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Subtopic E11: Alternative Options

For the E11: Alternative Options subtopic, 176 public and agency comments were received. These 176 comments produced 51 common concern statements. The primary theme to emerge from the E11. Alternative Options subtopic was that alternate or new routes should be explored, most of which had been studied and screened throughout the PEIS process. Others expressed opinions about a variety of other alternatives as well as opinions about the details of these alternatives:

- Modified rail or AGS
- Modified bus in guideway
- Modified HOV/HOT lanes
- Transit planning
- Use of the Eisenhower-Johnson Memorial Tunnels (EJMT) ventilation shaft for transit
- New or expanded airports
- Broader termini
- Structured lanes
- New statewide system
- Phasing/pinch points
- RTD coordination
- I-70 cut and cover
- Auto transport
- Notch cut at Continental Divide and Twin Tunnels to avoid a new tunnel bore
- Design options/details
- Recommendations for specific Corridor areas
- Suggested alternatives, including specific technologies and construction techniques
- Staged approach starting with Minimal Action
- Sequenced approach of the I-70 Coalition Regionally Preferred Alternative

CCS No.	Transportation Common Concern Statements (CCSs)
Subtopic E11: Alternative Options	
Alternate and/or New Route	
E 11 - a1	<p data-bbox="321 1461 1520 1598">Exploration of Other Options Development of alternate routes is imperative and would relieve pressure on the I-70 Corridor. An alternate route from Denver to Grand Junction would solve I-70 congestion problems, provide travel options when I-70 is closed, and allow money to be better spent. Rather than funneling traffic through a single highway, there should be three or four routes. Options to consider are as follows:</p> <ul data-bbox="375 1608 1520 1789" style="list-style-type: none">• Some existing east-west highways, for example, US 285 and US 24, could be widened to provide access to the mountains and relieve congestion far better than widening I-70. Alternate east-west routes would spread traffic and help development in other areas of Colorado.• A southern highway-tunnel system and a northern highway-tunnel system should be explored.• Building roads to Summit County from other points along I-25 both north and south of Denver should be considered.

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E 11 -a 2	<p>Premature Dismissal of Alternate Routes</p> <p>Alternate routes were dismissed too early in the process, and current alternate local routes are all but nonexistent. The elimination of alternate routes in the screening process is premature given the homeland defense needs. The PEIS did not put enough effort into the evaluation of alternate routes.</p>
E 11 -a 3	<p>Identify Alternate Routes Before Construction</p> <p>Alternate route components should be considered before beginning any construction on I-70, especially in light of mitigation. Alternate routes should be provided before impacting I-70 with construction.</p>
E 11 -a 4	<p>US 285 as an Alternate Route</p> <p>US 285 offers several options as an alternate route:</p> <ul style="list-style-type: none"> • The four-lane section of US 285 could be extended to Fairplay, along with road improvements (three lanes) to SH 9 over Hoosier Pass. • US 285 through Boreas Pass to Breckenridge could be used to relieve I-70 congestion, serve as an alternate route in case of I-70 closures (such as due to avalanches), and encourage development of new ski areas. Four lanes through Boreas Pass would make an impact and take pressure off I-70. • A tunnel could be built under Boreas Pass or Hoosier Pass to solve many of the problems associated with I-70 and prevent Summit County businesses from being affected too much by construction activities. • Improvement of the US 285/US 50 corridor from Denver to Grand Junction would take pressure off I-70 and offer economic benefit to an area that needs it. • US 285 could be improved across the Continental Divide to Grant to access ski areas (Copper Mountain, Keystone, and Breckenridge); the trip time would be the same as that for I-70 and it would cost much less than \$4 billion. • An alternate route from C-470/US 285 junction, following the Whale Peak route (near Georgia Pass) and from there either following SH 9 or tunneling under Ten Mile Peak and connecting I-70 at Copper Mountain, could carry a very large amount of traffic (as compared to six lanes on I-70).
E 11 -a 5	<p>Suggested Alternate Routes</p> <p>Options for alternate routes include the following:</p> <ul style="list-style-type: none"> • A new east-west interstate from Colorado Springs through Fairplay or along Highway 50 from Pueblo through Gunnison; the PEIS does not document why such a route was dismissed or if it was even considered when such a route would generate new ski areas and economic benefits. • A southern route from Limon to Grand Junction because it would increase commerce to Colorado Springs, Buena Vista, Salida, and other areas and allow truckers a route that avoids mountain passes and saves time. • A new interstate from Denver through Alamosa or Pagosa to divert cross-state travelers and truckers from I-70 and to spur economic growth in this area of the state.

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E 11 - a 6	<p>Fixed Guideway Routes</p> <p>Options to consider for fixed guideway routes include:</p> <ul style="list-style-type: none"> • A second rail bore (passenger service) at Moffat Tunnel, including improvements to Rollinsville. A new route could be built to access Grand County that could follow the existing railroad route and include a new bore near the Moffat Tunnel. • A monorail option from the C-470/US 285 junction following the Whale Peak route (near Georgia Pass) with two options from there: follow SH 9 or tunnel under Ten Mile Peak and connect I-70 at Copper Mountain. • The single line rail over the Continental Divide tunneled under Loveland Pass and go to Dillon via Keystone resort. • A rail alternative to Central City/Black Hawk to resolve I-70 congestion problems. • A rail line added to the west end to Dotsero to connect to existing Amtrak rail with future expansion to Aspen. • A heavy rail alternative that carries trucks and cars from Denver and follows a route south of I-70 along the old rail right-of-way over Boreas Pass past Breckenridge and past Camp Hale to Grand Junction.
E 11 - a 7	<p>Berthoud Pass/Winter Park</p> <p>A better solution is to widen and improve US 40 over Berthoud Pass and eventually put a tunnel through this area. A new route to Winter Park (bypassing I-70) should be considered.</p>
E 11 - a 8	<p>Nine Mile Canyon</p> <p>An alternate route via Nine Mile Canyon, through Indian Peaks, down by Lake Granby, down to US 40, and to Kremmling, and then Wolcott, was not considered.</p>
E 11 - a 9	<p>Red Buffalo Pass</p> <p>Red Buffalo Pass by Vail should be revisited to help when Vail Pass is closed for weather/accidents/maintenance.</p>
E 11 - a 10	<p>Cottonwood Pass</p> <p>An alternate route (possibly through Cottonwood Pass to avoid Glenwood Canyon) should be considered to relieve I-70 congestion and offer an option in case of disaster. For example, Cottonwood Pass from Eagle/Gypsum to Highway 82 could be made into an all-season paved road to handle I-70 emergencies (also helping Glenwood Springs) or improvements that include transit could be made in this area.</p>
E 11 - a 11	<p>New Parallel Routes</p> <p>Options that should be considered for new parallel routes include the following:</p> <ul style="list-style-type: none"> • Building a new road on the mountainside parallel to the high-voltage powerline above Clear Creek County towns. • Building a new HOV/Reversible lane, using any alignment (does not have to follow I-70), from Denver to the Eisenhower-Johnson Memorial Tunnels (EJMT), with one exit for Winter Park; this alternative, which could be expanded to two lanes in the future, would have a much lower cost than other alternatives and would be ideal for weekend recreational travelers. • Building an entirely new toll road north of I-70 from Floyd Hill to Georgetown or Winter Park and switch traffic over.

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Rail Design	
E 11 - b	<p>Rail offers several benefits in that it would not be affected by snow and ice and would keep traffic flowing in the winter. The following rail design modifications should be considered:</p> <ul style="list-style-type: none"> • Consider a metered gauge single-track rail alternative or a historic-type steam rail system • Use an elevated structure, such as above the existing interstate terminating at Denver International Airport (DIA) with service to all major Corridor tourist destinations • Implement electric rapid rail • Make independent of highway right-of-way • Build in phases • Include spurs from the main line to major destinations • Include an integrated feeder/distribution network • Use existing technologies (without significant research and development), with construction and operation to commence as soon as feasible • Operate on one track in narrow sections of the Corridor (Georgetown, Silver Plume, EJMT) with modern operating controls, global positioning system locational safeguards, and short “passing sidings”
AGS/Monorail Design	
E 11 - c	<p>The Draft PEIS did not fully evaluate the AGS and implies that AGS is a “fictional future system.” The reality is that it is feasible/deployable and can be implemented in the next 10 years; for example, the Final FTA Report (June 2004) indicates that AGS is feasible both technically and economically, would work on steep grades, would perform extremely well under adverse Corridor weather conditions, and has answered questions raised in the Draft PEIS (Chapter 2, page 2-32). The FTA alternative should be studied as a viable alternative. The AGS alternative offers several advantages:</p> <ul style="list-style-type: none"> • The AGS could enter a tunnel at the Divide at a higher elevation, decreasing the tunnel length by 50 percent. • The AGS alternative could be designed outside the I-70 right-of-way and without a third bore at the Continental Divide. • Immediate phased construction could start with safety improvements to the highway in 2005 and 2008, initiation of AGS from the Hogback to Frisco in 2008, building climbing lanes in 2011, deployment of AGS from Frisco to Minturn in 2011, and building AGS over Vail Pass from Minturn to Gypsum, and then fixing Dowd Canyon. • The AGS is technically feasible in the Floyd Hill and Genesee areas (steep grades are accessible). • The AGS could be used 24/7, including special off-hours cargo trains and having a terminal at DIA. Monorail expandability is realistic in terms of adding switching stations. • Building the AGS first would remove hundreds of cars from I-70.
Scenario for Preferred Alternative	
E 11 - d	<p>The Preferred Alternative should include the following:</p> <ul style="list-style-type: none"> • AGS, implemented outside the I-70 right-of-way • No six-lane highway improvements • Only selected highway improvements • Enhanced bus operations to supplement the AGS with intermodal transfer centers • Travel demand and travel system management • Enhanced air service

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Bus in Guideway Design	
E 11 - e	<p>The reversible bus guideway option was eliminated due to schedule dependability and should be reconsidered in light of other factors. A study should be conducted to determine if a one-direction/reversible bus in guideway system (Modified Bus in Guideway) would work. The guideway could be reversible from the EJMT to the Hidden Valley interchange and bi-directional from Hidden Valley to C-470 and could be built at a much lower cost.</p> <p>An elevated guideway would offer many benefits as well, including:</p> <ul style="list-style-type: none"> • It could be built in four months and a third bore at EJMT would not be necessary. • It could be built first to address the most serious pinch points. • It could be implemented at congestion areas to improve traffic flow. • It could be built now and upgraded to accommodate AGS or monorail technology in the future. • It would minimize traffic disruptions and environmental impacts.
Reversible/HOV/HOT Design	
E 11 - f	<p>The design of the Reversible/HOV/HOT alternative should be reconsidered either at Tier 1 or Tier 2 because:</p> <ul style="list-style-type: none"> • a one-lane reversible lane could be used to handle peak traffic; allowing bottleneck areas (Silver Plume/Georgetown, Idaho Springs to Floyd Hill) to flow smoothly at far less cost; and I-70 could swing to the south and north to avoid homes and businesses on this stretch of road; • it seems implausible that the only access/egress points would be at the termini of the entire facility (EJMT and Hyland Hills); at the least, emergency access/egress points should be included, and the lanes should be capable of serving intermediate locations and providing for convenient bus transit; and • the HOV/HOT lanes would eliminate an important access to Idaho Springs to travelers as well as local residents.
Transit Design	
E 11 - g	<p>Before committing significant resources, the following should be considered in transit planning for the Corridor:</p> <ul style="list-style-type: none"> • A transit operator must be identified. • A funding stream to cover “expected” subsidization must be identified. • A supporting local transit system must be devised. • Transit must be at least as fast as highway, provide seamless connection to DIA, and be networked into Front Range and Corridor systems. • The transit mode does not need to be aligned with I-70, and actual alignment should be determined in the future based on need, technology, financing, and connectivity. • Most engineering reports show that transit can be built faster than highway widening. • Consideration should also be given to long-range planning for high-speed mass transit. • A transit stop should be included for Georgetown to allow local use. If transit modes are used, there should be consideration of electric transportation in the median. • Rapid transit can be reassessed as highway problem areas are fixed and transit technology improves. • Building transit on the east end with a rideshare parking lot west of Floyd Hill would ease traffic over this bottleneck. • Transit should be provided before impacting I-70 with construction. • If a new lane is added, it should be for public transportation only and could include a travel tax for road usage during peak travel.

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Suggested Scenario	
E 11 - h	<p>Additional highway lanes and Minimal Action components should not be implemented without an item-by-item justification and reprioritization. Instead, local transit service and modified rail should be implemented. An alternative that combines local transit service and modified rail would:</p> <ul style="list-style-type: none"> • be consistent with sustainability of community integrity and quality of life, • have minimal environmental impacts, • offer traveler choice, • provide environmental justice, • have the potential for better land use patterns, • preserve aesthetic qualities, and • preserve quality of life. <p>Also, a new institutional mechanism such as a Mountain RTD to plan, develop, and operate the system, with new funding sources and partnerships should be established. This would allow for maximum integration of transportation and land use planning and development.</p>
Bus Service	
E 11 - i	<p>The PEIS Transit alternatives are too grandiose, and modest Transit alternatives have not been given adequate consideration, such as bus service. The following should be considered in regard to the way bus service was treated in the PEIS:</p> <ul style="list-style-type: none"> • Bus service should include interim upgrades along the Corridor, to resort destinations, and from the Front Range, not drastically jump to bus in guideway. • High-frequency bus service in mixed traffic should be considered as a single-mode alternative, preferably in an HOV lane in areas where the highway would be widened. • The PEIS lacks analysis of relatively low-cost service to link regional circulators throughout the Corridor and adding frequent, reliable service from DIA to Vail, and less frequent service to Glenwood Springs. The bus service could be operated exclusively by CDOT or as a public and private partnership between CDOT and a private carrier such as Greyhound.
EJMT Ventilation Shaft	
E 11 - j	<p>One or more modes can fit in the EJMT ventilation spaces and can be configured to enhance ventilation. In particular, placing the AGS through the EJMT ventilation spaces would:</p> <ul style="list-style-type: none"> • enhance ventilation by moving air through the tunnel, • completely eliminate tunnel costs, • save billions of dollars, and • allow much faster construction.
Airports	
E 11 - k	Airport expansion or additional airports in Summit County would assist out-of-state tourists.
Termini	
E 11 - l	<p>The following suggestions involving project termini should be reconsidered:</p> <ul style="list-style-type: none"> • Study broader termini from DIA to Grand Junction • Extend rail termini to Glenwood Springs to take advantage of the train station downtown • Begin the eastern terminus, which currently co-incides with the western terminus of RTD's planned FasTracks network, at DIA rather than C-470 to ensure the most direct route and adequate future capacity

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Structured Lanes	
E 11 - m	The PEIS should explore the feasibility of double-decking or structured lanes along the Corridor to minimize environmental impacts, particularly at narrowly constrained areas of the Corridor. An elevated portion above the existing roadway with interchanges at major points of interest would provide a better solution.
Integrated Statewide System/Transportation Planning Scope	
E 11 - n	<p>All Draft PEIS project alternatives should be retained and incorporated in the findings and future statewide and I-70 planning efforts. I-70 should not be the only multilane access to the mountains, and there should be consideration to improving other highways throughout the state including north/south routes. The PEIS is too limited in scope to solve the problem. An integrated statewide system should be created. This integrated strategy should include the following points of consideration:</p> <ul style="list-style-type: none"> • Critical connections from the Corridor to DIA, the Eagle Valley Airport, and Grand Junction should be included. • North and south routes are equally important. • Planning across all modes of transport should be concurrent to build each into the final design for the Corridor. • Alternative modes and alternate routes could provide economic benefits off the I-70 Corridor (US 40 and US 50). • Mass transit, alternate routes, and enhancement and acceleration of the Minimal Action alternative should be considered. • The plan should include multiple routes west to absorb future traffic and participate in future growth.
Phasing of Improvements	
E 11 - o	An adaptive management plan to fix pinch points and re-evaluate the impact could be implemented with available funds and started in the near future. Proper sequencing of improvements between Floyd Hill and EJMT will optimize mobility and mitigate congestion. If additional capacity is provided between Floyd Hill and EJMT, without improving Idaho Springs until the end of the process, this will result in a bottleneck at Idaho Springs.
Bottlenecks/Pinch Points/Priority Areas	
E 11 - p	<p>Bottlenecks and major pinch points should be addressed and prioritized now using context sensitive design with limited construction in Clear Creek. Doing so would allow the I-70 congestion issue to be reassessed. The following areas are of particular concern:</p> <ul style="list-style-type: none"> • Twin Tunnels to Floyd Hill • EJMT (additional bore for transit and automobiles) • US 40 Junction • Georgetown Hill • Empire Junction interchange • East of Idaho Springs • Hidden Valley (curve straightening) • Floyd Hill to Frisco (highway widening)
RTD Coordination	
E 11 - q	RTD will be interested in participating in Tier 2 studies, which would further define the “Jefferson Station” interface.

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CCS No.	Transportation Common Concern Statements (CCSs)
I-70 Covered Lanes	
E 11 - r	<p>A tunnel from above East Vail through the south side of the valley, traveling under Vail Mountain, and exiting near Dowd Junction is the solution for I-70 through Vail traffic. Selling Vail Valley land that I-70 currently occupies could offset the cost of the tunnel. The tunnel would cost \$2 billion and the sale of the land would generate \$2.2 billion (550 acres at \$4 million/acre).</p> <p>The possibility of covering certain sections of the interstate near communities has not been considered. This is possible economically because large amounts of developable land would be made available and environmental improvements could be made (such as removing stream culverts, adding green space, and restoring wildlife/habitat connections).</p> <p>The Town of Vail requests the alignment from milepost 184 to milepost 169 should be changed to hold open the option of someday either cut-and-covering the interstate with private use of air rights or providing for a series of tunnels that allows transfer of right-of-way.</p>
Auto Transport	
E 11 - s	<p>A rail alternative that includes double-decked train cars that could carry automobiles should be considered. The following would apply:</p> <ul style="list-style-type: none"> • An autotrain from Grand Junction to Denver would relieve some of the I-70 traffic and be a tourist attraction. • Both Rail and AGS alternatives could be designed to transport personal vehicles into the mountains, where they could then be unloaded for use. • Vehicles (engines turned off) could be conveyed through EJMT on an electric/pneumatic conveyor system or flatcar, allowing the size and ventilation requirements of the tunnel to be greatly reduced. • People and cars could be dropped off at ski resorts along the way. • A car carrier trucking system should be available (entrance east of Evergreen) during peak travel periods.
Specific Corridor Areas	
E 11 - t 1	<p>Continental Divide/EJMT</p> <p>Blasting a road through the Continental Divide is the long-term solution, not adding more tunnel bores. Construction of tunnels at locations other than EJMT would provide more flexibility for interstate movement and probably cost no more than additional bores at EJMT. Open pit mining operations could be employed to cut a notch (wide enough for snow removal and avalanche protection) in the Continental Divide south of EJMT, allowing EJMT to be abandoned to save money on operating costs. EJMT can be modified to accommodate increased traffic.</p>
E 11 - t 2	<p>Floyd Hill (milepost 247) to Idaho Springs (milepost 241) to Empire (milepost 232)</p> <p>The Floyd Hill area presents several issues that need to be resolved, as follows:</p> <ul style="list-style-type: none"> • Improvements to eastbound travel at the Floyd Hill interchange (Exit 247) should include mitigation for visibility/sun glare problems and speed differentials between exiting and non-exiting vehicles. • The area from Idaho Springs to Floyd Hill (milepost 241 to milepost 247) requires an innovative and creative design to smooth curves, decrease traffic incidents, increase highway speed and throughput, accommodate the bike path and frontage road, and address the narrow Exit 244 area with a new interchange. • The section of I-70 between Floyd Hill (Exit 247) and Empire (Exit 232) requires drivers to slow down due to sharp curves, which creates congestion and jamming. The solution is to straighten the road so that drivers may maintain a steady speed of 65 mph. Tunnels could be constructed to remove the curves and the steep descent westbound could be lessened.

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E11-t3	<p>Georgetown/Silver Plume Area Issues in the Georgetown/Silver Plume area include the following:</p> <ul style="list-style-type: none"> • A cut-and-cover design with open-sided, colonnaded lanes on the hillside at Georgetown/Silver Plume (milepost 228 to milepost 226) would mitigate rockfall hazards, preserve the bike path, and avoid road widening through Silver Plume and the National Historic Landmark District, and, in turn, mitigate noise, air quality, water quality, and visual impacts. • There should be further consideration of an incline tunnel at Georgetown Hill to address rockfall, noise, and viewshed impacts. • The rejection of the Silver Plume/Georgetown Hill tunnel/roof is not substantiated because it would address congestion, safety, and general community values.
E11-t4	<p>Silver Plume/Bakerville/EJMT Any alterations between Silver Plume and Bakerville, including the proposed greenway (multiuse bike path area), should be north of I-70 to avoid impacts on property on the south. I-70 from Bakerville to EJMT should go south of the existing highway to avoid homes to the north.</p>
E11-t5	<p>Silverthorne/Dillon/Frisco Frontage roads between Silverthorne/Dillon and Frisco should be included in the project.</p>
E11-t6	<p>Idaho Springs The following issues were noted about the Idaho Springs area:</p> <ul style="list-style-type: none"> • A hillside route west of Idaho Springs would be short and substantially safer than the existing alignment. • A new roadway farther south of Idaho Springs, at the same elevation as Hyland Hills, would eliminate problems associated with changes in speed limits. • Highway improvements in the Idaho Springs area should be left until last. • A tunnel in the Idaho Springs area should be considered because it would not affect the residents. • The ramp intersection improvements at Exit 239 in West Idaho Springs should not be implemented because Idaho Springs does not want to encourage visitor travel through the west end of town, which is a residential area.
E11-t7	<p>Twin Tunnels The Twin Tunnels east of Idaho Springs is a major bottleneck. The solution should include removing the Twin Tunnels east of Idaho Springs, which would benefit I-70 by solving the congestion problem much more cheaply and with much less impact on people's lives. The only issue would be the transmission tower on the south side of the tunnels.</p>
E11-t8	<p>Herman Gulch Highway improvements at milepost 218 and the Herman Gulch trailhead should be made south of the existing highway with no widening to the north.</p>
E11-t9	<p>Mount Vernon Canyon US 40 could be used as an alternate route through Mount Vernon Canyon and provide the opportunity for reversible lanes during peak traffic.</p>
E11-t10	<p>Chief Hosa Exit 259 at Chief Hosa should be left alone because there are no major problems here, and a 25-foot wall and climbing lane will create huge bottlenecks when the Floyd Hill tunnel is complete.</p>

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CCS No.	Transportation Common Concern Statements (CCSs)
E11-t11	<p>Downieville/Dumont/Lawson Considerations for the Downieville/Dumont/Lawson area include the following:</p> <ul style="list-style-type: none"> • The auxiliary lanes between Downieville and Empire Junction (milepost 232 to milepost 234) should be considered in conjunction with relocating the ports, and the footprint of these lanes should be minimized in the Lawson area and should be designed using context sensitive design. • The footprint of auxiliary lanes between Downieville and Empire Junction (milepost 232 to milepost 234) should be minimized in the Lawson area and should be designed using context sensitive design. • The eastbound entrance ramp at Dumont (milepost 235) should be extended to create a longer merge lane and could include ramp metering. • Relocation of the eastbound and westbound ports in Downieville should be considered because the short ramps cause congestion as trucks leaving the port at slower speeds back up faster-moving I-70 traffic.
E11-t12	<p>Minturn Interchange/Dowd Canyon The Town of Minturn has serious concerns about the I-70 Dowd Junction interchange and proposed tunnel. The entry and exit lanes must remain available to the Town of Minturn on both sides of the proposed tunnel—a diamond-like interchange must be constructed to accomplish this.</p>
E11-t13	<p>Glenwood Springs The Preferred Alternative must include a Highway 82 interchange (via Midland Avenue, bypassing Grand Avenue in Glenwood Springs) that includes a new bridge over the Colorado River.</p>
E11-t14	<p>Silver Plume Interchange Relocation Routing traffic through Silver Plume during Historic Railroad operating months is problematic and should be considered in light of interchange relocation. The major issues resulting from interchange relocation include the following:</p> <ul style="list-style-type: none"> • Public safety (especially of children) • Congestion (parking west of the overpass, especially) • The need to control traffic (that is, blockade) through the Jack Pine wilderness and into the residential district east of there
Specific Technologies	
E11-u1	<p>Lighter Than Air Emerging Lighter Than Air (LTA) technology in the form of airships is an advanced technology not considered and could hold answers for I-70 congestion problems.</p>
E11-u2	<p>Evacuated Tube Transport Evacuated Tube Transport (ETT) technology should be considered for the following reasons:</p> <ul style="list-style-type: none"> • It may be built using existing processes for less than a tenth of the cost of high-speed rail. • It can make money and costs less than driving a car. • It has a higher capacity than highways or train tracks. • It exceeds the capacity of 10 lanes of freeway. • It eliminates virtually all friction. • It uses less than 1/50th as much energy. • It causes less than 1/50th as much pollution as cars, planes, or trains. • It is immune to bad weather.
E11-u3	<p>Linear Induction Motor The Linear Induction Motor technology should be considered for rail alternative options. The PEIS does not explain why consideration of the linear induction motor monorail was dropped.</p>

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E11-u4	<p>Urbanaut The SemiMaglev™ Urbanaut technology should be evaluated as an alternative, including cost considerations, because it is substantially different from the general AGS alternative.</p>
E11-u5	<p>Gondolas Gondolas should be considered as an options for the following reasons:</p> <ul style="list-style-type: none"> • Gondolas (high-speed quad chairlift technology) between ski resorts are approved in the White River Plan and can run at 40 mph from Frisco to Breckenridge (20 minutes). • Gondolas and resort shuttles could be used to reduce I-70 congestion. • Gondola vehicles can be lightweight aerodynamic pods that detach.
E11-u6	<p>High-Speed Monorail CDOT should give consideration to the High-Speed Monorail (HSM) originally proposed by CIFGA in the comparisons of alternatives for the PEIS. The characteristics of the HSM were more likely to have met the Corridor goals than any of the other alternatives according to the consultant’s early calculations. Why was the HSM left out?</p>
Construction Techniques	
E11-v	<p>Monocoque construction techniques for rail alternatives were not considered. High-pressure waterjet tunnel boring makes tunnels a more viable option for some problem areas in the Corridor (Floyd Hill, Georgetown/Silver Plume, EJMT, Minturn) and more consideration of this technology should be included in the study. The PEIS does not describe when discussions about foundations and soil retention systems will take place.</p>
DRCOG Staged Approach	
E11-w	<p>Could decision-making regarding actions to be taken be staged to allow more time to more fully consider all alternatives? Could, for example, efforts be focused first on the Minimal Action alternative, leaving time to more fully explore the best Transit alternative for the Corridor?</p>

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CCS No.	Transportation Common Concern Statements (CCSs)
I-70 Coalition Regionally Preferred Alternative	
E 11 - x	<p>The I-70 Coalition, composed of 31 political jurisdictions in and along the Corridor, has developed a Regionally Preferred Alternative (RPA) that they believe would best address the long-term transportation needs in the Corridor. The Coalition RPA:</p> <ul style="list-style-type: none"> • is a long-range multimodal sequenced alternative that addresses the transportation concerns of the I-70 Corridor for at least the next 50 years; • is designed to align available funding with a sequenced plan to safely increase the long-range capacity of the Corridor while addressing the concerns of local communities represented by the Coalition; • consists of five components: highway, transit, aviation, alternate routes, and nonmotorized transportation; • includes steps for the logical re-evaluation of the capacity requirements, technological advancements, and available financing for the Corridor with the re-evaluation helping to determine the sequencing of subsequent actions; and • envisions Coalition and member involvement for any and all future transportation decisions affecting the I-70 Corridor. <p>Other points of significance in regard to the I-70 Coalition RPA include the following:</p> <ul style="list-style-type: none"> • Implementation of the Coalition RPA requires balanced, concurrent planning of each of the five components with constant community and Coalition involvement regarding the schedule, need, and mitigation. This collaborative planning effort will allow local jurisdictions to coordinate their own improvements and land uses (that is, future transit facilities, feeder lines, and so forth) with CDOT's. Concurrent and joint planning for each of these components should preclude doing any work in the Corridor that will have to be replaced to accommodate subsequent actions. • At this time, the Coalition has not defined a transit system, alignment, or implementation plan for the transit component. In their comments dated May 24, 2005, the Coalition stated that for the Highway Mode of the Coalition RPA, the goal is to eventually achieve an equivalent of what today would be a six-lane capacity. The Coalition is opposed to the I-70 Corridor ever being physically expanded beyond a six-lane width.