

## MEMORANDUM

May 2, 2024

To: Devin King, AICP, City of Durango Transportation Department  
From: Janine White, PE

**Re: Animas View Dr Safety Evaluation and Recommendations**

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### Introduction

Toole Design has conducted a desktop review of existing conditions and data available for Animas View Dr for its entire length from the intersection with Main Ave (US 550) / W 2<sup>nd</sup> Ave north to the intersection with Main Ave (US 550) / La Plata County Road 203 in Durango, CO. A pedestrian fatality in September 2023 has initiated the need to take steps to improve pedestrian and bicyclist safety and reduce vehicle speeds. The City of Durango (the City) has identified potential actions for near-term, mid-term, and long-term implementation. This memo reviews the City's suggested potential actions, proposes additional potential actions, and summarizes our recommendations for next steps.

### Existing Conditions & Observations

#### Geometry

Animas View Dr is a 2-lane rural roadway with narrow paved or gravel shoulders. The total paved roadway width varies throughout the corridor and is typically 22 to 24 feet. There are no intersections with other major roadways between the two Main Ave intersections, which are approximately 1.55 miles apart. The roadway horizontal alignment contains numerous curves, some that are gentle and some that are sharper. Curve warning signs are present at curves with poor sight distance.

Most of the Animas View Dr corridor is heavily vegetated with large mature trees which restrict sight distance in some locations.

On-street parking is not allowed anywhere on Animas View Dr, but illegal parking often occurs, especially near the Oxbow Park trailhead. No Parking signs have been posted in some of these problematic areas.

#### Traffic Speeds and Volumes

The posted speed limit is 25 mph. The Durango Police Department conducted an automated traffic speed and volume count during a six-day period from 9/26/23 through 10/2/23 near 900 Animas View Dr. The results showed an average daily traffic volume of 519 vehicles, an average speed of 26 mph and an 85<sup>th</sup> percentile speed of 36 mph.

Dynamic Speed Display Feedback signs exist in two locations along the corridor in straight segments where drivers tend to operate their vehicles at higher speeds.

## Land Use

The land use along the roadway is mostly residential, including some single-family homes built close to the roadway with many frequent driveways. There are many townhome, multifamily, and mobile home park developments with more consolidated major access points. There are also commercial businesses including an auto body shop, storage units, hotels, a campground, and a rafting outfitter with very wide curb cuts which poorly define the access points. A parking lot and trailhead for the city-owned Oxbow Park and Preserve is at the north end of the corridor.

## Topography

The corridor parallels Main Ave (US 550) to the west and the Animas River to the east. The west-side terrain generally slopes up and away from the road with heavy vegetation in some locations. The combined effects of the vegetation and the terrain obstructs sight distance around horizontal curves in several locations where the inside of the curve is on the uphill side of the road. Examples of such curves with restricted sight distance include:

- Near the middle entrance of the three accesses to the River View Mobile Home Park at 288 Animas View Dr
- Immediately to the north of the Recodo Del Rio Townhomes (525 Animas View Drive) and Oxbow Park and Preserve
- Just north of the Sundancer Townhomes at 601 Animas View Dr
- South of the Redwood Apartments and Redwood Lodge bus stop

The east-side terrain drops off towards the river, sometimes sharply, leaving a minimal shoulder width and guardrail protecting the steep slopes from the roadway. The vertical alignment of Animas View Dr is generally flat in the middle of the corridor due to the road paralleling the river, with more significant vertical grades at the north end and south end where the road climbs to its two intersections with Main Ave.

## Transit Service

The City operates a fixed-route bus service, branded the “Main Avenue Trolley,” that serves the corridor three times per hour between 7:00 am and 8:40 pm, 7 days a week, year-round. The bus route operates in a loop starting from the Durango Transit Center in downtown, north along Main Ave to its northern intersection with Animas View Dr, then south along the entirety of Animas View Dr, and back onto Main Ave southbound and returning to the Durango Transit Center.

## Pedestrian Patterns

Owing to a lack of pedestrian infrastructure such as sidewalks, pedestrians are commonly sighted walking in the shoulders, especially near bus stops, multi-family housing, and other heavy pedestrian demand generators. Due to the topographic constraints and roadway curvature significantly narrowing or eliminating the shoulder in some locations, pedestrians will walk in the vehicle travel way of the road. Overgrown vegetation is another obstacle forcing pedestrians into the roadway in some locations.

## Street Lighting

Street lighting exists in some locations, but it is generally limited.

## Crash History

Eighteen total crashes were reported between 2017 and 2023, resulting in 6 injuries and 1 fatality. The causes of the injury crashes included a driver driving off an embankment at night, an intoxicated driver

driving off an embankment, an angle crash at a driveway that injured two people, and two crashes involving bicyclists. The fatal crash occurred on September 14, 2023, at 7:46 pm—less than an hour after sunset that day—where a pedestrian walking in the roadway near 1200 Animas View Dr was struck by a motorist.

## Analysis & Key Themes

Toole Design has reviewed the existing conditions, the crash history, and other data provided by the City. Several key themes are apparent, which will inform our approach for evaluating improvements and potential next steps throughout this memo.

1. **Speeds are too high.** Given the residential context for this corridor, the presence of pedestrian activity within the roadway and shoulder areas, and an 85<sup>th</sup> percentile speed that is 10 miles per hour over the speed limit, there is the need to implement traffic calming strategies. The injury and fatal crash types experienced in the past six years—drivers colliding with other cars, bicycles, or pedestrians, or driving off embankments—are either caused in part by or aggravated by higher speeds.
2. **Sight distance is poor.** Whether visibility is limited by overgrown vegetation, terrain, roadway geometry, poor lighting at night, illegally parked cars, or other factors, drivers along Animas View Dr often have limited visibility of downstream conditions, decreasing reaction time when something unexpected occurs, such as a pedestrian walking in the roadway around a curve or a deer running into the roadway.
3. **Clear zones are limited.** The 2011 *AASHTO Roadside Design Guide* suggests clear zones of approximately 7 to 10 feet in width with grades no steeper than 1V:6H for roadways with traffic volumes under 750 vehicles per day and a design speed of under 40 mph. This standard is rarely met along the corridor due to the topography.
4. **Infrastructure is inadequate given the current land uses.** Historically, Animas View Dr was a rural two-lane state highway. Over time, it has devolved to City control with the construction of the current US 550 alignment along Main Ave. Residential and recreational land uses have developed along the roadway, but without sidewalks or bicycle infrastructure. Bus service was added to serve a need, but without funding for construction of PROWAG-compliant bus stops or accessible pedestrian routes to bus stops.

## References

We reviewed and referenced these resources for guidelines on traffic calming and safety enhancements:

1. Crash Modification Factors Clearinghouse ([www.cmfclearinghouse.com](http://www.cmfclearinghouse.com))
2. Safety effects of fixed speed cameras (Alena Hoyer, 2015, <https://www.sciencedirect.com/science/article/abs/pii/S0001457515002225>)
3. Effectiveness of Traffic Signs on Local Roads (<https://www.lrrb.org/pdf/trs1002.pdf>)
4. Evaluation of Shared Lane Markings (<https://www.fhwa.dot.gov/publications/research/safety/pedbike/10044/10044.pdf>)
5. State Best Practice Policy for Shoulders and Walkways ([https://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/fhwasa11018/](https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa11018/))
6. Rumble Strips and Rumble Stripes: Bicycles ([https://safety.fhwa.dot.gov/roadway\\_dept/pavement/rumble\\_strips/bike\\_fs/](https://safety.fhwa.dot.gov/roadway_dept/pavement/rumble_strips/bike_fs/))

7. Pedestrian Safety Guide for Transit Agencies  
([https://safety.fhwa.dot.gov/ped\\_bike/ped\\_transit/ped\\_transguide/ch3.cfm](https://safety.fhwa.dot.gov/ped_bike/ped_transit/ped_transguide/ch3.cfm))
8. Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations  
(<https://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf>)
9. FHWA Rural and Small Town Multimodal Networks Guide  
([https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/small\\_towns/fhwahep17024\\_lg.pdf](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/fhwahep17024_lg.pdf))
10. Denver Bikeway Design Manual
11. ITE Traffic Calming Measures(<https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/>)

## Near-Term Improvements Identified by the City

The City has identified the following low-cost, near-term improvements for rapid implementation.

### Speed Reduction Strategies

- Replace flags on existing speed limit signs to increase visibility.
- Install automated speed enforcement cameras. This would involve a new ordinance being passed to permit camera installation and enforcement.
- Until speed cameras are installed, increase speed limit enforcement, especially along the north end of the corridor.

Evidence shows that automated speed enforcement cameras are an effective means of reducing speeds, with one study showing a 22 percent reduction in crashes 0.6 miles downstream of the speed camera. [1] [2] Photo enforcement mechanisms have a history of being highly controversial in communities where they have been implemented. Other research shows speed enforcement by police officers only has a temporary effect that dissipates once it is perceived enforcement activities have declined.

It should be noted that during increased enforcement activities to date, many drivers stopped for excessive speeds are residents who live on Animas View Dr. The City may wish to evaluate whether it can maintain public support for automated enforcement when the most likely offenders to be issued citations by speed cameras are local residents. In addition, drivers are likely to decrease their speed only near the cameras once they learn the locations of the fixed speed cameras.

Pairing speed enforcement by police officers as an interim solution until speed cameras are installed is likely to have ongoing success at slowing speeds. It is preferable to pair enforcement with other design strategies to change roadway conditions to encourage slower speeds.

### Sight Distance Improvement Strategies

- The City recently repaired broken street lighting near United Campground and worked with La Plata Electric Association to install additional lighting along the roadway.
- The City is planning a community volunteer event to trim vegetation along the roadway this spring. Street lighting improvements and vegetation-trimming directly address the identified issues of poor sight visibility and limited driver reaction time, which may have contributed to the September 2023 pedestrian fatality. Toole Design agrees with these actions.

### Infrastructure Enhancement Strategies

- Install flashing “Share the Road” warning signs on both ends of Animas View Dr to increase driver awareness of the presence of cyclists and pedestrians.

- Install shared-lane markings (also known as sharrows) on the roadway.

Research has shown that warning signs of infrequent hazards have little effect on driver behavior. [3] Shared lane markings, or sharrows, absent any other geometric changes to a roadway, have been shown to increase driver awareness of bicyclists, but the effect is small and they have not resulted in meaningful improvements to safety outcomes. [4]

While these are positive, proactive, and affordable steps to increase driver awareness of bicyclists, we recommend these near-term strategies be only a first step in an intentional program to change the design characteristics of the roadway in a way that is tied to stronger evidence of behavior change.

## **Mid-Term Improvements Identified by the City**

The City has identified the following mid-term and long-term improvements and strategies.

### **Increased Parking Enforcement and Transportation Demand Management Strategies**

In December of 2022, the City adopted a Comprehensive Parking Management Plan. Information gathered during this creation of this plan, as well as feedback gathered from the community in late 2023 in response to the roadway safety concerns discussed in this memo, revealed public complaints of a shortage of parking at the Oxbow Park and Preserve Trailhead at 500 Animas View Dr and illegal parking along the roadway and shoulders near the trailhead at peak times. The City is considering increasing enforcement of the existing No Parking signs posted along Animas View Dr, particularly near the Oxbow Park and Preserve. Because illegal parking along the roadway and shoulders creates various safety issues, including obstructing the roadway and driver sight lines and increasing pedestrian activity within the roadway, we agree that parking in unauthorized areas should be strongly discouraged and that enforcement is an appropriate tool.

Using existing public transit to transport people between popular open space areas and locations with larger amounts of parking is a travel demand management (TDM) practice that has been adopted with success for many years by other jurisdictions, such as the City of Boulder. For the summer of 2024, the City will experiment with instituting a free bus fare to the Oxbow Park and Preserve on the existing Main Street Trolley bus route that has a stop directly across the street from the park. The Durango Transit Center at the opposite end of this bus route has a parking lot with 131 spaces that is free on weekends. Many weekend visitors to the park may be unaware of this existing direct transit connection. Therefore, the City plans to target advertising for the free bus route this summer towards Oxbow Park users. We endorse this experiment and urge the City to collect as much data as possible this summer related to ridership to the park, peak times of demand, and impact on parking utilization both at the trailhead and along nearby portions of Animas View Drive.

TDM strategies pair well with other improvements discussed later in this memo to create high-comfort bicycle and pedestrian facilities. These improvements may encourage nearby residents and United Campgrounds guests to walk or bike to the park, freeing up parking for guests travelling from further away.

Another mid-term parking improvement could be widening the roadway where there is physical space to do so and allowing safe and legal parallel parking in designated areas. This option likely would result in pedestrians and bicyclists using the travel way to maneuver around parked vehicles.

### **Placement of Gravel on the Roadway Shoulder**

Another suggested mid-term improvement is to add gravel to the shoulders where space allows to provide a walking surface outside the travel way for pedestrians. According to Federal Highway Administration studies, there is some evidence this sort of treatment can reduce pedestrian crashes. [5] However, the studies that make this finding are in the context of a continuous paved or gravel walking surface treatment alongside rural highways, matching the grade of the edge of the roadway. Along Animas View Dr, this would require significant regrading of embankments, drainage ditches, and other steep roadside topography, and removal of significant vegetation. Additionally, compacted gravel surfaces can require significant long-term maintenance, as rainwater and snowmelt tend to dislodge gravel over time. Gravel surfaces are not considered accessible under PROWAG guidance, and therefore could not be officially designated as pedestrian infrastructure.

Select locations along the corridor could be treated with gravel without significant regrading to provide intermittent pedestrian refuge space along the shoulder. However, the effectiveness of an intermittent treatment from a safety perspective has not been well studied.

For these reasons, we would not recommend prioritizing this treatment.

### **Installation of Rumble Strips on the Fog Line (Outside white stripe)**

Rumble strips have been shown to be highly effective at promoting lane adherence in rural contexts and in reducing severe roadway departure crashes at a relatively low cost. [6] Rumble strips could potentially reduce the incidents of drivers departing the roadway and going over the embankments on Animas View Dr. However, research showing the effectiveness of rumble strips has focused on much higher volume roadways than Animas View Dr. Additionally, this treatment would do little for pedestrian safety and reduce the effective shoulder space for bicyclists without widening the shoulders. Best practice for rumble strip installation is to provide a shoulder wide enough for bicycling on the outside of the travel lane and rumble strip.

As research backs the use of this treatment primarily in different contexts than that of Animas View Dr, it would not directly address the primary pedestrian safety concerns. There are other strategies to lower vehicle speeds that would provide similar benefit as the rumble strips of reducing run-off-the-road crashes along with yielding other safety benefits. As such, we suggest that implementing rumble strips is a low priority for improving safety along the roadway.

### **Installation of Crosswalks at Transit Stops**

Pedestrian safety at the bus stops along Animas View Dr is a high-priority community concern. In general, pedestrian safety takes on heightened importance along transit corridors where bus stops serve as pedestrian demand generators. Given the pedestrian safety concerns and recent fatality, the current high speeds along the corridor, the relatively low cost of such a treatment, and the documented safety benefits of improving pedestrian amenities to access transit, [7] we do recommend installing signs and markings for crosswalks near each bus stop.

PROWAG requires an accessible route on either side of the crosswalk with detectable warning surfaces. Precedent examples of short segments of sidewalks constructed adjacent to a bus stop, with the sidewalk tying into the roadway shoulder up and downstream of the bus stop, along a roadway facility that otherwise does not have sidewalks can be found in rural transit districts across the country. Some urban areas with bus service, such as Silver Spring, MD, also make widespread usage of the practice. Some minor grading around the bus stops would likely be needed to construct the sidewalks along with



considerations given to drainage, but these improvements could still be done in a relatively low-cost way and improve pedestrian safety in the immediate vicinity of bus stops. Each bus stop and crosswalk location can be looked at in isolation of other locations. Crosswalks and short sidewalk segments can be installed only at locations where there is sufficient space to easily do so.



*A bus stop in Silver Spring, MD. A sidewalk has been added in the shoulder only at the bus stop.*

Ideally, striped crosswalks are paired with other treatments such as improved street lighting and raised crosswalks. Research shows that combining striped crosswalks with other safety countermeasures improves crosswalk effectiveness. [8]

### **Conversion of Animas View Dr to One-Way Southbound Operation**

Another change the City is considering is converting Animas View Dr to one-way southbound operation.

A comprehensive traffic study, community outreach and engagement with key stakeholders, and coordination with the Colorado Department of Transportation (CDOT) for geometric design and operational changes at both intersections of Animas View Dr with Main Ave (US 550) are recommended next steps to fully assess the feasibility of this alternative. Some opportunities and challenges noted at this preliminary stage associated with this operational change include:

- One-way southbound operation would be preferred over one-way northbound operation because it would eliminate left turns from Animas View Dr onto Main Ave (US 550) at the northern unsignalized intersection, reducing crash risk at this location. Left turns from Animas View Dr onto Main Ave would be handled exclusively at the southern signalized intersection. Furthermore, the bus stops are on the southbound side of the roadway and would not need to be relocated.
- There will be an increase in out-of-direction travel. For properties at the southern end of Animas View Dr, access from downtown Durango would increase by 3 miles, which is over 5 minutes of additional travel time assuming an average speed following the speed limits of 55 mph on Main Ave and 25 mph on Animas View Dr. The Mild to Wild Rafting and Jeep Tours, a tourism-oriented business on the southern end of Animas View Dr, would be the most impacted. There may be an opportunity to reconfigure access to this specific property directly from the existing Main Ave intersection. For the residential properties at the southern end, such as the River View Mobile Home Park, reconfigured access could not as easily be provided, and residents would endure the full additional time and mileage associated with the out-of-direction travel. Access time for

emergency vehicles would also increase, making the Durango Police and Fire Departments critical stakeholders to engage for the success of this option.

- There is space to provide safe and protected bicycle and pedestrian facilities on the corridor. The existing northbound lane could be converted for pedestrian and bicyclist use by installation of low-cost materials, such as flexible delineator posts and rubber curbs or concrete parking wheel stops, to delineate a buffer between the southbound vehicle lane and the pedestrian/bicycle lane. These low-cost materials could potentially be installed as an interim experimental basis and converted to permanent concrete curbs or other barrier in the future. Signs and pavement markings could clearly delineate the pedestrian and bicycle space, and bidirectional travel by the active modes could be allowed.

This option directly addresses the goals of reducing speeds and separating vulnerable bicyclists and pedestrians from higher speed traffic, and it would do so at a lower cost than something more substantial like a roadway widening project to construct sidewalks or increase shoulder widths. This combination of benefits gives this option high potential to have a significant positive safety impact. We recommend moving forward with a preliminary traffic study and public outreach process to explore the option in more depth.

## **Additional Potential Mid- and Long-Term Improvements**

In addition to the improvements suggested by the City, Toole Design suggests the City also consider the following longer-term improvements to the Animas View Dr corridor. For each option below, we suggest further study before moving forward with design or implementation.

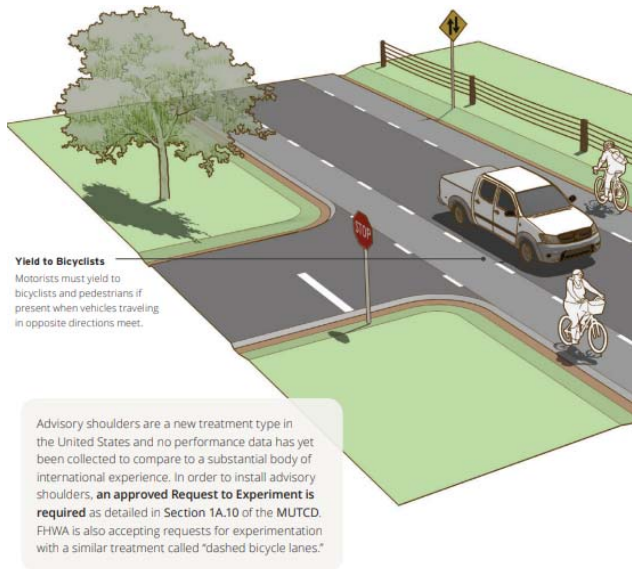
### **Advisory Shoulders**

FHWA's *Rural & Small Town Multimodal Networks Guide* [9] contains a discussion of advisory shoulders, sometimes also referred to as advisory bike lanes. As the guide states:

*Advisory shoulders create usable shoulders for bicyclists on a roadway that is otherwise too narrow to accommodate one. The shoulder is delineated by pavement marking and optional pavement color. Motorists may only enter the shoulder when no bicyclists are present and must overtake these users with caution due to potential oncoming traffic.*

A typical advisory shoulder roadway width is about 24 feet wide, with 6-foot lanes on the outside, separated with dashed white striping from a 12-foot inside lane. Motor vehicles generally travel in both directions in the single 12-foot center lane, leaving room for bicyclists and pedestrians travelling in the outside lane. When two vehicles travelling in opposing directions approach each other, it is permissible for both vehicles to enter into the shoulder area to pass one another.





## Advisory Shoulder

*Images from FHWA's Small Town & Rural Multimodal Network Guide.*

The FHWA guide suggests this treatment be limited to roadways with operating speeds below 35 mph, and volumes below 6,000 vehicles per day, with the preferred conditions being speeds below 25 mph and volumes below 3,000 vehicles per day. Animas View Dr easily falls within the preferred range for traffic volumes, but operating speeds are too high. Therefore, this treatment would likely be feasible only when combined with other traffic calming treatments. In addition, the FHWA guidance mentions good sight lines are desirable to implement this treatment, and conventional yellow-centerline striping may be needed around horizontal curves with poor sight distance.

Currently, an FHWA-approved Request to Experiment is required to implement advisory shoulders, as the treatment is not present in the MUTCD. As of 2024, there are 16 ongoing advisory shoulders experiments across the United States. As an experimental treatment type, robust data showing safety and operational performance does not yet exist, though the treatment has been used with great success in several European countries for decades as well in a few Colorado mountain communities.

In the context of Animas View Dr, advisory shoulders could be an innovative treatment with the benefit of reducing speeds, more clearly defining pedestrian and bicycle space, and retaining two-way operation of the roadway, for a low construction cost. The Request to Experiment process, the poor sight distance in several locations on the corridor, and high existing speeds, are all challenges to implementation.

If one-way conversion is studied and found undesirable due to out-of-direction travel or other reason, we suggest evaluating advisory shoulders as another option.

## Increase Traffic Calming

Bicycle boulevards are another treatment mentioned in the FHWA *Rural & Small Town Multimodal Networks Guide*, and they are also being deployed in a growing number of cities of all sizes across the United States. Bicycle boulevards are typically envisioned as a low-stress roadway designed to give priority to bicyclists operating in a shared roadway with motor vehicle traffic. Toole Design's experience in

implementing bicycle boulevards in cities across the country, including Denver, CO, shows that successful implementation often calms traffic enough that pedestrians are comfortable walking in the street, which is an added benefit along roadways lacking sidewalks such as Animas View Dr.

The key to successful bicycle boulevard implementation is found in intensive traffic calming treatments. Traffic volumes should be under 3,000 vehicles per day and speeds should be under 25 mph. To lower speeds below this threshold, research shows that traffic calming devices should be placed every 250 to 400 feet along a corridor. Several cities, such as Denver, have adopted this 250- to 400-foot spacing as a standard for traffic calming treatments, and they have had success in lowering 85<sup>th</sup> percentile speeds below 25 mph by following this deliberate strategy. [10] This would translate to installation of about 20 to 32 traffic calming devices along the entire 1.55-mile length of Animas View Dr to systematically reduce speeds throughout the corridor. These traffic calming devices could include [11]:

- **Raised crosswalks/speed tables.** Raised crosswalks could be installed at the four bus stop locations in conjunction with other bus stop improvements suggested in this memo. Raised speed tables or speed humps could be installed at other key locations such as in advance of driveways. Drainage and pedestrian accessibility need to be considered.



- **Pinch points.** Pinch Points are created by a pair of curb extensions, which can be concrete and landscaped or made out of quick-build materials such as paint and flex posts. Pinch points temporarily reduce the roadway width to one lane, forcing motorists in opposing directions to slow and yield to one another. As such, they are only appropriate on lower volume roadways, preferably with traffic volumes less than 1,000 vehicles per day.



- **Chicanes.** Chicanes can be constructed similar to pinch points, but offset from each other by 50 to 100 feet, having an effect of narrowing the roadway at a given point to approximately 18 to 20 feet wide, and introducing horizontal curvature into a straight roadway alignment. Chicanes can reduce speeds while being a less severe treatment than a pinch point.



- **Median refuge islands.** Though Animas View Dr is generally narrow, there are several locations where the roadway could be widened by approximately 6 feet to install a refuge island in the middle of the roadway. This would serve a dual purpose of slowing vehicular traffic with horizontal deflection and providing a safe place for pedestrians to wait and cross the street in two phases. These islands could work well near concentrations of residential driveways, where pedestrian demand will be higher and where the grades along the roadside are generally flatter and could accommodate some widening.



- **Mini traffic circles.** Cities such as Denver and Seattle have had success installing mini traffic circles to slow vehicular speeds on roadways as narrow as 30 feet. This is wider than the typical 22 to 24 foot width of Animas View Dr, but there may be locations along the corridor the road could be widened to allow for a minimal circle with an outer diameter of about 10 feet centered in a 30 foot-wide intersection. Mini traffic circles are designed to be mountable for larger vehicles but the horizontal deflection to navigate around them slows passenger cars significantly.





These traffic calming devices could be used independently or in tandem with other strategies such as converting the roadway to one-way operation to reduce speeds. Given the existing high speeds and importance of reducing speeds to increase safety, we suggest further exploration of traffic calming as part of any long-term solution for Animas View Dr.

### **Major Capital Improvements**

Though potentially costly, and not on the near-term list for capital improvements, major overhauls to the physical characteristics and geometry of the roadway are perhaps the most enduring and effective solution. We would encourage the City to evaluate pursuing future CDOT and other federal grants for a comprehensive reconstruction of Animas View Dr. The reconstructed roadway could include sidewalks on at least one side, wider paved shoulders, and enhanced bus stops and mid-block pedestrian crossings.

Major reconstruction need not be considered in complete isolation to other options discussed in this memo. For example, a one-way conversion of the roadway, if pursued, would make construction of sidewalks behind a curb and gutter much more economical, because the sidewalks could be built along the existing roadbed grade instead of widening embankments or into hillsides adjacent to the road. A major reconstruction could intentionally include landscaping and lighting elements that maintain the attractiveness and character of the neighborhood, but enhance rather than obstruct visibility along the road. Roadway reconstruction allows for easier integration of horizontal alignment options that gently meander traffic and provide lanes that are narrow enough to discourage faster speeds.

### **Summary**

Animas View Dr was built long ago in a truly rural highway context. Today it has evolved into a local street travelled by residents, business patrons, and recreational users in cars, buses, bikes, and on foot. Though the uses of the roadway have changed, its physical characteristics have not, which is the root cause of the safety concerns discussed in this memo.

The near-term improvements the City is making will provide additional awareness of bicyclists and pedestrians, improve sight distance where vegetation is trimmed back, and ideally reduce vehicle speeds. However, we believe that these actions alone will not have the long-term traffic calming effect and improved pedestrian safety the City desires.

For the mid-term improvements, we recommend further investigation and/or next steps to determine feasibility for the following options:

- Free transit fares to Oxbow Park and Preserve in summer of 2024, and further study on long-term TDM strategies.
- Crosswalks at transit stops.
- Conversion of Animas View Dr to one-way southbound.
- Advisory shoulders.
- Traffic calming treatments every 250-400 feet along the corridor.

Sincerely,



Handwritten signature of Janine White in blue ink.

**Janine White, PE** | Project Manager, Civil Engineering Manager

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