rifle, or Colorado River Island
58. The Isle at Rifle
59. Rifleland Island
60. Whitmore Island
61. Grand Valley Moraine Park
62. Rugar Island, Winchester Island, Rifle Island,
63. Osprey Island
64. Rainbow Island
65. Money pit
66. The Oasis
67. Cowpoke
68. Rifle Caye (key)
69. Reefle Island Park
70. Rifle Island Preserve
71. KCA island
72. Rifle Island is perfect
73. Island Park
74. The Rifle Recreational Park
75. The Island
76. Ok

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COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

APPENDIX A2 | RIFLE VISION OUTREACH SUMMARY | final survey question

Is there anything else we should consider? 99 responses

1. Community access with low level impact would allow island participation in the near future for Rifle and the neighboring partner communities.
2. Preferred Access Locations; Rifle Creek (North side) Mid Island (South side)
3. This is such a cool opportunity and amazing place! I would avoid board ramps, camping, wave parks, and event venues as these are all relatively high impact and may take away from the quality and special experience that this place can provide. Focus on highlighting the incredible nature and off-the-beaten path opportunity this provides. I would consider ADA trails as this is a rare chance to help connect people with disabilities to a really special place - no reason they shouldn't be able to share it, but keep it quiet and sweet - doesn't feel right for a party zone.
4. Creating connections between the Island and downtown Rifle.
5. Play park
6. The island should remain a primarily passive recreation space and natural wetlands/wildlife habitat environment.
7. Don't let this be an opportunity for the careless, inconsiderate pond scum of this town to ruin natural resources with litter and other pollution. The town has gone out of its way to put trash cans in more places than it is reasonably expected to (good job on that!), but people in this town still leave trash all over the ground. Rifle Creek and our other waterways are already filled with garbage. Adding too much to the island will only invite the lowest assbags who live in Rifle to trash the place.
8. Keep homeless away from the island. Make it safe for the community. 585-30-946 6
9. Access and adverse affects on traffic, otherwise I love it.
10. Does the island pay for itself if not is it a value added to enough of the community to justify using taxes?
11. brew pub! I know it's unrealistic.... :-)
12. Off island parking with a footbridge or shuttle only
13. Please stop spending money on concrete and make this a more family friendly community! For the amount of families that live here, the activities and facilities are certainly limited!
14. Family area- beach, park, event center
15. A public transit system to the island rather than car-reliant infrastructure would be incredible
16. Might as well make money off of it-floating casino.
17. Rifle needs a park near the veterans hospital. There are lots of kid around and they are playing ball games in the streets and riding their bikes. We need to keep the youth in rifle safe. We also need a dog park. This is a great way to socialize with others.
18. Since access is limited and money shouldn't be invested in structures in a flood plane the island should be left as a wild land open space to provide habitat for wildlife.
19. In 1886, prior to a bridge or ferry connecting South and North Rifle, a woman by the name of Hannah Crann, who resided in South Rifle, would row people across the Colorado River to get them to/from South and North Rifle. I learned this information on Page 24 from a book called

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COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

"Rifle Shots: The Story of Rifle Colorado". I think it would be neat to dedicate a plaque (possibly on a bridge) to Hannah Crann and her contribution to transporting founding citizens across the Colorado river in Rifle's hey-day. Here is that excerpt from the book: "(Hannah Crann) having learned how to row on the Ohio river as a child, became an expert on rowing across the swift waters of the Grand River. This she could accomplish when no one else could do it. It was before there was a ferry or bridge. People wanting to cross the river would call -- our cabin being one-fourth mile away -- and (Hannah Crann) would row across to get whoever called." Thank you for considering this idea. - Salvador Tovar-Guzman (salvadortovarguzman@gmail.com)

20. We need a recreation center in Rifle. It will open up job opportunities, keep our money local instead of outsourcing to Glenwood or Parachute, and it will keep children and teens off the streets. As an educator, I can see firsthand what happens when children don't have healthy outlets or activities to get into.
21. Really like the amphitheater!!!
22. Traffic egress/ingress; and emergency routes
23. Restrooms and sinks
24. I think it should sit there indefinitely, or sell it. When people are struggling to buy groceries, pay rent and put gas in their car to even go to work, it's a waste of money to even consider another park. Did you even look at how or if the other parks in town are being used. Did you read your own comments? Flood plain!, no bridge to access! How much are you planning to spend on a bridge? Our property tax is up 2.5 times what we paid the previous year. Do you think maybe this was a total waste of taxpayer dollars?
25. Hiking and swimming in the river would be so cool
26. How to limit homeless camps on the island and if the island is home to endangered or protected animals and birds. Like the bald eagles in the area.
27. I've been told by a few people that they do not like using the paths that are at Lions Pond because of the homeless that live on those trails and they have quit using them. Because of those comments, I don't believe using the island mainly for walking/hiking paths would be a great idea.
28. FISHING TRAIL ACCESS FROM THE LOWER BOAT RAMP TO THE SOLAR FARM
29. Not making it a rafting spot.
30. please don't over commercialize it
31. A camping and nature conservation area is what I would like to see, along with a beach area
32. No.
33. Parking overlooking the river
34. The cost to the taxpayers!
35. Bridges and access
36. Do the goats still live on the island? I think it's important for the goats to continue living there
37. How can it be developed when it is the floodway (not just the floodplain but the floodway)? Isn't this in conflict with the city's land use code? How will the island be accessed? How can a bridge and trails be constructed without causing an increase in the base flood elevation? Not every piece of land needs to be developed - protect the island and keep it undeveloped and natural.

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COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

38. Good luck
39. Don't build many structures in the flood plain - waste of time and \$\$
40. Water destination like Buena Vistas festival
41. I would like to see a 3D archery course. While there are some at Cameo, they are not shaded and it is quite windy and hot in the summer. The shaded and cooler area this could provide would provide a challenging course with minimal risks to the public to accommodate. This could be a tourism opportunity if dry camping hookups could also be facilitated here, or in another location around town.
42. I think we should ask the high school students what would they use to get them outdoors
43. Incorporate local art & artists - art installed along walking trails. Sculpture garden, labyrinth, meditation garden, kid friendly tree house (look up the one by the Basalt library), kid fishing pond, family friendly beach area, off-leash dog area, interactive sound garden (Rotary Park in Moab), picnic shelters, small stage for local events & music, if open after dark, make sure there is good lighting for safety. Space for food truck, coffee shack for riverside food/drinks destination. Paddle boats, or kayaks to rent.
44. A safe, semi enclosed water park and beach area would be a huge asset to make use of our valuable natural resource! Side note, not directly related but the float from Silt to Rifle is easy and beautiful but the Rifle Bridge abutments are extremely dangerous (since the river realigned to the north) for anyone floating the Colorado River, the current pushes rafters directly into the abutments.
45. Disc Golf Course
46. No harsh nighttime lighting
47. Archery is a huge sport and Garfield County is lacking in places to do this sport. This area would be an amazing spot. There are currently over 50 kids in Garfield county 4-H archery and over 60 kids in S3DA archery. This is just the kids. Most of their parents along with numerous other adults also participate in archery, but have to travel long distances to do it.
48. You should think big... Draw people in, like Olympic kayak training course. A very nice whitewater park from beginners to expert level. Multiple surf waves, ect...use both sides of island.
49. A nature preserve building
50. Finish some of the projects park and already has started first.
51. A short boardwalk trail for people with disabilities.
52. Disc golf course!
53. a disc golf course would be amazing in Rifle, this is the perfect place.
54. What ever the City develops is just a lot of concrete & trash
55. As a family that has traveled the country and the world as pro kayakers, we'd love to be involved. Dan Kellogg - 970.309.4978
56. WHITEWATER KAYAKING! Make sure you talk to real expert kayakers, there are a lot of parks that look good from the road, but are almost completely unusable most of the year (Basalt park, ie, a few million dollars and there was actually a better surf wave before they made the park, it's such a disaster, nobody uses it. Unsafe too)
57. Do not block the channel for boaters

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COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

58. More river surfing waves please!
59. I'm curious how the city plans to keep the growing homeless population from camping out on the island .also there is so much trash on the island how is it going to be cleaned up and how much is this going to cost the local taxpayers ? Who's going to maintain it ? We are talking about nearly 100 acres .. I'm all for more trails but the city has a hard enough time maintaining the current trails throughout the area . Should the projects that are already started be completed before the city takes this huge project on ?
60. How the island connects to downtown and ultimately is the gateway to economic and recreation channel of the city (river, retail/food/arts, biking, reservoir, climbing)
61. Use Gary Lacy to build a great whitewater park
62. Absolutely not an homeless camp site
63. Whitewater park!!!!!!!!!! Can have cool events and bring the community together and people from other areas
64. I'm curious how much it will cost the City to properly access this island. The City already has enough trouble keeping the roads in driveable condition yet there are funds available to pay for renovating an island to be used by the public?
65. improve fish habitat, no water park
66. No event venue/amphitheater. This would bring too many people at once and hinder the preservation of a great spot!
67. Rifle is a good city I love living in there but we need more places and thing to do with family, friends or alone.
68. Elevated bird watch tower
69. Water safety, river danger, education & PFD's
70. Keep it as pristine and untrampled as possible, limit automobile traffic, make it easy for biking, hiking and golf cart type vehicles. Keep our senior and disabled population in mind while making a trail system.
71. Dog park
72. There are no fenced dog parks in Rifle. Fencing would keep local flora and fauna safe from dogs and vice versa.
73. The island idea is good. Putting the qr code on Facebook is a pain. just put them url on Facebook so I don't have to use two devices to fill out a survey.
74. security to keep the drifters away
75. Keep it as close to nature as possible, the least intrusive the better.
76. I know this will take years to develop but small steps go a long way Trails will get people out and ADA access on the river would benefit a lot of families. As people utilize the area they will enjoy the long term vision of adding river activities and pavilions
77. Keep it natural and educational
78. Lots of shade trees
79. I love camping, but I worry that if sites are developed, someday some one will burn the island down on accident.

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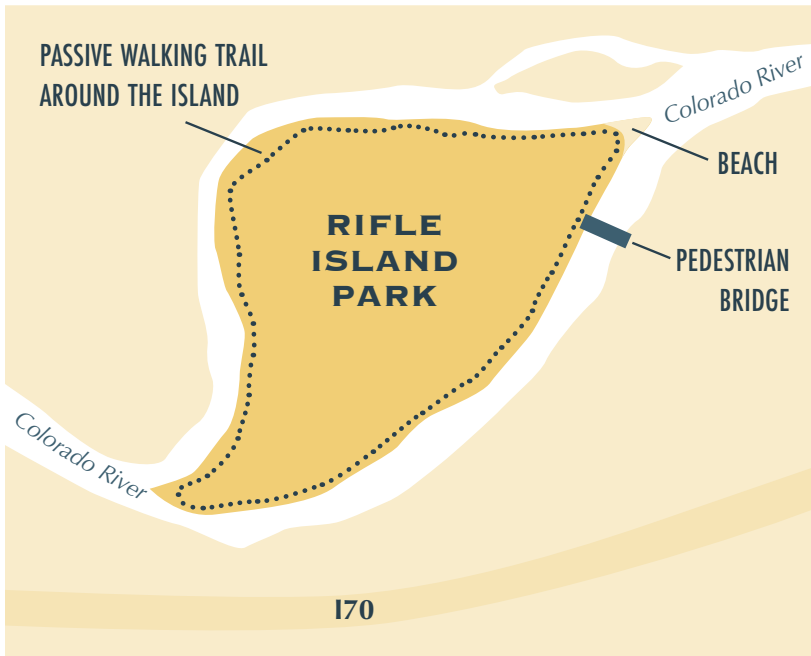
COMMUNITY VISION PROCESS

FOR THE RIFLE ISLAND

80. I think you should consider selling the island. I think you should provide the costs for cleanup, bridge access, and infrastructure. From what I'm hearing this is going to be very expensive. How is the area going to be Monitored to prevent homeless camping.
81. Disc golf
82. Make fun for teenagers
83. Structures on stilts due to the possibility of flooding.
84. Make it the best whitewater park in Colorado!!!
85. They should not consider camping. That would be an additional cost for staffing/ equipment that could go to other P&R items.
86. Any chance to extend trails up and downstream proximal to the river?
87. Restoration of native plant communities including the removal of noxious plant species and planting/reseeding of natives to improve biodiversity and ecosystem health.
88. Make all facilities accessible for handicapped and for pets as they are part of the family; an amphitheater by the river could be too buggy -- recreation not entertainment. We have to make it safe, so have to clear cut some of the brush; keep young kids off river trails; maybe have access only during the day.
89. The flooding
90. Safety, law enforcement (concerns for homeless people settling in and ruining it for the rest of us with drug use, etc)
91. Camping for homeless
92. Disc golf!
93. Dog park please. Nearest one is in Glenwood
94. Anything outdoors that is free for the community/families to partake in will be great!
95. Disc Golf
96. A brothel
97. Protecting environment
98. Leave it alone
99. When we place the hard lines in side wall it stops skating, skateboards, ect. There is no where to go around for for that activity

RIFLE ISLAND PARK

A RIVER EXPERIENCE FOR ALL



A UNIQUE ISLAND PARK:

The City of Rifle envisions this community recreational asset to be used for refuge, outdoor activity, and discovery. The island is a blank canvas allowing a greater connection to nature, the Colorado River, and adventure connected by one trail that circles the island and a footbridge from nearby land access. The Rifle Island Park will be inclusive of people from different cultures, age groups, and interests.

WORDS THAT DESCRIBE THE RIFLE ISLAND PARK:

CONNECTION TO NATURE

tread
lightly

Unique water park

**a landing place for rafting,
boating, and fishing**

Inclusive access to the

Colorado River

RIVER EXPERIENCE VIA A WALKING BRIDGE

passive walking trail around the island

A quiet and seasonal park

connection to community

USE GOALS:

- The community will be actively engaged in shaping a long-term vision
- Principles related to sustainability will be integrated into the operational approach: social, economic, environmental, and leadership sustainability
- Our focus for the next five years will be on island connections, funding sources (grants), and development options surrounding more costly goals, e.g., White Water Park

THE CITY OF RIFLE
COMMUNITY VISION PROCESS
FOR THE RIFLE ISLAND



Agenda Item #8.a.

Agenda Item Name:

Consider Declining Participation in Colorado FAMLI Program - Resolution No. 13, Series of 2022

Presenter:

Danielle Hogan, HR Manager

Item Description:

Consider declining City participation in the Colorado FAMLI Program

Recommended Action:

Move to approve Resolution No. 13, Series of 2022 to opt out of the FAMLI program.

Fiscal Impact:

Minimum of .45% of gross annual wages for an employee. If the City wishes to adopt the FAMLI program, then an additional .45% of an employee's gross annual wage will be paid by the City.

Operational Impact:

Participation in FAMLI will require additional staff time from the Human Resources and Finance Departments to manage the administrative work related to FAMLI.

Prior Board Motions:

N/A

Background Information:

In November 2020, 57% of voters approved Proposition 118, allowing for the implementation of a state-run Paid Family and Medical Leave Insurance (FAMLI) program.

Executive Summary:

The Colorado Paid Family Medical Leave Insurance program (FAMLI) is not mandatory for local governments. The option to participate or opt out of the program must be approved by a vote of the governing board (City Council). If the City of Rifle opts out, employees can opt in to the state FAMLI program at the same cost (.45% of their annual gross salary) and will receive the full benefit offered. Employees who opt in are responsible for paying the premium to the state program if the City does not adopt the program. The City will not make payroll deductions if we choose not to adopt the plan.

If the plan is not adopted (Resolution is passed):

Employee pays .45% to the state for full benefits if they wish to participate

If the plan is adopted:

Employees pay .45% and the City pays .45% for full benefits

Notification of employees is required within 30 days of a vote to reject or approve the program. One employee notified Human Resources that he wants the plan adopted by the City and his email is attached. There were no other objections.

Notification Requirements:

Public Notice of Meeting and notifying employees of Council's vote within 30 days of vote decision. Employees were notified.

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Council Memo 9.21.22 Opt Out CO FAMLI Program
2. Knowledge Now FAMLI
3. Resolution No. 13-FAMLI Opt Out
4. Employee Comment 9.13.2022



To: Mayor and Rifle City Council Members

From: Danielle Hogan, HR Manager

Date: Wednesday, September 14, 2022

Subject: **Recommendation to Opt Out of CO FAMLI Program Participation**

EXECUTIVE SUMMARY:

In November 2020, Colorado voters approved Proposition 118, allowing for the implementation of a state-run Paid Family and Medical Leave Insurance (FAMLI) program. The Colorado Paid Family and Medical Leave Insurance program (FAMLI) is not mandatory for local governments. The option to participate or opt out of the program must be by a vote of the governing board (City Council).

The attached Knowledge Now document, prepared by CML, has been included for the City Council's review. It provides an overview of the new program from the local government perspective (attachment B).

Financial Impacts:

- .45% of each employee's annual salary paid by Employer
- .45% of each employee's annual salary paid by Employee

May be increased by the State to 1.2% total of employee's wages without additional voter approval

City Council Options:

1. Take no action. The City will be automatically enrolled into the FAMLI program (must stay in program for 3 years)
2. Approve Resolution No. 13 Series of 2022 and opt out of the FAMLI program

Staff Recommendation:

Staff recommends approving the resolution and opting out of the FAMLI program at this time. As you know the City of Rifle has a generous leave program for our employees which provides superior coverage and benefits. See below for a comparison of our current benefits to the proposed FAMLI program.

City of Rifle	FAMLI
Full time employees accrue sick leave at 3.69 hours per pay period (96 hours per year). When used is paid at 100% of normal rate of pay. Maximum accrual balance is 480 hours (12 weeks). Has broader list of reasons for usage of leave.	Up to 12 weeks of partial rate of pay for leave required for illness of employee or family member, victims of sexual assault or domestic violence, birth or adoption of a child. Can only be used once during a 12 month period.
FMLA leave for 12 weeks for same reasons as FAMLI program. May be paid if employee has sick and/or vacation or may be unpaid if they do not have available sick/vacation. Available to employees who have worked 1250 hours with employer. Job protected for 12 weeks.	Job protected for 12 weeks (up to 16 weeks for complicated pregnancy or child birth). Colorado employee eligible after earning at least \$2,500 in wages within Colorado in the last 4 quarters. Not tied to a specific employer. (If local gov opts out, job protection is only available from Federal FMLA)
Full time employees earn vacation time of 80 – 200 hours per year. (depending on length of service) Maximum accrual is up to 400 hours. When used is paid at 100% of normal rate of pay. Part-time employees with benefits earn vacation time of 60 to 150 hours per year (depending on length of service) When used is paid at 100% of normal rate of pay.	
Full-time and Part-time benefitted employees received 3 floating holiday days to be used for any reason the employee needs to be away from work. When used is paid at 100% of normal rate of pay.	
Seasonal employees and year-round part-time employees earn the HFWA-required 1 hour of sick leave for every 30 hours worked. Maximum accrual 48 hours.	
Sick Leave Bank hours available to employees who have exhausted they paid leave due to a catastrophic illness or injury, section 6.3.8 Personnel Manual	
COST TO EMPLOYEE:	COST TO EMPLOYEE:
Zero cost to employee for all benefits. City fully covers the cost of these paid leave benefits.	.45% Of annual salary.

If the City of Rifle opts out, employees can opt in to the state FAMLI program at the same cost (.45% of their annual salary) and will receive the full benefit offered. Employees who opt in are responsible for paying the premium to the state program. The City will not make payroll deductions.



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Knowledge

KNOWLEDGE NOW – PRACTICAL RESEARCH ON TIMELY TOPICS

Briefing

- The FAMLI program provides employees with 12 weeks of paid leave to take care of themselves or a family member
- Participation in FAMLI is automatic for municipalities unless they formally opt out
- Opt-out votes and notice to the FAMLI Division should occur before the end of 2022 to avoid premium assessments in 2023
- Employees can take part in FAMLI even if their municipality declines to participate

COLORADO'S PAID FAMILY MEDICAL LEAVE INSURANCE (FAMLI) PROGRAM



FAMLI: WHAT'S RIGHT FOR YOUR CITY OR TOWN?

URGENT ACTION IS NEEDED. Colorado municipalities must make immediate decisions regarding their participation in Colorado's

Paid Family Medical Leave Insurance (FAMLI) program. Participation will have a substantial impact on your municipal budget, operations, and employee relations. **Participation is automatic for any municipality unless your council or board formally votes to decline participation or opt out. The FAMLI**

Division must be notified by the end of 2022 to avoid premium liability. CML is not encouraging municipalities to participate or to decline participation in the program. Each municipality should assess the program for themselves. Opting out now does not prevent later participation, and employees can still participate individually and should receive the full benefit of the program.

Continued on page 2

Colorado Municipal League
1144 Sherman St. • Denver, CO • 80203
303 831 6411 / 866 578 0936
www.cml.org



Empowered cities and towns, united for a strong Colorado

What is FAMLI?

In November 2020, Colorado voters approved Proposition 118, which paved the way for a state-run Paid Family Medical Leave Insurance (FAMLI) program. FAMLI is codified at C.R.S. §§ 8-13.3-501 to -524, and is administered through the Colorado Department of Labor and Employment, Division of Family and Medical Leave Insurance (famli.colorado.gov). Premiums will be collected (including employer and employee shares) starting **Jan. 1, 2023**, and benefits will be available starting **Jan. 1, 2024**.

FAMLI provides covered employees with 12 weeks of paid leave to take care of themselves or a family member during life events like injury, serious illness, or pregnancy. An additional 4 weeks are available to employees who experience pregnancy or childbirth complications. Payments would be at a rate below the employee's weekly rate, as described below. Leave can be taken together or intermittently. FAMLI benefits are portable between jobs.

FAMLI also provides job protection for employees who were employed for at least 180 days before the protected leave occurs. This means that an employer must return the employee to the same or an equivalent position with equivalent benefits, pay, and other terms and conditions following the leave. Employers must also maintain healthcare benefits during the leave, but the employee would have to continue to pay their share of the cost. Accrual of seniority and other benefits are not protected.

FAMLI is a separate program from the paid sick leave requirements of the Healthy Families and Healthy Workplaces Act and the Federal Family and Medical Leave Act (FMLA).

What will participation in FAMLI cost my city or town?

Participating employers and employees will contribute to premiums for FAMLI, and municipalities will bear the administrative costs of compliance. Premiums will be 0.9% of an employee's wage (HB22-1305 is pending in the General Assembly and

would reduce this to 0.81% for the first six months of the program). Wages and exempt items are determined under administrative rules (7 CCR 1107-1:1.5.3 and 1.5.4). A municipality can expect to contribute an amount equal to at least 0.45% of its current employee "wages" on an annual basis and possibly up to 0.90% of that figure. The FAMLI Division will provide notice of expected premiums and publish due dates and guidance on premium remittance.

A participating municipality (unless it has fewer than 10 employees) must remit 100% of the premium for each employee. The employer must directly contribute at least 50% of that amount (i.e., 0.45% of the employee's wage) and may require the employee to deduct the remaining 50% from their paycheck (i.e., employees would see a deduction of about 0.45% from their pay). An employer can choose to contribute part or all of the employee portion of the premium. For a municipality with fewer than 10 employees there is no "employer share"; the municipality can require the employee to deduct up to 50% but can also choose to contribute part or all of the employee portion.

An employer is responsible for any error it makes in calculating, deducting, and remitting premiums, including the employee portion.

If a municipality does not participate in FAMLI, the employee would be solely responsible for 50% of the premium if the employee elects to participate individually. The municipality can, but need not, deduct the employee portion from payroll and remit it to the state. If the municipality is involved in deducting or remitting the employee portion, any error would be the municipality's responsibility.

Why would my city or town not participate in FAMLI?

Declining participation in the FAMLI program is a significant decision, but it must be made quickly to meet FAMLI's initial deadlines. If a municipality does not opt out now, it must wait three years to decline participation. If a municipality opts out now, it can opt in any future year. It must renew its decision to decline participation at least every eight years.

The cost of the FAMLI program may outweigh the benefits to the municipality and its employees. FAMLI program participation will increase municipal budgets by at least 0.45% of its employees' wages annually and potentially more. FAMLI also includes additional administrative work for finance and human resources staff and raises employer liability concerns. Employees who want the paid benefits of FAMLI can participate individually at no greater personal cost and without imposing a cost on the municipality and other employees who do not want to participate.

Municipalities may want to make a local decision as to how to provide employee benefits and protections. Participation in the FAMLI program could conflict with existing employer benefits plans or collective bargaining agreements. Alternatives, like a private plan pursuant to C.R.S. § 8-13.3-521 (or adopted independently after opting out of FAMLI by a vote) or a supplemental insurance program, could be a better fit for your organization.

Because FAMLI is a new program and the program rules have not been fully established, a municipality may choose to be cautious and opt out initially so it can evaluate the program in operation to determine if it is the best choice for the municipality. By opting out, a municipality can determine budgetary and employment impacts locally. Because FAMLI assigns the costs of errors in calculating and remitting premiums to employers, a municipality may wish to wait until procedures can be developed to ensure compliance. Finally, the FAMLI Division has yet to issue all necessary administrative rules, including explaining the interplay between the program and other federal and state laws.

What is best for our employees?

Employees can still participate individually (C.R.S. § 8-13.3-514) and should receive the same benefits, even if the municipality declines participation. Benefits rules to be issued this year will hopefully confirm that benefits will apply equally. The cost to the employee who wants FAMLI coverage is the same whether the employer



Employees can participate in FAMLI individually and should receive the same benefits, even if their municipality declines participation.

participates or not; employees who do not want this coverage would not have to pay any premium.

Employees who choose to participate individually when the municipality opts out would be required to remit their premium share directly to the FAMLI Division unless the municipality chooses to handle this payment by deducting the premium from the employee's pay or paying it on the employee's behalf.

Employees may benefit from a municipality opting out because the municipality would have no financial responsibility for 50% of the premium. The municipality could choose to use that savings to benefit employees directly, such as by paying for some or all of the 50% premium for employees who participate individually.

Employment protections under the statute do not apply if a municipality declines participation in FAMLI, but the

Federal Family and Medical Leave Act (for employers with 50 or more employees in the current or prior year) and any local standards would still apply.

What are the costs and benefits for employees?

Employees bear up to 50% of the premium (or 0.45% of their weekly wage) if the municipality participates or the employee chooses to participate individually. Employees who do not want to participate must still pay a premium if the municipality does not decline participation. Job protections defined in C.R.S. § 8-13.3-509, apply only if a municipality participates in the program.

By statute, an employee would receive a weekly benefit under FAMLI in the amount of 90% of their weekly wage that is equal to or less than 50% of the state average weekly wage, and 50% of their weekly wage that is more than 50% of the state

average weekly wage. Weekly benefits are capped at 90% of the state average weekly wage until 2025, when the maximum weekly benefit is limited to \$1,100 per week. The FAMLI Division suggests that an employee would receive benefits between 37% (\$1,100 based on a weekly wage of \$3,000 or more), 55% (\$1,100 based on a weekly wage of \$2,000), 68% (\$1,018 based on a weekly wage of \$1,500), 77% (\$768 based on a weekly wage of \$1,000), and 90% (\$450 based on a weekly wage of \$500) of the employee's weekly wage.

Benefits rules have not been finalized. The FAMLI Division provides a premium and benefits calculator on its website. Federal income tax may apply to benefits, but benefits are exempt from state income taxes.

How do we opt out?

All municipalities are included in FAMLI by default, regardless of size. A municipality

may opt out and avoid the employer portion of premiums by a vote of a governing body. The opt-out procedure is governed by C.R.S. § 8-13.3-514 and administrative rules at 7 CCR 1107-2. Declination takes effect 180 days after the vote so employees can elect to individually participate in the FAMLI program if they choose. A municipality cannot decline part of FAMLI's provisions.

Pre-vote notices: The municipality must give prior notice of the vote in the same manner it notices other public business. Under the Colorado Open Meetings Law, this means at least 24 hours advance notice must be posted. Local requirements may apply.

Special notice must be provided to employees in writing before the vote indicating the voting process and providing an opportunity to submit comments to the governing body. Information about individual opt-in may also be required (see 7 CCR 1107-2: 2.6.A.4), although those standards likely apply only to post-vote notices. The rules do not indicate that email communication is not appropriate (7 CCR 1107-2: 2.6.A.2). Municipalities might consider both email and written communications to employees.

A description of the voting process could identify the local requirements for the governing body to approve an action, including the potential to make a motion, council or board deliberation, and vote requirements. Municipalities could also consider allowing both oral testimony at the meeting and a written comment option.

Hearing and vote: The vote must occur at least 180 days before the declination will be effective (This deadline appears to apply to an initial declination before the program even begins in 2023, but the rules are not clear). While a formal hearing is not required, the rules require the governing body to take testimony before voting. This could include both verbal and written comments from any interested person.

The rules require that the vote follow the entity's procedures for formal votes and be a "decision by an affirmative vote of the local government's governing body



to decline participation in the [FAMLI] program" (7 CCR 1107-2: 2.6.A). The rules do not indicate that any formal approval mechanism is required, unless one is required by local standards. A motion, resolution, or ordinance may suffice but could modify the "voting process" that needs to be detailed to employees in the advance notice. At a minimum, the document should probably include language indicating that notice was given to employees and the public as required, testimony was taken, and that the body voted affirmatively to decline participation in the FAMLI program.

Post-vote actions: After a vote to decline participation, the municipality must provide several notices. First, the municipality must provide written notice to the FAMLI Division "memorializing the decision" and identifying the date of the vote. The rules are silent on the timing of notice to the FAMLI Division; prompt action is advised. The FAMLI Division has suggested that a letter would be sufficient and expects to have an electronic portal for submissions ready in late 2022. A certified record of the meeting (e.g., minutes showing the motion, vote, and date; resolution; ordinance) with a cover letter would provide a more concrete explanation of the vote and demonstrate compliance with other requirements (7 CCR 1107-2: 2.5.A and, 2.6.A).

Second, the municipality must provide written, individual notices to employees within 30 days after the vote. This notice must indicate the vote to decline coverage and "the impact toward FAMLI, or other paid family and leave insurance coverage" (7 CCR 1107-2: 2.6.A.3). The notice must explain the difference between the FAMLI program and any private plan offered by the local government and identify FMLA eligibility and other local benefits.

The employee notice (and possibly the pre-vote notice) must also provide information on the right of the employee to voluntarily opt in to FAMLI pursuant to C.R.S. § 8-13.3-514, and FAMLI Division contact information (7 CCR 1107-2: 2.6.A.4).

Third, the municipality must post the post-vote notice in a "conspicuous and accessible place in each establishment where employees are employed" (7 CCR 1107-2: 2.6.A.4). Email notice or posting on a web- or app-based platform is recommended and is required for employers with no physical workplace and for employees who work through a web- or app-based platform or work remotely.

Continued on page 5



Special Notice Standards: The post-vote notice, at a minimum, and potentially all notices must be provided in English and any language representing the first language spoken by at least 5% of the municipality's workforce.

The FAMLI Division will make posters and notices available, but municipalities must request the materials and should expect to pay printing and mailing costs. Notices and posters in languages other than English or Spanish must be specially ordered.

Declination renewal: The declination must be renewed every eight years or the municipality is automatically added back in to FAMLI (7 CCR 1107-2: 2.5.C). The rules require "a similar vote process and margin." That likely means the same number of votes needed to approve an action, not passage by the exact same number of votes as the prior declination.

How do we opt back in to the FAMLI program?

A municipality that previously opted out of the FAMLI program may opt back in by affirmative vote "of a quorum of the governing body" at the beginning of the annual local budgeting cycle, as determined by the municipality (7 CCR 1107-2: 2.5 and 2.6). Coverage would begin no later than the quarter after the vote and submission of one quarter's premium. Municipalities who opt into FAMLI must stay in the program for at least three fiscal years.

Opting back in also involves employee notice requirements. No more than 90 days after the vote, individual employees who opted in must be personally notified in writing that the municipality has opted back into FAMLI. The notice must include the date for the municipality's first submittal of quarterly premiums and any potential lapses or changes in benefits eligibility. The local government must publicly post a notice of the date the employer will begin paying FAMLI premiums and when coverage is expected to start. Employees who did

not opt in must also be notified in writing, both publicly and personally, no later than 180 days after the vote to opt back into FAMLI. The notice must contain a detailed explanation of employee rights under the FAMLI program, including program requirements, benefits, claims processes, payroll deductions, premiums, and employee protections like the right to job protection and benefit continuation and protection against retaliatory or discriminatory information, among other things.

Anticipate updates to FAMLI program.

Municipalities must act now to determine if they want to participate in the FAMLI program, but they should expect updates throughout 2022. Several administrative regulations have yet to be finalized, including benefits rules and the interaction between FAMLI and other federal and state leave laws. The Colorado Supreme Court is also considering a court challenge to the premium requirement that might be decided this year.



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Knowledge

KNOWLEDGE NOW — PRACTICAL RESEARCH ON TIMELY TOPICS

Colorado's Paid Family Medical Leave Insurance (FAMLI) program

**CITY OF RIFLE, COLORADO
RESOLUTION NO. 13
SERIES OF 2022**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIFLE,
COLORADO, OPTING OUT OF THE STATE OF COLORADO FAMILY
MEDICAL LEAVE INSURANCE PROGRAM.

WHEREAS, in November 2020, Colorado voters approved Proposition 118, which created the state-run Family Medical Leave Insurance (FAMLI) program to ensure all Colorado workers have access to paid leave in order to take care of themselves or their family during life circumstances that pull them away from their jobs; and

WHEREAS, under FAMLI, employers and their employees are both responsible for funding the program and may split the cost of premiums which are set at 0.9% of the employee's wage, 0.45% paid by the employer and 0.45% paid by the employee, starting January 1, 2023 with benefits available to enrolled employees starting January 1, 2024; and

WHEREAS, the City of Rifle (the "City") offers paid time off for medical and family purposes as outlined in the City's Personnel Manual; and

WHEREAS, FAMLI is codified at Colorado Revised Statutes Sections 8-13.3-501 to 524, and is administered through the Colorado Department of Labor and Employment, Division of Family and Medical Leave Insurance; and

WHEREAS, a local government may decline all participation in the FAMLI program by a vote of its governing body under Colorado Revised Statutes Section 8-13.3-522, and interested employees may still elect to participate individually under Colorado Revised Statutes Section 8-13.3-514; and

WHEREAS, City staff recommends that the City Council decline participation in FAMLI and decline to withhold and remit the employee share of premiums for City employees who elect FAMLI coverage; and

WHEREAS, a public hearing was held on September 21, 2022 during which employees were given the opportunity to submit comments to the City Council regarding the FAMLI program, all employees have been notified of the options available under the FAMLI program and will be notified of this decision to opt out of the FAMLI program.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF RIFLE, COLORADO, THAT:

1. The City Council incorporates the foregoing recitals as conclusions, facts, determinations, and findings by the City Council.

2. The City hereby declines full participation in FAMLI, to include declining to collect and remit employee premiums to the State for those employees who elect coverage under FAMLI.

THIS RESOLUTION was read, passed, and adopted by the Rifle City Council at a regular meeting held this 21 day of September 2022.

CITY OF RIFLE, COLORADO

By _____
Mayor

ATTEST:

City Clerk

Danielle Hogan

From: Danielle Hogan
Sent: Tuesday, September 13, 2022 4:30 PM
To: rifle hr; Dylan Lauffer
Cc: Tommy Klein; Danielle Hogan
Subject: RE: FAMLI Opinion

Hi Dylan,

If the City chooses to opt out, but still performs the deduction from payroll and remits the employee portion to the State for the premium, it places additional administrative burden on the City as well as liability for any error in reporting those deductions. The recommendation is to not assume the liability or the administrative time for this option. Employees can participate on their own at no additional cost and would receive the full benefit. This is not a full wage replacement benefit from the state, it will replace between \$450 and a maximum of \$1,100 per week of salary depending upon the weekly wage base and the associated percent payout for that weekly wage. City paid sick leave and other leave is a 100% wage replacement benefit however.

Danielle Hogan, PHR
HR Manager, City of Rifle
Phone (970)665-6403
dhogan@rifleco.org

-----Original Message-----

From: Dylan Lauffer
Sent: Tuesday, September 13, 2022 3:48 PM
To: rifle hr
Subject: RE: FAMLI Opinion

I actually found the page I was looking for on the Colorado website. I see that there are 3 options for the City to choose from and only 2 are being represented by the vote. Considering the 2 options I still stand with the City opting in. I would be fine with the 3rd option that is not being represented, for a local government to "decline employer participation", but I think it is wrong that they would opt out of ALL participation and make employees have to file for it like independent contractors which we are not. I guess I do not understand why this 3rd option is not represented? Thank you for helping resolve my confusion.

-----Original Message-----

From: Dylan Lauffer
Sent: Tuesday, September 13, 2022 3:27 PM
To: rifle hr
Subject: RE: FAMLI Opinion

Thank you for the additional information. I guess I am confused as to what (if any) benefit there would be for the City to opt in, for either the City or its employees. After browsing the Colorado website I still don't really get what the city opting in would do. Is there a link to the specifics of for a local municipality opting in?

-----Original Message-----

From: rifle hr

Sent: Tuesday, September 13, 2022 12:55 PM

To: Dylan Lauffer

Cc: Tommy Klein; rifle hr

Subject: RE: FAMLI Opinion

Hello Dylan,

Thank you for your comment, we will provide to Council for their consideration.

I did want to offer additional information for you, that regardless of the decision the Council makes, City employees are able to decide to opt in to the program and are only required to pay the normal .45% of the premium they would pay if the City opted in. You would still eligible for the full benefit available to any Coloradan.

We will update our employees after the Council has made their decision.

Thank you.

Danielle Hogan, PHR

HR Manager, City of Rifle

Phone (970)665-6403

dhogan@rifleco.org

-----Original Message-----

From: Dylan Lauffer

Sent: Tuesday, September 13, 2022 11:45 AM

To: rifle hr

Subject: FAMLI Opinion

FAMLI

Attracting and retaining competent employees is hard in an area where a short commute earns the worker a substantial increase in wages. Declining a benefit like FAMLI, when private employers are required to offer it, would only divide the playing field further. I urge you to opt in.

Also, this was voted in by Coloradans. It would not be right for a government (for the people by the people) to opt out. Again, I urge you to opt in.



Agenda Item #8.b.

Agenda Item Name:

Ratification of Roadway Improvement Expenditure

Presenter:

Brian Prunty, Public Works Director

Item Description:

An explanation for approving work not under a purchase order for Stripe A Lot for annual pavement striping billed at \$25,225.20.

Recommended Action:

Move to ratify and approve payment of an invoice from Stripe A Lot for the 2022 roadway striping service in the amount of \$25,225.20.

Fiscal Impact:

Work was slated for 2022 and it was budgeted at \$34,500.

Operational Impact:

Conformance to budget and work intended for 2022.

Prior Board Motions:

None

Background Information:

Stripe A Lot has done the City's striping for approximately 15 years. They are knowledgeable of the work expectations and specifications. In concert with striping activities for other entities on the Western Slope, they provide superb value and minimal mobilization charges.

Executive Summary:

An employee approved this work unilaterally. I stand by his decision to direct Stripe A Lot to proceed. Stripe A Lot had just been in Moffat County for whom they have worked for the past 20 years and, with the high-tempo schedule that the Operations and Maintenance crew maintains given the workload and manpower shortage, it was a prudent decision. While we recognize that this instance was outside the bounds of our procurement policy, it is our commitment to adhere to it in future purchases.

Manager comment - Operations and Maintenance has one vacancy and one team member that is injured and on extended leave.

Notification Requirements:

We feel obligated to notify Council and the public about a matter that does not comply with the procurement process.

Prepared By:

Brian Prunty, Public Works Director

Attachments:

1. Memo - TKlein re Stripe A Lot unapproved work_bgp
2. Memo - BPrunty re Stripe A Lot Services 2022
3. Invoice - Stripe A Lot - 2022 Roadway Striping



TO: Tommy Klein, City Manager
FROM: Brian Prunty, Public Works Director *BGP*
CC: Colton Secary, O&M Supervisor
DATE: September 13, 2022
RE: Street Marking Invoice

Last week, I became aware of some work done by a contractor on behalf of Public Works. Stripe A Lot showed up in the O&M yard the week before last, unannounced, and ready for work. While they had not contacted Colton regarding scheduling, they had provided a preliminary estimate earlier in the year, and “assumed” they would be doing the work.

In no way did Colton intend to eschew the process for bidding the work, but simply under the crush of work he and his crew (they are two crew members down) are doing gave them the approval to proceed. Colton is aware of the purchasing policy, and we discussed the necessity for following new procurement guidelines. He was just trying to beat the calendar knowing that summer was slipping, and that Stripe A Lot was aware of our specifications, the city’s stripping patterns and methodologies, and that they have always provided us with the best striping value.

I do stand by his decision to approve the work given our history with Stripe A Lot and expediency necessary for this project. That said, we will endeavor to not let this happen in the future. I ask that the Stripe A Lot invoice for \$34,500 be approved for payment.



**TO: BRIAN PRUNTY****FROM: COLTON SECARY****CC:****DATE: SEPTEMBER 13, 2022****RE: STRIPING PURCHASE ORDER**

At the beginning of this month, I approved work where the total amount due exceeded that of my financial scope of practice. In no way did I have any ill intentions, plan to mislead, or show contempt for our processes. Our Operations and Maintenance group has taken on large projects this year, and kept a high speed work flow for many months, while simultaneously being down 25% of our man power. I know that Stripe A Lot had already been awarded the bid for the Airport Project and the 9th street Bridge. When Stripe A Lot arrived in our yard after striping Rio Blanco and Meeker, somewhat unannounced, I approved of the work as our window for appropriate weather for striping is getting narrower. This was my decision and I take full ownership of the fault in not following the established guidelines. In the future I will correct this action, and not allow precedent to rule over process.

Stripe-a-Lot has been our provider of street striping for a many years now. They work with many of the surrounding municipalities which holds down mobilization costs and have the right equipment to complete the job in a few days. They have worked with us on the specific paint used to help offset some of the cost increases due to the increases in oil, fuel, labor and materials. Stripe-a-Lot is also the best prepared vendor to do the large volume of striping the City of Rifle requires.

I request that this invoice be paid, and will resolve to follow proper procedure in the years to come.





P.O. Box 1957
Montrose, CO 81402
Ph. (970)-249-7588
Fax (970)-249-9199

RECEIVED

SEP 10 2022

City of Rifle
Finance

Invoice

Date	Invoice #
9/1/2022	1516

Bill To

City of Rifle
City Shop
P.O. Box 1908
Rifle, CO 81650

P.O. No.	Terms	Project
	Net 30	

Description	Rate	Quantity	Amount
This Invoice is for Paint Striping the City of Rifle (Reflective Beads/Traffic Control included) 2022*			
- Paint Stripe Double Yellow	0.15	131,339	19,700.85
- Paint Stripe White Edge/Turn Lanes	0.15	26,829	4,024.35
Mobilization/Demobilization	1,500.00		1,500.00
Please contact Denise or Dave with any questions at 249-7588, Thank You			
Date: _____			
Approval: _____			
ACCOUNT #: _____			
Billable Not Billable			
PO #			
Grant #			

Thank You !

Total

\$25,225.20

E-mail

stripealotinc@msn.com



Agenda Item #8.c.

Agenda Item Name:

Consider Third and Railroad Change Order for Final Payment

Presenter:

Craig Spaulding, Civil Engineer

Item Description:

These costs reflect discrepancies between plan quantities and field quantities. These items have the same justification as CO#8 and should have been included in CO#8 by the contractor. These do represent final payment

Recommended Action:

Recommend approving Change Order #9 for the 3rd and Railroad Avenue Improvements

Fiscal Impact:

The project cost will remain less than the original estimates in the Streets Capital and Maintenance Plan. The increase also remains within the approved 2022 budget.

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

There have been 8 prior change orders for the Third and Railroad Contract with the most major being a change to concrete pavement, Electrical Services and gear at Third Street and Fifth Street, Temporary surfacing and traffic control for the Garfield County Fair, and tree uplights. All other cost increases have been for unit quantity discrepancies.

Executive Summary:

This change order is for unit quantity discrepancies between the bid schedule and what was installed all items have been verified multiple times by the City of Rifle and the change order is paying for material and items that were installed.

Notification Requirements:

None

Prepared By:

Craig Spaulding, Civil Engineer

Attachments:

1. Third and Railroad CO #9_signed
2. PAY ESTIMATE 8_final
3. Change Order Summary memo
4. 2022 Budget Summary 9-15-22

Change Order

Order No.: 9

Date: 9/15/22

Agreement Date: April 14, 2021

NAME OF PROJECT: 3rd Street and Railroad Avenue Improvements

OWNER: City of Rifle

CONTRACTOR: KSK, LLC

The following changes are hereby made to the CONTRACT DOCUMENTS: This change order accepts all overages in Pay Estimate 8 and also credits all unused quantities. Payment per Pay Estimate 8 will be final payment with no additional payments or credits.

Justification: This Change order contains no additional scope. All additional cost in this change order are a summation of overages on bid quantities to complete scope as previously accepted.

Change to CONTRACT PRICE: \$34,102.00

Original CONTRACT PRICE: \$3,807,000.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER(s) No.(s) 1-8 \$4,580,048.05

The CONTRACT PRICE due to this CHANGE ORDER will be (increased) by: \$34,102.00

The new CONTRACT PRICE, including this CHANGE ORDER, will be: \$4,614,150.05

Change to CONTRACT TIME:

The CONTRACT TIME will be (increased)(decreased) by 0 calendar days.

The date for completion of all WORK will contractually remain October 14, 2021

Approvals Required:

To be effective, this ORDER must be approved by the Federal Agency (if applicable), if it changes scope or objective of the WORK, or as may otherwise be required by the Owner.

I hereby accept this order, both as work to be performed and prices on which payment is to be based.

Contractor Representative: [Signature] 9-15-2022
Signature Date

Recommended by: [Signature] 9/15/22
Signature Date

Authorized by Owner's Project Engineer: [Signature] 9/15/22
Signature Date

Approved by Owner Public Works Director: [Signature] 9/15/2022
Signature Date

Estimate #8 City of Rifle
Third Street and Railroad Avenue Improvements

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	ESTIMATED AMOUNT	QTY	PREVIOUS AMT	QTY	CURRENT AMT	QTY	TOTAL AMT	Final (Over)/Under
100 City Parking Lot												
101	Remove 36" Dia Tree & Roots greater than 1" diameter (Alley by City Parking Lot)	1	LS	\$ 1,000.00	\$1,000.00	1.000	\$1,000.00	0.000	\$0.00	1.000	\$1,000.00	\$ -
102	Remove yard hydrant	1	EA	\$ 450.00	\$450.00	1.000	\$450.00	0.000	\$0.00	1.000	\$450.00	\$ -
103	Excavation Cut (export 115-CY)	166	CY	\$ 22.00	\$3,652.00	166.000	\$3,652.00	0.000	\$0.00	166.000	\$3,652.00	\$ -
104	Grading Fill	47	CY	\$ 35.00	\$1,645.00	59.000	\$2,065.00	3.000	\$105.00	62.000	\$2,170.00	\$ (525.00)
105	Remove/export existing concrete sidewalk adjacent to building, saw cut all concrete/asphalt edges at connections	100	SF	\$ 29.00	\$2,900.00	100.000	\$2,900.00	0.000	\$0.00	100.000	\$2,900.00	\$ -
106	Concrete Sidewalk: 4" thick Class D with Fibermesh & wire panels	160	SF	\$ 5.50	\$880.00	160.000	\$880.00	0.000	\$0.00	160.000	\$880.00	\$ -
107	Concrete Wall: Parking Lot Barrier Wall (26-l.f.)	26	LF	\$ 135.00	\$3,510.00	26.000	\$3,510.00	0.000	\$0.00	26.000	\$3,510.00	\$ -
108	Concrete Curb & Gutter: 6" VC & 12" gutter	116	LF	\$ 33.00	\$3,828.00	116.000	\$3,828.00	0.000	\$0.00	116.000	\$3,828.00	\$ -
109	Concrete Drainage Pan 3' wide, 7" thick (#5 rebar @ 12" o.c.)	110	LF	\$ 30.50	\$3,355.00	110.000	\$3,355.00	0.000	\$0.00	110.000	\$3,355.00	\$ -
110	Asphalt: 4" thickness (6930-sq.ft.)	180	TON	\$ 116.00	\$20,880.00	239.430	\$27,773.88	0.000	\$0.00	239.430	\$27,773.88	\$ (6,893.88)
111	Road Base: 6" CDOT Class 6 (6010-sq. ft)	223	TON	\$ 39.00	\$8,697.00	277.000	\$10,803.00	0.000	\$0.00	277.000	\$10,803.00	\$ (2,106.00)
112	Drain Trough through sidewalk	1	EA	\$ 2,850.00	\$2,850.00	1.000	\$2,850.00	0.000	\$0.00	1.000	\$2,850.00	\$ -
113	Signage & Striping: 2 ADA Parking Signs, City Public Parking Notification Sign, relocate one-way sign, Parking lot striping	1	LS	\$ 3,100.00	\$3,100.00	1.000	\$3,100.00	0.000	\$0.00	1.000	\$3,100.00	\$ -
200 Post Office/Alley Reconfiguration												
201	Remove/export existing asphalt, concrete, & shrubs, saw cut concrete/asphalt project edges	67	CY	\$ 28.00	\$1,876.00	82.000	\$2,296.00	45.000	\$1,260.00	127.000	\$3,556.00	\$ (1,680.00)
202	Regrade portion of alley & and landscape area	1	LS	\$ 1,200.00	\$1,200.00	1.000	\$1,200.00	0.000	\$0.00	1.000	\$1,200.00	\$ -
203	Concrete Driveway (Post Office & Alley Connection): 7" thick Class D, #5 rebar @ 12" o.c.	2,128	SF	\$ 9.25	\$19,684.00	846.000	\$7,825.50	1485.000	\$13,736.25	2331.000	\$21,561.75	\$ (1,877.75)
204	Road Base: 6" CDOT Class 6 (2128-sq. ft)	79	TON	\$ 45.00	\$3,555.00	72.000	\$3,240.00	79.000	\$3,555.00	151.000	\$6,795.00	\$ (3,240.00)
205	Relocate Mail Drop Box, provide new 6" thick concrete pad, re-mount boxes	1	LS	\$ 1,000.00	\$1,000.00	0.500	\$500.00	0.500	\$500.00	1.000	\$1,000.00	\$ -
206	Signage & Striping	1	LS	\$ 3,350.00	\$3,350.00	0.000	\$0.00	1.000	\$3,350.00	1.000	\$3,350.00	\$ -
207	Underground Service for Post Office	1	LS	\$ 4,500.00	\$4,500.00	1.000	\$4,500.00	0.000	\$0.00	1.000	\$4,500.00	\$ -
208A	Soil Separator Fabric, Mirafi 140N	245	SY	\$ 1.00	\$245.00	245.000	\$245.00	0.000	\$0.00	245.000	\$245.00	\$ -
209A	Muck Excavation: Excavation & Export of muck & replace with Class 2 road base	123	TON	\$ 56.00	\$6,888.00	123.000	\$6,888.00	0.000	\$0.00	123.000	\$6,888.00	\$ -
300 East Third Street												
301	Remove/export existing asphalt & concrete, saw cut all exterior edges	3,098	SY	\$ 7.00	\$21,686.00	3409.000	\$23,863.00	14.800	\$103.60	3423.800	\$23,966.60	\$ (2,280.60)
302	Remove/export existing subgrade	933	CY	\$ 16.50	\$15,394.50	1062.000	\$17,523.00	0.000	\$0.00	1062.000	\$17,523.00	\$ (2,128.50)
303	Asphalt: 6" thickness (7,620-sq.ft.), includes East Ave intersection	0	TON	\$ 119.00	\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ -
CMO 4	Asphalt: 6" thickness	186	TON	\$ 220.00	\$40,920.00	186.000	\$40,920.00	0.000	\$0.00	186.000	\$40,920.00	\$ -
CMO - PCCP	7" PCCP (CMO)	823	SY	\$ 86.00	\$70,778.00	846.000	\$72,756.00	0.000	\$0.00	846.000	\$72,756.00	\$ (1,978.00)
304	Road Base beneath Asphalt: 12" CDOT Class 6 (5,886-sq. ft)	458	TON	\$ 41.00	\$18,778.00	548.000	\$22,468.00	0.000	\$0.00	548.000	\$22,468.00	\$ (3,690.00)
305	Concrete Parking Area: 7" thick Class D, #5 rebar @ 12" o.c.	8,077	SF	\$ 9.25	\$74,712.25	8577.000	\$79,337.25	0.000	\$0.00	8577.000	\$79,337.25	\$ (4,625.00)
306	Concrete Sidewalk: 4" thick Class D with Fibermesh & wire panels	8,935	SF	\$ 5.50	\$49,142.50	9391.000	\$51,650.50	0.000	\$0.00	9391.000	\$51,650.50	\$ (2,508.00)

307	Concrete Sidewalk: 4" thick Class D, Stamped & Colored, with Fibermesh & wire panels	120	SF	\$ 15.10
308	6" curb around landscape islands, poured monolithically with sidewalk	135	LF	\$ 28.00
309	Concrete Roadway: Stamped & Colored Crosswalks: 9" thick Class D, #5 rebar @ 9" o.c. (plus 3 sample sections, 4' x 4', of varying color/pattern for review & approval prior to construction)	476	SF	\$ 23.00
310	Concrete Surface Coating at Flexible Parking Spaces, BASF MasterSeal	1,488	SF	\$ 1.25
311	Road Base beneath Concrete: 6" Class 6 (14,098-sq. ft.)	548	TON	\$ 40.00
312	Soil Separator Fabric, Mirafi 140N	1,394	SY	\$ 1.00
313	Concrete Curb & Gutter (6" curb & 18" Gutter)	305	LF	\$ 35.00
314	Concrete pedestrian ramps with cast iron landing mat	8	EA	\$ 350.00
315	Trench Drain: Zurn 886 with Concrete encasement, including connection to storm inlets	490	LF	\$ 157.00
315M	Trench Drain: Zurn 886 with Concrete encasement, including connection to storm inlets	0	LF	\$ 157.00
316	Relocate Banner Pole	2	EA	\$ 5,000.00
317	Awning Support Posts: Provide temporary support and new concrete base support, remount to sidewalk	2	EA	\$ 2,000.00
318	New raised concrete sidewalks at building entrances, fill with geofoam	6	EA	\$ 500.00
319	Bollards (Plus 3 different mock up versions prior to construction)	23	EA	\$ 940.00
321	Additional Bollard Inserts (removable locations)	5	EA	\$ 940.00
322	Tree Grate, Neenah R-8721-A, with granite mulch & 24" "Deeproot" barrier	2	EA	\$ 1,250.00
323A	Remove Tree & Roots greater than 1" diameter	14	EA	\$ 750.00
400 West Third Street & West Ave				
401	Remove/Export Existing asphalt & concrete, saw cut all project edges	3,491	SY	\$ 7.00
402	Remove/Export Existing Subgrade	827	CY	\$ 19.00
403	Asphalt: 6" thickness (9058-sq.ft.)	0	TON	\$ 114.00
CMO 4	Asphalt: 6" thickness (9058-sq.ft.)	113	TON	\$ 220.00
CMO - PCCP	7" PCCP (CMO)	672	SY	\$ 86.00
404	Road Base beneath Asphalt: 12" CDOT Class 6 (8728-sq. ft)	679	TON	\$ 40.00
405	Concrete Parking Area & Driveways: 7" thick Class D, #5 rebar @ 12" o.c.	8,502	SF	\$ 9.25
406	Concrete Sidewalk: 4" thick Class D with Fibermesh & wire panels	7,871	SF	\$ 5.50
407	6" curb around landscape islands, poured monolithically with sidewalk	351	LF	\$ 28.00
408	Concrete Roadway: Fillets 9" thick Class D, #5 rebar@ 9" o.c.	238	SF	\$ 14.00
409	Concrete Roadway: Stamped & Colored Crosswalks: 9" thick Class D, #5 rebar @ 9" o.c.	328	SF	\$ 22.00
410	Road Base beneath Concrete: 6" Class 6 (17,140-sq. ft.)	667	TON	\$ 45.00
411	Soil Separator Fabric, Mirafi 140N	2,019	SY	\$ 1.00
412	Concrete Curb & Gutter (6" curb & 18" Gutter)	434	LF	\$ 32.00

\$1,812.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ 1,812.00
\$3,780.00	141.000	\$3,948.00	0.000	\$0.00	141.000	\$3,948.00	\$ (168.00)
\$10,948.00	383.000	\$8,809.00	133.333	\$3,066.67	516.333	\$11,875.67	\$ (927.67)
\$1,860.00	0.000	\$0.00	1488.000	\$1,860.00	1488.000	\$1,860.00	\$ -
\$21,920.00	572.000	\$22,880.00	0.000	\$0.00	572.000	\$22,880.00	\$ (960.00)
\$1,394.00	1544.000	\$1,544.00	0.000	\$0.00	1544.000	\$1,544.00	\$ (150.00)
\$10,675.00	305.000	\$10,675.00	0.000	\$0.00	305.000	\$10,675.00	\$ -
\$2,800.00	10.000	\$3,500.00	0.000	\$0.00	10.000	\$3,500.00	\$ (700.00)
\$76,930.00	490.000	\$76,930.00	0.000	\$0.00	490.000	\$76,930.00	\$ -
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ -
\$10,000.00	2.000	\$10,000.00	0.000	\$0.00	2.000	\$10,000.00	\$ -
\$4,000.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ 4,000.00
\$3,000.00	6.000	\$3,000.00	0.000	\$0.00	6.000	\$3,000.00	\$ -
\$21,620.00	23.000	\$21,620.00	0.000	\$0.00	23.000	\$21,620.00	\$ -
\$4,700.00	5.000	\$4,700.00	1.000	\$940.00	0.000	\$0.00	\$ 4,700.00
\$2,500.00	2.000	\$2,500.00	0.000	\$0.00	2.000	\$2,500.00	\$ -
\$10,500.00	14.000	\$10,500.00	0.000	\$0.00	14.000	\$10,500.00	\$ -
\$24,437.00	3491.000	\$24,437.00	0.000	\$0.00	3491.000	\$24,437.00	\$ -
\$15,713.00	827.000	\$15,713.00	0.000	\$0.00	827.000	\$15,713.00	\$ -
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ -
\$24,921.60	113.280	\$24,921.60	0.000	\$0.00	113.280	\$24,921.60	\$ -
\$57,792.00	672.000	\$57,792.00	0.000	\$0.00	672.000	\$57,792.00	\$ -
\$27,160.00	683.000	\$27,320.00	0.000	\$0.00	683.000	\$27,320.00	\$ (160.00)
\$78,643.50	8554.000	\$79,124.50	0.000	\$0.00	8554.000	\$79,124.50	\$ (481.00)
\$43,290.50	7871.000	\$43,290.50	0.000	\$0.00	7871.000	\$43,290.50	\$ -
\$9,828.00	351.000	\$9,828.00	0.000	\$0.00	351.000	\$9,828.00	\$ -
\$3,332.00	238.000	\$3,332.00	0.000	\$0.00	238.000	\$3,332.00	\$ -
\$7,216.00	328.000	\$7,216.00	0.000	\$0.00	328.000	\$7,216.00	\$ -
\$30,015.00	679.000	\$30,555.00	0.000	\$0.00	679.000	\$30,555.00	\$ (540.00)
\$2,019.00	2139.000	\$2,139.00	0.000	\$0.00	2139.000	\$2,139.00	\$ (120.00)
\$13,888.00	434.000	\$13,888.00	0.000	\$0.00	434.000	\$13,888.00	\$ -

413	Concrete pedestrian ramps with cast iron landing mat	6	EA	\$ 350.00
414	Raised Concrete Patio: 6" thick CDOT Class D, #4 rebar @ 12" o.c. each way	1,033	SF	\$ 8.00
415	Geofoam beneath rasied patio, EPS 29 & geofoam at old coal chute by Locksmith (1.5-CY), provide waterproofing on foundation walls	43.5	CY	\$ 110.00
416	Concrete Stairway with reinforcement for McLearn raised patio	2	EA	\$ 850.00
416A	Handrail - Stairs	4	EA	\$ 2,650.00
416B	Handrail - Ramp	2	EA	\$ 4,250.00
417	Concrete Wall on West Avenue	42	LF	\$ 150.00
418	Relocate Banner Pole	2	EA	\$ 5,000.00
419	Bollards	26	EA	\$ 940.00
421	Adjust support posts: 112 West 3rd St. - Provide temporary support & mount to raised concrete patio	2	EA	\$ 2,500.00
422A	Remove Tree & Roots greater than 1" diameter	6	EA	\$ 750.00
500 Water				
501	12" PVC C900, 305-psi (DR-14) Water Main	730	LF	\$ 119.00
502	Repair Couplings at each intersection connection	10	EA	\$ 882.00
503	12" Gate Valves	4	EA	\$ 3,491.00
503a	8" X 12" Reducer	1	EA	\$ 3,915.00
503b	12" 22 Degree	1	EA	\$ 5,450.00
503c	10" Cap	1	EA	\$ 1,520.00
504	12" Tee	1	EA	\$ 2,655.00
505	12" x 10" Tee	1	EA	\$ 1,730.00
506	12" x 8" Tee	1	EA	\$ 2,925.00
507	12" 45-deg Elbows, includes flowfill at vertical adjustment	4	EA	\$ 4,860.00
508	12" Joint Restraint Harness, EBAA Iron Series 1912	2	EA	\$ 908.00
509	12" x 10" Reducer & 10" 90-deg elbow	1	EA	\$ 2,580.00
510	Blue board insulation (double layered) @ storm drain crossings	4	EA	\$ 100.00
511	Raise Fire Hydrant	4	EA	\$ 2,200.00
512	4" Service Lines: 12"x 4" Tee, 4" gate valve, 40-l.f. of C900 pipe (DR-14, Class 305-psi), restrained joints & cap, extend through building foundation, service saddle tap & connection by plumber inside building.	16	EA	\$ 5,180.00
513	2" Service lines: 12" x 2" Tee, 2" corp stop valve, 40-l.f. of 2" Pure-Core SIDR-7 pipe, extend through building foundation, plumbing connection to existing service	16	EA	\$ 2,730.00
513a	Connection from service to existing meter (per HR)	128	HR	\$ 50.00
513b	Allowance: Connection from service to existing meter	1	llowance	\$ 30,000.00
515	Abandon old water main in place: Cap ends & remove valve risers	1	LS	\$ 200.00
516	Adjust Rim elevations on existing valves	18	EA	\$ 150.00
517	8" PVC C900, Class 305-psi (DR-14) Water Main	362	LF	\$ 68.00
518	8" Gate Valve	2	EA	\$ 4,547.00
519	8" 90-deg elbow	1	EA	\$ 952.00
519a	8" Blind Flange	1	EA	\$ 1,870.00
519b	8" Caps	2	EA	\$ 3,830.00

\$2,100.00	6.000	\$2,100.00	0.000	\$0.00	6.000	\$2,100.00	\$ -
\$8,264.00	1033.000	\$8,264.00	0.000	\$0.00	1033.000	\$8,264.00	\$ -
\$4,785.00	44.167	\$4,858.37	0.000	\$0.00	44.167	\$4,858.37	\$ (73.37)
\$1,700.00	2.000	\$1,700.00	0.000	\$0.00	2.000	\$1,700.00	\$ -
\$10,600.00	4.000	\$10,600.00	0.000	\$0.00	4.000	\$10,600.00	\$ -
\$8,500.00	2.000	\$8,500.00	0.000	\$0.00	2.000	\$8,500.00	\$ -
\$6,300.00	47.000	\$7,050.00	0.000	\$0.00	47.000	\$7,050.00	\$ (750.00)
\$10,000.00	2.000	\$10,000.00	0.000	\$0.00	2.000	\$10,000.00	\$ -
\$24,440.00	26.000	\$24,440.00	0.000	\$0.00	26.000	\$24,440.00	\$ -
\$5,000.00	4.000	\$10,000.00	0.000	\$0.00	4.000	\$10,000.00	\$ (5,000.00)
\$4,500.00	6.000	\$4,500.00	0.000	\$0.00	6.000	\$4,500.00	\$ -
\$86,870.00	727.000	\$86,513.00	0.000	\$0.00	727.000	\$86,513.00	\$ 357.00
\$8,820.00	10.000	\$8,820.00	0.000	\$0.00	10.000	\$8,820.00	\$ -
\$13,964.00	4.000	\$13,964.00	0.000	\$0.00	4.000	\$13,964.00	\$ -
\$3,915.00	1.000	\$3,915.00	0.000	\$0.00	1.000	\$3,915.00	\$ -
\$5,450.00	1.000	\$5,450.00	0.000	\$0.00	1.000	\$5,450.00	\$ -
\$1,520.00	1.000	\$1,520.00	0.000	\$0.00	1.000	\$1,520.00	\$ -
\$2,655.00	2.000	\$5,310.00	0.000	\$0.00	2.000	\$5,310.00	\$ (2,655.00)
\$1,730.00	1.000	\$1,730.00	0.000	\$0.00	1.000	\$1,730.00	\$ -
\$2,925.00	2.000	\$5,850.00	0.000	\$0.00	2.000	\$5,850.00	\$ (2,925.00)
\$19,440.00	3.000	\$14,580.00	0.000	\$0.00	3.000	\$14,580.00	\$ 4,860.00
\$1,816.00	7.000	\$6,356.00	0.000	\$0.00	7.000	\$6,356.00	\$ (4,540.00)
\$2,580.00	2.000	\$5,160.00	0.000	\$0.00	2.000	\$5,160.00	\$ (2,580.00)
\$400.00	9.000	\$900.00	0.000	\$0.00	9.000	\$900.00	\$ (500.00)
\$8,800.00	2.000	\$4,400.00	0.000	\$0.00	2.000	\$4,400.00	\$ 4,400.00
\$82,880.00	15.000	\$77,700.00	0.000	\$0.00	15.000	\$77,700.00	\$ 5,180.00
\$43,680.00	12.000	\$32,760.00	0.000	\$0.00	12.000	\$32,760.00	\$ 10,920.00
\$6,400.00	163.000	\$8,150.00	0.000	\$0.00	163.000	\$8,150.00	\$ (1,750.00)
\$30,000.00	1.450	\$43,500.00	0.000	\$0.00	1.450	\$43,500.00	\$ (13,500.00)
\$200.00	3.000	\$600.00	0.000	\$0.00	3.000	\$600.00	\$ (400.00)
\$2,700.00	30.000	\$4,500.00	0.000	\$0.00	30.000	\$4,500.00	\$ (1,800.00)
\$24,616.00	372.000	\$25,296.00	0.000	\$0.00	372.000	\$25,296.00	\$ (680.00)
\$9,094.00	2.000	\$9,094.00	0.000	\$0.00	2.000	\$9,094.00	\$ -
\$952.00	2.000	\$1,904.00	0.000	\$0.00	2.000	\$1,904.00	\$ (952.00)
\$1,870.00	1.000	\$1,870.00	0.000	\$0.00	1.000	\$1,870.00	\$ -
\$7,660.00	2.000	\$7,660.00	0.000	\$0.00	2.000	\$7,660.00	\$ -

519c	8" Joint Restraint	3	EA	\$ 4,420.00
519d	12" Repair Coupler	2	EA	\$ 1,500.00
520	8" x 6" Tee	1	EA	\$ 1,740.00
521	4" Service Lines: 8"x 4" Tee OR Saddle, 4" gate valve, 30-l.f. of C900 pipe (DR-14, Class 305-psi), restrained joints & cap, extend through building foundation, service saddle tap & connection by plumber inside building	5	EA	\$ 3,577.00
522	2" Service lines: 8" x 2" Tee OR Saddle, 2" corp stop valve, 40-l.f. of 2" Pure-Core SIDR-7 pipe, extend through building foundation, plumbing connection to existing service	3	EA	\$ 4,130.00
523	Raise exterior hose connection in exterior wall at Brickhouse, install frost free hose bib	1	EA	\$ 1,400.00
600 Storm Drain				
601	Inlet, Type 1 (single grate)	12	EA	\$ 4,149.00
602	Inlet, Type 1 (single grate, V-pan)	4	EA	\$ 4,347.00
603	Reset existing Inlet, Type 1	1	EA	\$ 2,267.00
604	Install riser and solid cover on existing inlet, Type 1	1	EA	\$ 1,229.00
605	Storm Manhole, grade rings or custom lid grouting	5	EA	\$ 3,552.00
606	Storm Manhole, Insert new MH in ex 30" RCP pipe run	1	EA	\$ 11,622.00
607	New Connection to existing manhole	1	EA	\$ 1,954.00
608	Pipe: 24" RCP (Reinforced Concrete Pipe)	362	LF	\$ 98.00
609	Pipe: 18" RCP	205	LF	\$ 89.00
610	Pipe: 12" RCP	274	LF	\$ 83.00
600M	RCP Material on Hand (601/602/606/608/609/610)	0	Inv	\$ 31,102.55
611	Abandon existing 24" RCP: Fill with sand and grout seal both ends, or remove/export & backfill trench	293	LF	\$ 45.00
612	Remove/export 12" RCP Pipe & backfill trench	210	LF	\$ 45.00
613	Remove/export existing Inlet boxes (8)/manholes (1), remove 150-l.f. of slot drain on East 3rd St	1	LS	\$ 12,100.00
613a	Alpine Bank Drain Extension and Moving Inlets	1	LS	\$ 5,500.00
700 Railroad Avenue between 3rd & 4th Street				
701	Remove/export existing asphalt (assume 6" concrete slab beneath asphalt), saw cut all project edges	1,305	SY	\$ 7.00
702	Remove/export existing concrete sidewalk, curb & gutter	639	SY	\$ 24.00
703	Remove/Export Existing Subgrade	1,237	CY	\$ 16.00
704	Asphalt, 6" depth (11,315 sq. ft.)	0	TON	\$ 109.00
CMO 4	Asphalt: 6" thickness	112	TON	\$ 220.00
CMO - PCCP	7" PCCP (CMO)	1,269	SY	\$ 86.00
705	Road Base: 12" CDOT Class 6 (11,315-sq. ft)	880	TON	\$ 40.00
706	Sub Base: 24" CDOT Class 2 (11,315-sq. ft)	1,760	TON	\$ 40.00
707	Soil Separator Fabric	1,257	SY	\$ 1.00
708	Muck Excavation: Excavation & Export of muck & replace with Class 2 road base	100	TON	\$ 56.00
709	Concrete, 6" vertical curb & 18" gutter (measured at flowline)	542	LF	\$ 35.00
710	Concrete Sidewalk: 4" thick Class D with Fibermesh & wire panels	3,529	SF	\$ 5.50
711	Concrete Driveways: 7" thick Class D, #5 rebar @ 12" o.c.	1,143	SF	\$ 9.50

\$13,260.00	3.000	\$13,260.00	0.000	\$0.00	3.000	\$13,260.00	\$	-
\$3,000.00	2.000	\$3,000.00	0.000	\$0.00	2.000	\$3,000.00	\$	-
\$1,740.00	1.000	\$1,740.00	0.000	\$0.00	1.000	\$1,740.00	\$	-
\$17,885.00	5.000	\$17,885.00	0.000	\$0.00	5.000	\$17,885.00	\$	-
\$12,390.00	3.000	\$12,390.00	0.000	\$0.00	3.000	\$12,390.00	\$	-
\$1,400.00	1.000	\$1,400.00	0.000	\$0.00	1.000	\$1,400.00	\$	-
\$49,788.00	12.000	\$49,788.00	0.000	\$0.00	12.000	\$49,788.00	\$	-
\$17,388.00	4.000	\$17,388.00	0.000	\$0.00	4.000	\$17,388.00	\$	-
\$2,267.00	1.000	\$2,267.00	0.000	\$0.00	1.000	\$2,267.00	\$	-
\$1,229.00	1.000	\$1,229.00	0.000	\$0.00	1.000	\$1,229.00	\$	-
\$17,760.00	5.000	\$17,760.00	0.000	\$0.00	5.000	\$17,760.00	\$	-
\$11,622.00	1.000	\$11,622.00	0.000	\$0.00	1.000	\$11,622.00	\$	-
\$1,954.00	7.000	\$13,678.00	0.000	\$0.00	7.000	\$13,678.00	\$	(11,724.00)
\$35,476.00	370.000	\$36,260.00	0.000	\$0.00	370.000	\$36,260.00	\$	(784.00)
\$18,245.00	205.000	\$18,245.00	0.000	\$0.00	205.000	\$18,245.00	\$	-
\$22,742.00	274.000	\$22,742.00	0.000	\$0.00	274.000	\$22,742.00	\$	-
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	-
\$13,185.00	293.000	\$13,185.00	0.000	\$0.00	293.000	\$13,185.00	\$	-
\$9,450.00	270.000	\$12,150.00	0.000	\$0.00	270.000	\$12,150.00	\$	(2,700.00)
\$12,100.00	1.100	\$13,310.00	0.000	\$0.00	1.100	\$13,310.00	\$	(1,210.00)
\$5,500.00	1.000	\$5,500.00	0.000	\$0.00	1.000	\$5,500.00	\$	-
\$9,135.00	1314.000	\$9,198.00	0.000	\$0.00	1314.000	\$9,198.00	\$	(63.00)
\$15,336.00	641.000	\$15,384.00	0.000	\$0.00	641.000	\$15,384.00	\$	(48.00)
\$19,792.00	1252.000	\$20,032.00	0.000	\$0.00	1252.000	\$20,032.00	\$	(240.00)
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	-
\$24,640.00	112.000	\$24,640.00	0.000	\$0.00	112.000	\$24,640.00	\$	-
\$109,134.00	1269.000	\$109,134.00	0.000	\$0.00	1269.000	\$109,134.00	\$	-
\$35,200.00	880.000	\$35,200.00	0.000	\$0.00	880.000	\$35,200.00	\$	-
\$70,400.00	1796.000	\$71,840.00	0.000	\$0.00	1796.000	\$71,840.00	\$	(1,440.00)
\$1,257.00	1457.000	\$1,457.00	0.000	\$0.00	1457.000	\$1,457.00	\$	(200.00)
\$5,600.00	128.000	\$7,168.00	0.000	\$0.00	128.000	\$7,168.00	\$	(1,568.00)
\$18,970.00	542.000	\$18,970.00	0.000	\$0.00	542.000	\$18,970.00	\$	-
\$19,409.50	4433.000	\$24,381.50	0.000	\$0.00	4433.000	\$24,381.50	\$	(4,972.00)
\$10,858.50	1148.000	\$10,906.00	0.000	\$0.00	1148.000	\$10,906.00	\$	(47.50)

712	6" curb around landscape islands, poured monolithically with sidewalk	137	LF	\$28.00
713	Road Base beneath Concrete: 6" Class 6 (4,672-sq. ft.)	182	TON	\$46.00
714	Drain Columns	400	LF	\$4.00
715	Awning Support Posts: Provide temporary support and new concrete base support, remount to sidewalk, includes posts on 3rd Street	14	EA	\$1,000.00
716	Fill old coal chute with flow fill, provide forming against building foundation (beneath sidewalk Brickhouse Bldg), provide waterproofing on foundation wall	1.5	CY	\$500.00
717	Adjust Sewer Manhole lid elevation, provide grade ring or custom grouting	1	EA	\$800.00
718	Sidewalk Zurn Drain - Railroad Avenue South of 3rd St.	1	EA	\$4,300.00
800 Railroad Avenue & 4th Street Intersection				
801	Remove/export existing concrete sidewalk & asphalt, saw cut all project edges	5,125	SY	\$7.00
801a	Slab Concrete Removal	880	SY	\$14.00
802	Export existing soils for road section	2,307	CY	\$19.00
803	Muck Excavation: Excavation & Export of muck & replace with Class 2 road base	300	TON	\$56.00
804	Asphalt, 6" depth (23,129 sq. ft.)	0	TON	\$108.00
CMO 4	Asphalt: 6" thickness (2nd Street)	113	TON	\$220.00
CMO - PCCP	8.5" PCCP (CMO)	1,112	SY	\$86.00
PCCPa	Mill Tie Ins	1	LS	\$7,500.00
805	Road Base for asphalt: 12" CDOT Class 6 (23,129-sq. ft)	1,799	TON	\$40.00
806	Soil Separator Fabric	2,570	SY	\$1.00
806a	Soil Separator Fabric - RS 580	1,750	SY	\$12.00
807	Concrete, 6" vertical curb & 18" gutter (measured at flowline)	1,406	LF	\$35.00
808	Concrete Sidewalk: 4" thick Class D with Fibermesh & wire panels	9,811	SF	\$5.50
809	6" curb around landscape islands, poured monolithically with sidewalk	664	LF	\$28.00
810	Concrete Driveways: 7" thick Class D, #5 rebar @ 12" o.c.	836	SF	\$9.10
811	Concrete Pan & Fillet: 7" thick Class D, #5 rebar @ 12" o.c.	123	SF	\$9.50
812	Concrete Roadway Intersections: 9" thick Class D, rebar at joints per CDOT	3,540	SF	\$11.00
813	Concrete Roadway: Stamped & Colored Crosswalks: 9" thick Class D, #5 rebar @ 9" o.c.	4,006	SF	\$22.00
814	Concrete pedestrian ramps with cast iron landing mat	6	EA	\$350.00
815	Road Base for Concrete: 6" thick Class 6	792	TON	\$46.00
816	Adjust Sewer Manhole lid elevation, provide grade ring or custom grouting	2	EA	\$1,800.00
900 TRAFFIC SIGNALS, SIGNAGE, & STRIPING				
901	REMOVAL OF LUMINAIRE	2	EACH	\$100.00
902	REMOVAL OF SIGN PANEL	13	EACH	\$100.00
904	REMOVAL OF PULLBOX	8	EACH	\$200.00
905	REMOVAL OF TRAFFIC SIGNAL HEAD	12	EACH	\$150.00
906	REMOVE TRAFFIC SIGNAL POLE	4	EACH	\$600.00

\$3,836.00	137.000	\$3,836.00	0.000	\$0.00	137.000	\$3,836.00	\$	-
\$8,372.00	364.000	\$16,744.00	0.000	\$0.00	364.000	\$16,744.00	\$	(8,372.00)
\$1,600.00	400.000	\$1,600.00	0.000	\$0.00	400.000	\$1,600.00	\$	-
\$14,000.00	9.000	\$9,000.00	0.000	\$0.00	9.000	\$9,000.00	\$	5,000.00
\$750.00	1.500	\$750.00	0.000	\$0.00	1.500	\$750.00	\$	-
\$800.00	2.000	\$1,600.00	0.000	\$0.00	2.000	\$1,600.00	\$	(800.00)
\$4,300.00	0.523	\$2,248.90	0.477	\$2,051.10	1.000	\$4,300.00	\$	-
\$35,875.00	5290.000	\$37,030.00	0.000	\$0.00	5290.000	\$37,030.00	\$	(1,155.00)
\$12,320.00	880.000	\$12,320.00	0.000	\$0.00	880.000	\$12,320.00	\$	-
\$43,833.00	2437.000	\$46,303.00	0.000	\$0.00	2437.000	\$46,303.00	\$	(2,470.00)
\$16,800.00	654.000	\$36,624.00	0.000	\$0.00	654.000	\$36,624.00	\$	(19,824.00)
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	-
\$24,921.60	62.500	\$13,750.00	0.000	\$0.00	62.500	\$13,750.00	\$	11,171.60
\$95,632.00	2345.000	\$201,670.00	0.000	\$0.00	2345.000	\$201,670.00	\$	(106,038.00)
\$7,500.00	1.000	\$7,500.00	0.000	\$0.00	1.000	\$7,500.00	\$	-
\$71,960.00	1818.000	\$72,720.00	0.000	\$0.00	1818.000	\$72,720.00	\$	(760.00)
\$2,570.00	2226.000	\$2,226.00	0.000	\$0.00	2226.000	\$2,226.00	\$	344.00
\$21,000.00	1855.000	\$22,260.00	0.000	\$0.00	1855.000	\$22,260.00	\$	(1,260.00)
\$49,210.00	1480.000	\$51,800.00	0.000	\$0.00	1480.000	\$51,800.00	\$	(2,590.00)
\$53,960.50	10094.000	\$55,517.00	0.000	\$0.00	10094.000	\$55,517.00	\$	(1,556.50)
\$18,592.00	664.000	\$18,592.00	0.000	\$0.00	664.000	\$18,592.00	\$	-
\$7,607.60	836.000	\$7,607.60	0.000	\$0.00	836.000	\$7,607.60	\$	-
\$1,168.50	123.000	\$1,168.50	0.000	\$0.00	123.000	\$1,168.50	\$	-
\$38,940.00	3540.000	\$38,940.00	0.000	\$0.00	3540.000	\$38,940.00	\$	-
\$88,132.00	4006.000	\$88,132.00	0.000	\$0.00	4006.000	\$88,132.00	\$	-
\$2,100.00	6.000	\$2,100.00	0.000	\$0.00	6.000	\$2,100.00	\$	-
\$36,432.00	792.000	\$36,432.00	0.000	\$0.00	792.000	\$36,432.00	\$	-
\$3,600.00	2.000	\$3,600.00	0.000	\$0.00	2.000	\$3,600.00	\$	-
\$200.00	2.000	\$200.00	0.000	\$0.00	2.000	\$200.00	\$	-
\$1,300.00	12.000	\$1,200.00	0.000	\$0.00	12.000	\$1,200.00	\$	100.00
\$1,600.00	4.000	\$800.00	0.000	\$0.00	4.000	\$800.00	\$	800.00
\$1,800.00	12.000	\$1,800.00	0.000	\$0.00	12.000	\$1,800.00	\$	-
\$2,400.00	4.000	\$2,400.00	0.000	\$0.00	4.000	\$2,400.00	\$	-

907	REMOVE TRAFFIC SIGNAL MAST ARM	4	EACH	\$300.00
908	REMOVAL OF VIDEO DETECTION SYSTEM (CAMERA)	4	EACH	\$200.00
909	RESET SIGN PANEL	26	EACH	\$ 300.00
910	FURNISH AND INSTALL NEW TRAFFIC SIGNAL CONTROLLER AND CABINET	2	EACH	\$32,000.00
911	3 INCH ELECTRICAL CONDUIT (PLASTIC) (TRAFFIC)	1065	LF	\$40.00
911	2 INCH ELECTRICAL CONDUIT (PLASTIC) (TRAFFIC and LUMINAIRE)	320	LF	\$30.00
912	PULL BOX (TYPE 4)	2	EACH	\$2,100.00
913	PULL BOX (TYPE 5)	2	EACH	\$2,800.00
914	WIRING (TRAFFIC)	1	L S	\$20,000.00
915	WIRING (LIGHTING)	1	L S	\$4,000.00
916	LUMINAIRE (LED)	2	EACH	\$700.00
917	SIGN PANEL (CLASS I)	76	SF	\$ 20.00
918	SIGN PANEL (CLASS II)	180	SF	\$ 30.00
919	STEEL SIGN SUPPORT (2-INCH ROUND)(POST AND SOCKET)	2	EACH	\$ 300.00
920	PEDESTRIAN FACE SIGNAL (16) (COUNTDOWN)	8	EACH	\$1,600.00
920M	PEDESTRIAN FACE SIGNAL (16) (COUNTDOWN)	0	EACH	\$860.00
921	TRAFFIC SIGNAL FACE (12-12-12)	8	EACH	\$1,400.00
921M	TRAFFIC SIGNAL FACE (12-12-12)	0	EACH	\$358.00
922	TRAFFIC SIGNAL FACE (12-12-12-12-12)	4	EACH	\$2,000.00
922M	TRAFFIC SIGNAL FACE (12-12-12-12-12)	0	EACH	\$603.50
923	PEDESTRIAN PUSH BUTTON	8	EACH	\$600.00
924	3RD STREET: INTERSECTION DETECTION SYSTEM (CAMERA, ECONOLITE AUTOSCOPE)	4	EACH	\$7,500.00
924M	3RD STREET: INTERSECTION DETECTION SYSTEM (CAMERA, ECONOLITE AUTOSCOPE)	0	Inv	\$ 5,043.00
925	5TH STREET: INTERSECTION DETECTION SYSTEM (REPLACE CONTROLLER, CAMERAS, & WIRE)	4	EACH	\$0.25
926	RECTANGULAR RAPID FLASHING BEACON	2	EACH	\$0.50
927	TRAFFIC SIGNAL LIGHT POLE STEEL (2-40 FOOT MAST ARM)	2	EACH	\$44,000.00
928	TRAFFIC SIGNAL PEDESTAL POLE STEEL	2	EACH	\$4,600.00
929	MODIFIED EPOXY PAVEMENT MARKING	16	GAL	\$ 250.00
929a	PAVEMENT MARKING PAINT (PARKING)	9	GAL	\$ 130.00
930	PREFORMED PLASTIC PAVEMENT MARKING (60 MIL) (WORD- SYMBOL)	218	SF	\$ 23.00
931	PREFORMED PLASTIC PAVEMENT MARKING (60 MIL) (XWALK-STOP LINE)	268	SF	\$ 21.00
932	PREFORMED PLASTIC PAVEMENT MARKING (60 MIL) (ADA SYMBOL)	4	SF	\$ 475.00
933	Relocate Existing Pedestrian Push Button RRFB at 4th Street and Railroad	2	EACH	\$ 4,500.00
CMO - TS&L	Meter Pedestal and Wiring	1	EACH	\$ 8,426.25
1000 LIGHTING & ELECTRICAL				
1001	Panel: PP1 - 200A MCB 120/240 1Ø 40CCT	1	EA	\$ 2,032.00
1002	SubPanel: PP2- 60 Amp Subpanel	2	EA	\$ 1,017.00
1003	Splice Vault: Traffic rated electrical pull box	4	EA	\$ 857.00
1004	GFCI REC: Planter Outlets	10	EA	\$ 278.00
1005	Dedicated Vendor Outlets	13	EA	\$ 285.00
1006	Globe Style Acorn Light: 12' Street Light	19	EA	\$ 4,200.00

\$1,200.00	4.000	\$1,200.00	0.000	\$0.00	4.000	\$1,200.00	\$	-
\$800.00	8.000	\$1,600.00	0.000	\$0.00	8.000	\$1,600.00	\$	(800.00)
\$7,800.00	46.000	\$13,800.00	0.000	\$0.00	46.000	\$13,800.00	\$	(6,000.00)
\$64,000.00	2.000	\$64,000.00	0.000	\$0.00	2.000	\$64,000.00	\$	-
\$42,600.00	1164.000	\$46,560.00	0.000	\$0.00	1164.000	\$46,560.00	\$	(3,960.00)
\$9,600.00	253.000	\$7,590.00	0.000	\$0.00	253.000	\$7,590.00	\$	2,010.00
\$4,200.00	2.000	\$4,200.00	0.000	\$0.00	2.000	\$4,200.00	\$	-
\$5,600.00	2.000	\$5,600.00	0.000	\$0.00	2.000	\$5,600.00	\$	-
\$20,000.00	1.000	\$20,000.00	0.000	\$0.00	1.000	\$20,000.00	\$	-
\$4,000.00	1.000	\$4,000.00	0.000	\$0.00	1.000	\$4,000.00	\$	-
\$1,400.00	2.000	\$1,400.00	0.000	\$0.00	2.000	\$1,400.00	\$	-
\$1,520.00	66.500	\$1,330.00	3.000	\$60.00	69.500	\$1,390.00	\$	130.00
\$5,400.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	5,400.00
\$600.00	26.000	\$7,800.00	1.000	\$300.00	27.000	\$8,100.00	\$	(7,500.00)
\$12,800.00	8.000	\$12,800.00	0.000	\$0.00	8.000	\$12,800.00	\$	-
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	-
\$11,200.00	8.000	\$11,200.00	0.000	\$0.00	8.000	\$11,200.00	\$	-
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	-
\$8,000.00	4.000	\$8,000.00	0.000	\$0.00	4.000	\$8,000.00	\$	-
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	-
\$4,800.00	8.000	\$4,800.00	0.000	\$0.00	8.000	\$4,800.00	\$	-
\$30,000.00	8.000	\$60,000.00	0.000	\$0.00	8.000	\$60,000.00	\$	(30,000.00)
\$0.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	-
\$1.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	1.00
\$1.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	1.00
\$88,000.00	2.000	\$88,000.00	0.000	\$0.00	2.000	\$88,000.00	\$	-
\$9,200.00	2.000	\$9,200.00	0.000	\$0.00	2.000	\$9,200.00	\$	-
\$4,000.00	7.700	\$1,925.00	0.000	\$0.00	7.700	\$1,925.00	\$	2,075.00
\$1,170.00	8.400	\$1,092.00	1.800	\$234.00	10.200	\$1,326.00	\$	(156.00)
\$5,014.00	95.000	\$2,185.00	124.000	\$2,852.00	219.000	\$5,037.00	\$	(23.00)
\$5,628.00	334.500	\$7,024.50	236.000	\$4,956.00	444.000	\$9,324.00	\$	(3,696.00)
\$1,900.00	4.000	\$1,900.00	0.000	\$0.00	4.000	\$1,900.00	\$	-
\$9,000.00	2.000	\$9,000.00	0.000	\$0.00	2.000	\$9,000.00	\$	-
\$8,426.25	1.000	\$8,426.25	0.000	\$0.00	1.000	\$8,426.25	\$	-
\$2,032.00	1.000	\$2,032.00	0.000	\$0.00	1.000	\$2,032.00	\$	-
\$2,034.00	2.000	\$2,034.00	0.000	\$0.00	2.000	\$2,034.00	\$	-
\$3,428.00	6.000	\$5,142.00	0.000	\$0.00	6.000	\$5,142.00	\$	(1,714.00)
\$2,780.00	10.000	\$2,780.00	0.000	\$0.00	10.000	\$2,780.00	\$	-
\$3,705.00	13.000	\$3,705.00	0.000	\$0.00	13.000	\$3,705.00	\$	-
\$79,800.00	19.000	\$79,800.00	0.000	\$0.00	19.000	\$79,800.00	\$	-

1007	Relocate existing Globe Style Acorn Light including demo old foundation and install new	21	EA	\$ 1,200.00
1008	Relocate existing overhead lights @ 4th Street, Replace Fixtures with LED	2	EA	\$ 1,800.00
1009	25' Pole Light	1	EA	\$ 5,700.00
1010	Low Profile Wall Fixtures: Type HS	43	EA	\$ 467.00
1011	Main HS Lighting Controller: Luxor ZDC	1	EA	\$ 2,346.00
1012	Satellite HS Lighting Controller: Luxor LSAT	2	EA	\$ 1,896.00
1013	Set up: Programming Fixtures, Schema, Schedule	1	EA	\$ 1,312.00
1014	Trenching: 6" Wide by 24" deep	5,000	LF	\$ 1.00
1015	Conduit: 2" Schedule 80 PVC	300	LF	\$ 9.00
1016	Conduit: 1" Schedule 80 PVC	5,000	LF	\$ 2.10
1017	Wiring: (3#250(AL,XHHW))	300	LF	\$ 3.00
1018	Wiring: (2#6(CU,THWN)+1#10(CU,THWN)G)	500	LF	\$ 2.75
1019	Wiring: (2#8(CU,THWN)+1#8(CU,THWN)G)	2500	LF	\$ 2.50
1020	Wiring: (2#10(CU,THWN)+1#10(CU,THWN)G)	4000	LF	\$ 0.80
1021	Wiring: (2#12(CU,THWN)+1#12(CU,THWN)G)	1000	LF	\$ 0.70
1022	Wiring: CAT6 cabling	800	LF	\$ 6.75
CMO 1 - R&A	Meter Pedestal	1	EACH	\$ 14,572.94
CMO 2 - R&A	Meter Pedestal Wiring (.124)	1	EACH	\$ 7,495.95
CMO 3 - R&A	Up Lights	16	EACH	\$ 1,500.00
1100 IRRIGATION & LANDSCAPING				
1101	22" planter wall w/ footing	620	LF	\$ 102.00
1102	36" planter wall w/footing	66	LF	\$ 145.00
1103	stone wall finish	1,388	SF	\$ 11.00
1104	cast in place wall cap, colored	513	LF	\$ 135.00
1109	shade tree	26	EA	\$ 400.00
1109a	ornamental tree	5	EA	\$ 400.00
1110	shrub bed, planted, fabric & mulch	4,158	SF	\$ 5.00
1111	irrigation tap, backflow protection, locking enclosure	2	EA	\$ 2,000.00
1112	4" irrigation sleeving	3,470	LF	\$ 1.00
1113	control valve	3	EA	\$ 500.00
1114	drip piping	1,761	LF	\$ 1.00
1115	drip distribution/emitters	4,158	SF	\$ 1.00
1116	Replace sod strip along post office/City Hall & adjust sprinkler heads (if necessary)	250	SF	\$ 5.00
1200 MISC				
1201	Mobilization, Staging, Supervisor, & Project Management	1	LS	\$ 331,285.15
1202	Stormwater protection & maintenance: Straw Wattles around inlets & vehicle tracking pads	1	LS	\$ 25,000.00
1203	Traffic Control During Construction & Traffic Control Plan preparation	1	LS	\$ 25,000.00
1203a	Traffic Control Management Day	30	Day	\$ 730.00
1203b	Traffic Control Inspection Day	200	Day	\$ 250.00
1203c	Flagging Hour	160	Hour	\$ 32.00
1203d	MHT/TCP	1	LS	\$ 1,500.00
1203e	Construction Traffic Sign (Detour) Each	2	EA	\$ 50.00
1203h	Construction Traffic Sign (Road Work Ahead) Each	10	EA	\$ 10.00
1203i	Construction Traffic Sign (Sidewalk Closed) Each	6	EA	\$ 10.00
1203j	Construction Traffic Sign (Road Narrows) Each	4	EA	\$ 10.00

\$25,200.00	21.000	\$25,200.00	0.000	\$0.00	21.000	\$25,200.00	\$	-
\$3,600.00	2.000	\$3,600.00	0.000	\$0.00	2.000	\$3,600.00	\$	-
\$5,700.00	1.000	\$5,700.00	0.000	\$0.00	1.000	\$5,700.00	\$	-
\$20,081.00	43.000	\$20,081.00	0.000	\$0.00	43.000	\$20,081.00	\$	-
\$2,346.00	1.000	\$2,346.00	0.000	\$0.00	1.000	\$2,346.00	\$	-
\$3,792.00	2.000	\$3,792.00	0.000	\$0.00	2.000	\$3,792.00	\$	-
\$1,312.00	1.000	\$1,312.00	0.000	\$0.00	1.000	\$1,312.00	\$	-
\$5,000.00	5242.000	\$5,242.00	0.000	\$0.00	5242.000	\$5,242.00	\$	(242.00)
\$2,700.00	654.000	\$5,886.00	0.000	\$0.00	654.000	\$5,886.00	\$	(3,186.00)
\$10,500.00	7400.000	\$15,540.00	0.000	\$0.00	7400.000	\$15,540.00	\$	(5,040.00)
\$900.00	310.000	\$930.00	0.000	\$0.00	310.000	\$930.00	\$	(30.00)
\$1,375.00	493.000	\$1,355.75	0.000	\$0.00	493.000	\$1,355.75	\$	19.25
\$6,250.00	2576.000	\$6,440.00	0.000	\$0.00	2576.000	\$6,440.00	\$	(190.00)
\$3,200.00	4055.000	\$3,244.00	0.000	\$0.00	4055.000	\$3,244.00	\$	(44.00)
\$700.00	991.000	\$693.70	0.000	\$0.00	991.000	\$693.70	\$	6.30
\$5,400.00	804.000	\$5,427.00	0.000	\$0.00	804.000	\$5,427.00	\$	(27.00)
\$14,572.94	1.000	\$14,572.94	0.000	\$0.00	1.000	\$14,572.94	\$	-
\$7,495.95	1.000	\$7,495.95	0.000	\$0.00	1.000	\$7,495.95	\$	-
\$24,000.00	0.000	\$0.00	16.000	\$24,000.00	16.000	\$24,000.00	\$	-
\$63,240.00	231.000	\$23,562.00	0.000	\$0.00	231.000	\$23,562.00	\$	39,678.00
\$9,570.00	418.000	\$60,610.00	0.000	\$0.00	418.000	\$60,610.00	\$	(51,040.00)
\$15,268.00	1313.100	\$14,444.10	15.170	\$166.87	1328.270	\$14,610.97	\$	657.03
\$69,255.00	672.000	\$90,720.00	0.000	\$0.00	672.000	\$90,720.00	\$	(21,465.00)
\$10,400.00	23.000	\$9,200.00	3.000	\$1,200.00	25.000	\$10,000.00	\$	400.00
\$2,000.00	5.000	\$2,000.00	0.000	\$0.00	5.000	\$2,000.00	\$	-
\$20,790.00	3565.000	\$17,825.00	0.000	\$0.00	3565.000	\$17,825.00	\$	2,965.00
\$4,000.00	1.000	\$2,000.00	0.000	\$0.00	1.000	\$2,000.00	\$	2,000.00
\$3,470.00	3484.000	\$3,484.00	0.000	\$0.00	3484.000	\$3,484.00	\$	(14.00)
\$1,500.00	0.000	\$0.00	3.000	\$1,500.00	3.000	\$1,500.00	\$	-
\$1,761.00	2482.000	\$2,482.00	0.000	\$0.00	2482.000	\$2,482.00	\$	(721.00)
\$4,158.00	2253.000	\$2,253.00	0.000	\$0.00	2253.000	\$2,253.00	\$	1,905.00
\$1,250.00	0.000	\$0.00	160.000	\$800.00	160.000	\$800.00	\$	450.00
\$331,285.15	1.000	\$331,285.15	0.000	\$0.00	1.000	\$331,285.15	\$	-
\$25,000.00	1.000	\$25,000.00	0.000	\$0.00	1.000	\$25,000.00	\$	-
\$25,000.00	1.000	\$25,000.00	0.000	\$0.00	1.000	\$25,000.00	\$	-
\$21,900.00	99.000	\$72,270.00	2.000	\$1,460.00	101.000	\$73,730.00	\$	(51,830.00)
\$50,000.00	178.000	\$44,500.00	0.000	\$0.00	178.000	\$44,500.00	\$	5,500.00
\$5,120.00	642.250	\$20,552.00	0.000	\$0.00	642.250	\$20,552.00	\$	(15,432.00)
\$1,500.00	1.000	\$1,500.00	0.000	\$0.00	1.000	\$1,500.00	\$	-
\$100.00	3.000	\$150.00	0.000	\$0.00	3.000	\$150.00	\$	(50.00)
\$100.00	9.000	\$90.00	0.000	\$0.00	9.000	\$90.00	\$	10.00
\$60.00	13.000	\$130.00	0.000	\$0.00	13.000	\$130.00	\$	(70.00)
\$40.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$	40.00

1203k	Construction Traffic Sign (Detour/Various)) Each	25	EA	\$ 10.00	\$250.00	23.000	\$230.00	0.000	\$0.00	23.000	\$230.00	\$ 20.00
1203l	Construction Traffic Sign (Road Narrowes) Each	4	EA	\$ 10.00	\$40.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ 40.00
1203m	Construction Traffic Sign (Road Closed to Thru) Each	8	EA	\$ 10.00	\$80.00	7.000	\$70.00	0.000	\$0.00	7.000	\$70.00	\$ 10.00
1203n	Construction Traffic Sign (Road Closed) Each	7	EA	\$ 10.00	\$70.00	6.000	\$60.00	0.000	\$0.00	6.000	\$60.00	\$ 10.00
1203o	Construction Traffic Sign (4 way intersection) Each	8	EA	\$ 10.00	\$80.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ 80.00
1203p	Construction Traffic Sign (Stop Sign) Each	8	EA	\$ 10.00	\$80.00	4.000	\$40.00	0.000	\$0.00	4.000	\$40.00	\$ 40.00
1203q	Construction Traffic Sign (Variable Message Board) Each	800	EA/Day	\$ 15.00	\$12,000.00	1003.000	\$15,045.00	0.000	\$0.00	1003.000	\$15,045.00	\$ (3,045.00)
1203r	Drum Channelizing Device Each	100	EA	\$ 35.00	\$3,500.00	87.000	\$3,045.00	0.000	\$0.00	87.000	\$3,045.00	\$ 455.00
1203s	Traffic Cone Each	250	EA	\$ 5.00	\$1,250.00	79.000	\$395.00	0.000	\$0.00	79.000	\$395.00	\$ 855.00
1203t	Concrete Barrier (Temporary) Linear Foot	1200	EA	\$ 13.00	\$15,600.00	228.000	\$2,964.00	0.000	\$0.00	228.000	\$2,964.00	\$ 12,636.00
1203u	Barricade (Type III) (Temporary) Each	8	EA	\$ 500.00	\$4,000.00	8.000	\$4,000.00	0.000	\$0.00	8.000	\$4,000.00	\$ -
1203v	Flashing Beacon (Portable) Each	150	EA	\$ 10.00	\$1,500.00	0.000	\$0.00	0.000	\$0.00	0.000	\$0.00	\$ 1,500.00
1204	Surveys: Construction Staking & Asbuilts	1	LS	\$ 32,425.00	\$32,425.00	1.000	\$32,425.00	0.000	\$0.00	1.000	\$32,425.00	\$ -
1204A	Surveys: Restake Railroad from 2nd to 3rd	1	LS	\$ 2,835.00	\$2,835.00	1.000	\$2,835.00	0.000	\$0.00	1.000	\$2,835.00	\$ -
1204B	Surveys: Restake East Railroad TBC per Revised Control Revisions	1	LS	\$ 2,208.00	\$2,208.00	1.000	\$2,208.00	0.000	\$0.00	1.000	\$2,208.00	\$ -
1204C	Surveys: Restake Railroad from 3rd to 4th - Revisions at North Railroad, Post Office, Bank and Rimrock	1	LS	\$ 6,868.00	\$6,868.00	1.000	\$6,868.00	0.000	\$0.00	1.000	\$6,868.00	\$ -
1205	Relocate Clock Tower	1	LS	\$ 4,000.00	\$4,000.00	1.000	\$4,000.00	0.000	\$0.00	1.000	\$4,000.00	\$ -
1206	Force Account: Accommodating Businesses during construction: Maintain customer access, temp water service, etc.	1	LS	\$ 25,000.00	\$25,000.00	1.230	\$30,750.00	0.000	\$0.00	1.230	\$30,750.00	\$ (5,750.00)
1206a	Force Account: Potholing	120	HR	\$ 250.00	\$30,000.00	197.500	\$49,375.00	0.000	\$0.00	197.500	\$49,375.00	\$ (19,375.00)
1206b	Extra Work Temporary Opening of Railroad Avenue	1	LS	\$ 24,542.43	\$24,542.43	1.450	\$35,586.52	0.000	\$0.00	1.450	\$35,586.52	\$ (11,044.09)
1207	Temporary Road Surfacing (CDOT Class 6 Road Base)	840	TON	\$ 20.00	\$16,800.00	781.000	\$15,620.00	0.000	\$0.00	781.000	\$15,620.00	\$ 1,180.00
1208	Building siding adjustments & rock finish work for grading changes on Third Street	1	LS	\$ 10,000.00	\$10,000.00	0.600	\$6,000.00	0.400	\$4,000.00	1.000	\$10,000.00	\$ -
1209	Re-mount Newspaper distribution boxes	3	EA	\$ 500.00	\$1,500.00	3.000	\$1,500.00	0.000	\$0.00	3.000	\$1,500.00	\$ -
1210	Re-mount Trash Cans (14) and park benches (10)	24	EA	\$ 500.00	\$12,000.00	16.000	\$8,000.00	11.000	\$5,500.00	21.000	\$10,500.00	\$ 1,500.00
1211	Bonding (Performance & Payment)	1	LS	\$ 111,000.00	\$111,000.00	1.000	\$111,000.00	0.000	\$0.00	1.000	\$111,000.00	\$ -
1211a	Bonding (Performance & Payment)(Based on \$4,643,860.24)	1	LS	\$ 21,350.02	\$21,350.02	0.000	\$0.00	1.000	\$21,350.02	1.000	\$21,350.02	\$ -

TOTAL

\$4,267,011.79

\$4,532,694.46

\$98,906.51

\$4,619,904.47

Back Charges

Deductions	
PO Clean Up	\$739.42
Savage Sewer	\$1,435.00
Sewer Main	\$2,400.00
Savage Jet	\$680.00
JCI Sewer Service	\$2,000.00

Total

\$7,254.42

Work Completed less Back Charges

\$4,612,650.05

PUBLIC WORKS



TO: Tommy Klein
FROM: Craig Spaulding
DATE: September 15, 2022
RE: Third and Railroad Change Order Summary 9/15/22

Tabulated below is a summary additional costs incurred to the Third and Railroad Project. CO#9 has been issued for approval. This change order is for discrepancies in the bid schedule. CO#9 has the same justification as CO#8 and the items should have been included in CO#8 by the contractor. Please note that this is the final CO and final payment.

CO #1-4 Electrical Services, Concrete Paving, RR Avenue Temporary Opening

The contract documents did not provide adequate power supply and a new electrical service was required at the intersection of East avenue and Third St. This also required additional conduit wiring and boxes. A new service was also required for the 5th St signal as the existing posed safety concerns and was far from meeting code. As proposed by the EOR and Contractor, concrete pavement was used in lieu of asphalt due to its long term savings and reduced maintenance to the downtown area.

Electrical Services	\$	22,999.19
PCCP approved on council agenda April 7, 2022	\$	170,784.20
RR Open	\$	24,542.43
Total	\$	218,325.82
New Contract Amount	\$	4,025,325.82

CO #5 Material Overages, Unforseens, and Stair Rails

Removal of the existing trees which was called out on the plans but not on the bid schedule (\$15,000).muck excavation and soil separator fabric at the post office parking lot due to unsuitable soils (\$6,888.00).. The engineer of record requested a structural fabric be used in Railroad Avenue after discovering an existing structural fabric that was removed during waterline replacement (\$21,000). Additional waterline parts and restraints were needed for connections at mains and services (\$6,565.00) A concrete slab was beneath Railroad Avenue and had to be removed (\$12,320.00). Additional utility potholing was required primarily at the DDA parking lot as the tree to be removed had fiber and gas lines installed through its roots Additional potholing at 4th was also required a there were unexpected gas conflicts (\$15,000). The Rifle house parking lot was expanded to cover failed asphalt at the flintlock building (\$9,146.88). Material overages on East Third ST and West Third St were (\$5,467.50) and (\$7,124.37) respectively. Many buildings had roof drains discharging to sewer and beneath the street which had to be rerouted to connect to the storm drain (\$11,724.00) There was additional storm drain pipe needed to avoid the new gas line (\$4,694.00) Material overages on RR Ave were (\$12,625.50) New traffic detection cameras were installed at 5th St (\$30,000). Changes in plans and control points yielded additional survey time (\$5,043.00). Additional conduit, boxes and wire were needed as a result of the service change in CO #4 (\$10,447.75). The curb and wall heights were changed by the EOR (\$11,362.00). Plan quantities for the wall caps was not correct (\$5,670.00). There was an overage on landscape materials (\$735.00). Flagging the intersections of Whiteriver and East Avenue for school and rush hour traffic and having flaggers helping pedestrians find stores (\$15,432.00). Stair rails were required in the plans but not included in the bid schedule (\$19,100.00)

tree removal	\$15,000.00
muck excavation	\$6,888.00
soil separator fabric	\$21,000.00
additional waterline fittings	\$6,565.00
concrete slab removal in Railroad Avenue	\$12,320.00
potholing	\$15,000.00
Whit Parking	\$9,146.88
East Third Material Overages	\$5,467.50
West Third Material Overages	\$7,124.37
Roof Drain and Private Drain Connections	\$11,724.00
Storm Drain Material Overage	\$4,694.00
RR Ave material overages	\$12,625.50
5th St Cameras	\$30,000.00

Survey Restake	\$5,043.00
Additional Conduit, boxes, wire from service change CMOs	\$10,447.75
landscaping wall height change	\$11,362.00
wall cap plan quantity shortage	\$5,670.00
landscaping materials	\$735.00
flagging hours	\$15,432.00
Stair Rails	\$19,100.00
Total	\$225,345.00
New Contract Amount	\$4,250,670.82

CO #6 Additional concrete paving up to approved purchase requests

calculated quantities for concrete paving provided in CO #4 were less than what was required in the field. Debris left in a sewer manhole cause a back up into the post office which was cleaned by Mr. Vac and paid by the COR (\$739.42). Debris left in the sewer service of the Rifle house had to be jetted and removed. This was paid for by the COR (\$1,435). Sewer main jetting was performed and concrete and asphalt debris removed paid for by COR (\$2,400), after an incomplete attempt to repair the Rifle house service, debris was removed and paid for by the COR (\$680.00). Johnson Construction repaired the Rifle House Sewer service and was paid by the COR half of this is to be paid by KSK (\$2,000)

Concrete Paving Additional	\$	144,075.40
9/27/21 Mr Vac Post Office Sewer Cleanup	\$	(739.42)
7/29/21Savage Sewer Jetting	\$	(1,435.00)
9/2/21 Sewer main jetting	\$	(2,400.00)
10/27/2021 Savage jetting	\$	(680.00)
11/16/21 One Half of JCI Sewer Service Repairs	\$	(2,000.00)
Total	\$	136,820.98
New Contract Amount	\$	4,387,491.80

CO #7 Tree Uplights, Additions to RR Ave Reopening, Traffic Control Management

up lights	\$	24,000.00
RR Ave temporary additional		\$11,587.52
TCM		\$29,930.00
bonding (2% of delta)		\$18,411.27
Total		\$83,928.79
New Contract Amount	\$	4,471,420.59

CO #8 discrepancies between plan quantities and field quantities

costs associated with materials and the remainder of Traffic Control Mgmt. incurred in the process of completion of the 3rd Street and Railroad Avenue Improvements (Downtown). These costs reflect discrepancies between plan quantities and field quantities.

City Parking Lot Material Overages	\$272.12
Post Office/Alley INCOMPLETE	\$665.00
East 3rd Material Overages	\$11,639.00
West 3rd Material Overages	\$0.00
Handrails	\$0.00
Handrails	\$0.00
Remove Tree & Roots - 1"	\$0.00
Additional Waterline Fittings	\$26,595.00
Water Material Addon and Overages	\$27,512.00
Storm Drain Overages	\$0.00
Railroad Ave. Between 3rd and 4th Street Overages	\$5,125.00
Sidewalk Zurn Drain - Railroad Avenue South of 3rd	\$2,250.00
Slab Concrete Removal	\$0.00
Soil separator Fabric - RS 580	\$1,260.00
Railroad Avenue, 4th Street Intersection Overages	\$28,355.50
Permanent Signing Overages	\$13,200.00
Electrical Conduit Over/Under	\$1,950.00
Intersection Cameras	\$0.00
Pavement Marking Paint (Parking)	\$1,092.00
Traffic Signal, Striping and Signage	\$2,383.75
Meter Pedestal Wiring	\$0.00
Splice Vault	\$1,714.00
Trenching and Conduit Overages	\$5,668.00
Wiring	\$291.00
Meter Pedestal	\$0.00
Meter Pedestal Wiring	\$7,495.95
Tree Up Lights	\$0.00
Irrigation & Landscaping	\$0.00
22" and 36" Planter Wall	\$0.00
Stone Wall Finish	\$1,525.70
Cast In Place Wall Cap	\$15,795.00
Traffic Control Management Day	\$24,820.00
Flagging Hour	\$0.00
Survey Overages	\$6,868.00
Potholing	\$4,375.00

Extra Work Temporary Opening of Railroad Avenue	-\$543.43
Bonding (P&P)	\$2,247.66
Asphalt / PCCP	\$0.00
Total	\$192,556.25
New Contract Amount	\$ 4,580,048.05

**CO #9 discrepancies between plan quantities and field quantities
that were not captured in CO #8**

These costs reflect discrepancies between plan quantities and field quantities. These items have the same justification as CO#8 and should have been included in CO#8 by the contractor. These do represent final payment.

	\$0.00
Total	\$34,102.00
New Contract Amount	\$ 4,614,150.05



CITY OF RIFLE

202 RAILROAD AVENUE • P.O. BOX 1908 • RIFLE, CO 81650
WWW.RIFLECO.ORG

*Funds Carried over from 2021

*Projected

Account Number	Account Name	Activity Code(s)		Proposed	Awarded	Final
201-4312-400-320	Professional Services		PW Manual, ROW Permitting, Development Code Update	\$ 70,000.00	\$ -	\$ -
				\$ 70,000.00	\$ -	\$ -
Account Number	Account Name	Activity Code(s)		Proposed	Awarded	Final
201-4312-400-641	Minor Projects	Crack Seal, Preventative Maintenance	Continuing to Crack Fill Rifle. This portion will include Downtown and Highlands East	\$ 50,000.00	\$ 37,976.41	\$ 37,976.41
201-4312-400-641	Minor Projects	HA5	HA5 is a preventative maintenance coating that is a preferable alternative to chip and seal. Roads that have been crack sealed in the last two years will be receiving this coating	\$ 200,000.00	\$ 172,661.50	\$ 133,858.00
201-4312-400-641	Minor Projects	2022 Asphalt Patching and Overlay	This will repair a number of failing asphalt areas that are able to be either patched or overlaid	\$ 300,000.00	\$ 52,437.10	\$ 59,727.41
				\$ 550,000.00	\$ 263,075.01	
Account Number	Account Name	Activity Code(s)		Proposed	Awarded	Final
201-4312-400-733	Traffic Signal		9th St and Middle School Light, fiber to existing	\$ 225,000.00	\$ 225,000.00	\$ 45,000.00
				\$ 225,000.00	\$ 225,000.00	
Account Number	Account Name	Activity Code(s)		Proposed	Awarded	Final
*201-4312-400-735	Major Overlay/Reconstruction			\$ -		
Account Number	Account Name	Activity Code(s)		Proposed	Awarded	Final
201-4312-400-734	Major Projects	Airport Road Overlay	The increased rate of deterioration of Airport road makes it critical that an overlay is performed, this would be the priority major project	\$ 1,100,000.00	\$ 1,100,000.00	\$ 1,100,000.00
201-4312-400-734	Major Projects	Gateway	Expect some Carry Over	\$ 315,000.00	\$ 315,000.00	\$ 350,000.00
201-4312-400-734	Major Projects	Morrow Drive		\$ 650,000.00	\$ 110,000.00	\$ 300,000.00
				\$ 2,215,000.00	\$ 1,415,000.00	\$ 1,450,000.00
Account Number	Account Name	Activity Code(s)		Proposed	Awarded	Final
201-4313-400-734	Maj Overlay/Reconstruction	Ute/5th	Spring FMLD Grant Application Pending, Design to be performed in 2021	\$ 700,000.00	\$ 110,000.00	\$ 110,000.00
201-4313-400-734	Maj Overlay/Reconstruction	RR Ave 5th to 9th	Design Only	\$ 110,000.00	\$ 110,000.00	\$ 110,000.00
201-4313-400-733	30th St		Grant Dependent, 2022 design only	\$ 150,000.00	\$ -	\$ -
*201-4313-400-735	Downtown Project-Road		Costs carried over to 2022	\$ -		\$ 1,290,536.62
201-4313-400-751	Downtown Project-Road	Whiteriver/Centennial Intersection	Grants have been applied for, this would be design and construction would be 2023	\$ 100,000.00	\$ 411,409.00	\$ 250,000.00
201-4313-400-751	Major Project Devolution Funds	Park and Ride	Grants have been applied for, this would be design and construction would be 2023	\$ 150,000.00	\$ 104,680.00	\$ 60,000.00
				\$ 1,210,000.00	\$ 736,089.00	\$ 1,820,536.62
Total				\$ 3,975,000.00	\$ 2,639,164.01	\$ 3,270,536.62



Agenda Item #9.a.

Agenda Item Name:

Report to City Manager

Presenter:

Tommy Klein, City Manager

Item Description:

Staff report on notable tasks completed within the individual departments.

Recommended Action:

No action necessary

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Work Report to City Manager

09/16/2022

Notification Requirements:

N/A

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Report to City Manager 09.16.2022

WORK REPORT TO CITY MANAGER

09.16.2022

PIO

- Continuing updates on website and social media on local issues and citizen concerns. Citizens are thrilled to have bulk water back.
- Press release on holiday closures.
- Attended GRIT meeting and BATT community meeting. Apparently, I like attending any meeting with acronyms. 😊
- Met with Angela Mills and Breeze Richardson from Aspen Public Radio to discuss communications in areas west of Glenwood Springs. She mentioned that the story they did on Rifle's Smile, Wave and Greet campaign won an award which we had no idea about. How cool is Rifle?



COURT

- Handled 97 adult cases and 07 juvenile cases on September 7 court day and held one bench trial. I'm fairly certain that this is a record! We're not making Angela's last month easy!
- Held 08 telephone hearings with inmates in custody including five over the holiday weekend.
- Our soon-to-be new City Prosecutor spent a day with Angela to learn the role. We are already familiar with him since he has been on our court appointed list since he moved to town.

PUBLIC WORKS

- 0.5 MG Airport Water Tank: contractor mobilized and earthwork started (5%)
- I-70 Exit 90 Gateway Beautification: construction complete; closeout phase.
- RFQ's for Design of 5th Street and Ute Avenue, Railroad Ave 5th to 9th Street, & Morrow Dr./Tripp Dr./Whiteriver Ave.: all awarded and in design
- Park Hill retaining wall for City/Frontella property line: pending until a contractor is secured. Awaiting on CTL Thompson design report for engineering of wall structure
- Paradise Island cleanup – in progress Week of Sept. 12 stockpiling for flying materials Week of September 19th.
- 2022 Streets Improvement Contract with Frontier Paving scheduled for construction beginning August 15, 2022 and proceeding through mid-October (est.). Pre-construction meeting, today, August 9, 2022. Project is on schedule and at 35% complete. The following elements are included:

- East Airport Road Re-surfacing – 100% complete
- W. 7th Street Repair – 100% complete
- Re-surface of the 9th Street Bridge – 100% complete
- Enterprise Court – 100% complete
- Cemetery roadways improvements – 60% complete
- 100 Block of W. 2nd Street Rehab: construction underway September 12, 2022.
- Whiteriver Roundabout: Design progress - traffic flow and environmental investigation ongoing; Traffic study recommendations to be discussed at the upcoming City Council Meeting workshop.

The following are CIP projects currently under construction:

- Railroad Avenue Rehabilitation project: Punch List work 99% complete; closeout following.

FLEET

- Refurbishing of Unit 1001 snowplow bed, conveyor, bed frame: 75% complete (bed refurbishing complete, truck chassis work – in progress (95%) complete; re-assembly: 30%
- We received the 2021 Ford F-550 medium-duty snowplow
- Track-steer purchase awarded and made to Bobcat of the Rockies

OPERATIONS & MAINTENANCE

- Currently engaged in cleaning up the island.
- Preparing estimate for demolishing the Graham Mesa Water Treatment Plant
- Repair and recovery of damage done by a water leak on Cedar Drive.

Two weeks look-ahead

- Closeout and acceptance of 3rd Street and Railroad Improvement project work; addressing some warranty issues.
- Development inspection and management of the following:
 - North Pasture, Filing VII
 - Wapiti Commons (Habitat for Humanity)
 - I-70 Exit 90 Gateway acceptance and closeout
 - Construction observation of W. 2nd Street – 100 Block Improvements



Agenda Item #11.a.

Agenda Item Name:

Executive Session for discussion of a personnel matter under C.R.S. Section 24-6-402(2)(f) and not involving: any specific employees who have requested discussion of the matter in open session; any member of this body or any elected official; the appointment of any person to fill an office of this body or of an elected official; or personnel policies that do not require the discussion of matters personal to particular employees - (Review of City Manager - 1 Year Review).

Presenter:

Jim Neu

Item Description:

N/A

Recommended Action:

N/A

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

N/A

Notification Requirements:

N/A

Prepared By:

Misty Williams, City Clerk

Attachments:

None