COLORADO SIERRA CLUB COMMENTS: MATTERS OF CDOT NEPA COMPLIANCE FOR I-70 FPEIS AND RELATED STUDIES

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I. GENERAL COMMENTS

1. Four reports – FPEIS, AGS, RMRA and ICS - are all involved in the overall I-70 corridor NEPA process. Following the Record of Decision (ROD) of the FPEIS, further studies were mandated regarding the feasibility of alternative systems categorically called “Advanced Guideway Systems.” At this point, in satisfying the ROD requirement for on-going NEPA analysis of alternatives, additional study is necessary. All must meet NEPA requirements for analysis of all feasible alternatives, but none do at this time. Also, analysis of various impacts – positive and negative - in comparison of alternatives must be presented. Again, none of the reports do at this time (See “Specific Comments”: section below.)

2. From AGS Feasibility Study Chapter 2: "Triggers in the ROD – The AGS Project Leadership Team (PLT) indicated that the 2025 trigger included in the ROD was meant to be a guide, not a drop-dead date. They explained that the Collaborative Effort did not intend for the Maximum Program of Improvements for the highway to be triggered if the AGS were deemed feasible before 2025, but not fully constructed and operational. They agreed that the AGS Study Team should challenge the industry to fund and/or complete the AGS by 2025. If an industry team could not meet that goal, the AGS Study Team should propose when and how the AGS could be completed.”

3. NEPA processes are a tool for arriving at the best feasible development and should be viewed and utilized with this positive approach. Unfortunately, some view NEPA as an obstruction that causes unnecessary delays and litigation. Studies by the National Association of Environmental Professionals conclude that the delays and suits usually result from improper utilization or abuse of proper processes and scientific information.

4. A new and critical mandate by the Colorado General Assembly affects the needs for further analysis and revisions of impact analyses. This is the new Colorado laws and regulations about energy and climate change that very recently enacted. House Bill 19-1261 which sets goals for Greenhouse Gas Reductions is directly relevant. Implementation of the State methodologies and processes for conducted the studies and determining actions appropriate for CDOT in conjunction with others, such as local government, should follow. In effect, this is a new ball game.

5. The “shelf life’ of the 2011 and 2014 reports: “shelf life” is generally considered five years but this is not a law or regulation. After completion of the AGS report, CDOT has not published any further reports, but has been involved in more studies such as the proposed “Hyperloop” maglev in a vacuum tunnel. External knowledge and experienced has caused new impact analysis and planning: extreme events such as the 2013 St. Vrain and Boulder-Weld County flood caused CDOT wisely to revise former non-resilient designing. Major international climate change reports add vital information which it would be irresponsible to ignore.

6. Another more recent development is the excellent and popular CDOT intercity bus program and route network known as “Bustang.” This is a legitimate alternative to be examined as the AGS hardware for the I-70 Corridor. It is appealing for potentially meeting the goals of HB1261 and addressing the collection-distribution considerations. Due to the “segmentation” of the PEIS and AGS studies, this factor was not examined except in general in the ICS report. For GHG reduction concerns, electric buses of adequate capacity are available from German and Chinese manufacturers, but it is not known if they are suitable for I-70 terrain and climate and appropriate for Bustang-type of operations or if further technological issues exist. In general, this is an alternative that is new and is another reason why additional NEPA study is essential

7. Obviously, further work is essential before NEPA requirements for selection of a course of action is warranted. Unnecessary delay in what has been a long process in devoutly to be avoided. However, time requirements caused by needs to meet new legal factors and external conditions are critical to
avoid decisions adverse to the future residents of Colorado. Integration of the three existing studies should be involved. For example, the ICS provides some information on origin-destination travel phenomenon but not adequate to compensate for the segmentation of the FPEIs on this subject and the total exclusion of it in the AGS study.

8. The studies (except ICS) should have included a “Technology Assessment” (TA) to identify the current status of the candidate AGS technology. The AGS came close in its “Technology Readiness Level” (TRL) requirement. TA identifies where a technology is in the progress from concept through R&D actions, timing requirements, new components design, materials, knowns and uncertainties, testing under various conditions, constraints, risks, financial factors, etc. This is needed to produce a viable final product or process. For example, the TRL should have been expanded to include the need for a test track in Colorado terrain and climate for some hardware. The Colorado Intermountain Fixed Guideway Authority (CIFGA) had proposed a test track in the mountains for its maglev (the $50 million funding needed for this was rejected by voters.)

ii. SPECIFIC COMMENTS

1. NEPA and case law are specific about the examination of all feasible alternatives to a proposed activity. In this case, both the Draft and Final PEIS reports and the follow-on AGS study process and report fail properly examine what some rail experts feel should be the best and most financially feasible alternative for a fast transit system in the I-70 Mountain corridor. One rail company that did some on-site investigation concurred. This is the “Electric Multiple Unit” (EMU). It has power units in each car, which enables more drive units/power and engine weight over bogies, improving traction. The PEIS study considered only trains with an engine at each end and carriages between. The AGS included maglev technologies. EMU was identified the early screening but dropped because the AGS departed from the intent of the CE Panel by requiring high speed rail; eliminating the appropriate alpine-capable EMUs. Somehow the entire RFP process of the AGS apparently discouraged most rail manufacturers – “push-pull and EMU’ - from joining the competition. The Spanish high speed Talgo (heavy “push-pull”) was the only rail to reply to the AGS Request for Statements of Technical Information. The RMRA study used one type of train for both the I-25 and I-70 routes: heavy high-speed rail with “push-pull” hardware inappropriate for I-70. The point is that there is a feasible alternative that was not given proper assessment in the process.

2. Despite the CE Panel discussions that travel time for AGS need not be faster than car travel in good traffic from Denver to Vail, the CE Recommendation report uses the term “high speed rail”. This designation means a top speed over 126 miles per hour. A high-speed EMU is now operating in the Norwegian mountains; several companies may have high speed EMUs capable of handle I-70 terrain and weather. It is possible that the overall agency AGS approach and process was a detriment obtaining expressions of interest from such companies.

3. It is not clear how the DRCOG travel demand model plus the traveler surveys used to estimate demand are adequate for full origin-destinations studies involving connections to and from stations as well as in-train time. This should be relevant in the travel time-cost-equipment-speed relationship; it could influence the preference for 200 mph speed equipment with its higher cost.

4. Climate change, energy and GHG are addressed in the AGS but not with logic or details to be meaningful. For auto travel, new goals for electric cars and renewable sources of electric power should alter older projections. Net energy analysis indicates the energy per passenger-mile for cars is several times higher than for rail (as is space utilization.) For climate change, weather temperatures (with effects on asphalt, rail and structure thermal expansion), wildfire risk and extreme precipitation events that will probable exist in the second half of this century must be considered.

5. Given the expressed desire of the CE panel to extend the vision for the future to 50 years, well beyond the standard 25-year planning period, it is irresponsible to ignore the longer-term implications of impacts of the changing climate. ###