

Meeting Summary

Date: November 9, 2023

29 Road Interchange at I-70, NEPA/1601 Project

Meeting Name: TAC #9

Meeting Date: October 10, 2023

Location: Virtual

Attended:

Invitee	Organization	Invitee	Organization
Kevin King	Mesa County	John Dibble	FHU
Scott Mai	Mesa County	Amanda Cushing	FHU
Laura Page	Mesa County	Paul Brown	FHU
Daniel Larkin	Mesa County	Cady Dawson	FHU
Dave Thornton	Grand Junction	Alex Pulley	FHU
Trent Prall	Grand Junction	Melanie Bishop	FHU
Eric Mocko	Grand Junction	Jeff Bellen	FHWA
Dave Cesark	CDOT	Stephanie Gibson	FHWA
Mark Bunnell	CDOT	Andrew Gingrich	GVRTPO
Rob Beck	CDOT	Dean Bressler	GVRTPO
Rachel Peterson	Grand Valley Regional Transportation Planning Organization (GVRTPO)	Dana Brosig	GVRTPO

Meeting Summary

Note: Not all details that were included in the presentation are shown in this summary, but comments and discussion brought up during the presentation are included; discussion is denoted as [blue](#) text. Meeting materials can be found at the end of this meeting summary.

Meeting Goal

- ▶ Present results of 29 Road Workshop and a review of the Level 3 analysis approach

Agenda Items/Topics

- ▶ Welcome and Introductions
- ▶ MOU Status
- ▶ Screening Step Summary
- ▶ 29 Road Corridor Cross Section Workshop Results
- ▶ Upcoming Traffic Analyses
- ▶ Schedule
- ▶ Next Steps

MOU Status

- ▶ The initial MOU was fully executed by Mesa County and CDOT on October 10, 2023.

Screening Step Summary

Alex provided a summary of the activities to date. The intent was to ensure that the context of the information presented is understood relative to the screening level.

- ▶ The first step was the determination of need for the interchange, followed by the evaluation of the 29 Road and 30 Road corridors. 29 Road was the selected corridor. This decision was made during TAC meeting #6 on February 21, 2023.
- ▶ **Level 2A Screening** evaluated the more precise location of the interchange, specifically between I-70 and the Government Highline Canal. Even though there were no substantial differences between the potential alignments in Level 2A, the next steps will provide additional analysis and assess additional elements (e.g.,

auxiliary lane, etc.) that may be required for the final approval of the interchange. The western alignment was selected to move forward.

- ▶ **Level 2B Screening** considered the types of interchange configurations, which included standard diamond, diverging diamond, and roundabout diamond interchanges. These configurations were evaluated to determine if a configuration was better suited for the context of the interchange location. A roundabout diamond interchange was selected to advance to Level 3.
- ▶ **Level 3 Analysis & Refinement** provides a detailed analysis of the preferred alternative for the interchange at 29 Road and effects on I-70 operations and safety. This is a critical piece of the project and is of utmost importance to the Project Team and Stakeholders. This analysis will also consider any potential improvements needed on I-70 or the adjacent interchanges (i.e., Horizon Drive and Clifton) to ensure that the 29 Road Interchange does not have any significant adverse effects on the safety and operations of the interstate.

29 Road Corridor Cross Section Workshop Results

Several cross section and layout options were presented using the City and County Transportation Engineering and Design Standards. The team was split into groups to draft section elements that would be appropriate for corridor traffic and safety, and reduce right of way (ROW) impacts, where possible. The Alternatives below were presented as a starting point for the teams to develop cross sectional elements appropriate for the corridor.

- ▶ Alternative 1: 110-foot ROW, 8-foot sidewalk and 6-foot streetscape (east and west sides), on-street bike lane (west and east sides), 11-foot travel lanes, 14-foot landscaped median. (Note: Buffers and curb and gutters not included.)
- ▶ Alternative 2: 96-foot ROW, 6-foot sidewalk, 5-foot streetscape (west and east sides), 14-foot landscaped median, 11-foot travel lanes, 14-foot shared use path. (Note: No separate bike lane. Buffers and curb and gutters not included.)

Note: It was communicated during the meeting that any 'streetscape areas' must be a minimum of 7-feet to accommodate tree growth.

Meeting Summary

Carried Forward

Alternative 1: 102-foot ROW, 8-foot sidewalk, 7-foot streetscape, & 8-foot cycle track on the west side, 11-foot travel lanes, 12-foot center left turn lane at intersections, a 7-foot streetscape & 8-foot sidewalk on the east side. (Note: Buffers and curb and gutters not included.) Stretches without an intersection include a raised 6-foot center median to reduce ROW impacts.

Alternative 2: 93-foot ROW, 8-foot sidewalk, 8-foot cycle track on the west side, 11-foot travel lanes, 12-foot center left turn lane, 7-foot streetscape & 8-foot sidewalk on the west side. (Note: Buffers and curb and gutters not included.) Stretches without an intersection include a raised 6-foot center median to reduce ROW impacts.

Questions:

- ▶ Are bike lanes out of the question? There are bike lanes to the south of Patterson Road that would be good to connect to.
 - ▶▶ Response: This will be confirmed prior to the public meeting.
- ▶ Could we use a narrower landscape area?
 - ▶▶ Response: This will be confirmed prior to the public meeting depending on context and ROW constraints.
- ▶ Why do we need to landscape the raised medians?
 - ▶▶ Response: Raised medians will be brick or cover material, and no landscaping.
- ▶ How many driveways/accesses were impacted?
 - ▶▶ Response: We looked to provide appropriate access control along the corridor, which included converting driveways and most streets to RI/RO during the corridor design.
- ▶ Comment: This is for consideration and not intended to stall the meeting on the bike and ped connectivity matter but want to add here that the discussion concerning continuity of connectivity to the south of Patterson, as well as along

Patterson, should include creating the connectivity to the north of the improved 29 Road section. In other words, since the plan includes utilizing the existing non-interchange overpass for bike and ped access to the north, a commitment to improve and maintain it should be included.

Upcoming Traffic Analyses

With the roundabout interchange determined in Level 2B, we need to answer the following questions:

- ▶ Will a roundabout interchange provide adequate traffic operations at the ramp terminals?
- ▶ Will queuing from ramp terminals affect I-70?

With a principal arterial with multi-modal elements as the 29 Road cross section, we need to answer the following questions:

- ▶ How will the system study area volumes redistribute based on 29 Road capacity and the new interchange?
- ▶ How will the 29 Road / Patterson Road intersection operate?
- ▶ Will redistributions affect other roadways and intersections?

Traffic Analyses Next Steps and Support Tasks

- ▶ Finalize Future Year (2045) Model Forecasts
 - ▶▶ Update forecasts based on Principal Arterial facility type
- ▶ Update Freeway Analyses
 - ▶▶ Use HCS to evaluate future LOS and density
 - ▶▶ Develop mitigations if needed (including westbound I-70)
- ▶ Evaluate Roundabout Ramp Terminal Intersections
 - ▶▶ Use Rodel to evaluate future LOS and queuing
 - ▶▶ Develop mitigations if needed

Meeting Summary

- ▶ Update Arterial Analysis, including Intersections
 - ▶▶ Use Synchro and Rodel to evaluate future LOS and queuing
 - ▶▶ Develop mitigations if needed (including Patterson / 29 Road)
- ▶ Safety
 - ▶▶ Use HSS to evaluate quantity of predicted crashes
 - 29 Road (existing and as a Principal Arterial)
 - I-70 mainline (existing and with the new interchange)
- ▶ Multimodal
 - ▶▶ Evaluate and document 29 Road access control concept
 - ▶▶ Use HCS to evaluate multimodal LOS along 29 Road
- ▶ Freeway Guide Signing (FHWA requirement)
 - ▶▶ Develop proposed guide signing plan per MUTCD

Questions:

None

TDM Evaluation

- ▶ Since the planned interchange is a Type 1 interchange and within an urban area, a TDM plan is required as part of the SLS. TDM plan requirements include the following:
 - ▶▶ The plan must achieve 80 to 100 points on the “TDM scorecard”.
 - ▶▶ There should be a 3% modeled ADT reduction on interchange ramps on opening day; there is an option to phase TDM strategies in over time.
 - ▶▶ There is an opportunity to use engineering judgement.
 - Waivers are possible.
 - TDM Commitments should be included in the final IGA.
 - ▶▶ Transportation Commission approval is required.
- ▶ TDM strategies include mobility hubs, shuttle services, pedestrian friendly mixed-use development, and park-n-ride lots among others.

Meeting Summary

- ▶ Grand Valley Transit and FHU recently met with CDOT (Nathan Linquist and Aaron Willis) to discuss the TDM requirements. Highlights of the meeting include the following:
 - ▶▶ CDOT will send over a template with examples of potential TDM strategies. This may help to potentially obtain a waiver or good faith effort for the required 3% trip reduction measurement component due to the City's current land use and the future proposed development.
 - ▶▶ Regardless of constraints, it is still important to maintain the intent of the TDM plan requirements.

Questions:

None

Schedule

- ▶ October/November
 - ▶▶ Traffic Analysis—Arterial Intersection; Freeway Operations (mitigation measures); Safety
 - ▶▶ TDM Analysis—Identification of methodology/scorecard
 - ▶▶ Interchange Data Collection –Survey/Geotech
 - ▶▶ Environmental Scoping Meeting
- ▶ December/January
 - ▶▶ Patterson Road Intersection Workshop
 - ▶▶ Advance Conceptual Design (I-70 interchange / 29 Road)
 - ▶▶ Initiate SLS Documentation
- ▶ February/March
 - ▶▶ Public Meeting
 - ▶▶ Review/Revisions of SLS Documentation
 - ▶▶ Initial review of NEPA Documentation

Meeting Summary

Next Steps

- ▶ Share the 29 Road cross section with the Urban Trail Committee for their review and comment.
- ▶ Develop the 29 Road and Patterson Road intersection improvements.
- ▶ Transition the cycle track to separate bike lanes to the south of Patterson Road. Refer to the cycle track along Colorado Mesa University on North 12th Street, between North Avenue and Orchard Avenue, if needed.
- ▶ Prepare for the public meeting to share design.
- ▶ Complete Level 3 Analysis.
- ▶ Schedule and hold environmental scoping meeting.
- ▶ Initiate NEPA Documentation.
- ▶ Schedule TAC Meeting #10.