

Meeting Summary

Date: March 11, 2024

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

Meeting Name: TAC #10 Meeting

Meeting Date: February 8, 2024

Attendees:

Name	Organization	Name	Organization
Kevin King	Mesa County	Paul Brown	FHU
Scott Mai	Mesa County	Melanie Bishop (virtual)	FHU
Laura Page (virtual)	Mesa County	John Dibble (virtual)	FHU
Daniel Larkin	Mesa County	Cady Dawson	FHU
Trent Prall	Grand Junction	Alex Pulley	FHU
David Thornton	Grand Junction	Amanda Cushing	FHU
Eric Mocko	Grand Junction	Andy Gingrich (virtual)	RTPO
Rob Beck	CDOT	Dana Brosig	RTPO
Mark Bunnell	CDOT	Dean Bressler (virtual)	RTPO
Zane Znamenacek	CDOT	Rachel Peterson (virtual)	RTPO
Dave Cesark	CDOT	Jeff Bellen (virtual)	FHWA
Chelly Sundermeyer (virtual)	FHWA	Cohen Turner (virtual)	FHWA

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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:

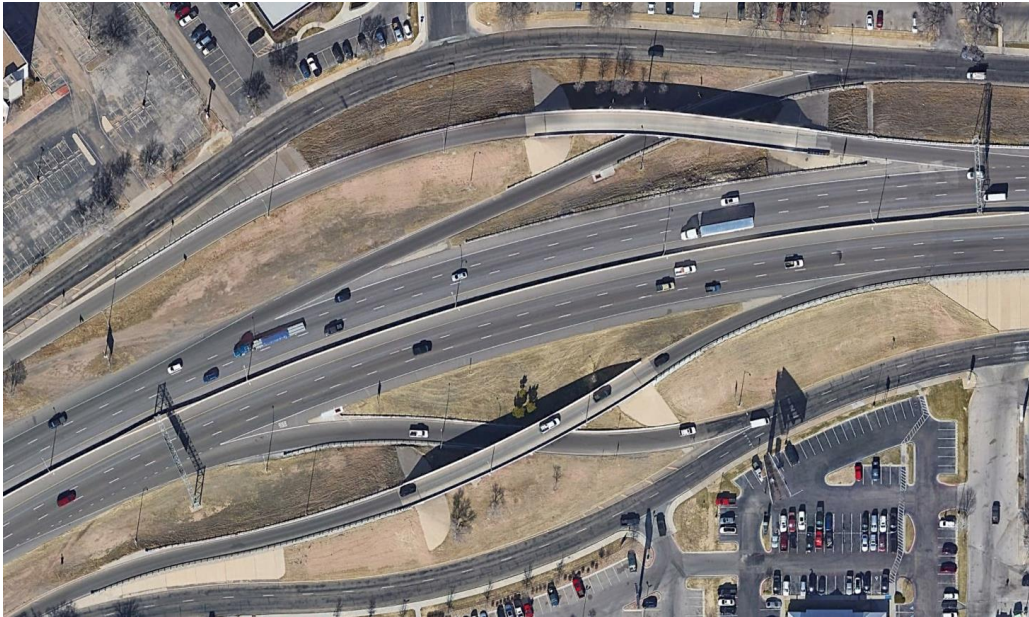
- ▶ *Present Current Results of the Level 3 Analysis*

Action Items Reviewed/Completed

- ▶ Welcome and Introductions
- ▶ Screening Process Flowchart
 - ▶ Level 1 and 2 screenings are complete, and we are currently advancing Level 3 screening, which will be documented in the 1601 SLS and eventually the IAR.
 - ▶ The current plan is to present the project to the Transportation Commission during the April 17, 2024, workshop for a May 16, 2024 vote.
- ▶ I-70 Traffic Analysis Refresher
 - ▶ 2045 No Action operations (based on existing conditions) revealed AM operations to be LOS D or better; PM operations are forecasted to be LOS C or better.
 - ▶ Adding the interchange in 2045 will result in LOS E or LOS F for four 15-minute periods (westbound only) during the AM peak period. The PM peak period has some LOS D time periods in the eastbound direction.
 - ▶ Year 2030 (Opening Day): LOS B and C (one 15-minute period in the AM) anticipated on opening day. Mitigation is not warranted.
 - ▶ The team evaluated adding in a westbound auxiliary lane as mitigation due to the 2045 forecasted LOS. This would also include a two-lane exit.
 - ▶ **Statement:** The 2045 No Action Eastbound LOS (AM and PM) should be LOS B (AM) and LOS C (PM) or better. Please double-check them.
 - ▶ **Post Meeting Response:** That was an error in the slides. The 2045 No Action Eastbound LOS (AM) is LOS B (AM) and LOS C (PM) or better rather than LOS C (AM) and LOS D (PM).

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- ▶▶ **Question:** Do we have to mitigate for worse conditions even if the traffic is considered to be acceptable (LOS C)?
- ▶▶ **Response:** The FHWA IAR Guidance states that it "cannot be significantly worse." The definition of "significant" is determined by the FHWA jurisdiction. Jeff Bellen clearly stated that the future build alternative must have "no negative impact," including any degradation of LOS. Further discussion of LOS would require a review with the IAR author.
- ▶ I-70 Traffic Mitigation Evaluation - Timing
 - ▶▶ Year 2035: LOS C with one 15-minute period westbound in the AM at LOS D. Mitigation is not warranted.
 - ▶▶ Year 2040: LOS D with one 15-minute period westbound in the AM at LOS E. Mitigation is not warranted.
 - ▶▶ **Question:** How were the 2030 volumes determined?
 - ▶▶ **Response:** FHU used multiple different methods and a "straight line interpolation" was the best option. The documentation should include this methodology as well as all assumptions and caveats.
 - ▶▶ **Statement:** Rather than building an auxiliary lane, has FHU considered a "braided ramp" as a mitigation? Below is an example of braided ramps on I-40 in the Amarillo, Texas area. These braided ramps are in conjunction with one-way frontage roads on each side of I-40. However, braided ramps will work without one-way frontages.



» **Post Meeting Response:**

» **Regarding traffic impacts (braided ramps):**

- 29 Road traffic decreases by approximately 25% (4,000 to 5,000 out of 20,000-25,000).
- Patterson Road without 29 Road interchange increases between 5% and 10% (1,500 to 2,000 out of 25,000-30,000).
- Less traffic goes to the airport commercial area.
- Given the level of volume reduction, FHU does not feel that this option meets P&N.

» **Regarding traffic impacts (Collector/Distributor [C/D] Road vs Auxiliary Lane):**

- The C/D Road option reduces volumes on I-70 westbound including 29 Road on-ramp and Horizon Drive off-ramp. FHU assumes that speeds along the C/D Road would be slower than the I-70 mainline lanes. It would improve I-70 operations, but the auxiliary lane improves them similarly at a lower cost.
- » The braided ramps and CD roads were evaluated on a conceptual design level and significant issues with footprint / right of way between I-70 and the airport

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were observed. However, probable construction costs (2040 dollars) are as follows¹:

- Braided ramps: \$45.6 million²
- C/D road: \$31.3 million³
- Auxiliary lane: \$7.4 million

▶ Traffic Mitigation Timing

- ▶▶ FHU reviewed the freeway volumes to determine when mitigation (auxiliary lane) is needed.
- ▶▶ The team concluded that mitigation is not needed until between 2040 and 2045.
- ▶▶ **FHWA Statement:** All the mitigations (e.g., auxiliary lane) must be included in the in the proposed project description and design. Additionally, mitigations must be included in the STIP.

▶ TDM Requirements

- ▶▶ There are 7 steps, which includes the development of existing conditions, TDM strategies, inclusion of the TDM plan within the SLS, 1601 decision, and the operations and maintenance IGA.
- ▶▶ *Opening Day Ramp Volumes (2030):* 7,660 total ADT. A 3% daily trip reduction would be 230 trips per day.
- ▶▶ *Forecasted 2035 Ramp Volumes:* 12,455 total ADT. A 3% daily trip reduction if TDM strategies are phased in over time would be 374 trips per day.
- ▶▶ Potential project strategies include the following:

¹ All cost estimates are based on 2023 CDOT cost data and show a 2% inflation factor to a 2040 build year.

² The braided ramp will require a retaining wall at the 29 Road interchange for the Horizon Drive exit. Requires a bridge and retaining walls under the 29 Road ramp. Requires a new bridge over the Highline Canal to the Horizon Drive ramp. Requires additional ROW purchase, including a corner of the Airport ROW. 29 Road on ramp traffic will not be able to access Horizon Drive (design speed is set at 55 MPH).

³ Requires widening the existing bridge (or a new structure) over the Highline Canal. Assumed to be two lanes to accommodate the weaving between the 29 Road and Horizon Drive traffic (design speed is 55 MPH). Allows for 29 road traffic to Horizon Drive.

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- Mobility Hubs
 - Intercity Transit
 - Bicycle and Pedestrian Facilities
 - Park-and-Ride Lots
 - School Pool Program
 - Vanpool Program
 - Regional Ridesharing Projects
 - Car Sharing
- ▶ Environmental / NEPA
- ▶▶ NEPA Kick-off/Scoping Meeting held on November 27, 2023
 - ▶▶ Initial field work for existing conditions completed in May 2023 included Environmental Justice (EJ), biological resources, historic, noise, and hazardous materials among others.
 - ▶▶ Wetlands are present on the southern end of the 29 Road corridor along Indian Wash.
 - ▶▶ The Government High Line Canal could be a historic hurdle.
 - ▶▶ No EJ communities are present with the presumed study area.

Decisions Made

- ▶ A full project with necessary freeway mitigation will be required. Any mitigations (e.g., auxiliary lane) associated with the interchange must be included within the STIP.

Next Steps

- ▶ Overall project:
- ▶▶ Complete Draft System Level Study
 - ▶▶ CDOT Transportation Commission Presentation (anticipated to be April 2024)
 - ▶▶ Complete NEPA Analysis
 - ▶▶ Public Meeting

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- ▶▶ **Statement:** During the last TAC meeting, the 29 Road cross section was discussed. Before we go to the public, we must have a complete picture of what the project looks like.
- ▶ TDM:
 - ▶▶ Initiate development of Existing Conditions & TDM Background Memo
 - ▶▶ RTPCO coordination with DRCOG on methodology for calculating trip reductions for TDM strategies
 - ▶▶ Review strategies and forecasted reductions with County/City and obtain commitment on strategies to advance to CDOT
- ▶ Traffic:
 - ▶▶ Evaluate designs for the 29 Road & Patterson Road intersection
 - ▶▶ Evaluate multimodal considerations (e.g., multimodal LOS analysis and cycle track transitions)
 - ▶▶ Complete the 29 Road Access Management
 - ▶▶ Complete HSS evaluation for 29 Road and I-70
 - ▶▶ Develop proposed guide signing plan (use the latest MUTCD guidelines)
- ▶ Design:
 - ▶▶ Refine the 29 Road interchange design
 - ▶▶ Finalize design alternatives for the 29 Road corridor
 - ▶▶ Finalize 29 Road & Patterson Road intersection alternatives
- ▶ NEPA:
 - ▶▶ Complete environmental resource technical memos