

Alternative Suggestions, Improvements, and Modifications: Could be Included

The following list of suggestions could be included as improvements or modifications to the alternatives under consideration. Many of these suggestions may cause additional impacts, or trade-offs which are also briefly described.

All Alignments (Existing Alignment and Realignment): Could be Included

	Alternative/Suggestion	Concern	Response to Suggestion/Concern
#	Other: Buffer		
1	Wider buffer to address growth and impacts	Amount of buffer between highway and homes, neighborhood impacts, noise	Larger buffers between the alternatives and adjacent property will cause increased property takes, costs, and community impacts. Alternatives have been designed to account for capacity needed in 2030 according to the regional transportation model.
#	Other: Parks/development		
2	Allow parks and open space or private development under the highway	Neighborhood cohesiveness, elevated structure, hurt development in the area	Potentially a Homeland Security issue, uses under the highway may be allowed on a case-by-case basis. In addition, either option impacts large parcels that would have remainder property to sell off. This land could potentially be sold to the City to use as a park.
#	Other: Safety		
3	Add a turnabout on i-70 – opening between interchanges	Emergency response and outlet for backed up traffic	Future design could take this into consideration. An incident management plan will be developed for the corridor after the selection of a preferred alternative.
#	Other: Walkability		
4	No free right on red	Safety for pedestrians and bikes	Local agencies control the regulations related to signalization and safety of cross-streets, coordination could be done regarding this after the selection of a preferred alternative.
5	Bike/pedestrian corridor	46th Avenue walkability	Sidewalks will be provided along 46th Avenue. A four lane 46th Ave typical section with turn lanes, bike lanes, sidewalks and tree lawns would be wider than the existing viaduct.
6	Open space under hwy to connect sand creek and south platte	Block from river development	Since 46th Avenue will have sidewalks along the entire length, a connection from the South Platte to the Sand Creek Trail can be provided. This is not intended to be a separated bike path but that option could be considered at the cost of additional property impacts.
#	Other: Vertical		
7	Minimize vertical profile	Lessen miles of elevation	Vertical alignments are designed to meet design criteria and were designed to avoid the roller coaster effect. Profile elevation has been minimized but many facilities including railroads exist that make keeping the alternatives at grade difficult

Existing Alignment: Could be Included

	Alternative/Suggestion	Concern	Response to Suggestion/Concern
#	Connectivity: East/west		
1	Providing a connection between Thomson Court to Vasquez	Access	Vasquez would be rebuilt for the existing alignment alternatives on the north side connecting Thompson Ct, Clayton, Fillmore and Milwaukee. On the south side a new road would be created connecting Thompson Ct, Clayton, Fillmore, Milwaukee and St Paul.
#	Connectivity: North/south		
2	Make a thru streets at Columbine and Clayton – underpass to get under the ramps	Emergency response time, moving east/west through neighborhood when blocked by trains	Columbine will have right-in/right-out access, a full crossing is difficult because of sight distance and signal spacing (it would have to be signalized) and this would mean three signals in 630' and very limited storage. Preliminary estimates of the Clayton underpass range from \$8-\$9 million and will include additional property acquisitions.
3	Pedestrian facility for Columbine and Clayton for families to go to school	Neighborhood connectivity for pedestrians	A pedestrian signal could be placed at Columbine. A pedestrian undercrossing could be provided at Clayton. The current design has the viaduct ending at Elizabeth Street and a pedestrian crossing through 220' of wall/fill would be a long dark and potentially unsafe tunnel. The viaduct could be extended another 500+ feet at an additional cost of \$5.5 to \$6 million.
#	Connectivity: Other		
4	More lanes	Congestion on I-70 in the area of I-225 and Pena Blvd/Airport	I-70 and the connections at I-225/ Pena/Airport are built to the 2030 regional transportation plan. More lanes won't solve congestion problem. The problem is caused by the close spacing of I-225, Chambers and Pena and the associated weaving.
5	Improve ramps farther – Tower Road	Congestion on I-70 in the area of I-225 and Pena Blvd/Airport	I-70 and the connection at Tower Road are built to the 2030 regional transportation plan.

Realignment: Could be Included

	Alternative/Suggestion	Concern	Response to Suggestion/Concern
#	Connectivity: East/west		
6	Connect south side frontage road to Brighton and York street and connect to sand creek frontage road	Maintain existing connections that are on I-70 now	Brighton Blvd runs along the south side and it could be extended to Vasquez, along the 53th Ave grid, but has two rail lines to cross. Trying to direct connect this frontage road to Sand Creek frontage rd is very problematic due to signal spacing on Colorado Blvd, two more RR crossing and another crossing of Sand Creek.
7	Colorado Boulevard ramp onto I-70 East should continue to Dahlia	56th Avenue connection to Dahlia	Due to the proximity of Colorado, I-70/I-270 and Sand Creek you could not get the ramp over the highway and Sand Creek and down to Dahlia (Urban interchange spacing is 1 mile; Dahlia is .3 miles away). An alternate idea to serve the concern would be to create two one way streets that connect Colorado to Dahlia. Because these would need to connect into the on/off ramps, the ramps would need to be lengthen to provide weaving distance.
8	Westbound I-70 to Quebec, direct exit from highway	Access	There is a direct westbound exit. Due to spacing of Central Park Blvd, 46th Ave and Quebec the westbound Quebec/46th Ave exit to the existing I-70/Quebec Interchange is the direct access. To provide a ramp off the collector-distributor road to the realigned I-70/Quebec interchange would impact the open space/park/detention pond by Northfield.
#	Connectivity: North/south		
9	From Vasquez to I-270, to improve connectivity north/south from realignment to 46th	Maintain existing connections that are on I-70 now	Connections through the neighborhood exist from the realignment to 46th Avenue at York would run from 46th to Brighton Blvd (south Frontage Rd?), Vasquez and Colorado. (all other streets in the neighborhood have the problem of currently not being able to cross the railroad)
10	Holly connection	Maintain existing connections that are on I-70 now	Holly and Monaco currently have a disconnect at the railroad. A railroad crossing would have to be negotiated and additional properties may be impacted. An underpass of the realigned I-70 would also have to go under Sand Creek which runs beside the highway and underpasses of rivers are not a good idea. Only a flyover is feasible here not an interchange due to the proximity to the I-70/I-270 split.
11	Add frontage roads along I-70 to provide access	Access from I-70 into north Swansea would be more limited	Brighton Blvd runs along the interstate from Race to about Thompson Ct and provides access to York and Columbine. Brighton could be extended to Vasquez. Brighton Blvd from 46th to 48th would still provide the same access
12	Traffic flow and volume management	Various issues at the Colorado/ Brighton/ re-alignment area	All interchanges and side streets are built to the 2030 regional transportation plan, the increase in traffic as a result of improvements to I-70 do not require additional capacity improvements. Additional work on the interchanges in this area can be done to minimize traffic impacts.

	Alternative/Suggestion	Concern	Response to Suggestion/Concern
13	Increase north/south connectivity along existing roads	Fewer on/off ramps mean less access for emergency response	The gore to gore spacing between Brighton Blvd and Vasquez/Colorado is 1 mile and the spacing between I-70/I-270 and Quebec is just over a mile. Standard urban interchange spacing is 1 mile and interchange spacing has a pronounced effect on freeway operations. Race, York, Vasquez and Colorado all provide N/S access. All other streets in the residential area don't have a crossing of the UPRR.
#	Other: Connectivity		
14	Brighton Boulevard should be simplified	Plan shows circuitous route for Brighton Blvd	This is to avoid a complex 5 legged intersections to provide access to a low traveled local street. Any other design would increase impacts to the community including the park. Other interchange options could be considered.
15	Plans should be simplified	Confused road access, including Brighton Blvd	The interchange is a modified diamond. Swinging 46th Ave to intersect more perpendicular with I-70 and thus provide an easier diamond interchange will have large impacts to the community. There is also a spacing issue with the I-25 collector-distributor roads and Washington Blvd. Other interchange options could be considered.
16	More connections in and around the area	Trucks have limited access to 46th Ave	There is access to 46th at Brighton Blvd, Vasquez, Colorado and Quebec.
17	More lanes on I-270	Merger with I-270 – already chronic congestion in that area	The merge of I-70 and I-270 is built to accommodate 2030 future traffic volumes at a LOS E
18	Provide means to cross RR tracks	Access from I-70 into north Swansea would be more limited	Race, York, Vasquez and Colorado all provide N/S access. All other streets in the residential area don't have a crossing of the UPRR.
19	Improve flow I-270 to Dahlia area	Merger with I-270 – already chronic congestion in that area	Dahlia is too close to Sand Creek, Colorado and the I-70/I-270 interchange to provide more direct access. Additional detail on traffic analysis is being performed at the Vasquez/270 interchange to determine if additional improvements are needed.
20	Texas “u” turns at Dahlia, Vasquez and Brighton	Connectivity	A Texas Turnaround is usually for one way frontage roads to reverse direction not for interstate traffic to turnaround, could be used on existing alignment for 46th Avenue.
#	Other: Walkability		
21	Pedestrian overpasses for 46 th Avenue	Walk-overs – more than one – that families can get across	Pedestrian signals would be provide at intersections of 46th Avenue and cross-streets, overpasses could be included.