

# FINDING OF NO SIGNIFICANT IMPACT AND FINAL SECTION 4(F) DETERMINATION I-70 WEST VAIL PASS AUXILIARY LANES

Project Number: NHPP 0701-240, Project Code: 21865  
Eagle and Summit Counties, Colorado

## Lead Agencies

Federal Highway Administration



Colorado Department of Transportation



**COLORADO**  
Department of Transportation

## Cooperating Agencies

United States Forest Service



United States Fish and Wildlife Service



January 2021



## FINDING OF NO SIGNIFICANT IMPACT (FONSI) (AND SECTION 4(F) FINDING)

The Federal Highway Administration (FHWA) has determined that the Proposed Action described in the Environmental Assessment (EA) will have no significant impact on the human or natural environment. This FONSI is based on the EA and the proposed mitigation, which FHWA has independently evaluated and determined to adequately and accurately discuss the need, environmental issues, and impact of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. FHWA takes full responsibility for the accuracy, scope, and content of the EA. Based on the considerations identified in the Section 4(f) Evaluation, FHWA also concludes that there are no feasible and prudent alternatives to the use of Section 4(f) protected lands and that the Proposed Action includes all possible planning to minimize harm to the identified Section 4(f) properties resulting from such use.

Submitted by:

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The Federal Highway Administration may publish a notice in the Federal Register, pursuant to 23 United States Code (USC) § 139(I), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 150 days after the date of publication of the notice, or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.



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- Appendix A - I-70 West Vail Pass Auxiliary Lanes Final Section 4(f) Evaluation
- Appendix B - I-70 West Vail Pass Auxiliary Lanes Environmental Assessment and Section 4(f) Evaluation and Appendices (provided digitally here: [www.codot.gov/projects/i70westvailauxiliarylanes/assets/ea](http://www.codot.gov/projects/i70westvailauxiliarylanes/assets/ea))
- Appendix C - Revised Impact and Mitigation Table
- Appendix D - Geotechnical Maps
- Appendix E - Agency and Public Comments (full agency letters and a sample of the public comments regarding noise)



## LIST OF ACRONYMS AND ABBREVIATIONS

|       |  |       |   |
|-------|--|-------|---|
| AGS   | Advanced Guideway System                               | O&M*  | Operating and Maintenance                         |
| ALIVE | A Landscape-Level Inventory of Valued Ecosystems       | PA    | Programmatic Agreement                            |
| BMP   | Best Management Practice                               | PCCP* | Portland Cement Concrete Pavement                 |
| CDOT  | Colorado Department of Transportation                  | PEIS  | Programmatic Environmental Impact Statement       |
| CFR   | Code of Federal Regulations                            | ROD   | Record of Decision                                |
| Corps | U.S. Army Corps of Engineers                           | ROW*  | Right-of-Way                                      |
| CPW   | Colorado Parks and Wildlife                            | SCAP  | Sediment Control Action Plan                      |
| CSS   | Context Sensitive Solutions                            | SWEEP | Stream and Wetland Ecological Enhancement Program |
| CWA   | Clean Water Act  | SWMP  | Stormwater Management Plan                        |
| dBA   | A-weighted Decibel Level                               | TMDL* | Total Maximum Daily Load                          |
| DEA   | David Evans and Associates, Inc.                       | U.S.  | United States                                     |
| DOI   | U.S. Department of Interior                            | USFS  | U.S. Forest Service                               |
| EA    | Environmental Assessment                               | VMS   | Variable Message Sign                             |
| EB    | Eastbound  | VRC*  | Vail Racquet Club                                 |
| ERWSD | Eagle River Water and Sanitation District              | WB    | Westbound   |
| FHWA  | Federal Highway Administration                         | WVC   | Wildlife-Vehicle Collision                        |
| FONSI | Finding of No Significant Impact                       |       |   |
| GHG*  | Greenhouse Gas   |       |   |
| HMA*  | Hot Mix Asphalt  |       |   |
| I-70  | Interstate 70  |       |   |
| INFRA | Infrastructure for Rebuilding America                  |       |   |
| ITF   | Issue Task Force                                       |       |   |
| ITS   | Intelligent Transportation System                      |       |   |
| LCCA* | Life Cycle Cost Analysis                               |       |   |
| LEDPA | Least Environmentally Damaging Practicable Alternative |       |   |
| MM*   | Mile Marker  |       |   |
| MP    | Mile Post  |       |   |
| MPH   | Miles per Hour   |       |   |
| NAAG  | Noise Analysis and Abatement Guidelines                |       |   |
| NEPA  | National Environmental Policy Act                      |       |   |

*\* Indicates acronym/abbreviation only found within public comment(s).*



## 1. WHAT IS THE PROPOSED ACTION?

The Proposed Action (**Figures 1 and 2**) will add a 12-foot auxiliary lane, both eastbound (EB) and westbound (WB) on Interstate 70 (I-70), for 10 miles from approximately the East Vail exit (Mile Post (MP) 180) to the Vail Pass Rest Area exit (MP 190). Existing lanes will be maintained at 12 feet and the shoulders will be widened to a minimum of six feet for inside shoulders and maintained at 10 feet for outside shoulders. All existing curves will be modified as needed to meet current federal design standards.

Intelligent Transportation System (ITS) equipment will also be installed along the I-70 project corridor, consistent with recent recommendations from the 2017 I-70 Westbound, Vail Pass Narrows (MP 186) COBRA Evaluation. Additional variable message signs (VMSs) will be installed at key locations to warn drivers of upcoming curves, grades, and incidents. Additional variable speed limit signs will be installed to manage driver speeds to conditions. Automated lane closure signage will be installed approaching the East Vail exit on EB I-70 and approaching the WB I-70 Vail Pass Rest Area exit to quickly and efficiently close lanes when needed.

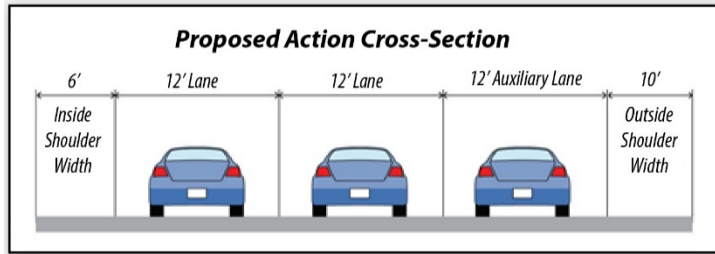
Additional elements of the Proposed Action include:

- The Vail Pass Recreation Trail will be relocated for approximately two miles, from MP 185 to MP 187, due to direct impacts from the addition of the I-70 EB auxiliary lane.
- Existing emergency truck ramps, located at approximately MP 182.2 and 185.5, will be upgraded to current design standards.
- Six wildlife underpasses and wildlife fencing will be constructed throughout the corridor.
- Additional capacity will be added to the existing commercial truck parking area at the top of Vail Pass on EB I-70.

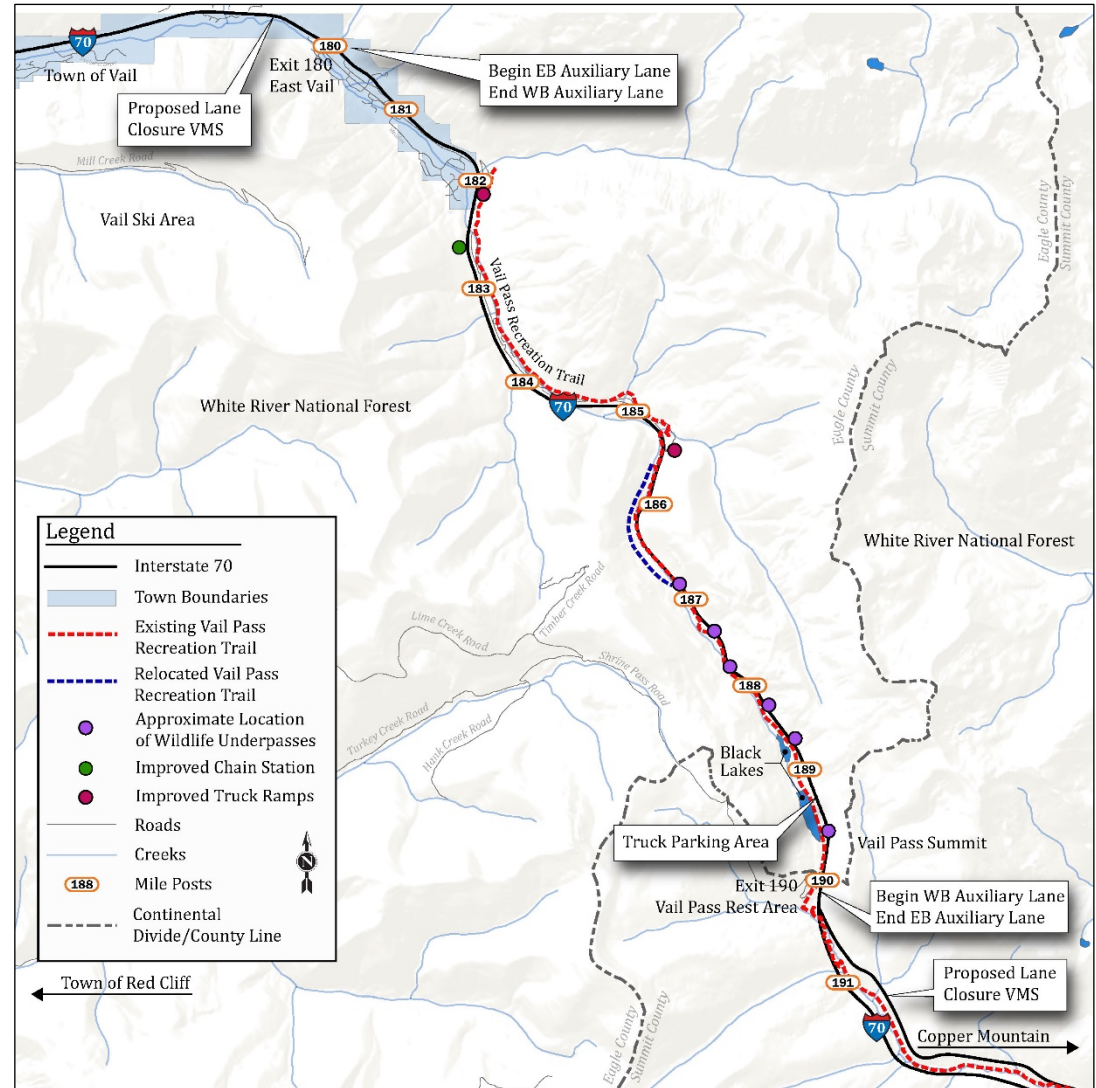
- Widened shoulders (minimum of eight feet of additional width beyond the 10-foot shoulder) will be constructed at multiple locations to accommodate emergency pull-offs, emergency truck parking, and staging for tow trucks.
- Median emergency turnaround locations will be improved to accommodate emergency and maintenance vehicle turnaround maneuvers.
- Chain station located at approximately MP 182.5 will be improved with additional parking, signage, lighting, and separation from the I-70 mainline.
- Avalanche protection will be installed at approximately MP 186.

The Colorado Department of Transportation (CDOT) will obtain easements (temporary and permanent) and an updated highway easement deed from the U.S. Forest Service (USFS) as required to accommodate these improvements. No full acquisitions of private property are anticipated but temporary construction easements may be required. Right-of-way needs will be evaluated during preliminary design.

1 **Figure 1. Proposed Action Cross Section**



**Figure 2. Proposed Action Map**







## 2. WHAT HAS BEEN DONE SINCE THE EA AND SECTION 4(F) EVALUATION WAS PUBLISHED?

### PUBLIC OUTREACH

The 30-day public comment period for the West Vail Pass Auxiliary Lanes EA took place from September 22 through October 21, 2020. Notification of the EA and Section 4(f) Evaluation availability and review period was advertised through digital ads in the Denver Post resulting in approximately 100,000 impressions. It was also advertised through four print and two full-day marquee digital ads in the Vail Daily, and four print ads in the Summit Daily.

Flyers in both English and Spanish were posted throughout the Town of Vail notifying the public of the EA and Section 4(f) availability. More than 3,400 bilingual postcard notices were mailed to property owners and tenants in the project area and East Vail. An email blast to the project mailing list reached more than 375 individuals. CDOT distributed a news release to media outlets across the state and multiple posts were made on CDOT's Facebook and Twitter accounts. The Town of Vail advertised the comment period on their web page.

The EA and Section 4(f) Evaluation were available online at [www.bit.ly/WestVailPass](http://www.bit.ly/WestVailPass) for review and hard copies of the EA and Section 4(f) Evaluation including appendices were available for in-person viewing at the Vail Public Library and Town of Vail Administration Office.

Due to current limitations on public events during the coronavirus pandemic and the need to provide a safe, convenient way for the public to participate in review of the EA, the public engagement was held virtually and consisted of a video on the project web page. Printed copies of the video presentation were also made available in English and Spanish at the two EA public review locations.

Comments could be submitted through the project web page, project email address, by phone to the project hotline, or in writing to the CDOT Project Manager. Almost all comments were submitted through

the project web page, followed by emails to the project email address and project team members.

### SECTION 4(F) EVALUATION

The EA and Section 4(f) Evaluation were sent to the United States (U.S.) Department of Interior (DOI) for review during the public comment period. The DOI responded with a letter on November 5, 2020 that stated their concurrence that there are no prudent and feasible avoidance alternatives for Section 4(f) use of the properties noted. The letter also stated that the DOI has no objection to Section 4(f) approval of this project, contingent on the execution by the State Historic Preservation Officer of the supplement to the I-70 Mountain Corridor Section 106 Programmatic Agreement (PA). The executed supplement to the PA is included in **Appendix A**.

### FUNDING AND SCHEDULE UPDATE

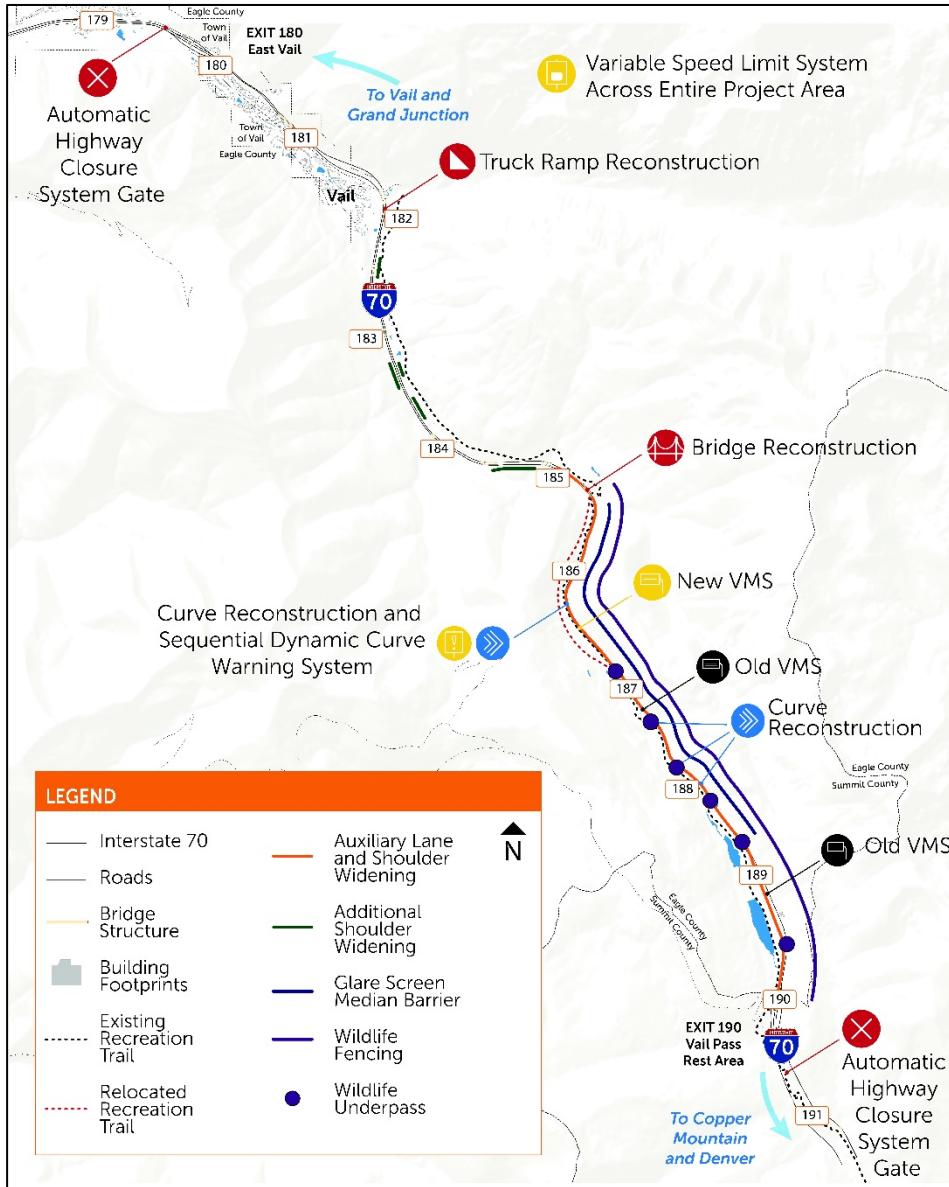
CDOT was awarded a \$60.7 million Infrastructure for Rebuilding America (INFRA) grant from the U.S. Department of Transportation for the first phase of improvements for West Vail Pass on I-70. CDOT has committed to provide a match to the INFRA grant of \$79.7 million to fund a \$140.4 million project. **Figure 3** provides a map of the improvements and **Table 1** lists the funded elements of the Proposed Action. This funding is only a portion of the total Proposed Action, as described in this document. Construction of the first phase of the INFRA grant improvements will begin in the summer of 2021. The timing and funding for the remainder of the project have not yet been identified.

During final design of these improvements, the following Issue Task Forces (ITFs) will be formed and will include members from the ITFs from the EA:

- Aesthetic Guidelines
- A Landscape Level Inventory of Valued Ecosystems (ALIVE)
- Stream and Wetland Ecological Enhancement Program (SWEEP)
- Context Sensitive Solutions (CSS) Design Criteria



**Figure 3. Location of INFRA Grant Funded Improvements**



**Table 1. INFRA Grant Funded Improvements**

| IMPROVEMENT   | MILE POST  |
|---|--|
| EB auxiliary lane, inside and outside shoulder widening, median glare screens | 185 - 190  |
| Wildlife underpasses  | 185 -190   |
| Wildlife fencing  | 185.2 - 190 (EB and WB)  |
| Vail Pass Recreation Trail relocation   | 185 - 190  |
| Additional outside shoulder widening  | EB 183.3-183.5<br>EB 184.6-184.8<br>WB 182.4-182.5<br>WB 183.3-183.4<br>WB 183.6-183.7 |
| WB curve reconstruction (two locations)                                       | 185.6 - 186.5<br>187.3 - 188.9   |
| Bridge reconstruction   | 185 - 185.6  |
| Truck ramp reconstruction   | 182  |
| Variable speed limit  | 180-190 (EB and WB)  |
| Automated highway closure systems   | 180 (EB)<br>190 (WB)   |



### 3. WHAT CHANGES HAVE BEEN MADE TO THE EA AND SECTION 4(F) EVALUATION?

The following corrections and clarifications to the EA and relevant technical appendices are noted. The EA and associated appendices are included as **Appendix B** to this document. **Appendix B** can be accessed through the project web page ([www.bit.ly/WestVailPass](http://www.bit.ly/WestVailPass)). There were no changes to the language of the impacts or mitigation measures.

- Table 5, Summary of Impacts and Mitigation for the Proposed Action: The mitigation measure after number 34 was not numbered. The measures have been renumbered and referenced appropriately in Table 4, Environmental Impacts of the No Action Alternative and Proposed Action. The updated Table 5 is included **Appendix C**.
- Appendix A5, Traffic Noise Technical Report: In Table 8 on page 14 of the report, the existing barrier on I-70 is the interchange at MP 180, approximately 2,000 feet east of where Bighorn Road crosses under I-70. This is a clarification as there are two locations where Bighorn Road crosses under I-70.
- Appendix A14, Water Quality Technical Memorandum: On page 14, under the “Drinking Water Sources, Wellhead Protection Areas”, the surface water supply should read, “Gore Creek supplies surface water...” instead of Black Gore Creek. This correction also applies to the mitigation table at the end of the memorandum and the “Context” and “Proposed Action” permanent impacts in Table 4 in the EA.
- Appendix A14, Water Quality Technical Memorandum: Table 2 was updated to reflect the 2020 Colorado’s Section 303(d) List of Impaired Waters and Monitoring and Evaluation List, which added “Aquatic Life” to the Monitoring and Evaluation Parameters of Black Gore Creek, adjacent to I-70 above Miller Creek. This correction also applies to the mitigation table at the

end of the memorandum and in the “Context” column in Table 4 of the EA. The reference at the end of the memorandum should also reflect the 2020 document rather than the 2018 one.

- Appendix A14, Water Quality Technical Memorandum: The snowmelt dates of May through June listed in the existing conditions section should read “April through July”. Appendix A18, Geologic Resources and Soil Technical Memorandum: The geohazard maps and cross section profiles were inadvertently excluded from the end of the technical memorandum and have been added as **Appendix D** to this document.
- FHWA held a Cost Estimate Review with CDOT to review the project elements to refine the cost of the Proposed Action. Based on this process, the total cost increased to approximately \$720M.

### 4. WHAT COMMENTS WERE RECEIVED ON THE EA AND SECTION 4(F) EVALUATION?

During the EA comment period from September 22, 2020 through October 21, 2020, 140 comment submissions were received from regulatory agencies, project stakeholders, and the general public. The majority of comments were submitted through a comment form on the project web page and others were sent via email to project team members. The comments were reviewed by the project team, including CDOT and FHWA, and responses for substantive comments and questions can be found in **Table 2**. In addition to the comments listed in Table 2, 98 additional individual comments regarding the traffic noise analysis were received. Examples of these comments, along with the full letters received from agency stakeholders, can be found in **Appendix E**. The majority of these comments were from residents of the Vail Racquet Club, located in East Vail on the south side of I-70. The comments were primarily focused on the results of the modeled noise levels for the Proposed Action and also expressed concern regarding the use of “Jake” brakes by freight trucks on I-70. In response to these comments and additional comments found in Table 2, CDOT prepared master responses that address the concerns in the comments.



## MASTER RESPONSES TO COMMENTS REGARDING THE TRAFFIC NOISE ANALYSIS

### WHAT GUIDANCE AND REGULATIONS DOES CDOT HAVE TO FOLLOW FOR NOISE ANALYSES?

Projects with federal transportation funding are required to comply with the highway traffic noise regulations as defined in Part 772 of Title 23 of the Code of Federal Regulations (23 CFR 772). State highway agencies, in this case CDOT, are required to prepare and adopt written guidelines specific to their state, which must demonstrate compliance with 23 CFR 772. CDOT developed Noise Analysis and Abatement Guidelines (NAAG), which is what the West Vail Pass Auxiliary Lanes Traffic Noise Technical Report was required to use for analysis of existing conditions and impacts from the Proposed Action.

### WHY DID THE NOISE STUDY NOT EVALUATE NOISE FOR ALL OF EAST VAIL?

As defined in the NAAG, the study area for noise analyses for highway projects is 500 feet from the edge of pavement. The study area could be expanded should there be impacts anticipated beyond the 500-foot boundary. Based on the noise modeling, no impacts are anticipated within the 500-foot boundary on the south side of I-70 and therefore expanding the boundary to include all of East Vail and the Vail Racquet Club condominiums was not necessary.

### HOW WAS EXISTING NOISE MEASURED AND FUTURE NOISE DETERMINED?

As the project is under the jurisdiction of FHWA and CDOT, there are very specific steps in the process to analyze noise impacts. A model of the existing conditions was created and included existing roadway alignment, topography, number of vehicles on I-70 including the percentage of freight vehicles, speed limit, and location of nearby residences. The model is able to “predict” the level of noise at the residences. Field measurements were then taken in June 2018 at specific locations throughout the study area (see Appendix A5 of the EA). The measurements are required to follow the NAAG guidelines for duration of measurements and additional site data collection, such

as traffic counts. In addition, long-term measurements were made over periods of several days, including both weekday and weekend periods, to establish the loudest traffic noise hour. These measurements are then used to validate the existing conditions model, meaning the modeled and measured noise levels are compared to each other to confirm the existing noise levels.

### HOW WERE NOISE IMPACTS DETERMINED?

In order to assess potential noise impacts from the Proposed Action, the model was then run utilizing future conditions, including future traffic volumes and the new footprint of the Proposed Action based on the conceptual design plans shown in Appendix C of the EA. The model was also run utilizing future traffic volumes and with no changes to I-70 (No Action Alternative). An impact from noise occurs if either of the following conditions is met:

- Proposed Action traffic noise level approaches (i.e., equals) or exceeds CDOT’s Noise Abatement Criteria (NAC). For residential land, the NAC is 66 dBA.
- Proposed Action traffic noise level exceeds the existing highway traffic noise level by 10 dBA.

Based on the noise modeling results, no impacts are anticipated from the Proposed Action on the south side of I-70, including at and near the Vail Racquet Club. For this reason, an assessment of mitigation was not conducted for this location.

### WILL THE ADDITION OF AUXILIARY LANES INCREASE FUTURE NOISE LEVELS?

The future (2045) noise levels from the Proposed Action, which show the modeled impacts with the addition of auxiliary lanes, were compared to modeled noise levels for the No Action Alternative, which does not include auxiliary lanes. Table 9 of Appendix A5 of the EA shows the No Action and Proposed Action modeled noise levels. When comparing noise levels between the No Action and Proposed Action alternatives, noise levels will change by a range of 1.8 dBA (decibels) quieter to 2.5 dBA louder, depending on the location. A change in noise



levels less than a 3 dBA difference are considered barely perceptible to the human ear.

### **WHY IS THERE NO NOISE MITIGATION RECOMMENDED FOR THE SOUTH SIDE OF I-70 IN EAST VAIL?**

The noise modeling determined that the Proposed Action would only impact receptors located on the north side of I-70 at two locations. There were no impacts, as defined in by the NAAG, to receptors on the south side of I-70. Noise mitigation was found to be reasonable and feasible at Barrier Location 1, as described in the Traffic Noise Technical Report. This barrier is located on the north side of I-70 near the Pitkin Creek Condominiums. A benefitted receptor survey will be conducted during final design to determine if a majority of the benefitted residents want the barrier constructed.

In addition, FHWA and CDOT can only mitigate for noise when the hourly average noise level exceeds the levels identified in the NAAG and if the mitigation is determined to be reasonable and feasible.

### **WHAT WILL BE DONE TO MINIMIZE NOISE IMPACTS DURING CONSTRUCTION?**

During construction, the contractor will be required to adhere to Town of Vail noise ordinance, where applicable. In addition, the contractor will be required to adhere to the Colorado Noise Statute 25-12-103 for the unincorporated areas. If construction activities must occur outside of ordinance hours, the contractor must apply for a noise variance. In addition, the contractor will utilize methods such as the following, to minimize impacts during construction:

- Notify neighbors in advance when construction noise may occur.
- Keep noisy activities as far from sensitive receptors as possible.
- Keep exhaust systems on equipment in good working order. Maintain equipment on a regular basis; it should be subject to inspection by the construction project manager to ensure maintenance is being conducted.

- Use properly designed engine enclosures and intake silencers if appropriate.
- Place stationary equipment as far from sensitive receptors as possible.
- Perform construction activities in noise sensitive areas during hours that are least disturbing to nearby residents, as feasible.

### **WERE “JAKE” BRAKES INCLUDED IN THE NOISE MEASUREMENTS?**

Intermittent loud noises such as “Jake” brakes are included in the noise measurement if the brakes were used by trucks during the measurement. However, traffic noise is measured as an average value over a period of time, not as a maximum value. The fluctuation in noise is averaged out over the entire reading; since “Jake” breaks are loud for a relatively short period of time, they do not increase the average noise value.

“Jake”, or compression, brakes are a type of safety device installed in heavy trucks to aid in slowing the vehicle, especially on highways with long, steep grades. All commercial vehicles operating on any public roadway in Colorado equipped with a compression or “Jake” brake device are required by law to have mufflers in accordance with Colorado Revised Statute 42-4-225. Failure to do so will result in a \$500 fine. Enforcement of this law is outside the purview of CDOT and is the responsibility of law enforcement officials. The enforcement is typically accomplished through commercial vehicle inspections at port of entry and weigh station facilities. Signs stating “engine brake mufflers required” have been installed around the state to inform motor carriers of this requirement and the Colorado Motor Carriers Association is actively working to educate their members about the importance of maintaining the mufflers.

Even with proper use of mufflers, engine braking still produces a distinct sound. Because they are a safety device, the use of engine brakes is not prohibited on state highways unless explicitly forbidden by local ordinance. The Town of Vail does have a noise ordinance for





heavy trucks; those trucks with properly installed and maintained compression brakes are within the established noise limits. For those vehicles that exceed the noise limits however, CDOT does not have the

authority or responsibility to enforce this ordinance. Law enforcement officials can provide additional information regarding local noise ordinances and their enforcement.

**Table 2. Public and Agency Comments Received and Responses to Comments**

| ID #  | COMMENT  | RESPONSE  |
|---|--|---|
| <b>U.S. Army Corps of Engineers (Corps)</b> |  |   |
| 1   | It is our understanding that a delineation of waters of the U.S. has yet to be conducted for this project but that fen wetlands are anticipated to be present within the project area. To ascertain the type and extent of waters on the project site, the applicant should prepare a wetland delineation, in accordance with the "Minimum Standards for Acceptance of Preliminary Wetlands Delineations" and "Final Map and Drawing Standards for the South Pacific Division Regulatory Program" under "Jurisdiction" on our website at the address below, and submit it to this office for verification prior to finalizing your assessment of impacts to waters of the U.S. and the associated alternative analysis.  | A formal wetland delineation in accordance with the applicable guidelines and standards will be conducted during the final design process.  |
| 2   | A complete review of the alternatives analysis will be conducted as part of the permitting process. The range of alternatives considered for this project should include alternatives that avoid impacts to wetlands or other waters of the United States. Every effort should be made to avoid project features which require the discharge of dredged or fill material into waters of the United States. In the event it can be clearly demonstrated there are no practicable alternatives to filling waters of the United States, mitigation plans should be developed to compensate for the unavoidable losses resulting from project implementation.  | During final design, if it is determined a Section 404 Individual Permit is necessary, CDOT and FHWA will prepare all necessary documentation to support the permitting process, including an alternatives discussion and a compensatory mitigation plan.   |
| <b>Environmental Protection Agency</b>      |  |   |
| 3   | The EA identifies that the proposed alternative will result in permanent impacts to wetlands, including approximately 9.44 acres of wetlands (including 0.42 acre of fen) and 0.19 acre of other water features. Secondary impacts to wetlands may also occur but they were not evaluated as they were identified to be "not quantifiable." While direct impacts are much easier to quantify than secondary impacts, evaluation of indirect impacts is an expectation of the 404 Clean Water Act regulations [40 CFR 230.11(h)]. FHWA/CDOT has completed several projects analyzing direct, secondary, and cumulative impacts to aquatic resources. It is unclear why secondary impacts were designated as not quantifiable in this EA. We recommend that the Final EA apply CDOT's past practice for evaluating secondary | All permanent impacts identified in the EA are preliminary, pending field verification of soils and hydrology, including those wetlands identified as potential fens. Secondary impacts to wetlands were not assessed due to the conceptual nature of the Proposed Action design. All wetlands, including fens, will be formally delineated during final design and the design will be refined as much as possible to minimize both permanent and secondary impacts. Should an individual |



| ID # | COMMENT   | RESPONSE  |
|------|---|---|
|      | wetland impacts or clarify why secondary impacts for CWA 404 purposes are not quantifiable.   | Section 404 permit be required, the analysis will include secondary impacts.  |
| 4    | Fens are peat-forming wetlands that rely on a perennial groundwater supply. As such, fens are particularly susceptible to secondary impacts to groundwater flow paths. Please identify all fentype wetlands in the project area. If there are fens downgradient of any planned road cut or fill, it will be important to assess and disclose the potential for permanent secondary impacts to those irreplaceable resources.  | All potential fens (19) were identified in Appendix A16 beginning on page 15 and listed in Table 2. There are 15 slope-type fens and 4 riverine-type fens. While some of these fens have been field-verified by CDOT and the Colorado Natural Heritage Program, not all listed in Table 2 have been verified and confirmed. All wetlands, including fens, will be formally delineated during final design and the design will be refined as much as possible to minimize both permanent and secondary impacts, including groundwater flow paths.  |
| 5    | Based on review of the EA and Wetlands Technical Memorandum, and considering the expected impacts to fens, the EA does not clearly demonstrate the preferred alternative would be the least environmentally damaging practicable alternative (LEDPA). We understand that the EA proposes that the project will likely be conducted in phases, and that 404 permitting will be sought once the final design is implemented. If possible, we do recommend that if there are other practicable alternatives (as discussed below) that can be evaluated prior to designation of a FONSI, they be evaluated in the Final EA. If the current preferred alternative moves forward, and there is further detailed delineation of impacted wetland complexes, especially fens and indirect impacts to wetlands, we recommend that the Final EA establish additional NEPA, CWA 404 consultation or public participation actions as part of the project timeline. This will allow agencies and stakeholders to provide feedback on those areas of the EA that are not fully evaluated. | <p>Please see the responses to comments 6 and 7 regarding the elimination of alternatives during the EA process. The Proposed Action was the only alternative that met the purpose and need criteria and is therefore the LEDPA. The Proposed Action will be refined during final design to further avoid and minimize impacts.</p> <p>The EA is also a Tier 2 National Environmental Policy Act (NEPA) document and the addition of auxiliary lanes on West Vail Pass was identified in the Tier 1 I-70 Mountain Corridor Programmatic Environmental Impact Statement as part of the ultimate Preferred Alternative for the corridor, which was also LEDPA for the entirety of the Mountain Corridor.</p> <p>The Corps was invited to and participated in numerous Technical Team meetings and the SWEEP ITF meetings throughout the project, including meetings focused on the development and screening of alternatives. In addition, there were a total of four public meetings, one of which presented the detailed results of the alternatives screening.</p> |



| ID # | COMMENT   | RESPONSE   |
|------|---|--|
|      |   | <p>There will be additional opportunities for input and feedback during final design as part of the SWEEP ITF.</p>   |
| 6    | <p>We note that all alternatives met the safety criteria and reduced number of full closures with reduced crashes. 40 CFR 230.10 states that “an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall basic project purposes.” The Auxiliary Lanes with WB I-70 realignment, curve modifications and ITS Improvements alternative was eliminated based on the following screening criteria: “Does the alternative maintain or improve access for emergency response?” The EA states, “While lane closure system improves access for emergency response, the loss of emergency turnarounds does not maintain or improve current emergency response access.” It is unclear why the cumulative actions of this alternative do not meet the criteria.</p> | <p>The alternative with the realignment of WB I-70 would shift the WB I-70 roadway to be separated from the EB I-70 roadway alignment with substantial elevation difference and distance between the two directional roadways. Due to the topography, emergency turnaround areas, where emergency response and maintenance vehicles can turnaround to access the other direction of the highway between interchanges, could not be provided. During the CSS stakeholder process, CDOT met with local emergency service providers and CDOT maintenance and confirmed that having those turnaround areas, particularly in the area of the corridor where the alternative realigned WB I-70, are critical for emergency and incident response and that the loss of those turnarounds outweigh the additional lane and maintenance of 10-foot outside shoulders.</p> <p>The loss of the turnarounds is a more substantive impact in regard to safety and operations than the benefits from the addition of a lane closure system and therefore would have a cumulative negative impact on emergency response access.</p> |
| 7    | <p>Similarly, the Existing Two Lanes and Operational Lanes with Curve Modifications and ITS Improvements alternative was eliminated based on the following screening criteria: “Does the alternative improve traffic flow?” The EA Appendix A1 states, “Majority of time only two travel lanes, which does not reduce disruptions in traffic flow.” It is unclear why the operational lanes do not result in reduced traffic disruptions. The widening that allows the operational lane is proposed to, “be opened for an additional travel lane (an “operational lane”) when needed due to an incident, emergency response, or unusually high traffic volumes. [emphasis added].” It is unclear how this alternative does not meet the traffic flow improvement criteria.</p>  | <p>As noted in the needs assessment in the EA, the steep grades, tight curves, and resulting speed differentials cause slow and unreliable travel times with everyday backups from slow-moving vehicles traversing the pass. The “operational lane” would only be open when needed due to an incident, emergency response, or unusually high traffic volumes. The existing needs related to slow and unreliable travel times occur under typical traffic volume and non-incident conditions, so the “operational lane” would not be open to provide the operational</p>  |





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|  |  | <p>improvement that is needed all the time, not only during times of incidents</p> <p>The speed differentials between passenger vehicles and slow-moving vehicles also cause erratic lane changes and braking maneuvers, resulting in crashes and safety concerns with spin outs. These are also everyday occurrences that happen under typical traffic volume conditions, so the “operational lane” that would only be open during times of incidents, emergency response, and unually high traffic volumes would not be open to address these safety issues.</p> |
| 8  | <p>To ensure that the analysis does not eliminate a potential LEDPA, we recommend that the EA provide additional information on the screening of alternatives per our recommendations above to increase clarity or determine if any of the other alternatives may be viable for consideration in the Final EA.</p> | <p>During final design, if it is determined a Section 404 Individual Permit is necessary, CDOT and FHWA will complete all necessary documentation to support the selection of the LEDPA. See the response to comment 5 for additional information regarding the LEDPA.</p>   |
| <b>Colorado Parks and Wildlife (CPW)</b> |  |  |
| 9  | <p>Staff requests that CDOT recognize CPW staff engagement on the location and design of the wildlife structures, wildlife jump-outs, and wildlife fencing. This consultation is critical to the success of the new features (which will remain on the landscape for decades to come).</p>                         | <p>CPW was an active participant in the ALIVE ITF during development of the EA and associated wildlife mitigation measures. CPW is listed as a participant in the ALIVE ITF on page 69 of the EA.</p>  |
| 10                                       | <p>Staff requests continued engagement on water quality, riparian habitat, and the design of fish passage structures &amp; barriers.</p>   | <p>As part of the SWEEP ITF, CPW will have an opportunity during final design for continued input on water quality, riparian habitat, and if required, fish passage structures and barriers.</p>   |
| 11                                       | <p>Staff requests continued consultation &amp; approval of the design of wildlife crossing structures, fencing, jump-outs, lighting, and noise mitigation.</p>   | <p>As part of the ALIVE ITF, CPW will have an opportunity during final design for continued input on the location and design of all wildlife features.</p>   |



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| 12   | <p>Staff requests a change to the Biological Evaluation (Appendix 13, page 26) that incorrectly notes that the project area does not include bighorn sheep habitat, or the presence of bighorn sheep within the project area. Rocky mountain bighorn sheep do in fact exist within the western portions of the project area. In particular, bighorn sheep winter range immediately adjacent to I-70 at MP180 and the surrounding area (Pitkin Creek &amp; Fall Line Drive) see significant bighorn sheep use typically starting in November running through the early summer months. Additionally, three bighorn sheep WVCs have been documented at MP 180 during the 2019/2020 winter.</p> <p>Subsequently, CPW requests continued engagement on mitigation efforts specific to the bighorn sheep population in this area.</p> | <p>Early coordination with CPW during project scoping and with the USFS during preparation of the Biological Evaluation indicated that bighorn sheep do not occur in the project area and that they did not need to be included in the species list. The Bighorn Sheep WVCs were on the WB on ramp of the East Vail Interchange at MP 180 and further west from there, which is outside of the limits of the project. Therefore, the EA does not include any specific bighorn sheep mitigation efforts.</p>   |
| 13   | <p>Staff requests that wildlife structures, fencing, and jump-outs be installed prior to construction if possible.</p>  | <p>The ultimate timing of the installation of the wildlife structures, fencing, and jump-outs may not be able to be implemented prior to other elements of the project based on construction footprint needs. CDOT is committed to the installation of the wildlife mitigation features listed above and as outlined on pages 53 and 54 in Table 5 of the EA.</p>   |
| 14   | <p>Staff requests continued engagement on the realignment of the Vail Pass Recreation Trail.</p>  | <p>As part of the CSS process, CPW will have a continued opportunity during final design for input on the realignment of the Vail Pass Recreation Trail.</p>  |
| 15   | <p>If construction overlaps with archery and rifle hunting seasons, CPW requests consultations on providing hunter access to public lands. Hunting and fishing contributes near \$1.8 billion to Colorado’s economy annually and supports approximately 306 jobs in Eagle and Summit Counties combined; protecting wildlife populations and providing positive hunter and angler experiences are critical aspects of our work.</p>  | <p>As outlined in the EA, impacts to designated public land access locations during construction will be minimized, but may be required during construction, including short-term closures of access to Deluge Lake Trail, Gore Creek Trail, Gore Valley Trail, the east trailhead for Two Elk Trail, and Gore Creek Campground due to safety-critical work on the I-70 bridges over Bighorn Road. Access to Bighorn Creek Trail may be closed due to construction work on the Columbine Drive concrete box culvert crossing under I-70. The trail would also be impacted where it crosses under I-70 near MP 184 due to safety-critical bridge work.</p> |



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|                                      |   | As part of the CSS process, CDOT will continue to coordinate with CPW on construction activities during hunting season.  |
| 16                                   | Regarding migratory songbirds: on Pg. 55, in Table 5. Summary of Impacts & Mitigation for the Proposed Action..., under "Mitigation Commitment from Source Document," surveys of migratory songbirds are listed as the mitigation effort. Surveying does not constitute mitigation unless it informs project decisions designed to protect migratory bird communities.  | Nest surveys prior to construction are mitigation as the identification of nesting birds minimizes the potential for "takes" of migratory birds.   |
| <b>Eagle River Watershed Council</b> |   |  |
| 17                                   | <p>Comment 1: Technical Memorandum A13 appears to cite either incorrect or out of date information for the current regulatory status of stream segment COUCEA06_H Black Gore above Miller Creek. Upper Black Gore Creek above Miller Creek is currently impaired for aquatic life use.</p> <p>Request: EA and technical memorandum materials should be updated to include the correct stream regulatory status. This error is especially relevant because we believe CDOT should contribute recurring financial resources as an additional water quality mitigation measure to continue the long-term monitoring and tracking of aquatic life conditions.</p> | <p>The Water Quality Technical Memorandum was updated to reflect the 2020 Section 303(D) List of Impaired Waters and Monitoring and Evaluation List. This update is also included in Appendix C of this document.</p> <p>CDOT has voluntarily provided water quality monitoring for the project area since 2000. These reports are typically produced every two years.</p> |
| 18                                   | <p>Comment 2: The study area discards or ignores basic science about water quality and stream systems to inappropriately exclude lower Gore Creek from environmental impact analysis for water quality.</p> <p>Request: Effects of increased pollutant load from the project on the lower mainstem of Gore Creek are highly relevant and should have been included in water quality impact analyses.</p>  | <p>Mitigation is included in the project to offset potential pollutant loading from the Proposed Action to waterways.</p> <p>Due to the addition of the auxiliary lane, a comprehensive drainage analysis will be conducted during final design and in conjunction with the Sediment Control Action Plan (SCAP) update, will reduce pollutant loading in Gore Creek.</p>   |
| 19                                   | <p>Comment 3: The technical memorandum provides inadequate treatment of increasing chloride load and ongoing salinity issues. Salinity is a highly probable contributor to aquatic life impairments; stormwater and annual loads will increase with this project.</p> <p>Request: Establish additional salinity monitoring at the watershed mouth for trends tracking with required stakeholder reporting and feedback and require exploration of salinity-responsive BMPs in the new SCAP designs.</p>   | <p>CDOT is committed to fulfilling the purpose and objectives of SWEEP and all applicable federal and state laws regarding water quality and protection of water resources. However, the recommendations for long-term monitoring fall outside the scope of the EA. Discussions will continue with the SWEEP ITF on partnering and</p>                                     |



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|      |   | continuing to collect and share data as it has been doing collaboratively since 1999.  |
| 20   | <p>Comment 4: SCAP design and implementation should be required concurrently with road segment design and construction for the project to move forward.</p> <p>Request: The decision document or change/addendums to the EA should explicitly require that approval of any new project phase is dependent on complete design, funding, and securement of life-cycle O&amp;M funding for the associated SCAP control measures for that road segment.</p>   | <p>In conjunction with final design and prior to the construction of any new impervious surface, the SCAP will be updated, in coordination with the SWEEP ITF. SCAP control measures will be implemented as appropriate when an improvement feature triggers the need for sediment collection, such as an increase in impervious area.</p> <p>CDOT has an operation and maintenance budget that is in part utilized to maintain sedimentation control measures along CDOT-maintained highways.</p> |
| 21   | <p>Comment 5: Monitoring for SCAP efficacy should occur on a finer scale to document progress and provide data at a sufficient spatial resolution to identify localized concern areas.</p> <p>Request: Mitigation measures should specify tracking of capture and removal at individual control measures or localized groups of measures to help guide adaptive management of SCAP design and implementation. Additionally, a programmatic mitigation measure that specifies annual sediment recovery maintenance schedules in the SCAP should address summer season sediment transport risks to streams by prioritizing recovery work immediately after snowmelt rather than any time prior to the next winter season.</p> | <p>The mitigation included in the EA is for impacts caused by the Proposed Action. As the EA is not a programmatic document and is for a specific project, including programmatic mitigation measures are outside the scope of the EA.</p>   |
| 22   | <p>Comment 6: Water quality mitigation measures lack quantitative goals for sediment capture and recovery in the new SCAP.</p> <p>Request: Mitigation commitments should set quantitative sediment recovery goals for use in a new SCAP and TMDL development. Reporting and feedback from increased SCAP monitoring should be used to regularly assess these goals within an adaptive-management type process with the Black Gore Steering Committee.</p>   | <p>The Proposed Action does not set a limit on how much sediment is removed annually from existing or proposed sediment ponds or traps. CDOT does have a maintenance program that removes sediment annually. Ponds and traps will be sized appropriately to collect and hold sediment given current maintenance practices. The SCAP update will also include project conditions and impacts as well.</p>   |
| 23   | <p>Comment 7: Specification of a process and timeline to complete and adopt a sediment TMDL should be required as a water quality mitigation measure.</p>   | <p>The mitigation included in the EA is for impacts caused by the Proposed Action. Establishing a Total Maximum Daily</p>  |



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|  | Request: CDOT should work with local partners to complete a sediment TMDL with watershed partners within 2 years of the final EA approval or decision record for the first phased portion of the West Vail Pass Auxiliary Lane project.  | Load for Black Gore Creek is outside the scope of the Proposed Action impacts and mitigation.  |
| 24   | <p>Comment 8: Legacy sediment sources below bridges and in some portions of SCAP Zones 1 and 2 comprise an important and unaddressed source load category. New construction and SCAP implementation will provide opportunities to address some of these sources during project construction.</p> <p>Request: Project design should include access grades in major bridge areas to allow periodic removal (3 to 10-year timeline) of legacy side accumulations and address ongoing additions to sediment reservoirs in these areas of Zone 2 and Zone 3.</p>  | As part of the SCAP update, CDOT will identify opportunities to improve maintenance access to these areas in Zone 1 (as defined by the SCAP) by incorporating improvements into the roadway and structure design.  |
| 25   | <p>Comment 9: A prioritization framework for wetlands mitigation should be specified to guide locational choices for onsite mitigation</p> <p>Request: Mitigation commitments should specify downstream water quality as a focus in determining final locations for onsite mitigation.</p>   | Mitigation priorities will be determined during the Section 404 permitting process in final design. The SWEEP ITF will be able to provide input during the permitting process.   |
| <b>Eagle River Water and Sanitation District (ERWSD)</b> |  |  |
| 26   | <p>SCAP and SWMP schedules: We would like to understand the schedules for the Sediment Control Action Plan (SCAP) update and Stormwater Management Plan (SWMP) document. It is critical that the SCAP and SWMP efforts take place during planning for on-the-ground activities, so that adjustments can be made contemporaneously. Additionally, with the announcement of funding available for several early phase projects, we want to ensure that the SCAP and SWMP happens prior to implementation and not lost in the push towards construction. The I-70 corridor has long had an impact on water quality and sediments and this project will compound the problem. Thus, the measures identified and implemented through SCAP and SWMP are crucial to protecting water quality in the Gore Creek watershed. We request that the District remain involved in these specific components of project planning and implementation.</p> | <p>In conjunction with final design and prior to the construction of any new impervious surface, the Black Gore Creek SCAP will be updated, in coordination with the SWEEP ITF. SCAP control measures will be implemented as appropriate when an improvement feature triggers the need for sediment collection, such as an increase in impervious area.</p> <p>Stormwater Management Plans (SWMPs) are required to be submitted to the Colorado Department of Public Health and Environment for projects over one acre 10 days prior to starting construction. CDOT will submit, as appropriate, prior to starting construction.</p> <p>The ERWSD will be invited again to have a representative on the SWEEP ITF that will provide opportunities for stakeholder feedback on the SCAP creation.</p> |



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| 27   | <p>Ongoing monitoring: We also request to further discuss a partnership for ongoing monitoring of the project corridor, so that impacts on the watershed can be quickly identified and adjusted for. We have included suggested sites for ongoing monitoring (see list below) that would be most beneficial as they align with efforts already funded and managed by the District, the town of Vail, and Eagle River Watershed Council. The continued collection of data from these sites would also allow us and CDOT to respond to likely public and municipal inquiries as to whether the project has or has not degraded the watershed over time.</p> <p>We have all seen the success of both the Black Gore Creek Steering committee’s work and the tracking of sediment and magnesium chloride application and cleanup by CDOT, and we would like to build on these on-the-ground, public successes. We are committed to ongoing water quality, sediment loading and macroinvertebrate monitoring on Black Gore Creek, Black Lakes, and Gore Creek, and would like to continue conversations with CDOT about partnership opportunities.</p>  | <p>CDOT is open to discussing partnerships at any time and those conversations need not be tied to any project. Please feel free to reach out to Karen Berdoulay to continue any further discussions.</p>  |
| 28   | <p>Aquatic life: While aquatic macroinvertebrates were not included in detail in the EA or technical memoranda, we maintain that macroinvertebrate monitoring is a critical component of detecting changes in stream health. The EA notes that Gore Creek is listed on the 303(d) list for aquatic life (provisional) but it does not clarify that the listing is based on macroinvertebrate multimetric index (a metric of the aquatic assemblage of benthic macroinvertebrates). This is important for the project because the stream is likely to be further negatively impacted by the project. Also, Table 2 in the water quality technical memorandum (A-14, page 14) incorrectly omits aquatic life from the upper segment of Black Gore Creek above Miller Creek. Please correct this entry. We recommend, and are open to discussion about partnership opportunities for, macroinvertebrate monitoring and a sediment study at four sites every two years:</p> <ol style="list-style-type: none"> <li>1. Polk Creek - Black Gore Creek monitoring (reference)</li> <li>2. Black Gore Creek Milepost 185 - Black Gore Creek monitoring</li> <li>3. Black Gore Creek Milepost 184 - Black Gore Creek monitoring</li> <li>4. Black Gore Creek above the confluence with Gore Creek - ERWSD and town of Vail Gore Creek reference site</li> </ol> | <p>The Proposed Action is unlikely to increase impacts to macroinvertebrates in Gore Creek as CDOT will be designing, constructing, and maintaining sediment control measures to reduce sediment loads into Black Gore Creek.</p> <p>Table 2 in the Water Quality Technical Memorandum was updated to reflect the 2020 303(d) listing.</p> |



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| 29   | <p>Wetlands: We applaud the inclusion of language asserting that “CDOT is committed to utilizing onsite compensatory mitigation as its first priority and will work with the Corps to confirm the specific wetland mitigation strategy” (page 62 of the EA). We recommend that channel-adjacent wetlands be considered first, prior to consideration of wetlands higher up in elevation or more separate from the creek. If and when suitable locations in the Black Gore watershed that serve to functionally protect or enhance receiving stream water quality cannot be found, local stakeholders would like to pursue options for wetland mitigation, riparian enhancement, and stream health improvements within the greater Gore Creek watershed. This should include site-specific project options within town of Vail, which have previously been identified in the Gore Creek Action Plan for potential benefits to Gore Creek stream health that may help locally offset water quality impacts transported downstream from the Black Gore system.</p> | <p>Mitigation priorities will be determined during the Section 404 permitting process in final design. The SWEEP ITF will have a continued opportunity to provide input on potential mitigation opportunities.</p>   |
| 30   | <p>We suggest, that for clarity for the public and stakeholders, you explain what the word “impacted” means in sentences such as “[a]pproximately 9.44 acres of wetlands (including 0.42 acre of fen) and 0.19 acre of other water features would be permanently impacted” (pages 30 and 62 of the EA, and elsewhere). The word “impacted” is not clear NEPA analysis language and does not provide information to the reader as to what might happen to the wetlands (destruction, infilling, scouring, etc.).</p>   | <p>Due to the conceptual nature of design, impacts to wetlands were determined using Geographic Information Systems by overlaying the potential construction disturbance area with the wetland boundaries. The areas of overlap were considered “impacted”. As the project progresses into final design, a formal wetland delineation will be conducted, and impacts will be determined based on the refined design of the Proposed Action. Impacts will be minimized as much as possible during the final design process.</p> |
| 31   | <p>We understand why, in the wetland technical memorandum (A-16) maps, wetland spatial information was “clipped” along the project boundary line. However, to improve final design and implementation decisions, we would like you to share the geospatial data with the Issue Task Force (or other appropriate team members) so that we can understand the extent of the wetlands and provide the best guidance to CDOT on wetland protection. In fact, this may better show that in terms of total watershed function, the slope wetlands are significantly larger than what is shown in the project corridor. And this may provide opportunities to better link wetlands with the proposed mitigation sites. We can assist in identifying areas of opportunity that would link wetland areas for environmental enhancement.</p>  | <p>A formal wetland delineation will be conducted during final design and CDOT will refine the wetland boundaries identified in the EA. The SWEEP ITF will have a continued opportunity to see the updated wetland boundaries and to provide input in to mitigation strategies for impacted wetlands.</p>  |





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| 32   | <p>Fens: There are 0.42 acres of fen wetlands likely to be impacted. In the wetland technical memorandum (A-16), it is stated that mitigation guidance from the Army Corps of Engineers will be followed at a replacement ratio greater than 1:1. “Fens may need to be replaced at a higher ratio, if determined by the Corps” (page 27). However, the EA should recognize that fens are exceedingly difficult to replace. Further, under 33 CFR 332.3(e)(3), compensatory mitigation of fens must be provided through in-kind rehabilitation, enhancement, or preservation to the extent practicable. In addition, mitigation ratios greater than 1 to 1 are needed to account for the likelihood of success (33 CFR 332.3(f)(2)). Although the research community is working on fen restoration in Colorado, it is our understanding that the likelihood of success for fen creation is still minimal. We would like to learn more about the proposed mitigation of the fens and believe the EA should be clear if the impacted fens are not being replaced with fen wetlands. As noted in Appendix A-16, fens have special watershed function for water quality and habitat.</p> | <p>Since a fen is a type of wetland, the Corps would impose compensatory monitoring requirements if a wetland, including a fen or fen/wetland complex, is impacted. The requirements depend on the degree to which it might be impacted (i.e. permanent vs temporary impacts).</p> <p>All wetlands, including fens, will be formally delineated during final design and the design will be refined as much as possible to avoid and minimize both permanent and secondary impacts. Replacing a fen, as with similar persistent emergent non-fen wetlands, would require a robust site investigation of soils, hydrology and be in an area of similar geology.</p> <p>Should fens be impacted, there may be opportunities for restoration as most of the potential fens identified in this EA are impaired due to traction sand. Removal of the sand could be part of the mitigation. Restoring hydrology of drained fens would be a possibility as they would still have the remnant soils and organic layer.</p> |
| 33   | <p>Source water: The EA frequently mentions that “Black Gore Creek supplies surface water to the Gore Valley Drinking Water Facility in East Vail.” Although the Gore Valley Drinking Water Facility is located on the banks for Black Gore Creek, its supply is from Gore Creek just above the confluence of Black Gore Creek and Gore Creek. Please correct the EA.</p>   | <p>The Water Quality Technical Memorandum was updated and a correction to the EA is included in this FONSI, which states “Gore Creek supplies surface water to the Gore Valley Drinking Water Facility in East Vail.”</p>   |
| 34   | <p>Life cycle performance of BMPs: As we and others voiced on the last technical team call, we are concerned about how best management practices (BMPs) and related mitigation measures will be tracked as individual components of the project move forward. While we have shared this concern in the past, it is more important now that it is certain that portions of the project may move forward quickly while others may be years delayed. We would like to better understand life cycle performance and maintenance of the BMPs and look forward to additional discussions with you about this topic.</p>   | <p>The Black Gore Creek SCAP update during final design will include coordination with the SWEEP ITF. Members of the ITF will have the opportunity to provide input on control measure recommendations.</p>   |



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| 35   | <p>Table 5, “Resource Mitigation Measures” in the water quality technical memorandum (A-14), includes impacts and mitigation measures focused on gross solids and sediments. We feel there will be opportunities in the final design phase to address suspended and dissolved solids and nutrients with a broader array of stormwater treatment BMPs. There are proven BMP technologies that should be included in the final design selection process that filter suspended solids and reduce nutrient loading. These controls may be used in focused areas to address sensitive locations along the project corridor. If selected in final design, they should be included in annual maintenance plans to ensure sustainable performance.</p>  | <p>See comment 34 for a response regarding future input on control measures.</p>   |
| 36   | <p>Snowmelt runoff: In the water quality technical memorandum (A-14), there is a mention of the annual cycle of snowmelt runoff occurring between May and June of each year (page 9). The District sees runoff occurring from April to July depending on the year, and we suggest making this clarification. While snowmelt is the greatest contributor to the annual volume of runoff, impacts can be more critical later in the summer when streamflows are low. During this time, summer rain events can quickly generate many times the streamflow and move solids (gross settleable solids as well as suspended and dissolved) and nutrients. The water quality controls you propose are primarily focused on snowmelt and sediment, not impervious surfaces, and smaller, more frequent rain events. The latter generate large loads to streams when flow is low, making them much more impactful. The increased impervious surface of the proposed project will exacerbate these negative impacts. We encourage the project team to address a more complete view of nonpoint source pollutants and a more holistic analysis of the site hydrology.</p> | <p>A correction to the snowmelt dates is noted on page 5 of this document.</p> <p>See comment 34 for a response regarding future input on control measures.</p> <p>The proposed sediment ponds and traps function by attenuating flows and discharging at a lower rate than incoming flows, providing a secondary benefit of reducing any impacts from summer storms, reducing large loads to streams in the summer.</p> <p>There will be a hydrologic analysis of the Proposed Action during final design, which will provide a more holistic analysis of site hydrology.</p> |
| 37   | <p>Sediment runoff, erosion, and accumulation: In the water quality technical memorandum (A-14), it states, “Without mitigation, sediment and/or pollutants from construction activity may reach Gore Creek and Black Gore Creek” (page 17). We recommend additional language to the effect that CDOT will ensure mitigation measures and BMPs will be used and assessed often during construction to minimize contamination of Gore Creek and Black Gore Creek. Similarly, we recommend additional language to the effect that CDOT will remove traction sand under the bridges where accessible.</p>  | <p>During construction and as required by construction stormwater permits, the contractor will be required to regularly inspect temporary control measures. CDOT will also have construction inspectors to oversee stormwater management plan compliance by the contractor.</p> <p>The EA does commit to removing accumulated traction sand, where feasible, during construction.</p>  |



**Vail Fire and Emergency Services**

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| <p>38</p> | <p>The project sounds great and will improve traffic flow and safety. I would like to assure your shoulder widths will allow safe use for emergency response vehicles. We respond to a significant amount of traffic accidents AND vehicle fires on Vail Pass. Our fire engines need 9 feet of width to safely pass on a shoulder. The outside width of 10 feet seems adequate but I am concerned with the 6 feet on the inside shoulder. If we cannot utilize the outside shoulder to pass traffic jams resulting in accidents and fires, will the inside shoulder be sufficient. Are the bridges going to maintain these shoulder widths?</p> <p>Will the recreation path allow emergency response vehicles access, and how wide will they be? We respond to frequent accidents and emergencies on the recreation path, and at times drive an ambulance on them.</p> <p>Craig Davis, Vail Fire and Emergency Services</p> | <p>During the CSS Stakeholder process, CDOT met with local emergency service providers and confirmed a desired outside shoulder width of 10 feet for the passage of emergency service providers. The bridges will maintain the same width as the proposed roadway with six-foot inside shoulders and 10-foot outside shoulders. Emergency vehicles will have access in a similar manner as the rest of I-70 in Summit and Eagle Counties, which have a 4-foot inside shoulder and 10-foot outside shoulder. During the meeting with local emergency responders, access was discussed and noted that it emergency response was easier on I-70 on the west side of the Eisenhower Tunnel due to I-70 having three lanes at this location. The inside shoulder is not intended to provide for emergency access.</p> <p>The realigned portion of the Vail Pass Recreation Trail will be 11 to 14 feet wide. CDOT will take into consideration emergency vehicle access on the new path alignment during final design.</p> |
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| Public Comments |   |   |
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| 39              | <p>As an outdoor foot traffic enthusiast (esp. nordic/AT skiing), who has used Vail pass many times, I propose that with construction involving the westbound Vail area, consideration be made for a recreation parking area.</p> <p>Currently official parking is only at the Vail Pass rest area, making access to the north side of I-70 by foot at times quite inconvenient; the Vail pass rest area is very busy and not pleasant for skiers, and probably hikers; accessing the north side from a dedicated, less busy spot off the westbound lane would diffuse the crowd and be a much more pleasant experience (many have parked by the CDOT barn for this reason).</p> <p>Without knowing the details, specifically the location, of the proposed improvements, I'd like to suggest placement of a parking area for recreational/foot traffic all season access; currently, the only official place for this is the Vail Pass rest area, so ski/hike access to the Uneva peak area is inconvenient.</p> <p>Thank you for your consideration in this matter.</p> <p>Mark Stephens, Vail/Edwards</p>  | <p>CDOT will share your comments on access to public lands for recreational purposes with the USFS for their consideration. The USFS regulates the winter recreation area parking.</p>  |
| 40              | <p>Thank you for the opportunity to submit comments about CDOT's (sic) West Vail Pass project. This area is not only a very popular recreational area, but is an important wildlife crossing area for quite a number of different species, including some threatened ones. I would like to stress the importance of the following issues:</p> <ol style="list-style-type: none"> <li>1. Protecting access to Wilderness during and after construction (e.g., the Uneva Peak Trailhead).</li> <li>2. Taking all feasible precautions during construction to protect wildlife (particularly Canada lynx), including using a 4-day-on, 3-day-off work schedule, and avoiding construction and bright lighting during sensitive dusk, evening, and dawn hours.</li> <li>3. Taking all feasible precautions to protect wildlife during operation of the expanded highway. The project is supposed to include six wildlife underpasses, wildlife fencing throughout the corridor, small mammal shelves within drainage and stream crossing culverts "wherever feasible" to increase below-grade crossing opportunities for smaller animals; and "wildlife escape ramps" throughout the project area at a minimum of every 0.25 miles. Efforts will be made to keep wildlife access through these areas free of snow buildup.</li> <li>4. Preventing runoff that would affect aquatic life including trout.</li> </ol> | <ol style="list-style-type: none"> <li>1. Access to the Uneva Peak trailhead will not be impacted during construction.</li> <li>2. The EA recognizes the importance of West Vail Pass to the wildlife in the area and many investments are planned to mitigate potential impacts, as noted in the EA, including 4-day-on and 3-day-off schedule for any night work that may occur. Compliance with these mitigation measures will be monitored throughout design and construction.</li> <li>3. See previous response.</li> <li>4. Sediment control measures will be designed and constructed as part of the Proposed Action. The update to the Black Gore Creek SCAP will include these control measures and additional information regarding protection of waterways.</li> </ol> |



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|    | <p>Thanks for your efforts and the investments to minimize impact on the environment. These investments will be paid back many times over.</p> <p>David L. Brewster</p>   |   |
| 41 | <p>As a Frisco resident who has to drive frequently to the Vail-Avon areas for business and personal reasons, I strongly support the plan to add an additional lane in both directions on the west side of Vail Pass! I've had several near-accidents during winter months because of other drivers losing control, tailgating or driving too fast for conditions. I believe additional lanes would greatly improve safety on that part of I-70. I also strongly support the construction of wildlife underpasses and overpasses to improve safety and lessen the mortality rate of animals trying to cross that very busy highway! On many occasions, I have seen elk along the shoulder of the eastbound lane near MM 184 and have been very concerned that one or more of them may run into the road just as I'm passing by. Thankfully that hasn't happened yet! I also had a near-miss of an animal that appeared to be a lynx or bobcat near MM 187 and was very happy that I missed it! I hope that all appropriate environment protections will be followed during the construction period which I believe will be rather lengthy.</p> <p>David Owens</p> | <p>Comment noted.</p>   |
| 42 | <p>While we are supportive of improving traffic flow over Vail pass, we believe that you should reconsider your decision not to mitigate the sound or create a safety barrier between the highway and the frontage road in East Vail. The highway noise is already considerable day and night with the volume of traffic and semi-trucks utilizing jake brakes coming down the pass. We feel this is a serious oversight on the part of C-DOT. Also, please do not make the third lane toll only. Your ridiculous approach to adding toll lanes from Empire to Golden is just downright silly. Open the lane without a toll except during high use times, then charge a toll. The third lane is never used in lower (but still considerable) trafficked times now. Please change this asinine policy. We all suffered through the construction only to not have the traffic alleviated.</p> <p>David Ridley</p>   | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>There are no plans to implement tolling on West Vail Pass.</p> |



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| <p>43</p> | <p>As a member of the Eagle Summit Wilderness Alliance, I am particularly concerned about the effect of project construction and operation on wildlife and plant life. As you know, the project is located adjacent to a federal Wilderness Area, and upstream of several Wilderness Areas. My comments are:</p> <ul style="list-style-type: none"> <li>• Fens: There are 0.43 acres of fen wetlands likely to be impacted. In the wetland technical memorandum (A-16), it is stated that mitigation guidance from the Army Corps of Engineers will be followed at a replacement ratio greater than 1:1. "Fens may need to be replaced at a higher ratio, if determined by the Corps" (page 27). We are unaware of proven successful fen creation, though the research community is working on this in Colorado. We would like to learn more about the proposed mitigation, and to note if the impacted fens are not being replaced with fen wetlands. As noted in Appendix A-16, fens have special watershed function for water quality and habitat. Protecting access to Wilderness during and after construction (e.g., the Uneva Peak Trailhead);</li> <li>• Wildlife: It is essential that CDOT take all feasible precautions during construction to protect wildlife (particularly Canada lynx), including using a 4-day-on, 3-day-off work schedule, and avoiding construction and bright lighting during sensitive dusk, evening, and dawn hours. Wildlife that will be affected by construction and operation of the expanded highway include Canada lynx, American marten, bobcat, coyote, elk, hoary bats, moose, mountain lion, mule deer, and numerous migratory bird species - in addition, runoff must be contained in order not to negatively affect riparian species, such as trout.</li> <li>• Wildlife: It is equally essential that CDOT take all feasible precautions to protect wildlife during operation of the expanded freeway. The project is supposed to include six wildlife underpasses, wildlife fencing throughout the corridor, small mammal shelves within drainage and stream crossing culverts "wherever feasible" to increase below-grade crossing opportunities for smaller animals; and wildlife escape ramps throughout the project area at a minimum of every 0.25 miles. Efforts will be made to keep wildlife access through these areas free of snow buildup. The above should be considered a minimum, and "wherever feasible" should be interpreted to provide numerous safe crossing opportunities, especially in areas that have experienced past casualties. Thank you for the opportunity to comment.</li> </ul> <p>Frances Hartogh, Secretary, Eagle Summit Wilderness Alliance</p> | <p>Please see comment 32 for a response regarding potential fen impacts and mitigation.</p> <p>Please see comment 39 for a response regarding mitigation for potential construction impacts to wildlife.</p> <p>CDOT is committed to implementation of the wildlife underpasses, fencing, and other enhancements identified in the EA. The underpasses and fencing will be constructed as part of the first phase of the project, as described on page 4 of this document.</p> |
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| <p>44</p> | <ol style="list-style-type: none"> <li>1. I applaud the thorough presentation and the efforts of all stake holders. As a resident of East Vail since 1995, I have noted the effects of I-70 on our environment and our lives. First and most important is the effect of noise. Large trucks are a constant source of noise in the downhill lanes from mm 182 to mm 180, potentially 2 trucks at a time. Not all trucks, just those who either cannot or will not use engine braking quietly. This can occur at any time of every day, 24 hours day. Adding a 3rd lane could increase this problem by up to 33%. I have often been awakened from sleep from such noise at late hours. I see your observed sound "receptors" were set in residences near the highway, but if you spent any time in East Vail, you would notice that the objectional noise from downshifting trucks INCREASES as one gets farther from I-70 where there are fewer building and natural obstructions. This problem increases at times of year when foliage has fallen from deciduous trees, which is a 6-month period. When were your studies conducted? There is a noise ordinance within the Town of Vail limits, but we do not know if or how it can be enforced. Truckers have no warning of their violation until it is too late, and with a sign that is relatively small and meaningless. What is the solution? A sound wall on the south side of I-70, or more accurately, on the south side of the westbound lanes, would be helpful. Even more helpful would be grade improvements on the westbound lanes, that give truckers a more predictable and visual ability to adjust their downhill gearing.</li> <li>2. Second, as a frequent driver of this corridor, I also fear the curved section between mm 184 and mm 186.5 where most cars travel too fast and truckers drive too slow, both eastbound and westbound. I was hoping this section of highway would be straightened.</li> <li>3. Additionally, I think it is unfortunate that this hazardous section has NO cell phone service. I would strongly suggest making CDOT property available to the wireless carriers for a microcell to fill cellular coverage in this critical area. This may require electrical power and an antenna structure that could use any planned CDOT camera, sign or light pole.</li> <li>4. My last comment involves the recreational trail. It appears that it will moved away from the highway between mm 186 and mm 187. This a great objective but not if it increases the grade required by bicyclists. The realignment shows the proposed path crossing Black Gore Creek twice, which may increase the difficulty of the path, which may discourage use. Our family appreciates this opportunity to comment on the Vail Pass project.</li> </ol> | <ol style="list-style-type: none"> <li>1. The auxiliary lanes are proposed to improve safety and operations and are not expected to increase the number of vehicles on I-70. Therefore, the project will not noticeably increase noise levels.<br/><br/>Noise measurements in the field can be taken at any time of year. Vegetation does not typically act as an effective noise barrier; to be effective as noise mitigation, 200 to 300 feet of dense, permanent foliage that is at least 16 feet high from the ground floor to tree top coverage is required.<br/><br/>CDOT cannot speak to or enforce local governments noise ordinances. Please see page 6 for additional responses to comments regarding the traffic noise analysis.<br/><br/>FHWA cannot and CDOT will not fund the installation of noise barriers as part of a project if there are no impacts, as defined by CDOT's Noise Analysis and Abatement Guidelines.<br/><br/>Improving the grade of I-70 would require substantially more impacts to the environment due to having to realign the highway to achieve lower grades.</li> <li>2. The section of highway from 184 to 186.5 will have the curves straightened out as much as possible to meet standards and improve safety. The speed differentials between the fast cars and slow vehicles can make for turbulent traffic flow. The downhill (WB) lanes of I-70 are posted at 45 mph for heavy trucks, which contributes to the downhill speed differential. The addition of the third lane will improve safety by providing more separation for the fast-moving cars and slow-moving vehicles traveling both uphill and downhill, creating less turbulent and smoother operation of traffic flow.</li> </ol> |
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|           | <p>I am fully in agreement with all of the proposed modifications, especially if the noise and hazard concerns are addressed.</p> <p>Bill Andrus</p>  | <ol style="list-style-type: none"> <li>3. Providing consistent cell coverage could be challenging as the USFS owns the surrounding property. During final design, CDOT will look into passing these concerns onto local providers.</li> <li>4. By crossing the creek, the overall length of the recreation trail may increase slightly in these areas, providing for some opportunity for flatter, friendlier grades and CDOT will attempt to flatten out the grades where feasible. However, given the steep nature of the Pass, this may not be possible in all areas.</li> </ol>   |
| <p>45</p> | <p>I am a member of the Vail Racquet Club (VRC), located in East Vail. I was informed that the planned construction on West Vail Pass will not include noise mitigation. The lack of noise mitigation is an oversight and should be addressed during construction, especially given that construction will temporarily increase noise levels and impact resident's use and enjoyment of the valley and the bike path in the short run. Based on the noise study conducted in early June 2018, and from what the VRC has informed me, CDOT has apparently concluded no noise mitigation is warranted on the west side of Vail Pass. There are a few problems with this.</p> <ol style="list-style-type: none"> <li>1. The noise mitigation study concluded that Evaluated Barrier 1, a 20 ft high x 1,350 ft long barrier located at Mile marker 180 would be both feasible and recommended, benefitting 28 receptors. Given that the barrier is recommended, it should be built.</li> <li>2. Evaluated Barrier 2 is also feasible, but not recommended, apparently because it does not benefit the same number of "receptors" as barrier 2.</li> <li>3. The noise study only extends 500 feet from the highway and does not include any sites farther from the highway which may be louder than those close to the highway due to echo/amplification effects from the close valley walls</li> <li>4. The noise study was conducted in early June, at a time when high creek runoff masks traffic sound--a concern which was noted in the traffic study, but may not have been adequately addressed.</li> <li>5. Early June--when the high country is still blanketed in snow, limiting outdoor opportunities--is a time of less traffic volume than other times of the year, compared to say, July or August, when there are more outdoor opportunities.</li> </ol> | <p>Please see page 6 for the response to comments regarding the traffic noise analysis</p> <ol style="list-style-type: none"> <li>1. As stated on page 41 of the EA, "One noise barrier located along the WB I-70 edge of shoulder near MP 180, 20 feet high by 1,350 feet long was found to be reasonable and feasible. A benefitted receptor survey will be conducted during final design to determine if a majority want the barrier constructed." This is stating that the barrier will be built if the benefitted receptor survey finds that the majority of benefitted receptors want it to be built. The survey is a requirement of the federal noise regulation</li> <li>2. This statement is partially correct. It is correct that the barrier is feasible. However, the reason that it was not recommended was because it was found not to be reasonable. This was because the barrier cost benefit exceeded the Cost Benefit Index of \$6,800/dBA/receptor. The cost benefit does not incorporate the number of benefitted receptors, but the number of receptors is not the only factor in determining if a noise barrier is reasonable and thus recommended. Sometimes a barrier meets the Cost Benefit Index even if the number of receptors is low. All noise barriers are evaluated using the same method.</li> </ol> |



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| <p>6. The noise study was conducted in predominately 10-15 minute intervals which may not have captured trucker's use of jake brakes--which are very loud and echo off the valley walls.</p> <p>7. Noise mitigation has long been a concern in the Vail Valley--there have been various noise study/mitigation efforts over the years. <a href="http://www.vailgov.com/docs/dl_forms/I-70_Vail_Underpass_Noise_Study_Summary.pdf">http://www.vailgov.com/docs/dl_forms/I-70_Vail_Underpass_Noise_Study_Summary.pdf</a>; <a href="https://www.codot.gov/projects/i-70-old-mountaincorridor/final-peis/final-peis-documents/technical-reports/Vol4_I-70_Mntn_Corridor_Final_PEIS_Noise_TR.pdf">https://www.codot.gov/projects/i-70-old-mountaincorridor/final-peis/final-peis-documents/technical-reports/Vol4_I-70_Mntn_Corridor_Final_PEIS_Noise_TR.pdf</a>; <a href="https://www.vaildaily.com/news/i-70-noise-prompts-call-for-civil-disobedience/">https://www.vaildaily.com/news/i-70-noise-prompts-call-for-civil-disobedience/</a> Given the current noise concerns and the opportunity to address these concerns while adding auxillary lanes in both directions, which will increase noise in the long run--especially if global warming impacts snow coverage--CDOT should construct noise barriers and explore further noise mitigation efforts.</p> <p>Jay Gurney CO Bar # 547847</p> | <p>3. The 500-foot study area is based on CDOT's Noise Analysis and Abatement Guidelines, which were developed to comply with Part 772 of Title 23 of the Code of Federal Regulations (23 CFR 772), which is the federal highway noise standard. The CDOT guidelines describe the CDOT policy and program to implement 23 CFR 772.</p> <p>4. The Traffic Noise Technical Report (Appendix A5) states that "Noise monitoring at L2 was relocated to location L3 on June 6, 2019 due to concern that water flow noise from the nearby creek may influence the data at location L2. Review of the data shows that this interference was minimal and did not affect the identification of the loudest hour." This review of the data was sufficient to determine there were no anomalies that would indicate influence by the creek. Regardless, all of the short-term field measurements were taken only to validate the noise model. The field work measures noise levels and collects traffic counts. The traffic data is input into a model that was developed specifically for this corridor. The model calculates noise levels based on field measured traffic data. Those calculated noise levels are compared to the actual noise levels that were measured in the field. This validation method is used to correct the model if needed, so that it will reflect the corridor; the noise measurements do not need to occur at the loudest time or when there are high levels of traffic. After the model is validated, the model is used to generate noise levels for the noise analysis. Field work noise levels are not used again in the noise analysis and are not used to determine impacts. Therefore, it is not necessary to capture noise at any specific time during the field work.</p> <p>5. Please see the previous response, #4.</p> |
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|    |  | <p>6. Ten-minute samples are considered statistically accurate for high-volume roadways. Measurements for this project were taken at 15-minute intervals. Measurements can be taken at any time and do not necessarily represent the worst-hour; however, it is best to measure when traffic is relatively free flowing at or near the posted speed limit. Long-term measurements, conducted over periods of 24-hours or longer, are conducted to identify the noisiest hour of the day, if the noisiest hour of the day is not available via other means.</p> <p>Traffic noise is measured as an average value over a period of time, not as a maximum value. The fluctuation in noise is averaged out over the entire reading; since “Jake” breaks are loud for a relatively short period of time, they do not increase the average noise value</p> <p>7. The traffic noise analysis conducted for the EA was specific to potential impacts from the Proposed Action and was conducted in conformance with applicable regulations and guidance. FHWA cannot and CDOT will not fund the installation of noise barriers as part of a project if there are no impacts, as defined by CDOT’s Noise Analysis and Abatement Guidelines. Previous studies and recommended mitigation are not relevant to this project.</p> |
| 46 | <p>1) The noise level from trucks and other vehicles going up and down Vail Pass from I70 Exit 180 to the East End of East Vail has increased dramatically and will only get worse with additional I70 traffic. A baseline of current noise levels must be completed now for residential areas in East Vail to validate this.</p> <p>Noise mitigation and reduction must be incorporated into the CDOT improvement plans.</p> <p>Truck engine braking coming down (West Bound from about MM 185 through the Town of Vail) must be eliminated. Signage must be erected, local and state</p> | <p>1. Please see page 6 for the response to comments regarding the traffic noise analysis. A baseline of current noise levels was taken for the project and is available in Appendix A5 of the EA.</p> <p>2. Short term safety closures to the Vail Pass Recreation Trail for construction will be required for bridge demolition and overhead bridge construction and project phasing. Changing closure times of the Trail are outside the scope of this project and would require a change to CDOT’s standard maintenance practices;</p>  |



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|           | <p>enforcement must be educated and required to monitor and ticket offenders. No different than the chain law enforcement for winter travel.</p> <ol style="list-style-type: none"> <li>2) The recreation bike path going from the East Vail Gore Creek campground up to the top of Vail Pass must not be closed. Any rerouting or new sections of the path must be completed before the old path is closed. The official opening window and maintenance window for the path from Memorial Day to Labor day is too short. Closing day should be weather dependent (like Independence pass is) not dependent upon CDOT staffing. Ongoing maintenance, ie sweeping frequency of the path can be reduced after labor day. Any new path sections need to be further distanced from I70 to eliminate gravel and potential for vehicle / cyclist accidents.</li> <li>3) Clean up and debris from winter gravel at the end of the season must be completed. The current gravel along I70 East bound along I70 EB MM 186 to 190 is unacceptable and certainly not good for the environment.</li> <li>4) The current recreation path rules for E-Bikes needs to be enforced or changed. From the East Vail Gore Creek Campsite entrance to the top of Vail Pass is currently restricted for no E-Bikes. This past summer has seen a dramatic and flagrant disregard for this restriction. The signage is limited and confusing as the recreation path headed from the top of Vail Pass to Copper Mountain clearly states Class 1 E- Bikes are permitted.</li> </ol> <p>Thanks for taking input on this project.<br/>Kent Johnson</p> | <p>however, your comments will be shared with CDOT maintenance for consideration. The proposed alignment of the new recreation path aims to set the path further away from I-70 either horizontally or vertically.</p> <p>CDOT will strive to relocate the Trail prior to constructing the adjacent lane in order to minimize closures to the recreation path. This phasing will be determined during final design.</p> <ol style="list-style-type: none"> <li>3. CDOT began cleaning traction sand on high mountain passes in Colorado, which includes the area around Eisenhower Tunnel and Vail Pass, around 2000 with a special dedicated fund. In addition to annual CDOT maintenance activities that clean up the traction sand, CDOT utilizes this special fund to hire an outside contractor to also clean up Vail Pass. This same fund is used to provide for instream monitoring of water quality in Black Gore Creek.</li> <li>4. CDOT will share your concerns about E-bikes with USFS as they regulate the non-motorized use of the path.</li> </ol> |
| <p>47</p> | <p>I hope you reconsider noise mitigation for East Vail area, particularly on the south side. The highway noise is clearly noticeable From my unit facing the highway. The additional lanes , while that work is being conducted, present the CDOT an economy of scale opportunity to save money by doing the sound mitigation construction simultaneously. Increased traffic flow will definitely = more noise = comfort, property value decline, though the snow driving potential should improve. And possibly straight some curves a bit.</p> <p>I have owned my property in vail for 28 years and drive To/from boulder most winter weekends. The road design is reasonably safe With ice and snow, but the surface heaving , regularly , on the lower west bound section needs a better long term fix, concrete?, vs paving and riding the bump when iced. You clean the snow well and thanks for that.</p> <p>Michael Kaplan</p>   | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>CDOT plans on installing a concrete test section on Vail Pass during the summer of 2021 for evaluation of commercial vehicle chain wear.</p> <p>As part of the Proposed Action, CDOT will be modifying several of the curves in the corridor to address safety issues.</p>   |



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| <p>48</p> | <p>I am highly disappointed that you have not included a noise wall for east vail (frankly all of vail). It is a valley that is accessible which makes it highly impacted by the highway that has 24/7 truck traffic as an essential artery for cross country travel. The noise is substantial and cannot be eradicated even with ear plugs. I would like to understand your rationale for this decision. Is it lack of private sponsorship? which I'm sure we can help resolve. Is it something else? It is devastating that you will go ahead and impact our roads and traffic patterns for a long time, add noise, add smell, add inconvenience and add ugliness and yet we cannot combine a basic need that the vail neighborhood needs. It is just appalling that we can't, while we are at it, accomplish more especially what our residents demand and want. I would like to know not excuses but how to make the noise wall happen. Don't reply with a bucket answer. I'm going door to door and will get majority of owners in this area, which you cannot ignore. Thank you.</p> <p>Anna Filatov</p> | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>Providing noise mitigation is not a matter of funding; the noise analysis did not show any impacts for receptors located on the south side of I-70 from this project and therefore the reasonable and feasible mitigation analysis was not conducted.</p> <p>Private or third party funding can be used on projects for the following to build noise mitigation as described under 2 CCR 601-17 and/or CRS 43-2-400 and per CDOT's guidelines for non-CDOT, non-federally funded noise barriers on state highway right-of-way (Appendix D of the 2020 NAAG). Private citizens may fund the mitigation in whole or in partnership with local agencies. The mitigation must meet the same guidelines as mitigation built by CDOT.</p> |
| <p>49</p> | <p>These proposed actions greatly improve the 10-mile recreational bike path. However, the addition of the third lane on I-70 will increase the noise impacts to a point where it is almost unbearable to East Vail Residents. Personally speaking, the "Jake-Brakes" keep me up all night, at the present moment. An additional third lane will ruin the sometimes tranquil setting of the East Vail Mountain community. Why not use this construction opportunity to decrease noise impacts on East Vail. Options include additional wildlife, skiing, hiking access overpasses. These options would not only improve sound impacts but provide additional acreage to capture snow melt (very important for a dry Colorado) and provide access to wildlife and people to the Eagle's Nest Wilderness and Two Elk Area. Additionally, a covered highway (even if partially covered) would be markedly safer and reduce closures.</p> <p>George Gurney</p>   | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>Wildlife crossing improvements are included along with addition of the auxiliary lane on West Vail Pass. Improvements are also included to a portion of the Vail Pass Recreation Trail.</p> <p>Covering I-70 is outside the scope of this project.</p>  |
| <p>50</p> | <p>I think the disruptions are worth the benefits.</p> <p>It's critical that the plan be followed to keep the recreation path open at all times.</p> <p>Rich Heinicka</p>  | <p>CDOT is committed to minimizing disruption to Vail Pass Recreation Trail users; access on the re-aligned portion of the Trail will not be closed for extended durations and will utilize flaggers during any additional work or conduct the work at night when the trail is not in use.</p>   |



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|           |  | <p>Where the Trail requires minor realignment, flaggers will be used as necessary keep the path operable during construction.</p> <p>Based on the conceptual design for the EA, there may be short-term closures of access to the west trailhead of the Vail Pass Recreation Trail due to safety-critical work on the I-70 bridges over Bighorn Road, which is the designated access point to the west trailhead. CDOT will coordinate with the USFS at the beginning of final design to discuss the timing of potential closures, should they be unavoidable. All closures of Bighorn Road will be minimized in duration to the maximum extent practicable and full closures will only be for the safety of trail users during construction.</p> |
| <p>51</p> | <p>While we understand the "need" for a third lane on the west side of Vail Pass in order to ensure that the road stays open during wrecks and storms, we urge CODOT to consider the noise implications of such a project. More lanes will, at least for a few years, result in less traffic and higher speeds. Higher speeds will equate to more noise which already has a very large negative impact on both wildlife, recreation, and residents in East Vail as well as up the pass. We understand that noise barriers are cost prohibitive given the current formula and instead urge CODOT to re examine speed limits and enforcement on this stretch of 70. Higher speeds exponentially increase the noise coming off of the highway. A reduction in speed limits from 65 to 55 would result in an additional 1.5 minutes of travel time up the pass and would drastically improve both safety and noise from the highway. As noise walls seem to be off the table, please look at a reduction in speed limits, coupled with strict enforcement, to allow for "free" noise reduction.</p> <p>Christian Allen</p> | <p>The speed limit for Vail Pass I-70 was evaluated in April 2016 as part of a corridor-wide study and determined to be 65 mph. Normally it requires a speed reduction of at least 20 mph to sufficiently reduce noise. CDOT does not have the jurisdiction to enforce speed limits. Additional enforcement is not "free;" it would require additional work-hours for the agency with speed enforcement jurisdiction.</p> <p>Please see page 6 for the response to comments regarding the traffic noise analysis. One noise wall was found to be reasonable and feasible.</p>   |
| <p>52</p> | <p>Very important to assure uninterrupted use of the Vail pass recreation trail throughout the non-winter months which is an important and extremely popular and high usage asset. Please give consideration to design of any temporary road and bike path realignments so they are paved and accommodating to road style bicycles that require a solid surface to operate. ie: pave the surfaces vs. compacted road base which is unstable and dangerous.</p> <p>Michael Barney</p>   | <p>Please see response to comment 50 for a response regarding Vail Pass Recreation Trail closures.</p>  |





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| <p>53</p> | <p>What portions of Columbine and Bighorn road will be closed?<br/>I could not tell from the online review.<br/>Ruthanne Polidori</p>   | <p>The portions of Bighorn Road that would be potentially closed are closer to the eastern end of the road, where the I-70 bridges cross over Bighorn Road. These closures would only impact trail and campground access and not any private property access.</p> <p>Access on Columbine Drive would only potentially be impacted where it crosses under I-70 if any rehabilitation or modifications are needed to the box culvert that carries Columbine Drive under I-70.</p> <p>CDOT is committed to minimizing the duration of closures of Bighorn Road and Columbine Drive to the maximum extent practicable and full closures will only be for safety.</p>                    |
| <p>54</p> | <p>If the safety will truly be enhanced and the environmental impacts mitigated, I support the project. Some key elements of the environmental mitigation are: more wildlife crossings, traction sand catchments, fen protection, noise and air quality mitigation. Furthermore, the variable speed limit signs seem to be sound technology.</p> <p>History and recreation are important here and around the world. I believe the proposal addresses protecting these resources properly.</p> <p>Air, water and noise pollution are important issues to me. I believe that keeping the interstate open more often will help with air quality, however more could be done, likely outside the scope of this project. The clean water mitigation sounds sufficient, but I am not sure about the noise. Also, on busy return to front range days, increasing the flow to Eisenhower Tunnel could lead to more problems there. Metering on Vail Pass with the variable speed limit signs could help with this.</p> <p>Jessen Wilson</p> | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>The primary intent of a variable speed limit system is not to meter traffic but to apply the appropriate speed limit given the roadway conditions, such as lowering the speed limit during inclement weather.</p> <p>The auxiliary lane only extends between two interchanges and is not expected to increase volume east or west of Vail Pass, including at the Eisenhower Tunnel, but will improve safety and operations on the Pass. EB traffic approaching the tunnel is already metered at the Tunnel and there is an additional meter in place on EB I-70 in Silverthorne.</p> |
| <p>55</p> | <p>This is one of the most congested areas of the country. As a medical courier for Eagle and Summit county's we realize that all tests will be delayed including COVID-19 tests. The traffic delays and detours will cause longer hours behind the wheel more fuel consumption and less time with families. I feel hwy 91 and I-70 between Golden and Summit county has far more of a roadkill problem than Vail pass. Disappointed and frustrated with this project let the traffic jams begin.</p>   | <p>During construction, all work requiring lane closures will follow CDOT's lane closure policy. CDOT will work with the contractor to avoid closures to the greatest extent possible and closures will be minimized to the greatest extent possible during peak periods.</p>   |





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|           | <p>Please keep traffic flowing the best you can and attempt to keep the bike path open if at all possible.</p> <p>Frederick Ritter</p>   | <p>In addition, warning signage for work zones will warn drivers of downstream traffic delays and backups and provide information on appropriate speeds.</p> <p>Please see response to comment 50 for a response regarding Vail Pass Recreation Trail closures.</p> <p>Construction of the improvements listed in Table 1 of this document will begin in the summer of 2021 and is expected to be complete in 2024.</p> |
| <p>56</p> | <p>Thank you for all the work that has gone into this project! 1) I very much like the idea of routing the bike path away from I70. It's a heavily used path and this should not only be aesthetically much better but also safer. 2) I've read about the EXISTING noise measurements that have been made and modest abatements planned. I think there need to be more done for the residents of East Vail as this road widening will increase traffic speeds and with that INCREASE the noise from semi trucks and jake brakes.</p> <p>I very much like the idea of routing the bike path away from I70. It's a heavily used path and this should not only be aesthetically much better but also safer. 2) I'm concerned about how long the frontage road will be closed (East Vail under I70) as both the bike path and the Gore Creek Trail/campground are also very popular and heavily used. Based on the video I'm sure you share my concern on this.</p> <p>Graham Hollis</p> | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>All closures of Bighorn Road will be minimized in duration to the maximum extent practicable and full closures will only be for the safety of trail and campground users during construction.</p>  |
| <p>57</p> | <p>I support the design and improvements.</p> <p>I'm not clear if the bridges and overpasses currently in use are wide enough for the added lanes?</p> <p>Any additional separation and distancing of the rec path from the active Interstate would be fantastic (I'm sure you know the sections which are close and parallel).</p> <p>Ira Tane</p>  | <p>The existing bridges are not wide enough to accommodate the added lane and will require replacement or modification to add a third lane.</p>   |
| <p>58</p> | <p>While it all seems beneficial, I'm very concerned about 2 years of construction noise for the residents of east vail, especially during summer nights when windows are open. I'm also concerned about the closure of those trailheads, although that might be good for them and some restoration.</p> <p>Whatever is done, westbound truck noise descending into east vail should be part of the project. The J-brake issue is a big one.</p> <p>Vince Tinnirello</p>   | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>CDOT is committed to minimizing closures to trails and trail access during construction. Please see comment 50 for additional information regarding closures of the Vail Pass Recreation Trail.</p>  |



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| <p>59</p> | <p>It's critical that I-70 safety improvements be implemented. The number of annual closures is excessive. Also need to be sure trucks stay in right lane. They often don't. The auxiliary lanes should never be converted to toll lanes as the taxpayer should not be excluded from the lanes that they fund through their taxes. Subsidizing Lexus lanes feels like a regressive tax to the majority of the population. Support moving the bike lane further from the driving lanes. The west side of Vail Pass feels very unsafe with the cyclists adjacent to the highway.</p> <p>Melanie Richmond</p>          | <p>Commercial vehicles are currently required to stay in the right lane, as posted on the pass. Once the auxiliary lanes are constructed, similar signage will be implemented on the pass to limit trucks to the right two lanes.</p> <p>There are no plans to implement tolling on West Vail Pass.</p> <p>The addition of an auxiliary lane is for the purposes of improving safety and traffic flow and not congestion, which is when managed lanes (such as toll lanes) are typically considered.</p>   |
| <p>60</p> | <p>Would you please explain how the West Vail Pass project proposal will affect my home and neighborhood at 4515 Bighorn Road? The elevated roadway is VERY close to my home. I want to know about the proposed construction and the noise.</p> <p>How are you going to widen the elevated EB roadway near my property? I their space on the north side to make the bridge wider?</p> <p>More important (at least for me), what kind of years long noise issue will this create? Will I be able to live in my home (with any quality of life) for the years the bridge is under construction?</p> <p>Todd Stave</p> | <p>The current conceptual plans for the Proposed Action (Appendix C of the EA) show that the proposed third lane will match the existing south edge of asphalt and south edge of the bridge near 4515 Big Horn Road as close as possible.</p> <p>The existing bridge would most likely be replaced with a new wider structure. To accomplish this, while still maintaining traffic, first a new structure would be built to the very north and traffic diverted to it, while the existing structure is removed and replaced. There is no formal plan or timeline, but this construction could probably take place over one to two seasons.</p> <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> |
| <p>61</p> | <p>My compliments. Bike Path, 1. Please build the trail 12 feet wide on the 2 miles. Eventually the entire trail will have to be reconstructed, upgraded to 12 feet to accommodate increasing bicycle use. 2. Change regulation of the bike path from the Forest Service to CDOT or Town of Vail. With E-Bikes now popular and on the path, although not permitted by the Forest Service, it makes sense an asphalted bike path is not National Forest. therefore change regulation of it.</p> <p>Lee Rimel</p>   | <p>The width of the recreation path will be evaluated during the final design phase of the project. Consideration will be made for a wider path.</p> <p>The Project is not evaluating or changing the regulation of the Vail Pass Recreation Trail as the Trail is located on USFS land and the USFS is the appropriate agency to regulate usage of it. CDOT will provide this comment to the Town of Vail and USFS.</p>   |



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| <p>62</p> | <ol style="list-style-type: none"> <li>1. This project looks like a nightmare for the residents of East Vail who are the only people that will be regularly impacted by the road construction. This seems like an undue burden that won't result in much improvement. As someone who drives over Vail Pass multiple times per week for work, I think there are incremental changes outlined in your presentation that could be implemented first at much less cost to taxpayers to see if there are improvements in the number of accidents / road closures. The variable speed limit signs and remote controlled road closures are a good idea, so long as there is someone around to enforce things. The raised center median glare reducers / blockers are also a good idea as there are two curves on the west side of the pass that are blinding at night...especially so in inclement weather. I can attest that there are really only a few spots on either side of the road that really need to be widened for pull off access...and I think better snow removal could abate this need in the winter. Bridges seem to be the narrowest spots on the roads right now and there is little you can do there that doesn't cost a fortune. My recommendation as a frequent driver is to immediately implement the glare reduction sections, variable speed limits, and remote road closure systems to see if these steps make a difference. It's cheap and could be very effective. I also want to touch on noise very briefly.</li> <li>2. The presentation seems to only address the Fall Line Dr. residences on the north side of i70 for noise measurement. I live to the south of i70 and road noise has increased over the past 5 years to deafening levels. The noise appears to be generated more often from Trucks going UPHILL vs. downhill. The J-brake "boogeyman" seems to be more of a concern to this study, but I have found uphill engine noise to be far louder of late. A casual observation is that Peterbuilt trucks are exceptionally loud and usually the culprit. Perhaps you could place some noise sensors on the south side of i70 opposite Fall Line Dr. to see if those sensors fall within the bounds of acceptability?</li> <li>3. As a closing statement, it seems that we are having enough trouble keeping four lanes in serviceable condition for travel. Adding two more lanes will only compound issues of maintenance and serviceability without reducing the number of accidents per year (but perhaps limiting the number of full closures only by virtue of having more lanes). Putting the federal money windfall towards road maintenance and enforcement of current rules would go a long way towards reducing accidents and road closures.</li> <li>4. Take things slowly and implement most cost effective measures first to incrementally see what makes a difference. If there are no improvements over a comparable period, move on to the next step.</li> </ol> <p>W F</p> | <ol style="list-style-type: none"> <li>1. While the glare screens, variable speed limit signs and remote closure system will improve operations on the pass and reduces the number of crashes, the most effective way to reduce the conflicts between faster moving cars and slow-moving vehicles is to install a third lane. Roadway construction will have temporary impacts, but the resulting safety improvement for the traveling public for the use of Vail Pass will be long-term.</li> <li>2. Please see page 6 for the response to comments regarding the traffic noise analysis. Noise measurements were taken on both the north and south sides of I-70, including opposite of Fall Line Drive (see Figures 2a and 2b of Appendix A5 of the EA – Traffic Noise Technical Report.) The noise on the south side of I-70 is below the threshold that would require analysis of noise barriers.</li> <li>3. Safety is anticipated to improve on I-70 due to a combination of improvements including the addition of auxiliary lanes, modification of curves, widened shoulders, and installation of variable speed limit and messaging signs. Enforcement of traffic laws is outside of CDOT's purview.</li> <li>4. As stated in the first response to your comments, the most effective way to reduce the conflicts between faster moving cars and slow-moving vehicles is to install a third lane. Incremental improvements do not meet the purpose and need of the project.</li> </ol> |
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| <p>63</p> | <p>I have been in communication regarding the project with John Kronholm regarding my suggestions. We have been homeowners at the Vail Racquet Club since 2003. My first suggestion was to improve signs (digital) getting trucks to slow down to the point where they don't need to use their Jake brakes. I live on the south side of I-70 near mm 181. I totally get it's a safety issue but if they had flashing warning signs sooner they may be able to minimize or even stop using their Jake brakes between mm 182 - 180. I was thinking of flashing signs that said something like "entering a noise ordinance enforced area ahead" or "steep grades ahead for the next 2 miles" or something that slows them down where they won't need to use Jake brakes between mm 182 and 180. I have a decibel app on my ipad and have measured close to 100 decibels from my deck. What I have also observed is the trucks disengage their Jake brake around mm 180.5 so we get the full effect of the noise just before they turn off their engine brake. I would love to talk with your trucking representative and get better educated on the options. Maybe they have recommendations to reduce the use of Jake brakes?</p> <p>A second suggestion is adding a noise reduction wall along the south side of I-70 from mm 180 - 182. I read the report and understand we didn't meet the criteria for a wall but all East Vail residences that live at eye level or below the interstate would benefit greatly.</p> <p>My last suggestion was to extend the exiting cement barrier along the south side at mm 180 all the way along the highway through the bend around mm 182. This option would eliminate a significant amount of the road/engine noise for any East Vail residences at eye level or below the interstate.</p> <p>I'd be happy to talk with anybody (I have already spoken with John a couple times) about these improvements. Thanks for your time.</p> <p>Larry Dreyer</p> | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>As part of the Proposed Action, CDOT does plan on installing electronic variable speed limits signs that will set the speeds of both commercial vehicles and non-commercial vehicles depending upon the conditions of the roadway. The current commercial vehicle speed is set for 45 mph in the WB downhill direction and CDOT can evaluate this speed in the future when a third lane is installed in the downhill direction. CDOT does plan on installing additional VMSs near the top of the pass that can be utilized to warn truckers of the steep grade ahead; however, utilizing the message signs to warn of a local noise ordinance would be against the CDOT's policy for the use of the signs. The Colorado Motor Carriers Association website has additional information regarding trucker education and outreach.</p> <p>FHWA cannot and CDOT will not fund the installation of noise barriers as part of a project if there are no impacts, as defined by CDOT's Noise Analysis and Abatement Guidelines.</p> <p>Concrete barrier would be preferred over a metal guardrail for longevity on the Pass. However, guardrail or concrete barrier can only be installed where warranted to protect against hazards like adjacent steep slopes or obstructions. CDOT cannot install barriers where they aren't warranted due to potential safety concerns.</p> |
| <p>64</p> | <p>These are all great measures, but the best thing that CDOT could do to improve safety on the pass is to increase the use of snow melt during the winter months.</p> <p>alexkube@gmail.com</p>  | <p>I-70 over Vail Pass has the most snowplows and maintenance staff per lane mile compared to any other stretch of I-70. The technology involved with anti-icing and the way materials are applied to the highway have evolved in the past 20 years, since CDOT started using them. CDOT is continually working to improve maintenance practices and the products used on the highway.</p>  |



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| <p>65</p> | <p>I drive through here for work and leisure several times a month. Any improvements are holy welcome. While I understand this isn't practical now, CDOT really needs to begin planning to make the entire stretch of I-70 west of Denver a minimum of 6 lanes (3 GP lanes each way) to Grand Junction. Traffic is really starting to get packed seemingly year round and it will only get worse. It needs to be a free lane and not a tolled one. More public transit and rail connections to many towns like Aspen and a light rail system through the I-70 Rocky Mountain corridor should be looked at. I realize these suggestions could come close to over 10 billion dollars but they need to be studied and planned.</p> <p>Thanks for all your hard work and be safe out there!</p> <p>Campbell Sadeghy</p>   | <p>Improvements in this project study area were included as a part of the preferred alternative selected in the I-70 Mountain Corridor PEIS and Record of Decision (ROD), a tier 1 NEPA process. The PEIS and ROD provide background on CDOT's efforts to collaborate with stakeholders to reach a consensus recommendation for needed transportation solutions in the I-70 Mountain Corridor, which spans 144 miles between the Denver metropolitan area and Glenwood Springs. The preferred alternative from the ROD includes an Advanced Guideway System (passenger rail) for the entirety of the Mountain Corridor and includes expansion of I-70 to six lanes in several locations along I-70. That document is the foundation for other NEPA planning along the mountain corridor, spurring individual studies to develop and evaluate specific projects. CDOT is implementing projects from the ROD, such as this one, as funding becomes available. Studies have been done and will continue to be done for an Advanced Guideway System for the corridor, which is part of the preferred alternative.</p> |
| <p>66</p> | <p>watched the video. still can't tell you if these auxiliary lanes are going to run immediately adjacent to the existing lanes, or if they will be separate lanes with their own shoulders. Could you clarify that. Generally I think this is an excellent idea to improve the road. It is long overdue. I hope two additional lanes is enough!</p> <p>Rosi Littlefield</p>  | <p>The auxiliary lanes will be directly adjacent to the existing traffic lanes. Please see Appendix C of the EA for conceptual plans that show the layout of the Proposed Action.</p>   |
| <p>67</p> | <p>The project seems too impactful To wildlife and water resources as proposed and mitigation is not sufficient as proposed because the funding is not available for those improvements in Phase 1. Perhaps you could achieve the same goals (up to 40% crash reduction) by simply implementing an enforced lower travel speed over the pass and installing automated ticketing systems to use during critical times. The type and scale of improvement project is detrimental and not appropriate in my view. The concept to "six lane" vail pass feels like a 1970's solution that will take too much money time and effort for what it's worth; it isn't very forward thinking in my view and by the time it is complete all the traffic impacts may be changed or different. The selected alternative does not warrant the Impacts and loss of natural resources; mitigation cannot adequately replace or enhance</p> | <p>The majority of wildlife mitigation will be installed in the next several years as part of the first phase of the project, which has identified funding. Those include the wildlife underpasses and wildlife fence on the upper portion of the pass from approximately MP 185 to MP 190. Water resources mitigation will be implemented in conjunction with each phase of the project. CDOT is not an enforcement agency, but will share your comments about speed enforcement with the Colorado State Patrol and local law enforcement.</p>   |



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|    | <p>these areas. The project is not fully funded and should be reconsidered knowing what we do about funding and impacts to Black Gore Creek, area wildlife and residents of the Eagle River Valley. Thank you for accepting these comments.</p> <p>Narrow scope of phase 1, try slower speed limits and electronic ticket cameras first - could prove to be cheap and effective and <i>(comment was not completed)</i></p> <p>Tambi Katieb</p>   | <p>This Project is needed to address safety concerns and operational issues due to geometric conditions (steep grades and tight curves) and slow-moving vehicle and passenger vehicle interactions that result in inconsistent and slow travel times along the corridor. The Proposed Action will improve safety and operations in the corridor.</p> <p>A speed study was completed in April 2016 as part of a corridor wide study and it was recommended to remain at 65 mph.</p> |
| 68 | <p>Safety is #1 interest for us. Preservation of wildlife is #2 Preservation of natural beauty &amp; aesthetics is #3 Recreation is #4 Thank you for paying attention to these details.</p> <p>We bike and hike near Vail Pass many times each year</p> <p>Are driverless vehicles being considered in construction?</p> <p>Martha Milbery</p>   | <p>Connected and autonomous vehicle technology is a rapidly developing technology and the capabilities and accommodations for driverless vehicles within construction zones with temporary signing and striping applications are evolving. During final design for each project phase, the construction traffic control methods will follow CDOT standards and guidelines, including consideration of possible technology applications at the time of construction.</p>            |
| 69 | <p>The noise study must be better proven. In reality, the noise all along the proposed new lane corridor is so egregious that I do not believe your noise study was adequate and the noise will get only worse in the future. The town of Vail is brought down in the eyes of many vacationers due to the noise level. My German relatives call Vail "the noisy town with a major road running through it" Renovation time is the time to bring down the noise pollution that is sooo pervasive in a town people choose for its environmental qualities. P.S. THERE IS NO ENFORCEMENT OF TRUCK NOISE AND NEVER WILL BE---HELP PREVENT IT. Tesla won't have their all electric trucks perfected for a while.</p> <p>How do you replace a fen? Does it work? Who oversees and monitors full compliance with the environmental and wildlife impacts created by this project?</p> <p>Donna Mumma</p> | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>Please see comment 32 for the response regarding fen mitigation.</p> <p>The design team, contractor, and CDOT perform environmental compliance monitoring throughout the design and construction processes to confirm all mitigation measures are implemented.</p>  |
| 70 | <p>The proposed actions are long overdue. Until 3 full lanes each direction are able to be constructed, climbing lanes will be a great improvement. Climbing lanes should be considered to be in concrete, as other states do, to help with PCCP v HMA LCCA longevity calculations. Asphalt, as Spec'd, does not withstand chains, environment or heaving, and is not maintained well at elevation after initial construction. The steep grades, in both</p>   | <p>CDOT plans on installing three concrete test sections on Vail Pass in the summer of 2021 for evaluation of commercial vehicle chain wear.</p> <p>MP 186 is part of the focus of the project and as part of a first round of improvements, the curve will be modified to</p>   |





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|    | <p>directions, at MM186, with morning shade from the sun, creates consistently difficult conditions wet or dry, and should be a focus area of the project. Deep subgrade cutoff walls on the mountain side of the ROW may reduce the consistent and heavy heaving in the area. Better, more concise, frequent updates &amp; usage of existing as well as additional VMS' well before the pass may minimize inexperienced drivers as well as provide drivers miles of heads up of an issue before getting "trapped" on the pass during an incident.</p> <p>Climbing lanes &amp; widened shoulders should be prioritized over technological improvements.</p> <p>Matt Miklovic</p>                        | <p>help reduce crashes. Unfortunately, the project is unable to reduce the grades on the pass without significant environmental impacts.</p> <p>A frost heave mitigation project was completed in the summer of 2017 that has successfully mitigated most of the heaving issues but these will be continued to be explored.</p>  |
| 71 | <p>I support the West Vail Pass Auxiliary Lanes project because it includes wildlife underpasses. However, the plan should also include wildlife bridges wherever possible. Vail Pass is a very important wildlife migration and travel corridor and we must actively work to mitigate and negate I-70's impacts on wildlife. Rocky Mountain Wild has been doing excellent research about Vail Pass for a long time and their recommendations should be fully implemented and funded on the plan. I live in Eagle, CO and travel over Vail Pass on I-70 frequently. Wildlife bridges and underpasses not only protect wildlife, but protect human life and property. Thank you!</p> <p>Hannah Irwin</p> | <p>The project team assessed potential wildlife overpasses in the corridor, in particular a previous recommendation for an overpass near MP 187.5. The location for this overpass was determined to not be safe for drivers as it would increase shading and blowing snow on the roadway and would be located within a narrow gorge, immediately following a sharp curve.</p>  |
| 72 | <p>Currently not only widening of the road is needed but an increase in sound abatement. For those that live in E. Vail especially the deceleration of large trucks and illegal use of jake brake systems 24 hours of day has grown steadily worse and sound barriers are badly needed. In addition there is significant ground movement from the current WB traffic lanes causing structural cracks, concrete settling and other concerns with our properties.</p> <p>Electric rail from Denver would be preferred but sound barriers are critical.</p> <p>Mark Gillis</p>   | <p>Please see page 6 for the response to comments regarding the traffic noise analysis.</p> <p>If you believe that I-70 has impacted or damaged your private property please reach out to the Office of the Attorney General to file a claim. To start the process, contact the State Office of Risk Management or visit their website to obtain the Notice to Attorney General claim form.</p> <p>State Office of Risk Management contact information:<br/>Outside the Denver Metro Area: 1-800-268-8092 OR On the web: <a href="http://www.colorado.gov/dhr/liability-claims">www.colorado.gov/dhr/liability-claims</a></p> <p>An Advanced Guideway System (AGS) from the Front Range to the Mountains has been studied and that report is located here:</p> |



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|    |  | <p><a href="https://www.codot.gov/library/studies/study-archives/AGSstudy/final-ags-feasibility-study">https://www.codot.gov/library/studies/study-archives/AGSstudy/final-ags-feasibility-study</a></p> <p>As of 2014, the AGS was found to not be financially feasible. However, it is part of the preferred alternative for the I-70 Mountain Corridor and will continue to be studied.</p>  |
| 73 | <p>I have lived in Vail all my life and am opposed to the expansion of Vail Pass. The problem is that too many vehicles going too fast. There are far too many trucks passing through Vail at higher speeds than ever and using their jake brakes as they come down the pass and also as they enter the turns into Dowds Junction at West Vail.</p> <p>The priority solution for Vail Pass should be in alignment with the state’s new GHG Pollution Reduction Roadmap. Reduce GHG emissions by reducing the number of vehicles on the road, reduce speeds, and use more public transit.</p> <p>The noise from I-70 is a huge negative impact on the residents of Vail and it should not be allowed to continue, and especially not to increase. The noise from the new rumble strips (installed last year with paving) on the sides of the highway surpass the Town’s noise ordinance thresholds when trucks drive over them. New technologies to ticket speeding and violations of noise ordinance thresholds should be installed.</p> <p>Also, the numbers of wildlife that are killed along the highway through Vail is unacceptable. Bighorn sheep on both lanes of I-70 this past March was a huge disaster in the making. The speed limits are too high through Vail for both our people and our wildlife.</p> <p>I don’t see how adding new lanes to Vail Pass is going to help our daily quality of life here. It is not a fiscally or environmentally responsible path forward. I encourage you to do the hard work to create sustainable long term solutions.</p> <p>Feel free to contact me if you would like to discuss this further. Most residents of Vail that I have spoken with are opposed to the addition of lanes to West Vail Pass and would prefer alternative long term solutions.</p> <p>Kim Langmaid</p> | <p>The I-70 Mountain Corridor is a critical part of the Primary Highway Freight System and I-70 is Colorado’s only east-west interstate, providing a critical interstate commerce link for Colorado and the country. Both truck and vehicular traffic are expected to increase, even without this Project. This project is needed to address safety concerns and operational issues due to geometric conditions (steep grades and tight curves) and slow-moving vehicle and passenger vehicle interactions that result in inconsistent and slow travel times along the corridor.</p> <p>The I-70 Mountain Corridor PEIS and ROD have explored and initiated ways to reduce the number of vehicles on the roadway, including a study of an AGS from the Front Range to the Mountains. The ROD selected a preferred alternative for the 144-mile I-70 Mountain Corridor. This project, the Vail Pass Auxiliary Lanes Project, is part of that overall solution of a corridor wide study performed in 2011.</p> <p>Please see page 6 for the response to comments regarding the traffic noise analysis. The use of rumble strips is one of CDOT’s most cost-effective tools when it comes to reducing the number of crashes on I-70 and are installed uniformly statewide.</p> <p>CDOT is not an enforcement agency, but your comments about enforcing the speed limit on I-70 and violations of noise ordinance thresholds will be shared with the Colorado State Patrol and local law enforcement.</p> |



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|  |  | <p>The project proposes to install wildlife fence and six wildlife underpasses within the project boundaries, which are between the East Vail Interchange and the Vail Pass Rest Area Interchange, to reduce wildlife vehicle collisions.</p> |
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1 **REFERENCES**

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- 4 Appendix A1
- 5 Illingworth & Rodkin, Inc. 2019. *Air Quality Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A4
- 6 Mead & Hunt. 2019. *Historic Resources Documentation for I-70 West Vail Pass Auxiliary Lanes* Appendix A7
- 7 Wood. 2019a. *Floodplain Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A15
- 8 Wood. 2019b. *Utility Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A11
- 9 AlpineEco. 2020. *Wetland Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A16
- 10 CDOT. 2011b. *I-70 Mountain Corridor Final Programmatic Environmental Impact Statement (PEIS)*.
- 11 CDOT. 2020a. *Environmental Assessment and Section 4(f) Evaluation for I-70 West Vail Pass Auxiliary Lanes*
- 12 CDOT. 2020b. *Archaeological Resources Documentation for I-70 West Vail Pass Auxiliary Lanes* Appendix A8
- 13 CDOT. 2020c. *Paleontological Assessment for I-70 West Vail Pass Auxiliary Lanes* Appendix A19
- 14 Colorado Wildlife Science, LLC. 2020a. *Biological Assessment for I-70 West Vail Pass Auxiliary Lanes* Appendix A12
- 15 Colorado Wildlife Science, LLC. 2020b. *Biological Evaluation Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A13
- 16 DEA 2020a. *Context Sensitive Solutions Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A2
- 17 DEA and Apex Design. 2020b. *Transportation Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A3
- 18 DEA. 2020c. *Social Resources Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A6
- 19 DEA and Mead & Hunt. 2020d. *Section 4(f) Evaluation for I-70 West Vail Pass Auxiliary Lanes* Appendix A9
- 20 DEA. 2020e. *Visual Impact Assessment for I-70 West Vail Pass Auxiliary Lanes* Appendix A17
- 21 DEA. 2020f. *Cumulative Impacts Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A20
- 22 Illingworth & Rodkin, Inc. 2020. *Traffic Noise Technical Report for I-70 West Vail Pass Auxiliary Lanes* Appendix A5
- 23 Wood. 2020a. *Hazardous Material Review Technical Memorandum for I-70 West Vail Pass Auxiliary Lanes* Appendix A10
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