Based on our review, the proposed elimination of the existing York St. interchange will create significant adverse impact to the local roadway network around York St. Please provide needed mitigation measures to include additional local roadway connections to York to help with the increase in traffic around this area. Revise and update section ES4.2, paragraph 3 on page ES-7 and section ES 6, paragraphs 6 and 7 on page ES-12 to include additional local roadway connections at York to help with the increase in traffic around this area.

"How will social..." add ...."Construction activity and property acquisition will lead to changes in the supply chain, customer access, and employee access; these changes will result in lower business sales, higher employee turnover, increased costs, and reduced profits. The result is lower tax revenues through sales/use taxes, property taxes (due to lost businesses or business capital), and other economic and fiscal reductions."

Due to the critical nature of outreach, please cross reference and add "Additional focused outreach, during the planning, pre-construction and construction phases, will be made to local businesses to minimize business loss and operational disruptions.

What and where can the specific mitigation measures be found in the SDEIS? Include a reference to 5.22 here.

CDOT should work with the City and County of Denver (CCOD) and Globeville Elyria Swansea Organizers Group and other community stakeholders during the entire process to procure a private sector team who will design and construct this project. This partnership will ensure that local interests and concerns are reflected in the project as it proceeds from design through construction.
Diagram 2-1 indicates the project area. Was the entire transportation network in the region taken into account? What improvements to the local network, I-270 and I-76 were considered to alleviate widening in the Swansea and Elyria neighborhoods?

EIS should take into account the entire transportation network in the region and consider what improvements to the local network, I-270 and I-76 could alleviate widening in the Swansea and Elyria neighborhoods.

FEDERAL HIGHWAY ADMINISTRATION’S LIVABILITY GOALS:

It is not clear that the FHWA Livability goals are captured in the text. The FEIS should address the Federal Highway Administration’s Livability goals.

This section should also reference the most recent, 2014 Transit Oriented Development Strategic Plan.

The “Managed Lane Option” considers at least one managed lane, using operational strategies like a high-occupancy vehicle (HOV) lane, from I-25 to Tower Road.

The SDEIS does not explicitly recommend managed lanes, or include specific recommendations on users or potential incentives to improve ridership and thus mitigate environmental impacts.

Managed lanes are important to both reduce potential congestion and minimize the impact of carbon emissions on air quality. HOV and bus lanes encourage riders to commute together or on shared transit, decreasing the number of vehicles on the highway, and mitigating some potential environmental impacts for the surrounding community, including pollutants and noise disturbance.

If CDOT determines to include toll lanes, the following statements should apply to those:

1) Managed lanes are included for the full length of the widened highway.

2) Managed lanes are free for vehicles containing three or more riders.

3) Managed lanes are free for buses. While there will be commuter rail access through the communities surrounding the expanded highway, lessons from RTD’s West Line Rail expansion show that bus transit may continue be the most flexible and cost effective transportation option for families in diverse communities, and should be considered as part of a holistic transportation planning process.
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<td>This section discusses that high traffic volumes on 46th Ave. as well as the fact that the truck traffic could degrade the quality of the area neighborhoods and cause safety concerns for the neighborhoods, pedestrians, bicyclists, and vehicles which contradicts the project need. Additional mitigation should be shown in FEIS between Steele St. and Colorado Blvd. to prevent those impacts from occurring in the neighborhoods and local City streets.</td>
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<td>The local connectivity north-south refers to Ex. 4-20 for the basic option. I believe this should refer to Ex. 4-21 as Fillmore is not called out as a connection and 4-20 shows the revised viaduct alt.</td>
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<td>York St. is proposed to convert from a one-way to two-way street between 45th and 47th Aves in the Modified Option. This section refers to 48th Ave. as the boundary. York St. is already a two-way street north of 47th Ave.</td>
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<td>All typical section graphics should include the existing viaduct as a point of reference, similar to Exhibit 3-9.</td>
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<td>Our review showed that the signalized Steele/Vasquez interchange has a better performance. Consider modifying paragraph 14 to show the Partially Covered Lowered (PCL) option with a signalized intersection at Steele/Vasquez and that 46th Ave. to remain one-way between Steele/Vasquez and Colorado Blvd. (WB 46th Ave. to the north of I-70 and EB 46th Ave. to the south of I-70).</td>
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<td>In Exhibit 3-13 showing the Managed Lane Option the interior shoulders are shown as 12 ft. and in Exhibit 3-12 showing General Purpose Lane Option they are shown as 16 ft. Indicate why these shoulders can't be 12 ft. or change appropriately. Please list the additional impacts and corresponding mitigation of the Managed Lanes Option if the width of the General Purpose Lane Option can be reduced.</td>
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<td>The FEIS should provide more information than was in the SDEIS and the 2008 DEIS as to the options considered for rehabilitating I-70; options considered for improving mobility that do not necessitate adding lanes; and alternatives considered for improving local mobility — routing truck traffic, improvements to local street network, additional transit in the corridor (beyond FasTracks).</td>
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<td>CCOD understands the capacity need for 10 mainline lanes on I-70, but believes that variances in some of the dimensions and geometrics are reasonable to minimize the overall footprint of the highway. Items such as reduced shoulder widths and less-than-full-standard geometries for accel/decel lanes should be thoroughly examined as a joint effort between the CCOD and CDOT, the results of which would be incorporated into the FEIS.</td>
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The design of the Partially Covered Lowered (PCL) should incorporate complete and green street concepts, taking into consideration best practices of design, multimodal safety and efficiency, visual and environmental protection for the neighborhood. In addition to lowering the highway and providing a cover, the design should incorporate measures to open the area up to natural light and air, improved multimodal facilities, landscaping, aesthetics to provide opportunities for mountain views across the lowered highway, and other features to improve aesthetics and reduce noise from the highway. Successful streetscape design reinforces the pedestrian scale and character and enhances the quality, identity, physical function, and economic vitality of an area. In locations where it is possible within proposed right-of-way, design the frontage road with wider sidewalks and buffers to be more inviting. Also address community cohesion and infrastructure needs that were disrupted by the location of I-70 through the community.

It states that the slip ramps at Monaco and Dahlia will be relocated and consolidated at Holly St. With this proposed change and from our review, there will be significant increase to traffic on Holly St. to the north and south of the interchange as well as cut through traffic on 48th Ave. Therefore, this paragraph will need to be updated to include language that additional work on Holly to the north of I-70 and also 48th Ave. to Colorado will be required to provide alternative accesses to Colorado to help relieve congestion on Stapleton Drive North and South.

ALTERNATIVES, ROAD WIDTH & SUFFICIENT CAPACITY:

Concerned that width of I-70 & number of lanes be sufficient to accommodate vehicle traffic growth and does not need widening in the future.

Regardless of how wide the road is under all Build Alternatives, traffic load demand forecasts for the next several decades must be adequate enough to solve congestion. The highway width and number of lanes need to be sufficient to avoid the need to further widen I-70 later.
The SDEIS does not discuss potential tolling costs, which would allow the impacted public to be informed of the fees they might anticipate for use of managed lanes. It is noted that p. 3-19 indicates “pricing and policies” will be made explicit in the EIS.

The EIS should provide more information on the intent and mission for managed lanes. It should include potential pricing scenarios for managed lanes (current examples of one-way tolling across the country, depending on miles/length of travel, toll segment and congestion level range from $0.20 to $9.00) and indicate how pricing may be related to vehicle type. It should also indicate the aspects of managed lanes that will be locked into the 2016-2021 Transportation Improvement Program (TIP) or other appropriate TIP, such as BRT, HOV, HOV+, SOV, ZEV and the associated air quality benefits.

The separate study that will evaluate the pricing and policies for the managed lanes should give priority to reduce impacts on air quality and provide equitable access across all income levels. Low-income residents of these neighborhoods and the region will bear a larger financial burden from the managed lanes relative to family budget. Please specify any monetary or other incentive options available for using managed lanes for residents impacted by the project, this could include allowing residents of Globeville, Elyria and Swansea to have FREE, not just subsidized, access to the managed lanes to facilitate neighborhood connectivity.

The EIS document should identify exactly how many (and where) access points to the managed lanes will be throughout this study area. There is language in the EIS that indicates access for low income residents. For this to truly benefit low income residents of the Globeville, Elyria and Swansea; there would need to be an access point to the managed, HOV, HOV+ lanes.

The EIS must show how the traffic from managed lanes will terminate on I-70 as it approaches the mousetrap interchange at I-25 and provide information on air quality and congestion impacts as west-bound I-70 narrows from five lanes to three lanes to two lanes as it crosses I-25.

Based on our review, the removal of the access at Steele/Vasquez creates adverse traffic impact to 46th Ave. and Steele/Vasquez.

There are major concerns with constructing the lowered alternative as to effective mitigation of groundwater and drainage & detention impacts from surface runoff.

If a lowered alternative is selected, CDOT must guarantee the mitigation will solve drainage problems impacted by this project.
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The PCL Modified Option proposes a pedestrian/bike only crossing on Josephine St. Need evaluation to investigate impact and provide needed design modification to the surrounding roadways to accommodate the increase in traffic.

| 1      | 3       | 3. 8    |      |                       |

Bullet #2 under "variations under consideration" lists "Highway cover." This is unclear. Please clarify if this is the highway cover described in the Basic Option, the "second cover" described in the Modified Option, or if it is referring to both.

| 1      | 3       | 3. 8    | 33-34|                       |

The FEIS should note that there is still an opportunity for a second cover with highway access at Steele/Vasquez.
Truck routes that minimize traffic and pollution on Swansea, Globeville and Elyria neighborhoods, as well as on Cole, Clayton, Skyland and Whittier neighborhoods, is strongly supported by residents. They should be implemented before I-70 construction begins to prevent additional truck traffic through these neighborhoods. As the Health Impact Assessment (HIA) for Globeville, Elyria and Swansea indicates, the highway access brought more industrial activity into GES neighborhoods. The combined highway and industry impacts resulted in increase public health risk due to decreased in air quality. Exhibit 4-8, Existing Truck Routes, on page 4-8, documents that there are numerous other truck routes in the area including Brighton Blvd. and Colorado Blvd.

CDOT has indicated (although it is not reflected in the SDEIS) the I-70 and Steele/Vasquez interchange will not be closed, in order to accommodate truck traffic. How will keeping the interchange open for truck traffic benefit the residents? What is the anticipated traffic count for trucks? What is the analysis of impact on air quality? Will residents of an environmental justice community see a further deterioration in air quality and negative noise impacts? Is there an analysis of impact of providing trucks improved access to Colorado Blvd. on other streets?

The study must assess the magnitude of the changes to the truck routes in the Elyria and Swansea Neighborhoods, especially related to the removal of York interchange. CDOT should cross reference and follow the recommendations of HIA and the Globeville and Elyria - Swansea neighborhood plans to minimize impacts of truck traffic through residential areas. CDOT must indicate how trucks will navigate through the local network, indicate all associated impacts and how they will be mitigated and ensure that truck routing avoids school zones and residential areas. This should also include working with the City of Denver to coordinate and financially support improvements of truck routes away from residential areas. Also, the EIS should include directing non-local truck traffic off of I-70 through this corridor and signage should be used to discourage trucks coming into the neighborhood. Furthermore, a Good Neighbor Agreement should be implemented during the construction period to define truck routes. While the City is open to working with CDOT to support mitigation, CDOT is responsible to reduce neighborhood impacts from truck traffic increases and rerouting.

Also, radioactive materials, poisons and A5 explosives are already prohibited at all times and Flammable liquids and LP gas prohibited during peak hours. All options should continue these same restrictions. Denver Local Emergency Planning Committee (LEPC) should petition the Colorado State Patrol to approve continuation of this designation.
It is stated that the roundabout option in the Build Alternatives to provide improved operations as compared to the signalized interchange. Based upon our review, the roundabout will likely have worse operations and more limited capacity than the signalized options. A failure of the roundabout would create significant queuing on Vasquez Blvd. north of I-70 and on WB 46th Ave. Due to severely high levels of traffic, the non-signalized crossing in the roundabout option will discourage pedestrian movement and make it unsafe due to extremely high levels of interaction with traffic. Also, additional notes should be added in paragraph 5 regarding the benefits of the traffic signals to include enhanced ability and flexibility to address potential future congestion.

The description of the Basic Option and Modified Option include the specific length of the highway cover between Clayton St. and Columbine St, but only provides general descriptions of variations using the terms "substantially extended" and "minimally extended." These variations should be described in more detail to clearly evaluate pros and cons of the variation options.

In the last paragraph on page - description of second cover states "it may also pose air quality impacts and may result in violation of regional air quality standards." This reads negatively and does not objectively describe what air quality impacts may need to be address with two covers. Provide more detail as a basis for this statement and a more thorough explanation.

The discussion on the frontage roads should include that one-way frontage roads provide better operations then a two-way frontage road system.

In its discussion of property acquisitions needed for the various alternatives, CDOT omits any discussion of the CCOD property, including right-of-way, that would be needed. At present, CCOD owns the right-of-way to 46th Ave. under the viaduct, as well as other property that would potentially be impacted by the different alternatives. Acquisitions of CCOD-owned property should be considered in CDOT's analysis.

The FEIS must address the economic development opportunities and urban design elements of the preferred alternative.

Neighborhood cohesion:

This section lacks clarity, does not define neighborhood cohesion and mainly focuses on the dominant visual barrier. Please provide a definition for neighborhood cohesion and state how the PCL accomplishes this with a more detailed description of specific design elements in additional to the visual barrier.
Neighborhood cohesion:

Since the PCL alternative "eliminates some local north-south connectivity," additional north-south connections should be considered as design continues to support north-south connectivity.

Existing local connectivity – mentions 18 roadways within the study area between Washington St. and Tower Rd., but when this section refers to streets under I-70 that provides critical north/south access for Swansea and Elyria neighborhoods, it does not quantify the number of streets that provide the limited access they currently have. The connectivity of the Elyria and Swansea neighborhoods will see fewer connections with this highway project under both PCL Alternative and Modified Option.

This section should quantify the exact number of streets under I-70 that provide critical north/south access for Swansea and Elyria neighborhoods, same as it did for the number of streets that have I-70 connectivity within the study area between Washington St. and Tower Road.

The sale and vacation of 46th Avenue is a process that will need action/approval by Denver City Council. CDOT and CCOD should explore opportunities for land exchanges near the I-70 and Vasquez interchange that would encourage economic development for these low income neighborhoods that have struggled to secure neighborhood –serving businesses such as a grocery store.

The study must provide information on the existing safety conditions on the major local roads within the impacted study area as defined in Exhibit 4-1. Documenting existing local safety issues is essential for the project team understand safety impacts from any alternatives that may divert traffic from I-70 to the local network.

Current trend lines around the United States indicate a slowing growth rate in Vehicle Miles Traveled (VMT). How does the Denver Regional Council of Governments (DRCOG) model adjust for changes in projected VMT growth rates, Transportation Demand Management (TDM) programs, and other VMT reduction measures? A sensitivity analysis for the future traffic projections should be provided and discussed with the CCOD.
Significant commercial and industrial development is expected to occur in the next twenty-five years on DIA property under the Airport City Concept. DIA has submitted estimated employment figures associated with this development to DRCOG for their 2040 model. DIA would recommend that this DEIS take into account those estimated employment figures.

The City and County of Denver (CCOD) is concerned about several aspects of the models used to project future traffic, which in turn result in the identified need for the number of lanes on I-70. In particular, CCOD is concerned how the future price and availability of fuel will affect the amount of people and goods traveling on I-70 over the next 20 years. Several research projects have touched on the topics of peak oil production and the price elasticity of fuel and its impact on people’s driving habits, including the September 2008 American Public Transportation Association report titled “Rising Fuel Costs: Impacts on Transit Ridership and Agency Operations” and the November 2013 World Energy Outlook published by the International Energy Agency. However, the models used to project future I-70 traffic have not factored in potential significant changes in travel behavior, as optional scenarios based on these variables are not considered in the DRCOG model that is the basis for the I-70 modeling. The Executive Summary of the March 2010 “Interim Guidance on the Application of Travel and Land Use Forecasting in NEPA” published by the Federal Highway Administration is clear that the document is just that—guidance and strictly voluntary—and therefore allows for flexibility as to the type of traffic model to be used. As such, CCOD requests that CDOT, working with CCOD, develop a sensitivity analysis of the I-70 models to evaluate the potential effect of various fuel availability/price scenarios on projected future traffic. CCOD also requests that CDOT provide research that supports the assumptions that are built into the existing models in the area of future fuel impacts on travel patterns, as well as research that might refute those assumptions. Finally, CCOD requests CDOT to disclose what other traffic projection models would be reasonable to use in this project, given the inherent flexibility in the NEPA guidance.

CDOT must indicate how 29,200 to 36,400 vehicles will navigate through the local network, indicate all associated impacts, and demonstrate how these impacts will be mitigated.
Prior to the construction of I-70, residents in the community had an at-grade railroad crossing at or near 47th and York for east/west connectivity. In the present situation, that connectivity has been compromised, as people wanting to drive, walk, or ride a bicycle east/west in that vicinity have to make a circuitous route down to 46th Ave. and back through numerous stoplights. With the proposed PCL, this will be further aggravated as a result of the separation of east and westbound 46th on either side of the lowered I-70. As a result of this changed access to I-70, there will be an adverse impact on circulation within and between communities both during and after construction. Exhibit 4.-43 shows a 300% increase in east/west volumes between Steele and York, which validates this conclusion. The only existing through roadway in this section is 46th Ave. Based on these projected volumes and impacts a mitigation should be determined to address the need for additional east/west multi-modal connectivity north of I-70 between Steele and York, to Brighton Blvd. This connectivity should be in the general vicinity of 47th and York, and may include some form of grade separated crossing for vehicles, and a separate grade separation for pedestrians and bicycles. CCOD would like to work with CDOT and the communities between the SDEIS and the FEIS to develop the most appropriate and cost effective solution, which would be incorporated into the FEIS.

CCOD sees opportunity for community revitalization in the area of the existing Steele/Vasquez interchange. The current interchange has a large footprint on what would otherwise be developable land, and has direct impact on the adjacent residents. An opportunity exists for this area to be a catalytic feature of revitalizing the surrounding communities. As more modeling information has become available through CDOT’s I-70 DynusT model, CCOD has further evaluated interchange options at Steele/Vasquez and Colorado Blvd. and is concerned that neither PCL option presented in the SDEIS is adequate—either the split diamond configuration shown between Steele/Vasquez and Colorado Blvd., or the full diamond configuration at Colorado Blvd. with no access at Steele/Vasquez. CDOD believes that the configuration of these interchanges and their access to I-70 have a direct impact on the health of the community, direct impacts of truck traffic on communities south of I-70, safety on the highway, the amount of land available for development, pedestrian and bicycle mobility, and the level of service of intersections, ramps, and streets that are part of the interchanges. CCOD would like to continue to work with the surrounding neighborhoods, CDOT, and as appropriate adjacent cities and counties to develop access as appropriate at these interchanges that maximizes the efficiency of ingress and egress, preserves the ability to consider a second cap over the highway, maximizes the potential to develop land in the area of the Steele/Vasquez interchange, supports the surrounding business community, is consistent with the desires of our neighboring entities, and minimizes the amount of truck traffic in the communities. CCOD believes that a better performing alternative for access at these interchanges can be developed jointly and with public input and be incorporated into the FEIS.

Based on our review, the removal of the York St. interchange will cause significant adverse impact to the surrounding local roadways. Additional evaluations are needed to provide local connections at York to help relieve congestion.
While adding shoulders to the reconstructed viaduct may not address congestion related safety problems it will improve safety during other times of the day. The FHWA clearing house has a Crash Modification Factor (CMF) for shoulders on freeways and CDOT needs to acknowledge and quantify that in the study.

How do any of the build alternatives address safety concerns on the local street network within the impacted area? The FEIS should document how the build alternatives improve or degrade safety on the local network.

To prevent traffic backups, the connection from I-70 to I-25 may need additional capacity. CDOT should reevaluate the traffic loads to address this issue and mitigate accordingly.

This chart indicates significantly higher peak hour congestion for EB traffic then what is shown in Exhibit 4-29. The changes between the Basic PCL and Modified PCL are mainly on the local network system and should not have this type of impact on the freeway system.

An infinite silt reservoir is assumed that increases with increasing traffic. As a result, the predicted values are expected to be conservative. Please clarify.

AIR QUALITY/NEW PM2.5 STANDARD:

SDEIS does not discuss the Dec. 14, 2012 revision of the primary annual standard for PM2.5 from 15 µg to 12 µg/m3; or review area PM2.5 values, such as the Commerce City monitor at 8.2 µg/m3 annual mean 3-yr average (2012 Annual Report, CDPHE AQCD). It does not discuss the potential for near-highway and project impacts to exceed the new standard or, if appropriate, mitigation strategies specific to PM2.5. This is particularly important as Vol. 3, Attachment 7 at 7.3.1 indicates increasing PM10 and PM2.5 emission inventories after 2025-2030 “as vehicular travel growth overtakes the technology-based emission reductions”.

The EIS should address the new primary annual PM2.5 NAAQS; review recent PM2.5 levels and forecast appropriate background levels of the project consistent with the revised PM2.5 NAAQS; and assess impacts of the project on maintaining PM2.5 attainment.
AIR QUALITY, MODELING:

The SDEIS does not indicate neighborhood/near-road modeling other than what is presented on hotspot CO and PM10. Denver’s Air Quality/Air Toxics modeling at neighborhood and near-road scale should be applied to assess expected air pollution impacts and conditions of the proposed I-70 east project. This should include projection of conditions at near term, mid-term (2020s) and out to planning horizon(s) (2030s/beyond).

The EIS should contain outcomes from Denver Air Quality/Air Toxics modeling that explore impacts of structural project features including depressed roadway, Swansea and other covers, and walls and barriers both hard and soft (vegetative). Further exploration of widened highway/added lanes and of transportation demand/congestion mitigation measures such as BRT, HOV and other managed lane features would be ideal as well. Outcomes should be reported for near, mid- and long-term.
It is stated that, "air quality monitoring will be conducted in the area during construction to evaluate the mitigation measures used to decrease impacts." However, there is no mention of when the air quality monitoring will begin. It is important to establish a baseline for the air quality PRIOR to construction to be able to identify whether there has been an impact to air quality and thus whether the mitigations measures have been successful. Add that monitoring will be installed ahead of construction with a sufficient lead time (suggest 12 months) prior to establish a sufficient baseline. Swansea Elementary School, location for previous CPDHE monitoring, may be a suitable location. Findings should be compared with results from CDPHE’s near-road monitors on I-25.

A monitoring station at Swansea School capable of providing information on a full suite of potential pollutants during construction into highway usage for the foreseeable future for the following parameters (pre-construction, during construction, and post-construction):

- NOx (oxides of nitrogen);
- NO2 (nitrogen dioxide);
- PM2.5 (particulate matter 2.5 micrometers);
- PM10 (particulate matter 10 micrometers);
- CO (carbon monoxide);
- Black Carbon (continuous monitored);
- Meteorology.

Potential (leveraging existing assets):
- BTEX (benzene-toluene-ethylbenzene-xylene);
- Ultrafine Particles or estimate thereof by correlation to Black Carbon

During construction, particulate matter (PM10 &/or PM2.5, as appropriate) measurement should include analyses of toxic metals content as related to contaminants of concern from hazardous materials disturbed within the project footprint.

In text explaining exhibit 5.10-13, it is important to point out that the hot spot analysis assumes an at-grade location. This may be conservative when compared to the depressed PCL options, which should be stated.

Suggest including a similar characteristic analysis section on families/households presents of children under 5, 6-18, and persons over 65 living in the same housing units and by neighborhood.
Add a summary sentence at the end of the first socioeconomic section: By every measure of socioeconomic status discussed above, the Elyria-Swansea neighborhood is the most vulnerable of all the neighborhoods in the project area. Since the 2008 EIS, there has been a significant increase in the number of Latino children in the neighborhood (up 39% from 2000-2010). Children are particularly impacted by such environmental impacts that will result from the I-70 reconstruction, such as noise. Noise has been shown to affect children's quality of sleep and ability to concentrate and learn in the classroom.

SOCIO-ECONOMIC CONDITIONS, MAINTAINING CONNECTIVITY OF LOCAL ROAD NETWORK:

Residents without a personal vehicle might have to rely on public transportation to get to a grocery store, rail stations, recreation facilities and other services, which are very important for the day to day necessities of its residents and their overall quality of live. Potential changes to the character and access to 46th St. could disrupt community mobility.

(Refer to Health Impact Assessment (HIA) for Globeville, Elyria and Swansea - Chapter on Access to Good and Services: To be healthy neighborhoods need more than just healthy food. To address these issues one way is to improve physical access by building complete streets, which enable safe access to pedestrians and bicyclist, motorist, trucks and public transportations users of all ages. Physical barriers have long created poor access to healthy, affordable food in GES. North south connectivity in crucial to residences due to service such as the RTD commuter rail stations which are located south of the highway. These neighborhoods are unique in that they are bisected by major highways and multiple railroad tracks.)

The EIS should allocate funds for the implementation of the safe-crossing on 47th and York. This intersection is critical for residents of Elyria to access safely and timely those services in Swansea such as schools, Focus Points, churches and Swansea Park. Swansea residents use this intersection to go to The Grow Haus, the Valdez Perry Library and the National Western Center (NWC).

Mitigations should include the implementation of extra pedestrian and bike bridges across the highway to give access by connecting the residents of the north of Swansea to services in the south and vice versa.

Maximize N-S connections between Brighton—Steele including ped/bike crossings.

Suggest the sentence should read the "...recovery is weak, uneven, and ongoing within this study area."
The number of households without access to a personal vehicle is disproportionately high in the Globeville, Elyria and Swansea neighborhoods. The construction in the neighborhood will make it hard for residents to get around due to detours and possible RTD schedule changes. As mitigation, CDOT could work with the City and County of Denver and RTD to utilize a shuttle system to provide additional access and transportation during the construction, to maintain the same level of service (i.e. frequency, availability, length of trip/time and access to public transportation). Furthermore, CDOT should work with Denver Public Schools on the coordination of “Success Express” bus stops for students to attend school and local recreation centers.

Please add a reference to the disruptive effects from long extended NEPA process resulting from the pre-construction and construction on business activity and investment.

The residents of Globeville, Swansea and Elyria consider themselves three distinct neighborhoods. After the construction of I-70, Denver designated Swansea/Elyria as an official administrative neighborhood. The proposed taking of homes will disproportionately impact Elyria.

The EIS calculations should be done based on the impacts to Elyria because statistics based on Elyria Swansea combined neighborhoods diminish the negative impact on the community of Elyria.

The discussion of food deserts should be modified from food deserts to ‘underserved areas’. It’s not only a lack of a grocery store in an area that creates the condition; it is also low incomes and low vehicle ownership.

Delete any references to Johnson Recreation Center as this facility is closed.

Last paragraph states none of alternatives will impact Globeville neighborhood character and cohesion because there are no relocations required. However, there are clearly existing and future impacts from I-70 to the character and cohesion for all of the GES neighborhoods, including Globeville. The text should acknowledge the cumulative impacts on neighborhood cohesion and identify needed mitigations.
Considering the study (\(^*\)) THE FUNDAMENTAL LAW OF ROAD CONGESTION: EVIDENCE FROM US CITIES Gilles Duranton, Matthew A. Turner Working Paper 15376, http://www.nber.org/papers/w15376 and other examples, such the expansion of Highways 36 and I-25, one can deduce that expansion does not resolve congestion. In this regard and to reduce further impacts to the communities of Elyria and Swansea, the project should reduce the width of the highway in the residential areas within the section between Brighton Blvd. and Colorado Blvd. (\(^*\)This study concludes that by adding road capacity will not alleviate congestion on any sort of major urban road or rural highway within metropolitan boundaries, because individuals drive more when the stock of roads in their city increases. Having as a consequence that the welfare gains for drivers of building more highways are well below the costs of building these highways).

The basic option expands the footprint to within 65’ of Swansea Elementary School and in all scenarios the highway is moved too close to the school, increasing noise impacts and reducing air quality. As described in Chapter 3, the Build Alternatives will more than double the width of the highway, taking it to 197’, as well as add an additional four lanes of frontage road to the width, not included the 197’ tally. The EIS should demonstrate that expanding the edge of I-70 155 feet and the outside of 46th Ave. 195 feet closer to the school will not have a negative health impact. The partial covered lowered Alternative Modified Option pushes the north edge of the highway 150 feet into the neighborhood. Hundreds of studies have demonstrated the adverse health impacts to those living within 500’ of a major roadway, particularly those caused by diesel traffic to adults and children. A simple cover is not adequate mitigation.

The slip ramps will back up with traffic exiting at Vasquez trying to get off at Colorado Blvd. east bound. Likewise, for traffic trying to get off at Vasquez traveling west bound, they have to exit at Colorado Blvd. onto a slip ramp. The PCL Basic Option creates a split diamond for the Vasquez and Colorado exits that creates yet further widening of the footprint of this corridor through these neighborhoods because of the need for the slip ramps on the north and south side connecting Vasquez to Colorado Blvd. This option puts more traffic within the footprint and will further impact with more air pollution and health problems for these residents.

To protect the health of the neighborhood and Swansea Elementary School the footprint must be reduced as much as feasible with a goal of 175 ft. This could be done in a number of ways – narrowing lanes, reducing the number of lanes, providing east-west connectivity at other locations, removing on/off ramps by closure of Steele/Vasquez and/or remove 46th Ave. on north side of highway. The close proximity to the neighborhood must be mitigated and footprint narrowed to protect health of neighborhood and reduce air quality and noise impacts.
Most project-related economic...Construction activity and property acquisition will lead to changes in the supply chain, customer access, and employee access; these changes will result in lower business sales, higher employee turnover, increased costs, and reduced profits. The result is lower tax revenues through sales/use taxes, property taxes (due to lost businesses or business capital), and other economic and fiscal reductions.

Please add note regarding in progress/upcoming National Western Center Master Plan (currently under development; adoption anticipated March 2015).

Please cut "However, as mentioned above...factory favorably." replace with "The loss of this company and business activity would have a negative employment, business and fiscal impact on the community and Denver. The tax revenue is substantial, and would result in both a loss of general fund for the city and resources for Denver Public Schools to operate and staff local schools."

The numbers in the text and the table do not appear to match each other for the number of "jobs created". Please verify and correct the values as appropriate. Also, verify the Job numbers in Exhibit 5.2-21.
Creation of construction jobs is listed as a significant benefit for all alternatives and all economy sectors including low-income and minority populations. However, no pathway is provided to enhance participation from these populations. Because the educational level (Estimated % low income households, Exhibit 5.2-13) in these neighborhoods is often not at the level needed for the jobs coming as part of the project, educational enrichment initiatives are needed.

EIS should include provisions to assist in employment opportunities for local low-income and minority populations including detail of how the investment in the education of area residents is a priority of the project. A comprehensive and sustainable community enrichment initiative should include a robust educational component that educates area residents including: comprehensive education programs, GED, education/scholarship fund, technical school, internship/apprenticeship and jobs training programs, and training subsidies. This should include a Job Center in the neighborhood. Job training programs for the neighborhood should include but are not limited to: Place-Based Training, Soft Skills Development, and Youth Jobs Program.

CDOT will host job fairs in the project area to provide opportunities for residents of the impacted communities, including low-income, youth and minority community members, to apply for jobs created by this project. Provide residents coaching, training and preparation to adequately compete for jobs presented at the job fairs in 2015 and early 2016 before the job fairs so that the members of the neighborhood are more competitive candidates and thus able to take advantage of the available jobs. Hold a targeted job fair for youth to attain employment and internship opportunities. Among the youth that should be targeted are those youth who have dropped out, have low academic performance, and live in low-income homes. CDOT should commit to youth construction job training and set aside a certain number or a percentage of total jobs for local neighborhood residents. The youth job training program could utilize local youth as interns and teach them a particular trade (i.e. construction management). CDOT should institute a preferential scoring system to ensure residents in the impacted construction areas are prioritized for job opportunities. Work with the Denver Office of Economic Development to help coordinate job fairs, training and outreach to residents and youth.

Include job training and employment goals in all contracts for companies receiving contracts on the project. EIS should include provisions to assist in employment opportunities for local low-income and minority populations. Examples include an employment outreach plan and program using job fairs as done by CDOT for current US 6 reconstruction; working with local job skills building and placement entities; as well as programs similar to the RTD WIN program. Hiring should be 20-25% from the local community, 80216, and 80205. Subcontractors should have detailed local hiring plan, including training and education as stated above.
In section 5.2.8, CDOT identified the Elyria/Swansea neighborhood as a food desert. CDOT should also acknowledge that there are no full service grocery stores. In section 5.2.10, CDOT notes that the Revised Viaduct Alternatives (both north and south) as well as the Partial Cover Lowered Alternative will displace two of the seven markets and convenience stores in this neighborhood, further reducing access to food. With regard to mitigation, CDOT indicates only that it is "researching contributions to GrowHaus programs for access to free food." In the FEIS, CDOT should detail how it will mitigate this loss to the community with a plan that will, at a minimum, maintain the existing level of access to food options within the community. In addition to contributing to GrowHaus or other neighborhood-serving healthy food programs to expand access to fresh food, CDOT should consider donating a remnant parcel for development of a grocery, providing economic incentives to attract a grocery store, and/or developing community garden space.

RELOCATION AND REPLACEMENT HOUSING:

The number of families is not represented in the units lost. Retention of families in replacement housing. Impact of “unknown” highway next steps on the first layer of housing around highway.

In 5.2-21 chart in existing bullet "CDOT is planning a replacement housing effort with partners such as CRHDC, Denver Housing Authority and Denver Office of Economic Development to assist in housing improvement loans and grant programs in the impacted area” and add a section: maximize housing replacement (e.g. 3:1) for the number of units to be lost under the I-70 reconstruction is recommended to make the neighborhood viable. The neighborhood’s viability was diminished during the initial I-70 construction and will be further diminished with the planned loss of additional housing units under any proposed option.

The EIS should follow recommendations from the GES Housing Advisory Group comment and the “GES Housing Replacement and Viability Study” that will give the details needed about the housing stock and conditions; and provide proper evidence to the types, character and amount of housing that should be replaced including Best Practices and leveraging opportunities. Develop single family replacement housing where feasible. However, due to the lack of sufficient redevelopment opportunities for single-family homes, the replacement housing may need to be more dense two, three bedroom, or larger multi-family, or multi-generational development which will provide enough scale to protect the neighborhood’s viability and also offer more affordable replacement housing options. Any CDOT-planned housing-related expenditure for development of new housing opportunities or rehabilitation of remaining properties should be channeled through the Denver Office of Economic Development, who will work with the Globeville/Elyria/Swansea Housing Advisory Group and non-profit housing providers to provide an open, fair and more coordinated process to complete housing redevelopment and rehabilitation in the affected neighborhoods. This will also allow additional funding to be attracted for housing development opportunities.
Add bullet "Work with Denver OED to identify specific strategies to minimize impacts and business loss during construction. Improve viability of businesses during and post-construction by working to understand the likely resulting disruptions. Identify and interview all affected businesses when developing phasing and outreach plans, provide information about available assistance, and develop a communication protocol for providing information to businesses about construction activities and schedule."

Add bullet "Provide excess CDOT-owned and remnant parcels for redevelopment, to assist in business relocation and retention (of direct and indirect impacted businesses). Design improvements to provide street access to remnant parcels and other potential development sites. Redevelopment sites should support community investment efforts by CCOD, nonprofits, and community organizers and focus on high-priority neighborhood needs, food co-op, recreation or community center, recreational and green spaces, community gardens, new businesses that provide employment, and residential housing."

Add new bullet reading "Loss of businesses that provide access to groceries or healthy food need to be replaced in the neighborhood. CDOT will work with CCOD to identify land of sufficient size to develop a grocery store within the neighborhood. CDOT will also work with Denver OED to develop a marketing plan and/or other incentives to attract a grocer to the neighborhood."

Current sentence reads "Holding urban design workshops to encourage local residents and businesses to take part in designing and/or providing input, advice, and/or artwork on nonstructural design elements of the highway (such as façades and noise walls)". Add sentence "The community would help develop guidelines for public art that is meaningful to the community and/or uses neighborhood artists."

Add suggested mitigation that CDOT will work to procure goods and services from local businesses during construction phases.
NEPA, Environmental Justice and Recommendations for Public Engagement

CDOT’s “open house” meeting format has not been effective in informing the public about the I-70 east project, including its impacts, nor has it succeeded in making sure that residents’ opinions are considered. A review of NEPA and Environmental Justice obligations and recommendations to change practices for engagement with the community follow:

NEPA Process and Environmental Justice

The NEPA process includes consideration of actions that could disrupt or destroy the social fabric of a community or sense of place. Adverse impacts include but are not limited to:

- Bodily impairment, infirmity, illness or death.
- A change in air, noise and water pollution and soil contamination.
- Destruction or disruption of man-made or natural resources.
- Destruction or diminution of aesthetic values.
- Destruction or disruption of community cohesion or a community’s economic vitality.
- Destruction or disruption of availability of public and private facilities.

Governmental agencies should consider alternatives as to adverse impacts on minority, low-income or Tribal populations; public comments and reactions about alternatives from these affected populations; and if a disproportionately high or adverse impact is predominately borne by these populations. Governmental agencies should consider and weigh at least the following criteria:

- Varying levels of disproportionate and adverse effects on minority, low-income or Tribal populations.
- Distribution of disproportionate impact. Impacts that are distributed throughout a larger geographical area tend to affect specific populations less.
- Cumulative effects already being experienced by the community when evaluating the impacts. Consider alternatives that mitigate impacts to the greatest extent practicable for the community.

The NEPA process for EJ Communities also includes:

- Meaningful opportunities for public participation throughout the project development process, including activities to increase low-income and minority participation such as consultation with affected communities to identify potential effects and possible mitigation measures, and improved accessibility to public meetings, project documents and project decision-makers.
- The degree to which the affected groups of minority and/or low income populations have been involved in the decision-making process related to the alternative selection, impact analysis, and mitigation.
- The types of outreach and involvement processes undertaken are responsive to the unique characteristics of the community, including the comments and opinions of the minority and/or low-income populations.

Specific Recommendations on Public Engagement:

To provide accountability to the community, CDOT should make available notes or transcripts of all public meetings in English and Spanish on a timely basis. CDOT and Denver should inform the residents of the options under discussion for the Steele/Vasquez & I-70 interchange. CDOT should additionally seek input from the community regarding the PCL options (including Steele/Vasquez options, 47th & York railroad grade separation, drainage projects, and other improvements).
to the cover at Swansea School and throughout the neighborhoods) and regarding proposed mitigation CDOT is considering and discussing with Denver, as decisions about these important features of this project will have a direct and significant impact on the Community. CDOT and Denver should listen to and incorporate public feedback on these matters. Because CDOT’s public input process has not been effective in informing the community or obtaining community input regarding the I-70 project, CDOT should conduct additional public meetings and provide continued opportunity for the community to comment on the project. Rather than the open house style of meetings CDOT has generally used, going forward, CDOT should use a traditional public meeting format that provides opportunity for meaningful dialogue to help develop community consensus, such as: (1) speakers sharing information with the entire audience and every one hearing the same message; (2) opportunities for members of the community to offer comments at microphones for everyone to hear; and (3) transcripts or notes from the meeting should be made available to the public in a timely manner to provide accountability and allow everyone to follow the public input process, even if they cannot attend all meetings. In addition, all meetings shall include Spanish translation.

In all build alternatives Elyria receives limited benefit from the lowered highway and cover and substantial negative impacts; such as lost housing, air quality and overall neighborhood viability. Elyria is a small historically separate neighborhood from Swansea and should have elements that benefit this neighborhood specifically. Access in particular to the cover is limited due to the at-grade crossing at 47th & York. CDOT should work with the City and the community to identify appropriate benefits and mitigation for these residents.

Please consider recommendations from the Health Impact Assessment (HIA) for Globeville, Elyria and Swansea, such as #14A "Improve connectivity and safety in School Zones. Improvements could include analyzing current School Zones and making modifications as necessary, including Safe Routes to School best practices. Improve education and outreach about safety in School Zones to residents, drivers and schoolchildren, particularly in alignment with the upcoming I-70 reconstruction."
CONNECTIVITY – BIKE AND PEDESTRIAN OVER RAIL:

(referencing GES LiveWell on walk ability)

One of the biggest issues in the neighborhood is that the majority of residents do not own a car. The design of the project is directed to increase connectivity of cars. While the project does respond to pedestrians by implementing sidewalks in all their crossings, there are not easy and convenient crossings besides the bridge at Josephine on the PCL alternative, to pedestrians.

(Refer to Health Impact Assessment (HIA) for Globevile, Elyria and Swansea - Chapter on Access to Good and Services: To be healthy neighborhoods need more than just healthy food. To address these issues one way is to improve physical access by building complete streets, which enable safe access to pedestrians and bicyclist, motorist, trucks and public transportations users of all ages. Physical barriers have long created poor access to healthy, affordable food in GES. North south connectivity is crucial to residences due to service such as the RTD commuter rail stations which are located south of the highway. These neighborhoods are unique in that they are bisected by major highways and multiple railroad tracks.)

Maximize N-S connections between Brighton—Steele including ped/bike crossings. Due to more limited number of bicycle and pedestrian crossings provided in the PCL alternative and as recommended as part of the pending Elyria and Swansea Neighborhood Plan significant attention and design should be included for the bicycle and pedestrian facilities on all bridge crossings (8' to 10' sidewalk). All intersections should be designed to minimize pedestrian crossings distances. In areas where there are a limited number of vehicle crossings there may be a need for additional bike/ped facilities. On Page 3-36, 3.8.4, north-south connections for ped/bike are preferred at both Fillmore and Milwaukee. Page 66 - Bike lanes should be added to the Clayton St. Bridge crossing I-70 to provide connection between the neighborhoods, access to Dunham Park and to provide connections to potential future city improvements for the bike route on Clayton St.

For the PCL Alterative, the neighborhoods are still losing some of their north/south access they currently have to the grid system under I-70 today. This statement is true for the area East of Colorado Blvd, but not West of Colorado Blvd.
AIR QUALITY:

As stated in the Health Impact Assessment (HIA) for Globeville, Elyria and Swansea health outcomes:

*"incidents among children and adolescents vary widely across Denver. In 2011 and 2012, asthma-related emergency care rates in GES were higher than in Denver overall. Geographically, the highest rates occur in the northern and western parts of the city near the I-25 and I-70 corridor. One concern is that children and adolescents who live near highways may have more problems with asthma because of vehicle exhaust."

*Pollutants emitted in one location impact air quality near the source as well as tens of thousands of miles downwind. Mobile sources are a major contributor to ozone. Many recent studies link nearness to high-traffic roads with adverse health effects in children and adults.

*The highway access brought more industrial activity into GES neighborhoods. The highway and industry impacts combined resulted in increased public health risk due to decreased in air quality.

Green roofs should be placed and maintained on appropriate buildings.

NOISE WALLS & TREES:

Walls and Buffer Area along highway

*HIA AIR PG-6 Trees and a healthy tree canopy provide long-term environmental, economic, and health benefits critical to vibrant and livable cities. This includes benefits to improved air quality, reduce urban heat island effect, and energy savings.

Work with City of Denver Urban Forestry and other organizations that work with built environment such as Groundwork Denver, GES Livewell to implement and maintain vegetation and the increase of the tree canopy number in the neighborhoods of GES, especially in those areas that can function as a buffer to the highway from the residential neighborhood, such as the noise walls and other barriers. Consult with Denver Arts and Venues to create and maintain landscape and wall designs to enhance and beautify the area adjacent to the noise walls and other barriers to avoid vandalism such as graffiti and create a sense of ownership by community members towards their neighborhood and public property.
ENVIRONMENTAL JUSTICE--HEALTH ACCESS:

There is a lack of Health-Wellness facilities in Globeville and Elyria-Swansea and no services for Medicaid/Medicare recipients. Facilities used in this regard are South of I-70 and residents will be challenged to get to these facilities, particularly during construction.

Pg. 50 & 5.2-21 chart: Add new bullet reading “In partnership with the City and County of Denver, identify public services and social support structures needed during the construction period to help residents cope with changes and that will enhance community stability and strength, such as mental health services, health care access, employment development, etc.; for example, a health and wellness center in Elyria and Swansea. There is a lack of Health-Wellness facilities in Globeville and Elyria-Swansea and no services for Medicaid/Medicare recipients. Facilities used in this regard are South of I-70 and residents will be challenged to get to these facilities, particularly during construction. Assist neighborhood serving non-profits and Denver Health providing these services and those that help residents navigate community resources, especially those organizations serving non-English speaking populations.”

ENVIRONMENTAL JUSTICE – MAINTANCE OF COVER AS MITIGATION FEATURE:

The SDEIS EJ section indicates the highway cover is an important mitigation feature as to minimizing presence of the highway and noise. It also mitigates other impacts including local air quality, public open space, recreation, school playground and aesthetics. Assistance in maintenance of the cover, as such an important EJ and other mitigation feature, is not clear.

The cost of the maintenance for the cover is not included in the maintenance of cost summary. Although maintenance of the cover is anticipated by parties other than CDOT, the cost of maintenance should be borne by the project or CDOT directly. The project is creating the costs which should not be born solely by the neighborhoods or the City of Denver but by all who use the roadway. The mitigation provided for in the lid will not enhance and improve neighborhood cohesion unless CDOT is committed to maintaining the urban landscape cover.

The EIS should specify that CDOT is responsible for long-term maintenance of the I-70 cover; if responsibilities will cover structural aspects of the feature; and what assistance and/or partnership opportunities will be pursued for maintenance of the top side of the cover. The maintenance cost of the cover should be subdivided to describe the cost of maintaining the structure of the cover and the ‘top’ of the cover since the structural elements are a part of the core CDOT project.

Local residents must have a meaningful role in the design and on-going operation of the cover.
Text should clarify how the neighborhoods were determined to be low-income by specifying the comparison values. E.g., if Denver neighborhoods were compared to the Denver County percentage of low-income households, and Aurora was compared to the Adams County value, the text should specifically state this for clarity.

All options will require aesthetically pleasing sound walls (with neighborhood input) that will also mitigate air quality emissions impacts from the increased traffic on I-70. Denver needs to be actively engaged in these evaluations as the walls serve more purposes than simply noise mitigation. Denver is concerned about budget constraints eliminating these key project features as local interests contend has occurred on previous I-70 work in close vicinity to Globeville.

ASSISTANCE IS NEEDED TOWARDS SUCCESSFUL RELOCATION OF BUSINESSES AND CREATION OF A BUSINESS DEVELOPMENT FUND:

In the interest of empowering relocated businesses and area residents to create and pursue their own business initiatives and entrepreneurship (to replace and expand existing businesses) CDOT should detail the resources and assistance necessary and work with CCOD OED to leverage possibilities for resources to support business or creative ventures in the development areas. These should include technical assistance/capacity building, a Business Center (with computer lab, internet, faxing, etc.), Small Business Development, Micro Loan Program, Business Incubator, Historically Underutilized Business Zones (HUBZone) and Arts Incubator.

Construction: The SDEIS acknowledges the potential for air quality impacts beyond the 45th to 47th Ave. corridor. Please define that area and identify what mitigations CDOT will provide for these impacts.

Housing improvement loans and grants: CDOT should identify a list of eligible housing improvements and include said list. In 5.3.11, insert the language “Loan guarantees for those who have difficulty”, since it’s missing from this section.

CDOT must be more specific about what additional resources will be provided for low-income homeowners, tenants and business owners and what conditions will trigger additional assistance. Loan assistance is not adequate. As noted the impacted group will have difficulty qualifying in traditional markets. It is not just for require people to take out loans to mitigate the impact of a forced locations by CDOT.
Ensure community access and availability to alternate modes of transit, particularly during the phased construction period, incorporating Transportation Demand Management (TDM) strategies such as encouraging the use of sustainable travel modes during and after construction, creating a program that is measurable, creating a program that is culturally appropriate, expanding the pool of travel resources available to residents and employees, encouraging transit use through incentives and education, reducing vehicle trips, proving pedestrian safety and increasing the perception of safety.
Standard construction measures to control fugitive dust, stormwater erosion and sediment controls to minimize spread of contaminated soil may be inadequate. The top priority is the health and welfare of residents. CDOT needs to commit to going beyond regulatory minimums to protect the residents.

Please outline the standards CDOT will use, monitoring practices before, during and after construction.

SDEIS states “CDOT will provide and facilitate the opportunity for homeowners to rehabilitate homes (such as improvements to doors, windows, and ventilation systems) that are close to the highway construction between 45th Ave. and 47th Ave. in the Elyria and Swansea Neighborhood”.

CDOT should provide improvements to doors, windows and ventilation system as well as assistance for operations and maintenance costs. As noted this is a low-income, minority community. This is also applicable to section 5.3.19.

In numerous places throughout 5.3, (pages 13, 19, 21, 26, and 27) it is stated that, “CDOT will provide and facilitate the opportunity for homeowners to rehabilitate homes.” However, homeowners may not be able to use the CDOT HVAC mitigation measures due to increased operations costs. In order to offset these ongoing maintenance costs, CDOT should consider additional energy and water efficiency measures for the home "rehabilitation" that may not be directly related to abating the construction impacts, but related to saving the property energy and water costs to offset the increased energy costs for air conditioning, ventilation, and filtration. CDOT should also utilize only the highest efficiency equipment so as to not put undue burden on the property owner. The Denver Energy Challenge staff could be a resource for evaluation these needs.

Loans are not adequate. EIS should specify if direct grants and or financial assistance will be provided to those households that cannot afford such improvements and will be most affected by construction impacts. Residents must not be required to pay for the mitigation.

New heating, ventilation, air conditioning system, doors and windows to mitigate impact of the highway must be maintained by CDOT for the life of the project. The negative noise and air impacts do not cease when construction ends. Numerous near roadway studies and a 2013 large-scale review of air quality measures in vicinity of major roadways between 1978 and 2008 concluded that the pollutants with the steepest concentration of gradients in vicinities ear roadways were CO, ultrafine particles, metals elemental carbon (EC), NO, NOx and several VOCs. The system installed must be sufficient to capture these pollutants. (Federal Register, Vol.78 No. 98, page 29837 quoting Karner, A.A; Eisenger, D.S.; Niemeier, DA (2010) Near-roadway air quality: synthesizing the findings from real world data, Environ. Sci. Tec. 44:5334-5335.
Residents living next to I-70 already experience noise from the highway at extremely high levels approaching 70 dBA, which levels the SDEIS projects will increase. Noise levels in a healthy environment are below 55 dBA outside, and 45 dBA inside. Noise mitigation provided must be state of the art in order to reduce noise levels to the maximum extent possible. The EIS should contain a more robust evaluation regarding what is possible through use of state of the art noise reduction. Please consider recommendations from the Health Impact Assessment (HIA) for Globeville, Elyria and Swansea, such as #5A "Noise in residential areas and schools near major roadways and highways should be mitigated to no more than 55 decibels, where feasible" and #6A "Sound walls or other noise mitigation measures are recommended along major roadways and highways where sound levels at schools and homes are expected to increase by 5 decibels or more, or exterior noise levels are expected to be 55 decibels or greater, or interior noise levels are expected to be 45 decibels or greater. Community preferences regarding aesthetic qualities of sound mitigation should be considered."

The SDEIS indicates that number 15 is Colorado Ranch Market. Please update to reflect this grocery store is no longer there and a Save A Lot has taken up a much smaller portion of its previous space.

The SDEIS should include the following mitigation consideration: Due to the age and quality of the housing stock in some areas, homeowners may need additional mitigation for air infiltration and noise beyond just improvements to doors, windows and ventilation systems to mitigate the impacts of highway construction.

CONNECTIVITY – LOCAL ROADS NETWORK:

Health Impact Assessment (HIA) for Globeville, Elyria and Swansea - Existing conditions Pg-1 *"GES were always isolated from the rest of Denver by the train and later by construction of two interstate highways through these neighborhoods further reducing north south connectivity and increasing isolation and significantly impacted the communities in many other ways."

The EIS should state that increased North-South connections across I-70 west of Colorado Blvd. (see page 5.3-9) and East-West connections including 47/York will help reduce isolation of neighborhood.

The document states, "The El Tepetate Market and El Rinconcito Mini Market do not have to be relocated with any options of the Partial Cover Lowered Alternative." However, the proximity of these markets to the highway makes it highly likely that access to the stores and noise, dust, and other construction activities will disrupt the operation of these stores. Mitigation measures should pay special attention to providing access to these markets and communicate with the neighborhood residents in English and Spanish how to access the markets.
ELEMENTARY SCHOOL:

When residents were given the option to move the school, only one location and configuration on the site near Swansea Rec Center was provided and when the residents said they didn’t want the school abutting the railroad tracks, they were not given any other options. These communities have experienced hazardous material rail incidents involving evacuation from their homes, and rightfully were concerned about the safety of their children. They were also concerned they would lose their school altogether if it didn’t stay in its current location.

To address health impacts to students, CDOT should work with Denver Public Schools to secure an alternate school location for Swansea Elementary (students) during the five year construction period to avoid exposure to the particulate matter from the construction activities, cars, trucks and heavy metals in the soils. The need for this takes into consideration both the expansion and reconstruction of the highway and that Denver City Council will be expected to vacate Elizabeth Street between 46th and 47th with construction of a relocated playground. Additional construction adjacent to the school will exacerbate the air quality and health impacts to school children and immediate neighbors because of additional exposure to heavy metals in the soils. Transportation and other considerations for the relocated students will need to be included in the planning effort regarding the alternate location. This shall be identified as mitigation and therefore be covered as a project cost.

CDOT acknowledges that standard noise walls create visual barriers, and that the impacts of these visual barriers will be borne predominantly by a low-income and minority community. Yet, the SDEIS does not consider alternatives to standard noise walls to mitigate noise—such as sound-absorbing materials, translucent panels (to lessen the visual barriers), angled or curved walls (to better direct the noise), earthen berms, and vegetation—which may be capable of providing similar or better noise reduction than standard concrete barrier walls with reduced fewer negative aesthetic impacts. For examples of innovative noise mitigation, see H. Bendtsen, Noise Barrier Design: Danish and Some European Examples, May 2010 (available at http://www.ucprc.ucdavis.edu/pdf/UCPRC-RP-2010-04.pdf), which was prepared for the California Department of Transportation. CDOT should explore design solutions to mitigate noise that are aesthetically pleasing and maintain views across the highway, particularly for areas facing or adjacent to residential properties, and make explicit any rationale that limits these design solutions. CDOT should present a variety of innovative solutions as options for community consideration through the benefited receptor survey process.

The CDOT traffic model should be reviewed with the managed lanes concept incorporated to determine what if any impacts the managed lanes may have on Peña Blvd. traffic. As part of this review, the impacts on Peña LOS at merge/diverge points should be analyzed.

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EIS should specify the impact of adding 4 managed lanes and subsequent increase in the footprint of the project. EIS should also provide analysis was done to document the benefit of less travel time, less congestion to the (stated benefits) with the increased burdens of roadway encroaching further into vulnerable neighborhoods.

Environmental Justice Mitigation Measures for the Managed Lanes option:

To insure development activity occurred, $.01 on each toll dollar collected shall be placed into a trust fund administered with neighborhood representation to assist with correcting past harm and securing desperately needed neighborhood businesses including ownership and jobs for residents.

The section describes mitigation for Swansea School. The text proposes to install new windows, doors, and a new heating and ventilation system for the school. To address environmental justice concerns, CDOT should facilitate maintenance needs, as well as conduct post-construction monitoring to ensure that new systems improve indoor air quality.
CONSTRUCTION:

*Air Pollution (dust), noise, safety, transportation and include specific text: “mental and physical stress”.

*According to the World Health Organization (WHO), an annual average night exposure not exceeding 40 decibels outdoors is recommended for restful sleep and adverse effects of chronic noise exposure on children’s ability to learn. Stress from noise affects biological risk factors such as blood pressure, fats and sugar levels, blood flow and other biological activities.

The FEIS should state that during construction they will work with neighborhood residents to create a Good Neighbor Agreement for contractors as to ongoing communication during construction period to address air pollution, noise, safety, transportation options and mental/physical stress. East-west and north-south connectivity during construction needs to be provided for bicycles and pedestrians.

As a mitigation, CDOT should work with Colorado Department of Public Health and Environment (CDPHE), Denver Public Schools, and City and County of Denver Department of Environmental Health to create educational material for residents during construction, especially for parents at the Swansea Elementary School. The material should include information about health and safety for transporting students to and from the school daily and include information about how to make residential homes safe from pollutants during construction. In addition, signage should be provided to ensure clear, safe, and direct pedestrian and bike access for existing and alternate routes. Please consider recommendations from the GES HIA, such as #22A, "Increase education and outreach to citizens about pedestrian safety, in anticipation of increased pedestrian activity with the redevelopment ...." of the project.

In the final EIS, CDOT should articulate and detail their outreach plan including specific information (i.e. flyers, mobile apps, languages, all modes of communication) for businesses and residents eligible for improvements by CDOT.
NOISE IMPACTS:

HIA NOISE PG 15-16 Existing noise levels from traffic in areas near I-70, extending from Brighton Blvd. east to Colorado Blvd, exceed the 55 decibels noise level EPA believes is an annoyance that can interfere with daily activities.

*Long-term exposure to moderate levels of noise can adversely affect sleep, school and work performance, and increase risk of cardiovascular disease.

*Denver Environmental Health (DEH) requested a noise study at the Swansea Recreation Center and Park in 2011, as part of the evaluation for improvements at the site. Results of this study indicated that the main sources of noise are train horns, train engines, various industrial metal working operations and I-70 located approximately 1,800 feet to the south. The average noise levels were approximately 55 decibels.

During the design and construction phases, CDOT should work in collaboration with the CCOD to design and implement mitigations to noise in a fashion that do not further hinder the character, cohesion, visual integrity and aesthetic quality of the neighborhood.

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Increased protection of areas is needed where respiration is higher (exercise/play areas). Protections should be specified around playground or cap where people are exercising.

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Swansea Elementary School and Construction of new classrooms: The new classroom design at Swansea Elementary School should provide state of the art science classrooms to encourage learning opportunities in coordination with Colorado State University coming to the National Western Center and creating a satellite campus.

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The design of the I-70 A-Line, which is not depicted in the SDEIS, could have a significant impact on access to properties along and near the A-Line and economic development opportunities for those properties, as well as connectivity throughout project area. In designing the A-Line, CDOT should take these impacts into consideration and should maximize access, and therefore economic development opportunities, where feasible.

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The EIS concludes that there is adequate replacement housing in the Denver area. The conclusion is erroneous and its needs to be stated that Denver currently has a tight housing market. The second quarter 2014 apartment rental rates for the Denver metro area was $1,117 per month. Has CDOT determined the availability of housing for households of the size and income level for the displaced residents? We believe there is not an adequate supply of housing for these residents. The FEIS should indicate that a bi-lingual third party expert on relocation practices and eminent domain procedures shall be hired as an advocate to provide advice to residents about their rights and relocation options.
The SDEIS proposes improvements on property located at I-70 and Peña Blvd. that is owned and maintained by Denver International Airport (DIA). CDOT must work with DIA to coordinate the planning of the improvements during the design process and construction. This will include, but is not limited to, addressing how the proposed managed lanes will interconnect with the existing Peña Blvd. as well as how any future expansion of Peña Blvd. will be accommodated. DIA is currently in the midst of a Peña Blvd. Study, recommendations from that study may require modification or refinement of the CDOT preferred action regarding the managed lanes interconnection to Peña Blvd.

In the final EIS, in addition to the plans listed, CDOT should take into consideration relevant changes to the CCOD's Zoning Code since 2008 and Strategic Transportation Plan (2008).

There may have been an amendment to the Areas of Change map in 2009, but Small Area Plans, as they are adopted by City Council amend the Blueprint Denver Map.

The South Platte Corridor study is not ongoing, it was completed in 2013.
The impending Elyria and Swansea Neighborhoods Plan will make multiple recommendations about I-70, beyond the recommendations below. The FEIS should acknowledge and respond to the recommendations in the Elyria and Swansea Neighborhoods Plan. The plan will be adopted prior to the release of the FEIS.

The following recommendations apply to land use, and more specifically how the I-70 project should contribute to the planned land use changes:

The south edge of the Swansea Elementary School cover, along 46th Ave. should be designed with enhanced pedestrian amenities. Where Elizabeth St. and Thompson Ct. terminate into 46th Ave, additional amenities should be considered, such as bulbouts, artwork, and iconic treatments to orient and attract the community to cross 46th Ave. and use the proposed cover. The enhancements will help catalyze surrounding private development which will add eyes on the open space amenity. The land use recommendation for properties along the south side of the proposed southern 46th Ave. shown in the PCL is "Neighborhood Center."

Neighborhood Centers are defined as small centers that serve the many everyday shopping, service or entertainment needs of one or more neighborhoods. A mix of land uses includes those for convenience shopping, personal services and restaurants. A neighborhood center also may contain offices that serve nearby residents. Occasionally, neighborhood centers contain boutique shopping or popular restaurants that act as a regional draw. Local Denver examples include historical streetcar districts, such as 9th and Corona, Old South Gaylord or Tennyson St. Good pedestrian and bus transportation links should connect neighborhood centers, and pedestrian-oriented streetscapes with ample sidewalk space, tree lawns/amenity zones, streetscape furnishings and other elements make them a highly desirable neighborhood destination.

Regarding the second cover:
In response to the community’s desire to improve connectivity, introduce services, such as a grocery store, to reduce the visual presence and associated impacts of the freeway, and to create a community focus and places where none exist today, the Elyria and Swansea Neighborhoods Plan recommends building a second cover.

This cover is different than the cover adjacent to Swansea Elementary School. That cover provides an open space amenity near the school, adjacent existing residential, and future small scale neighborhood center. The second cover provides an opportunity to completely re-imagine its immediate surroundings, opening up multiple acres of land for additional rooftops, and the type of development that the community has stated it is missing.

Related to this cover, the Plan recommends the following:
Design the second cover to serve as a catalyst for future redevelopment opportunities along Steele St. and Vasquez Blvd.

Acquire and develop CDOT land surrounding the current Steele St./Vasquez Blvd. interchange consistent with the recommendations of this plan.
Design the cover to create a special neighborhood place and presence for Elyria and Swansea, uniting both sides of the neighborhood visually, physically and safely along Steele St./Vasquez Blvd, Cook St. and across the cover. The community should have a seat at the table during the design discussions to ensure the cover and its surrounding area is an amenity and represents the desires of the neighborhood.

Conduct a study to analyze development on top of the cover and its compliance with Federal Highway Administration (FHWA) airspace requirements.

CDOT should build a new north-south multimodal connection at Cook St. as mitigation for its proposed overall reduction in north-south connectivity. Cook St. can then be integrated into the design of the second cover and increase the desirability to develop surrounding land. Similar to the treatment of 46th Ave. south of the Swansea lid, good pedestrian and bus transportation links should connect this center, and pedestrian-oriented streetscapes with ample sidewalk space, tree lawns with amenity zones should be included in the CDOT project in this area.

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Please clarify how build alternatives provide redevelopment opportunities and alternative transportation choices.

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It states that the managed lanes option will require 14.7 additional acres of right-of-way. However, on page 19 in Section 3.7, CDOT states, "There are no additional impacts to the surrounding neighborhoods or environments between the two options except at the locations of direct connections." Please clarify where the 14.7 acres are needed and correct any inconsistencies in the document, particularly in Sections 3.7 and 5.4.

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CDOT's discussion of mitigation for land use changes ignores the conversion of City streets to CDOT right-of-way. At present, CCOD owns the right-of-way to 46th Ave. under the viaduct, as well as other property that would potentially be impacted by the different alternatives. Acquisitions of CCOD-owned right-of-way should be considered in CDOT's analysis.

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Directly before the last sentence in the last paragraph on this page add "While it appears likely potential relocations sites/space may be available elsewhere within the neighborhood area or metro area, these alternative locations may be much higher in cost or cause disruptions to the business through employee accessibility/travel preferences, supply-chain or customer relationships, or other factors. Thus further analysis must be undertaken to understand the implications for business relocation."
Please cut "Considering these factors, it is...relocating warehouse occupants." Change to "While it appears likely potential relocations sites/space may be available elsewhere within the neighborhood area or metro area, these alternative locations may be much higher in cost or cause disruptions to the business through employee accessibility/travel preferences, supply-chain or customer relationships, or other factors. Thus further analysis must be undertaken to understand the implications for business relocation."

Please include one or two more columns focused on the sq-ft of the units being impacted (e.g., # of units more than 1,200sq-ft) and if the units are all single family (if so ignore).

RELOCATIONS and DISPLACEMENTS:

SDEIS does not deal with relocation options for residents within the 500 feet (45-47th St) of the project who will be impacted by air quality, diminished property value, etc.; particularly those impacted as the highway moves towards them.

EIS should provide relocation services if desired, for residents living within 500 feet of the highway.

Text defines "tax value" of a property. Please clarify if you are referring to "assessed value" or "actual value".

It would be helpful to incorporate a discussion which clarifies how noise walls will be handled for the PCL alternative, with respect to the areas where the highway is descending below grade prior to entering the covered portion and ascending back to grade level.

The FEIS should explain how the lighting, landscape, streetscape and other urban design elements associated with final alternatives are being incorporated to provide greatest benefit to all users of the facility.

In the FEIS, vantage points should be included of the preferred alternative for the Steele/Vasquez Blvd. and for all gateways into and out of the neighborhood, such as from interchanges.

This section states that community input will be sought to develop aesthetic requirements. It would be helpful to incorporate more detail clarifying what process will be used, within what timeframe.
PARKS & RECREATION:

Swansea Recreation Center and Colorado Miners provide limited functionality; proposed options impact Swansea playground; and there are air quality impacts for physical activity close to highway.

See more on this subject in the Health Impact Assessment (HIA) for Globeville, Elyria and Swansea.

Work with Denver Parks and Recreation and community to create a regional recreation center. A new regional recreation center should be built in Elyria-Swansea to provide a space indoors with clean air for physical activity. The price of the Regional Rec Center should be affordable for all residents, and the opening of the center should not result in the closing of centers in nearby neighborhoods.

Speaks about a permanent easement on the property on the South Platte River Greenway Trails and Globeville Landing Park. The third paragraph speaks about construction of a spillway for the offsite outfall system and requires permanent acquisition of a portion of the park. Denver Parks and Recreation would like clarification on the reimbursement and steps for acquisition for the affected properties. Denver recommends as design moves forward that you follow the City's Aesthetically Enhanced Detention and Water Quality Ponds guide.

Please coordinate with City and County of Denver South Platte River Trail planning efforts.

Please identify air quality impact caused by congestion from I-25 and I-225 Interchanges and mitigate accordingly.

The statement that particulate matter is not a major component of emissions from gasoline-powered vehicles minimizes the significant negative impacts particulate matter, and especially ultrafine particulates have on human health. Recent air quality studies show that people who reside within 500 feet bear the greatest health impact.

Motor vehicles, especially those powered by diesel engines have often been cited as a leading source of ambient UFP emissions and of human exposure. (Understanding the Health Effects of Ambient Ultrafine Particles, HEI Perspectives 3, January 2013). The same report concludes that in urban areas, particularly in proximity to major roads, motor vehicle exhaust can be identified as the major contributor to UFP concentrations. Diesel vehicles have been found to contribute substantially, sometimes in disproportionate to their numbers in the vehicle fleet.

A program should be developed for education in the community about best practices for minimizing exposures to construction related air quality. Please present the suite of local mitigation options that CDOT will undertake in the Final EIS.
The text should mention that all hot-spot analyses are at-grade since CAL3QHC and AERMOD cannot/do not account for elevated/depressed roadway geometries.

CDOT indicates that the forecasted PM10 concentrations for No-Action and Partial Cover Lowered Alternative, Basic Option are both right at the NAAQS compliance limit. Given the proximity to the upper threshold for compliance CDOT should conduct additional air monitoring pre-construction, during construction, and post-construction to ensure that air quality does not exceed the NAAQS limits. CDOT should also indicate confidence intervals for its forecasted values.

PM10 hotspot analysis demonstrates design values for two alternatives to be right at the 24-hr PM10 NAAQS for 2035 and all other alternatives examined would not be in compliance (i.e., exceed) at the I-70/I-25 hotspot location. CDOT indicates that "[a]dditional innovative air quality mitigation measures will be developed later in the process if the selected alternative exceeds air quality standards." (5.10.8, p. 5-10-42) In the final EIS, CDOT should specify what air quality mitigation measures it intends to utilize. EIS should document how compliance with the 24-hr PM10 NAAQS will be maintained for the chosen alternative; address more fully the difference in PCL design values for PM10 between basic and modified options; and resolve the unexplained differences in VMT and explain if this factor related to the different design values among PCL–managed lane alternatives in SDEIS.

It would be helpful to include a brief description of if/how/when the public has a chance to comment on the air control plan submitted to CDPHE.

It should also be mentioned that City of Denver has an air pollution control ordinance (DRMC Chapter 4) that also has fugitive dust provisions that can be applied to construction projects.

CDOT claims that for the No Action Alternative and for the PCL Partial Cover Lowered Alternative, "no specific mitigation measures are necessary for the project to proceed." While air quality may improve over time due to the fuel changes noted, it has been shown that populations, and in particular children, living in close proximity (<150-300 m) to highways have more problems with asthma than populations that do not live close to major highways. Please present options to mitigate the impacts on the local air quality.

To facilitate better decision-making regarding the operational energy consumption of the project, the study area for the operation energy consumption should include the study area as currently presented and the sub-area for the DynusT Model discussed in detail in Attachment E.
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CDOT indicates that it will "encourage" the use of cleaner and more fuel efficient construction vehicles to mitigate the negative effects from energy consumption associated with the project. Rather than simply "encouraging" the use of these vehicles, CDOT should set aggressive but achievable thresholds for use of cleaner and more fuel efficient vehicles. CCOD believes that a minimum 33 percent requirement for clean-fuel (i.e. EPA Nonroad Tier 4) vehicles is achievable and reasonable to reduce energy use, emissions and odor from construction equipment.

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This section should briefly discuss existing noise surveys as documented in the tech report.

| 1      | 5       | 5.12     |      |                       |

The Garden Place and Swansea elementary schools are key landmarks in the affected communities, and appear to be directly adjacent or impacted by highway noise. Please clarify and describe explicitly noise impacts on the two elementary schools.

| 1      | 5       | 5.12     |      |                       |

There are several scenarios presented in which noise walls have not been recommended for advancement on cost-benefit grounds. In these scenarios, some residents will be left to bear the impacts of high levels of noise. CDOT should offer these residents the choice of relocation or the provision of sound proofing measures to mitigate the noise impacts, and clarify how such measures would affect the cost-benefit of a sound wall.

| 1      | 5       | 5.12     |      |                       |

Please provide information clarifying whether the cost-benefit index as employed in this chapter was in effect for the I-25/TREX project.

| 1      | 5       | 5.12     |      |                       |

In the main body of the report, it would be helpful to explain whether the Traffic Noise Model includes the various geometries, with or without soundwalls. For example, it is not clear whether the PCL TNM modeling factor is in a 20-30 ft. below grade "canyon" with some minimum sound wall structure for safety, or whether all of these are assumed to be at a similar grade. Please clarify.

| 1      | 5       | 5.12     |      |                       |

All cost benefits that are shown as zero should really be infinite. $0 is less than $6,500 criteria, so please restate in all tables where this exists.

| 1      | 5       | 5.12     |      |                       |

Additional clarification regarding ambient noise conditions and expected noise levels is needed in order to evaluate noise. Existing and projected noise levels as they relate to time of day and night, and the duration of high noise levels are needed to better understand when noise increases are expected to occur. It is not clear whether the larger expected increased noise levels will occur at residences that are already experiencing extremely high levels, or at less impacted residences, or whether these high levels will occur continuously. This information is needed in order to evaluate the reasonableness of noise mitigation.
Please provide the reference for determining that a noise increase is not "substantial" unless it exceeds noise by 10 dBA or greater. CDOT's web page includes a fact sheet that describes a substantial noise reduction as that providing noise reduction of 5 dBA or more. FHWA allows states to define "substantial" as between 5 and 15 dBA increases. Other states define "substantial" as a smaller increase, such as 5 dBA. It is unreasonable to set criteria for noise reduction that may subject nearby residents, already experiencing extremely high road traffic noise, to an effective doubling of highway noise.

The descriptions of expected noise impacts associated with the Partial Covered Lowered Alternative describes noise increases of up to 15.4 dBA to impacted homes, greater than that of other alternatives. This seems counter-intuitive given that the sidewalls of the lowered highway should act as noise walls in and of themselves. Additional clarity is needed to understand why noise increases are more substantial associated with the Partial Covered Lowered Alternative.

The cost/benefit analysis of the barriers should also incorporate households that exceed Noise Abatement Criteria. As an example, in Swansea south of I-70, there are 35 households that will exceed Noise Abatement Criteria. However, only 27 households are considered in the reasonableness evaluation.

The Partial Cover Lowered Alternative Basic Option discussion concludes that "The walls in Swansea south of I-70 were not found to be reasonable because the highway cover between Clayton St. and Columbine St. provides enough noise reduction to the surrounding dwelling units." Yet, the associated table shows an optimal wall height of 16, 18, and 19 feet and Exhibit 5.12-17 shows 35 households exceeding NAC with a maximum predicted noise level of 75 dBA. It is unclear whether this noise analysis applies to the area where the cover exists, the area where the highway descends and ascends below grade yet is not covered, or where. It is difficult to understand how noise levels of 75 dBA will exist for the residents located between Clayton and Columbine. Please clarify and provide analysis for Swansea residents not located between Clayton and Columbine.

The mitigation tables and figures do not show numbers of homes that will experience noise increases, nor the severity of those increases, so it is difficult to evaluate and compare the severity of the increased burden as compared to the potential mitigation. The tables should be updated to compare noise increases experienced with mitigation that may be available, in order to assist in evaluation of reasonableness of mitigation.

The section states that public outreach efforts such as providing a 24-hour telephone contact line for questions and concerns regarding noise. This will be necessary in order that residents' concerns can be timely communicated and response provided.
Please consider adding prairie dog colonies that were not included in the original survey. There is a large colony that is located on the west side of Westerly Creek near the confluence with Sand Creek. This is within the Project Area boundaries.

The section states ". . . A substantial population of Burrowing Owls migrates to and nests in the prairie dog complexes found on the Rocky Mountain Arsenal National Wildlife Refuge" Discussion: What is a "substantial population"? When the Stapleton Reclamation project was in process, we found a few - probably ten burrowing owls during the entire process. If there are not metrics that define a ‘substantial number’, I would recommend changing the verbiage to “. . . Burrowing Owls have been observed migrating to and nesting in the prairie dog complexes found…” The existing language implies a large population of Burrowing Owls, which may artificially affect perceptions of the project.

In regards to this section on Page 11 concerning the common garter snake and northern leopard frog:

The northern leopard frog has been recently (2013) found to inhabit the Parkfield Lake/Natural Area located at 54th and Chambers (which appears to be within the biological resource study area (Exhibit 5.13-1). It is recommended that either (1) a survey be conducted again to determine if populations do exist in the project area; or (2) it be assumed that their presence within the study area indicates they are likely to exist, or potentially inhabit other suitable habitats throughout the study area (barring areas where landuse would make their presence unlikely). Garter snakes are also quite common throughout the metro area, often noted by city employees working in and around natural areas in close proximity to water.

For this section in regards to noxious weeds on Page 12 - the EIS indicates that the overall risk of noxious weed infestation is relatively low. This may be true for more urbanized areas, however, Sand Creek (within the boundaries of the project area) has dense infestations of a wide variety of noxious weed species. Please provide a vegetation survey and noxious weed management plan. For issues within the City and County of Denver, the DPR - Natural Resources staff (City Naturalist) should be included in the plan development and kept appraised of management activities.

Concerning the CDOT Impacted Black-Tailed Prairie Dog Policy Discussion: Recommend that CDOT reexamine their policy regarding the lethal removal of prairie dogs. The City has revised their “Prairie Dog Removal Matrix” to place a carbon monoxide injection system, at a higher priority than trapping and donating, as it causes a lower level of stress to the animals – as the cooled carbon monoxide is injected into the burrows, they simply lose consciousness and die. The pressurized injection method is the most humane alternative for lethal removal, and is very effective. There are currently no locations within the City and County of Denver where prairie dogs may be relocated, and there are no counties within the state that are allowing import of prairie dogs into their jurisdictions.
The comparison of black-tailed prairie dogs (which are in the Order Sciuridae – the same as squirrels) to “any small rodent population” is not an effective comparison. I would recommend a language change to “…and that the size and distribution of active black-tailed prairie dogs may reduce dramatically if there is an outbreak of disease, such as Plague, in the community. Other factors, such as predation and drought, may cause negligible fluctuations in prairie dog community growth and expansion.”

Under the section for burrowing owl mitigation: "If a nesting pair is discovered, no construction activity will occur within 75 yards of the nest." Construction activity should include prairie dog removal. According to Colorado Parks and Wildlife, no disturbance can occur within 150' of an active nest.

Bullets under 2nd paragraph: Recommend adding a bullet stating: “Colorado Parks and Wildlife (CPW) must be contacted if any nests must be moved, or are inadvertently destroyed”.

There is a potential conflict with the Onsite Drainage system that is outlined in Exhibit 5.14-3 and the Burlington Ditch that is on the east side of the Platte River. You will need to coordinate this effort with the Burlington Ditch company at final design.

It appears the on-site detention system will function as flood control and water quality treatment for the project construction area with a possible EDB design. Please note all the flood control and water quality design shall also meet the City and County of Denver (CCOD) and UDFCD design criteria as well as water right requirement from State Engineer Office.

The detention and water quality pond that is shown in Exhibit 5.14-3 could potentially be very large and very deep. A rough design of this pond should be considered to fully understand the scope of this pond.

Note that the normal EDB design may not able to handle the required water quality capture volume from the 60 acre construction site without large surface area due to some limitations, such as gravity outlet elevation, forebay and trickle channel slope, micro pool, water table elevation, pond slope, maintenance access, and other constraints if the storm conveying pipe too deep. Please note all the flood control and water quality design shall also meet CCOD, UDFCD design criteria as well as water right requirements from State Engineer Office.
Use the following language: "A pre-construction Conditional Letter of Map Revision (CLOMR) process must be undertaken with FEMA if the proposed construction raises the regulatory base flood elevation of any floodplain, or if requested by the Floodplain Administrator of the affected jurisdiction. A post-construction Letter of Map Revision (LOMR) process must be undertaken with FEMA if a CLOMR was obtained, if the proposed construction lowers the regulatory base flood elevation in excess of 0.3' of any floodplain, or if requested by the Floodplain Administrator of the affected jurisdiction."

It is believed that the valuation shown on pages 45-47 may only reflect the real property value, not the BPP value also. Please ensure that this is a full market value (including any equipment).

This section does not address drainage needs should permanent dewatering be necessary for the Partial Cover Lowered Alternative. The EIS should consider the need for permanent dewatering systems and should determine the additional capacity necessary for drainage and detention as a result of permanent dewatering. Text addressing that need should be included in Section 5.14.

Please Cut the section that reads "In addition many residents, …displacement of the factory as a positive effect."

The text mentions the 2005 Denver Storm Drainage Master Plan. Since then the 2009 Storm Drainage Master Plan (and 2010 errata) has been published and Denver is currently in the process of adopting the 2014 Storm Drainage Master Plan. Consider revising to reference the 2014 Storm Drainage Master Plan, or reference the 2009 Master Plan and make note that the latest master plan must be considered during design for identification of any other potential ponding areas.

South Platte River paragraph, the channel in Globeville Landing Park does not serve as a detention pond.

For the Revised Viaduct Alternative the table indicates impacts to the Sand Creek floodplain, but the table does not address a mitigation for this impact. Revise the table to indicate how this floodplain impact is going to be mitigated.

Since some of proposed options may impact the existing south drainage sub-basins along with the I-70 roadway system. More hydraulic analysis/modeling will be needed to address the local street and storm sewer capacity including the overflows from the proposed series detention ponds. The re-constructed local street shall meet the CCOD drainage design criteria in both depth and spread for minor and major storm events. The improvement of the drainage system shall be not posted any worse situation on any adjacent properties in comparing to the existing condition.
Exhibit 5.14-2 does not depict any ponding crossing I-70 between Brighton and York.

The storm drain pipe is proposed in Claude Ct. not Claude St.

Revise second sentence to say "Due to the new smaller study area Westerly Creek is no longer impacted by this project."

Drainage improvements at the Brighton/I-70 interchange:

As part of the City of Denver Corridor of Opportunity, the interchange of I-70 and Brighton Blvd. is a major gateway to downtown Denver. The drainage basins/detention ponds at this intersection need to address the visual importance of this interchange as a major gateway. NDCC would like to work with you to identify quality materials and a high level quality design to meet the goals of the City of Denver.

LOWERED ALTERNATIVES, DRAINAGE:

Details of all potential drainage solutions to the south of I-70 must engage residents and directly affected property owners.

Please clarify if this project requires a separate UDFCD Environmental Impact Study/Statement and provide cost and timing information.

Another primary source of stream flow in the South Platte River is releases from upstream reservoirs including Chatfield and Cherry Creek Reservoirs. Although waters in the reservoirs originate as groundwater, snowmelt, precipitation, effluent discharge, and stormwater runoff, instream flows are strongly influenced by releases from the reservoirs and, as a result, may not always reflect the timing of precipitation. CDOT should address the impact of releases from reservoirs on instream flows.

For noxious weed management: has a noxious weed management plan been created and approved? Who will coordinate noxious weed management activities? For issues within the CCOD, the DPR - Natural Resources staff (City Naturalist) should be included in the plan development and kept appraised of management activities.

"Herbicides will be applied by use of wicks or sponges to avoid off-target injury." The noxious weeds are too numerous to effectively treat with a wick or sponge. Spot spraying can be performed and off-target injury to desirable vegetation can be avoided with this method of application.
It is stated that "At this time . . . unavoidable [wetland] impacts will be mitigated at a wetland bank . . ." CDOT should work with nearby jurisdictions to find opportunities in the vicinity of the impacts to provide mitigation opportunities.

The project meets the CDOT New Development Redevelopment classification for a priority project based on the conceptual project information exhibited. The additional expanded impervious depicted in the EIS appears to meet the minimum threshold justifying the project designation. The final drainage study should include a permanent Water Quality Control Measures for the northern off site outfall as outline in following CDOT MS4 Program: Dated: April 22, 2014 Titled: New Development and Redevelopment Program Description Modification-Conditional Approval CDPS Permit No.:COS000005 Program Specific reference: Attachment A: Requirements for CDOT’s Interim New Development and Redevelopment Program Description Section a. ii (A) (ii) (New Control Measure Design Standard).

This section does not address impacts to water quality that might occur should permanent dewatering systems be necessary for the Partial Cover Lowered Alternative. Section 5.18 of the EIS and Section 6 of the Hazardous Materials Technical Memorandum both indicate that the project goes through areas known to be impacted by hazardous waste sites and that ground water underlying the stretch of I-70 between the UPRR to Columbine contains elevated metals levels. CDOT’s experience related to treatment of metals at I-25 and Alameda included higher than expected costs and difficulty reaching permit effluent limits. At a minimum, Section 5.16 should address the potential need for permanent dewatering systems, the likelihood that ground water extracted by permanent dewatering systems will contain pollutants, and the types of BMPs that would be necessary to address those pollutants.

The surface runoff water quality should be discussed more in the SDEIS. Possible water quality measurements, EDB, Bioretention (PLD), wetland, green infrastructures (LID), and others should be included in the storm runoff treatment for the construction area and possible related offsite runoff. Water quality treatment basin map with imperious percentage shall be provided in the related section or in the attachment to show the entire project will satisfy the MS4 programs.
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For completeness, Section 5.16.2 should include a list of all of the impaired waterways impacted by the I-70 East project. The 2012 section 303(d) list of impaired waters (CDPHE, 2013 available at https://www.colorado.gov/pacific/sites/default/files/Regulation-93.pdf) identifies the following segments of the South Platte River and their impairments: Segment 14 (South Platte River through Denver) for arsenic; Segment 15 (South Platte River and Burlington Ditch downstream of Denver) for E. coli, and; Segment 16a (Sand Creek) for selenium and E. coli. In addition, Segment 16 is also considered to be 4a for E. coli (see other comment on this section for explanation of 4a designation). The proposed drainage system and detention pond on the north side of I-70 will discharge into Segment 15 of the South Platte River. The boundary between Segment 14 and 15 of the South Platte River is the Burlington Ditch Headgate which is located about 25 yards upstream of the Denver – Adams County line. It would be helpful to clarify the location of the Burlington Ditch within the text, such that the reader might know where this stretch of the river is as compared to the study area.

| 1      | 5       | 5.16.2  | 1    |                       |

Section 5.16.2 of the EIS states that E. coli is no longer a problem in Segment 14 of the South Platte River, but that arsenic is. This statement is not completely correct. Segment 14 of the South Platte River actually falls under EPA’s category 4a for E. coli. EPA’s Category 4a is defined as “impaired water bodies for which TMDLs have been completed, but uses are not yet attained” (definition from CDPHE’s Section 303(D) Listing Methodology, 2012 Listing Cycle available at https://docs.google.com/file/d/0B4_2BkAMBRe8TWpsUnJFYXphQ0k/edit?pli=1). Please correct the text to reflect this distinction.

| 1      | 5       | 5.16.5  | 1    |                       |

Since both Sand Creek and the South Platte River are impaired for their uses by E. coli, CDOT should implement measures to address E. coli in urban waterways by eliminating bird roosting areas on the undersides of bridges and other infrastructure that will be part of the I-70 east project. USGS studies on Fountain Creek in Colorado Springs (see USGS Fact Sheet FS 2011-3095 available at http://pubs.usgs.gov/fs/2011/3095/fs2011-3095.pdf) concluded that the source of elevated levels of E. coli in Fountain Creek was birds roosting on bridges over the creek. Preventing birds from roosting on bridges and other infrastructure will address sources of E. coli in the receiving waters.

| 1      | 5       | 5.16.5  | 1    |                       |

Because storm water and water from construction and permanent dewatering will be discharged into waterways that are identified on the 303(d) list as impaired for their uses, we encourage CDOT to incorporate BMPs to address water quality from existing impervious surfaces in addition to those that address new impervious surfaces. Unpublished CCOD studies have directly linked the percentage of impervious surfaces in storm drainage basins to impacts to water quality in receiving waters. Both Sand Creek and the South Platte River are in exceedance of water quality standards for a number of pollutants and retrofitting existing infrastructure for water quality can help to remove those streams from the State’s 303(d) list.
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It is our understanding that CDOT had committed and the Colorado Department of Public Health and Environment has required that CDOT will use green infrastructure techniques to provide water quality treatment. Additional discussion of this use of green infrastructure should be incorporated in this section. Green infrastructure has numerous co-benefits beyond flood control and water quality improvement for the affected communities that can provide some assistance in mitigating other adverse effects of the project, including providing air quality benefits, noise reduction, reduction in heat island effects, and providing community amenities.
HAZARDOUS WASTE-MATERIALS, AIR QUALITY:

SDEIS has limited references to air monitoring during construction and these seem to focus on worker safety. No provisions are made for monitoring at project boundary and/or in the community for exposure to disturbed hazardous materials during construction, such as toxic metals transported by air-borne dust. Such monitoring would assist to validate effectiveness of control measures and promote worker and community/public safety.

Importance of this issue is recognized in: Volume 1, Exhibit 5.10-24, Potential Emissions Reduction Strategies, indicating potential monitoring for PM10; Volume 3, Attachment J, Air Quality Technical Report, 2.4, p.7 describes potential toxic materials in fugitive construction dust; Volume 3, Draft Air Quality Analysis Protocol at 4.7, p.9 describes that monitoring plans for PM10 from construction dust are anticipated; Volume 2, Attachment H, Hazardous Materials Technical Report, 7, Mitigation, p.36, describes a HASP/Health and Safety Plan for workers is needed as to methane and VOCs, indicates the presence of unknown contaminated media and that measures are needed for worker protection and public health; Volume 2, Attachment H, Hazardous Materials Technical Report, 8, Conclusions, p.37 as to primary concerns to protect workers, indicates the MMP/materials management plan and HASP should outline procedures to monitor and identify contaminants of concern and stop work requirements if contamination is encountered.

EIS should specify that suitable air monitoring will be installed at an appropriate boundary or community location, such as Swansea School if appropriate, to measure contaminants of concern. This should include particulate matter with speciation for toxic metals encountered during construction. Specify how appropriate action will be taken to protect public health if critical thresholds are exceeded.

(See in-community air monitoring proposed change from Council District 13, Chapter 5, 5.10).

Sample air for lead, cadmium and arsenic in the construction zone. If the daily average air samples exceed 1.5 microgram/m^3 for lead, work stops and work practices should be altered to minimize dust. An action level for arsenic should be defined as well.

Test window sills and window troughs for lead dust of homes nearest to construction site (1st and 2nd row of homes) where dust is being disturbed. If lead dust levels are above HUD residential standards, test next row of homes to identify how far the lead dust travelled. Homes that have been contaminated with lead dust should be cleaned to below lead dust clearance standards as per state regulation.

The first paragraph provides a brief summary of Colorado’s asbestos in soil regulation. Please add to the end of second sentence "...requirements that may add additional cost."
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Please provide clarity for the identified utility relocations and improvements to Brighton Blvd. and potential impacts to the service of the National Western Center (NWC).

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Need to coordinate relocation of the 12-inch and 20-inch pipes, respectively, running north south along 44th St. in front of the Coliseum with the NWC Master Plan.

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Denver acknowledges that the lowered highway and PCL are preferred over the previously considered viaduct options. At the same time the PCL alternative will also adversely affect neighborhood cohesion and concentrates adverse impacts in an already impacted community (air, noise, mobility, etc.) We respectfully disagree that all impacts are fully mitigated. CDOT should consider the proposed mitigation as reflected in CCOD’s comments and should continually work with the community to identify mitigation measures throughout the project.

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Chapter six does not mention climate change with the exception of a call-out box. Denver and the State have both spent considerable effort on identifying, quantifying and mitigating sources of greenhouse gasses. Given the accelerated pace of global GHG emissions Chapter 6 should include more information regarding GHG emissions. The following excerpt from Attachment J is an example of the information that could be added to Chapter 6: Under NEPA, detailed environmental analysis should be focused on issues that are significant and meaningful to decision-making. FHWA has concluded, based on the nature of GHG emissions and the exceedingly small potential of GHG impacts from the proposed action, that the GHG emissions will not result in “reasonably foreseeable significant adverse impacts on the human environment” (40 CFR 1502.22(b)). The GHG emissions from the project Build Alternatives will be insignificant, and will not play a meaningful role in a determination of the environmentally preferable alternative or the selection of the preferred alternative.

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Reference should be made at end of paragraph in section 5.9.1 to the Metro Denver Urban Forest Assessment and can be found at http://www.denvergov.org/Portals/7471documents/forestry/Denver_FinalReport.pdf

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<td>8.12.6</td>
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References to exhibits 8-63 and 8-64 appear to be flipped. 8-63 exhibits appear to be the partial covered lid options and should be the opposite. Also, the last paragraph should call for school use in addition to community and neighborhood activities in order to be consistent with other sections within this chapter.

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Language should be added to include investigation of improved indoor recreational opportunities to be consistent with community desires.
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<td>2</td>
<td>Attachment A</td>
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<td>The limits for Brighton Blvd. improvements and cross sections needs to be coordinated to ensure transitions and capacity needs are being met.</td>
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<td>2</td>
<td>Attachment A</td>
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<td>The Brighton Blvd. westbound I-70 on ramp should be realigned as close to I-70 (mainline) as reasonably possible to minimize impact to the National Western Center.</td>
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<td>2</td>
<td>Attachment A</td>
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<td>Based on our review, the all Build Alternatives have deficient traffic capacities at all the interchanges, such as Brighton and I-70, and need to be re-evaluated to provide additional capacities to avoid impacting local street networks.</td>
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<td>Attachment A</td>
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<td>In all the Build Alternatives, the consolidation of the Dahlia and Monaco accesses to Holly will create operational issues at Holly. Therefore, consider showing the reconstruction of Holly to the north of I-70 to 48th Ave. and also the reconstruction of 48th Ave. from Holly to Colorado to relieve to Stapleton Drive North and South. In addition, the Holly and 48th Ave. reconstruction would provide alternative access to Colorado and the East Rail Line crossing at Holly and Smith/42nd. Also include design of the interchanges at Quebec and Peoria to not preclude Denver’s ability to rebuild these roadways at the interchanges to a 10-lanes cross section.</td>
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<td>Attachment A</td>
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<td>Connections from the Elyria-Swansea neighborhood east to the 40th and Colorado Station are essential. 46th underpass at UPRR tracks should not preclude connection for regional/local connectivity from 47th.</td>
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<td>Attachment A</td>
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<td>The removal of the York St. connection to I-70 increases traffic circulation on the local roadway. Additional connections and improvements on the local streets are required. Some examples are the 47th Ave. crossing at the UPRR, York St. needs to be revised to add left turn lanes between EB and WB 46th Ave, and York St. needs to transition from a five lane section over I-70 to tie into the existing two-lane, two-way section north of the 47th Ave. The current map does not indicate this Transition.</td>
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<td>Attachment A</td>
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<td>In all the Build Alternatives, the removal of the York St. access to I-70 created undesirable traffic congestion on the local roadways. The introduction of a two-way approach on York St. from the south to the railroad crossing facilitated a need for a grade separation of York St. over the UPRR or a traffic signal to be installed at 47th and York St. with an associated pre-signal to the north of the tracks. Either the grade separated crossing or the signal will help to ensure safety at the railroad crossing, allow for the introduction a two-way York St. south of 47th and enhance the pedestrian indications at this crossing. Additional evaluation with the City and County of Denver review will be needed to determine which is the preferred alternative.</td>
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Protecting the Present  Building the Future
Accountability, Innovation, Empowerment, Performance, Integrity, Diversity, Teamwork, Respect, Excellence, Safety
The existing traffic operation on Peoria St. is at or near capacity, especially with the newly constructed Peoria St. crossing bridge at UPRR/RTD CRT and the Peoria Station. Peoria St. at I-70 should be a 10-lanes cross section which includes a continuous double turn lanes in for both NB and SB and adding additional capacity thru this constrained section of Peoria St. Therefore, the I-70 Bridge over Peoria will need to be lengthened to accommodate the ultimate cross-section of Peoria St. to not preclude Denver's ability to rebuild this section of the roadway.

These maps indicate significant improvements to the ramp system west of Quebec St. These improvements EB will increase the ability for traffic to enter and exit I-70 at Quebec St. and there are not current improvements shown on Quebec St. Improvements including providing continuous double turn lanes in for both NB and SB Quebec and adding additional capacity (10 lanes total) thru this constrained section of Quebec St. is needed to provide adequate traffic operations in this area with the proposed I-70 improvements. The I-70 Bridge will need to be lengthened to accommodate the ultimate cross-section of Quebec St.

The crossing at Monaco under I-70 only shows one lane per direction. Based on projected traffic volumes on Monaco and the existing 4 lane section to the south of I-70 a five lane section should be preserved under I-70.

A discussion of how traffic operations were considered in the selection of the Preliminary Preferred Alternative must be include in the Study. The document mentions matching the purpose and need which specifically identifies SAFETY, ACCESS, MOBILITY and CONGESTION. Of these four aspects, only mobility is discussed and that's in the context of ML or GP lanes.

The study must include a discussion on construction impacts to the local street network. In the discussion, it should be clear that the project will need to coordinate all local street and I-70 ramp/full closures with CCOD staff and neighborhood groups prior to implementation.

Include "Preferred Alternative" to the title of this table.
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East-west and north-south connectivity during construction needs to be provided. Alternate vehicle and truck access to I-70 and I-25 from the neighborhoods via Brighton, York, 48th Ave, 52nd Ave, and other major arterials is needed for residents and businesses to survive the construction period. Alternate routes for trucks are also needed to reduce neighborhood cut-through traffic. With limited access to I-70 and the frontage roads during construction, neighborhoods will be cut off. Additionally, safety and emergency response during construction is also critical. With only limited information available about construction phasing, detours, and road closures, it is difficult to assess the severity of impacts to residents, businesses, and emergency responders during construction. Additional roadway improvements appear to be needed. Consideration should be given to improvements that will provide permanent improvements after construction. The Project Team should work directly with Denver on access and closure issues in a timely manner (bi-weekly planned schedules, weekly updates, and 48 hour advance notice on closures/rerouting).

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Please add the street names Garfield, Elizabeth, Race and Baldwin as they are referenced on page 74 and it would help the reader not familiar with the area to follow the narrative.

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The text shows that the following should be considered: (1). York St. will need additional connections to the local network to help relieve added congestions resulting from the removal of this interchange. There are approximately 350% increase in traffic from existing traffic (screenline) as shown in Figure 129; (2). Steele St./Vasquez Blvd. will need a partial access to I-70 (WB on to WB I-70, and EB off from EB I-70). Again Figure 129 showed an increase of traffic over 300% from existing; (3). Full access to I-70 at Colorado Blvd.; (4). Consider roadway improvement on Holly north of I-70 and 48th Ave. between Holly St. to Colorado Blvd. to provide alternative access; (5). Consider interchange design at Quebec St., Peoria St. and Havana St. to not preclude Denver’s ability to reconstruct these roadways to 10 lanes, 8 lanes and 8 lanes cross section respectively.

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For minority populations the text uses the term "the appropriate unit of geographic analysis" for comparison value. However, the text does not clarify what values were utilized for comparison. E.g., If Denver neighborhoods were compared to the population of Denver County and Aurora was compared to Adams County, then the text should specify this so the methodology is clear. The same comment applies to the process for determining low-income neighborhoods.
In the Effects Analysis please include additional information regarding construction dewatering. The second complete sentence starts with “If dewatering of contaminated groundwater is required during construction, treatment may be required before the water is disposed or used.” Section 5.17.6 notes that “Extensive dewatering during the construction is anticipated for the Partial Cover Lowered Alternative”. Dewatering is likely for the stretch of I-70 between the UPRR to Columbine. Groundwater under this stretch of I-70 contains elevated concentrations of metals. Table 1, within Attachment H, Appendix H shows groundwater data for monitoring well YA-MW-03. Monitoring well YA-MW-03 is in a location near where excavation for roadway construction will extend into groundwater. The groundwater data for Monitoring Well YA-MW-03 show that most of the metals tested for were detected at concentrations that exceed expected groundwater discharge permit levels. Additionally, the laboratory reporting limits for three of the metals are greater than expected groundwater discharge permit levels. Experience from CDOT’s I-25 and Alameda project demonstrated the technical and financial challenges associated with construction dewatering. Accordingly, it is appropriate that the additional information should acknowledge possibility that:

- It may not be technically feasible to treat extracted groundwater sufficiently to meet permit levels for some metals such as arsenic, mercury, selenium and silver.
- Removal of uranium from groundwater may result in generating a source of radioactivity that could then require additional permitting and disposal activities for the recovered uranium.
- Present-day analytical capabilities may not be sufficient to demonstrate that adequate treatment can be achieved for mercury, selenium and silver.
- Land may be required for construction of temporary groundwater treatment ponds.
- Treated groundwater may need to be transported to an alternate segment of the South Platte River where less stringent permit discharge limits would be in effect. The text should be adjusted to clarify and acknowledge the likelihood for groundwater treatment and difficulties this may pose.

The ASTM E 1527-05 identifies several standard environmental record sources that shall be reviewed but are not identified in Table 1 including:

- Federal Delisted NPL site list
- Federal Institutional control/engineering control registries
- State/Tribal IC/EC
- State/Tribal VCUP Sites
- State/tribal Brownfield sites

A review of Attachment H – Appendix I Environmental Database Report, revealed that most of these missing environmental record sources were surveyed. Please add text summarizing these environmental record source reviews and/or explaining why information from these additional environmental record sources appear to not have been summarized in Attachment H.

This paragraph references ASTM Standard 1527-05). ASTM 1527-13 has been available for use since January 2014. Please add an explanation regarding the timing issue as to why the current ASTM 1527-13 was not used and verify changes do not cause substantial omissions, or use the most current version.
For met data section referenced above, the transport wind speed of 10 mph (5 m/s) is very generous for a winter morning. In addition, a mixing height of 1000m is quite high during the morning inversion. If these are model guidance values, please state that, but they are not worst case.

For the meteorological data description on pages 19-20, please clarify that Cal3QHC is typically run with a stability class of 4. If the model guidance suggests using Stability class 4, please clarify in the text. Stability class 4 is not worst case. DIA and Stapleton met. data clearly indicate that the worst stability class is 6 or 7 (F or G), depending on the scale.

For Table 1 footnotes, please correct effective date language to past tense.

In figure 2, please add the La Casa and I-25 (near road) monitoring stations, which did not exist at the time of the first draft EIS. The final EIS will also need to add the second near road station near 49th Ave. and I-25. See APCD website for stations.

Table 1 and associated footnotes do not match. Please clarify.

The footnotes do not seem to belong with this table.

It is recommended replacing the design value with the PM10 NAAQS.

The units should be corrected to pounds per day

It is not clear whether the 2017+MY CAFE standards have been factored into these estimates. Please clarify.

Please confirm whether upper air data is from the Denver International Airport or from the old Stapleton Airport location (23062).

Table should clarify that concentrations are 24-hour averages.

Appendix A should be retitled Data and Modeling Results. No monitored data seem to be included here.
On the York St. crosses, the SDEIS shows that both 66” storm sewer and 48” sanitary sewer will remain in the same location. Please be aware of that the storm sewer is located about 8 feet depth and sanitary sewer with about 9 feet depth that may affect the ramp design for meeting the required roadway clearance.

Throughout document please ensure you are using the final I-70 PCL Montclair Drainage Basin Hydrologic Analysis from Enginuity. The date of that memo is August 2014. The memo modified the 100-year flow from 2,691 cfs. up to 2,852 cfs.

There is also a I-70 PCL Park Hill Drainage Basin Hydrologic Analysis Memo from Enginuity, dated August 2014. That memo needs to be included in Appendix B.

The second paragraph of Section 6.1 describes the South Platte and Sand Creek drainage basins. In the context of the previous sentences, the last sentence is confusing. Suggested reword: “Discharges in the South Platte River are moderated by Chatfield Reservoir, located south of Denver, which serves as a flood retarding structure, as well as a recreational and water supply facility.”

With regards to the 5 pond proposal at Colorado Blvd, during the Multi Agency Technical Team (MATT) meetings, CDOT and there consultant Atkins proposed this system and put together a brief summary and study. Please include that in the attachments of Appendix B.

The text uses an assumption of an infinite silt/sand reservoir on I-70 that is proportional to VMT. This assumption is extremely conservative, which should be pointed out. CDOT is assuming an infinite silt reservoir, i.e. more VMT = more silt. If EPA guidance on determining background PM10 is expected to change for the final EIS, this should be pointed out. The high background and unlimited silt loading combined are very conservative approaches. For an example of recent I-710 handling on future year PM10, see http://media.metro.net/projects_studies/I710/images/tech_study/AQ_HRA_ENVIRON_Final_020312.pdf (page 26).

Text should clarify that AERMOD uses a grams per second or pounds per hour emission factor.

The text should list the name of the actual Commerce City PM10 station. It appears the text is referring to Alsop Elementary.

Text should clarify that concentration is a 24-hour average.
The data presented in Exhibit 5.10-20 (Chapter 5.10) should be included in Attachment J. Exhibit 5.10-20 should be shown in Attachment J as a supplement to the national MSAT trends chart.

Text includes the following characterization, which is incorrect: "modeled mean annual concentrations from highways were well below estimated Integrated Risk Information System (IRIS) cancer and noncancer risk values for all six MSAT" Benzene is clearly above the 1 in a million cancer risk level, if not 10-in-a-million. This entire statement (#1) should be deleted as it is misleading. In addition, a number of states, such as California, have developed comparison risk values, which may be more conservative than EPA. Denver regularly compares to other states' comparison risk values as well.

It would be helpful to use color shaded boxes (green and yellow) to indicate whether the design value meets the NAAQS.

The 24 hour noise monitoring data in Attachment C are not representative of the I-70 communities with residential premises. While Colorado at Smith Rd is the most representative, it is over 500 ft. away from I-70, and is not truly representative of residential locations very close to I-70. The 10 min readings from 2012 are not adequate. Per the FHWA guidance, "Existing Highway Traffic Noise Measurements are made to represent an hourly equivalent sound level, Leq(h). Statistical accuracy requires minimum measurements of approximately eight minutes. Most highway agencies have automated measurement equipment and typically measure 15-minute time periods to represent the Leq(h). This is acceptable if unusual events do not occur during the noisiest hour.... If information is not available to identify the noisiest hour of the day or if there is public controversy at a specific location, 24-hour measurements may be necessary." Based on the sensitivity of residences and schools in GES, 24-hour data are needed north and south of I-70 for the Final EIS. Existing ambient conditions must be monitored to determine actual noise levels occurring in the affected communities, the frequency and time variability of those noise levels, and to better determine the actual impact of the various alternatives. In addition, we recommend noise monitoring data be collected along the lowered portion of I-25 at a point most representative of that expected for the lowered portion of I-70. These data would be informative of actual conditions expected once the lowered portion of I-70 is constructed.

Input Data: please clarify whether the TNM model accounts for depressed versus elevated roadways. The section implies that it does. Whether this factor is accounted for should be made explicit.

Text does not address drainage needs should permanent dewatering be necessary for the Partial Cover Lowered Alternative. The EIS should consider the need for permanent dewatering systems and should determine the additional capacity necessary for drainage and detention as a result of permanent dewatering. Text addressing that need should be included in Section 10 of Attachment M.
This section needs to be revised to reflect all the current dates for various agency criteria manuals. For example, Denver and UDFFCD criteria are more current than the dates given in the document. Consider revising the language to indicate that the drainage design must be "performed in compliance with the following technical criteria, or as amended." Also, in the subtitle and text of this section, replace the word "guidance" with "criteria."

Third paragraph, last sentence should read "In cases where the BFE is increased, a CLOMR—followed by a LOMR—must be obtained from FEMA."

Add a bullet for the 1965 flood on the South Platte River. The following description is directly from Denver's Storm Drainage Master Plan: "June 16, 1965 - Black Wednesday, the day Denver was hit by the worst natural disaster in the City's history. After a cloudburst that dumped 15 inches of water on mountain slopes southwest of Denver, a devastating flood struck 20 counties, including Denver along the South Platte River. Twenty-five people were killed, and property damage was estimated at more than $500 million. Since that time, Chatfield and Bear Creek Dams have been constructed greatly reducing the flood threat to Denver from precipitation over major sub-drainage basins."

First Bullet - The Sept 2013 flood was not the most costly in Denver, remove that sentence.

Add language regarding the State's Rules & Regulations for Regulatory Floodplains in Colorado (Nov. 17, 2010), specifically Rule 12.J. that requires a LOMR where there are BFE increases or decreases in excess of 0.3', regardless of whether a CLOMR (CLOMR is required by NFIP regulations for any BFE increase) has been applied for.

In the fourth paragraph, replace the last sentence with the following language: "If there is no increase in the BFE, then the hydraulic analysis shall be submitted to the governing agencies for floodplain permit and to determine if the CLOMR and/or LOMR process is necessary.

Change the “The DSDMP provides preliminary recommendations for ....” “CCOD Storm Drainage Design & Technical Criteria requires, at minimum,...

The text indicates peak flows are not shown but the table does include peak flows. It is unclear if the tabulated peak flows are pipe flows only or if these are pipe plus overland flows.

Denver criteria specifies a minimum street grade of 0.7%. A variance is required for street grades less than 0.5%.
Chapter Section Page Additional Reference

3 Attachment M References