

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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DEC 8 2014



Ref: 8EPR-N

Mr. Ivan Marrero, Division Administrator
Federal Highway Administration
2520 West 4700 South, Suite 9A
Salt Lake City, UT 84118

Mr. Carlos Braceras, Executive Director
Utah Department of Transportation
4501 South 2700 West
P.O. Box 141265
Salt Lake City, Utah 84114-1265

Re: Draft Environmental Impact Statement, 1800
North Project: Council on Environmental Quality
#20140305

Dear Mr. Marrero and Mr. Braceras:

In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency Region 8 has reviewed the 1800 North Draft Environmental Impact Statement (Draft EIS) prepared by the U.S. Federal Highway Administration (FHWA) and the Utah Department of Transportation (UDOT). It is the EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project, which includes a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

Project Description

The FHWA and UDOT propose transportation improvements on 1800 North (SR-37) between 2000 West and Interstate 15 (I-15). The study area is located in Davis and Weber counties, within the cities of Clinton, Sunset, Roy and Clearfield. The 1800 North study corridor is a two-lane roadway with a two-way left turn lane between 100 West and 200 West. At approximately 500 West the Union Pacific Railroad freight mainline crosses 1800 North with two tracks and the Utah Transit Authority passenger mainline (FrontRunner) crosses 1800 North with a single track. The purpose of the project is to implement transportation improvements on the 1800 North study corridor that would address current operational and safety conditions and future 2040 traffic needs by reducing congestion, improving mobility and access to I-15, and improving safety and operational characteristics of the study corridor. Planning for the project began as part of the Wasatch Front Regional Council's (WFRC) regional planning efforts, and planned improvements are a part of the WFRC's overall plan to address congestion in the study area.



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The project evaluated a wide range of alternatives including the no-action alternative, a transportation system management alternative, a transit alternative, and numerous build alternatives. UDOT and FWHA identified the Preferred Alternative to include adding additional capacity to 1800 North (two through lanes in each direction and a shared left turn lane), a grade-separated railroad crossing at approximately 500 West, and a new interchange at 1800 North and I-15.

The EPA's Comments and Recommendations

The EPA appreciates your consideration of our scoping comments in our letter dated December 15, 2010. Those comments focused primarily on air quality, environmental justice and storm water runoff. Our comments on the Draft EIS, which focus on air quality and environmental justice, are outlined below and in our enclosed Detailed Comments. Our review did not identify substantive concerns with this project's potential to impact water resources.

1. Air Quality Analysis

The base year established for the project's air quality analysis is 2009. As the Draft EIS was released in 2014, we question if more recent data were available to establish a more current base year. Updated information may indicate higher traffic volumes, increased congestion and increased emissions, and may inform the impacts analysis completed in the Draft EIS. In addition, the air quality monitoring data used for Davis and Weber counties is from 2008 through 2011. It is our understanding that the Utah Division of Air Quality (UDAQ) possesses more current air quality monitoring data. We recommend the use of updated data in the Final EIS as it would better inform the impacts analysis.

The Draft EIS is lacking criteria pollutant and mobile source air toxic (MSAT) emission inventory data. Including this data in the Final EIS would support the assertions that the preferred alternative would not contribute to a new National Ambient Air Quality Standard (NAAQS) violation, increase the frequency or severity of any existing NAAQS violation, or delay timely attainment. Specific recommendations for criteria pollutants and MSATs to be added and associated recommendations for the Final EIS are included in the enclosed Detailed Comments.

The EPA commends the lead agencies for conducting carbon monoxide (CO) hot-spot modeling at three intersections in the project area. Including hot-spot modeling added value to the air quality analysis completed in the Draft EIS.

2. Environmental Justice Analysis

Overall the Draft EIS's use of census data to characterize minority and low-income populations is helpful. The EPA believes the environmental justice analysis may benefit from further analysis of impacts to these communities as the 2000 block level census data used to analyze minority populations may be outdated. The 2010 census does include block and block group level data for minority populations that can be used to analyze potential impacts on a more detailed scale. Detailed recommendations are provided in our enclosed Detailed Comments.

The EPA's Rating

Based on our review, and in accordance with the enclosed rating criteria, the EPA has rated the Draft EIS as "Environmental Concerns – Insufficient Information" ("EC-2"). The "EC" rating signifies that the EPA's review has identified environmental impacts that should be avoided in order to adequately protect the environment. The "2" rating signifies that the Draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment. Detailed comments are attached and a full description of the EPA's rating system can be found at www.epa.gov/compliance/nepa/comments/ratings.html#adequacy.

We appreciate the opportunity to comment on this Draft EIS. We would be happy to discuss these comments further. If you have any questions, please feel free to contact David Fronczak of my staff at 303-312-6096 or me at 303-312-6704.

Sincerely,



Philip S. Strobel
Acting Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Attachments: Detailed Comments

cc: Brett Slater, UDOT
Paul Ziman, FHWA

1800 North Draft Environmental Impact Statement – Detailed Comments

Air Quality

1.) Page 1-15, Purpose and Need, Current Conditions: On this page discussions appear under the headings “Travel Demand Model” and “Current Congestion (2009) on the 1800 North Study Corridor” with regard to the Draft EIS establishing the base year for the project’s evaluation as being 2009. As this Draft EIS was released in late 2014, the EPA questions if more recent data were available to establish a more current base year. We suggest reviewing potential newer field traffic observations and updated information available from the WFRC. Updated baseline information may indicate higher traffic volumes, increased congestion, increased emissions, and better inform and/or support the Draft EIS’s preferred alternative. This updated information could then be incorporated into the Final EIS.

2.) Page 3-55, Section 3.9 Air Quality, overall comment: The Draft EIS did not provide any project emission inventory data for the relevant criteria pollutant or for MSAT emissions. In both of the EPA’s letters to UDOT/FHWA of December 15, 2010, and May 2, 2011, we recommended that mobile source emissions estimates be provided for the base year and for both the no-action and preferred alternative. Development of emission inventories for use in the Final EIS would provide the public with information regarding the current emissions burden and projected 2040 emissions for both the no-action and preferred alternative. In addition, the emissions inventory data would support the assertions in the Draft EIS’s air quality section that the project would not cause or contribute to a new NAAQS violation, increase the frequency or severity of any existing NAAQS violation, or delay timely attainment (see Draft EIS page 3-58, first paragraph).

- The EPA recommends that total project estimated emissions from the project for CO, NO_x, PM_{2.5}, re-entrained road dust, and MSATs are provided in the Final EIS. At this time these emissions could be calculated using MOVES2010b, or preferably, we suggest that consideration be given to using the EPA’s most up-to-date mobile sources model, MOVES2014 (October, 2014 release). In addition to the MOVES mobile sources emissions model, we recommend the use of the EPA’s Compilation of Air Pollutant Emission Factors, also known as AP-42, Chapter 13.2.1 for re-entrained road dust emissions.
- The EPA also recommends that total project estimated emissions be prepared for the seven MSATs of greatest concern for transportation projects: Benzene, Formaldehyde, Naphthalene, Acrolein, Polycyclics, and Diesel Particulate Matter. We note that either MOVES2010b or MOVES 2014 can be reliably used for this purpose and can be done concurrently (within the MOVES model itself) with the development of the criteria pollutants noted above.
- Finally, we suggest using the EPA’s MOVE2014 model for the Final EIS. The MOVES2014 model incorporates the most up-to-date vehicle emissions data and also the emission reduction benefits from the EPA’s Tier 3 vehicle and fuels rulemaking action (see 79 FR 23414, April 28, 2014).

3.) Page 3-57, Table 3-25: This table provides ambient air quality monitoring data, for Davis and Weber counties, from 2008 through 2011. However, the UDAQ has ambient air quality monitoring data up through and including 2013 that are quality assured, certified by the State, and are currently available.

The EPA recommends that these more recent data also be included in the Final EIS. Use of ambient air quality data from 2008 through 2013 will assist the public in understanding air quality trends within the vicinity of the project area and in Davis and Weber counties.

4.) Page 3-59, Tables 3-26 and 3-27: These tables provide dated, and partially inaccurate, information from the WFRC, the Metropolitan Planning Organization that includes Davis and Weber counties. The tables provide 2011 WFRC information and incorrect data for the 2008 base year emissions and projected emissions. The EPA recommends that more recent 2014 information from WFRC be used in the Final EIS. We recommend that these tables be updated with the latest transportation conformity determination information from WFRC, as contained in their Air Quality Memorandum Report No. 31 dated August 28, 2014.

5.) Pages 3-59 and 3-60, section under “Carbon Monoxide” and Table 3-28: The EPA commends the lead agencies for conducting CO hot-spot modeling at three intersections in the study area that may be affected by the proposed project. We note that it is indicated in the second paragraph under this section that the hot-spot analysis used 1-hour concentrations from existing and projected traffic during 2040 PM peak hour time periods. It is, however, unclear as to what results are being displayed in Table 3-28. Do these results reflect the 2040 no-action alternative or the preferred alternative? The EPA recommends that CO hot-spot modeling results be presented for both the no-action and preferred alternative so that a conclusion regarding the preferred alternative can be observed. In addition, we also recommend adding a technical report to Appendix A in the Final EIS that fully describes the methodology, data inputs and intersection information (VMT, intersection geometry, selection of MET data, etc.) that went into the CO hot-spot modeling analyses for the respective intersections.

6.) Pages 3-67 and 3-136; Air Quality and Construction Related Impacts: Because this project is located in Davis, County, which is within the boundary of the Salt Lake Area PM_{2.5} 24-hour NAAQS non-attainment boundary, the EPA recommends that, in addition to the construction mitigation strategies described on the referenced pages of the Draft EIS, the Final EIS should also consider the following additional emission reduction strategies:

- Requiring heavy construction equipment to use the cleanest available engines or to be retrofitted with diesel particulate control.
- Requiring diesel retrofit of construction vehicle engines and equipment as appropriate.
- Using alternatives for diesel engines and/or diesel fuels such as biodiesel, LNG or CNG, fuel cells and electric engines.
- For winter construction, installing engine pre-heater devices to eliminate unnecessary idling.
- Prohibiting tampering with equipment to increase horsepower or to defeat emission control devices effectiveness.
- Using construction vehicles and equipment with the minimum practical engine size for the intended job.
- Using wind barriers and wind screens to prevent spreading of dust from the site.
- Having a wheel wash station and/or crushed stone apron at egress/ingress areas to prevent dirt being tracked onto public streets.
- Using vacuum-powered street sweepers to remove dirt tracked onto streets.
- Covering all dump trucks leaving sites.

- Locating diesel engines as far away as possible from residential areas.
- Locating staging areas as far away as possible from residential uses.

Environmental Justice

The EPA's environmental justice comments include both general and specific recommendations. The specific recommendations primarily focus on the following: updating some census data used in the analysis, combining Hispanic and Latino populations when discussing minority populations, and clarifying some unclear items in regard to the community survey questionnaire.

Section 3.5, General Recommendations:

- We recommend identifying a reference unit to compare census information for EJ consideration in the Final EIS. We suggest Davis County as reference population. The use of reference unit is valuable in understanding demographic characteristics and potential disproportionate impacts. When assessing census block, block group, or tract level data, it is most effective to provide a comparison to a reference population that is larger in scale. Comparing same scale demographic data does not allow for analysis of disproportionality or finding of environmental justice issues. The county level is the next larger geographic area from the census tract. Using the county reference seems reasonable, as alternatives are in a small geographic area. Comparing to much larger (state) or equal (census tract) reference populations is not recommended.
- To identify minority populations the EPA R8 uses the following: Total population (100%) – non-Hispanic white = minority population. This way Hispanic/Latino does not need to be separated. We are unclear as to why White plus Other Race Alone is used.
- We recommend including a map that displays 2010 poverty populations that exceed 2010 Davis County (similar to minority) in the Final EIS.
- We recommend including a map that displays minority populations with overlay (hatch marks, for example) of poverty measure compared, and display block groups that have both high minority and low-income population percentages in the Final EIS.
- We recommend clarifying in the narrative and figures in the Final EIS when using Census 2010 or ACS 2006-2010, as Census 2010 and ACS 2006-2010 are not intended to be compared.

Section 3.5, page 22, line 33: The 2000 census data used to assess minority populations is outdated. The 2010 census does include block group level data for minority populations for 2010 (just not on the Factfinder website). Tables 3-6 & 3.7 appear to be 2010 Census by block group for minority population.

Section 3.5, page 22, line 47: We recommend clarifying how many residences total for both on-corridor and off-corridor (including vacant) in the survey questionnaire completed in the Final EIS.

Section 3.5.1, page 23, line 4: It would be beneficial to the environmental justice analysis to characterize the part of 1800 corridor that is in Sunset City and Clinton city.

Section 3.5.1, page 23, Table 3.5: We recommend displaying a total for minority and Hispanic/Latino in the Final EIS. For example, Utah is identified as 20.9% minority and Davis County as 15.1%. It is unclear why Total Hispanic or Latino is separate from minority. P21 line 26 identifies that minority includes these populations. Please clarify.

Section 3.5.1, page 23, Table 3.5: This table includes the tract number for Sunset City. If there is a tract number for Clinton City, please include in this table.

Section 3.5.1, page 23 and 24, Tables 3.6 and 3.7: Please include totals for Clinton City in each of these tables in the Final EIS.

Section 3.5.1, page 23-24, Tables 3.6 and 3.7: We recommend combining minority and Hispanic/Latino percentages to identify a total minority in the Final EIS.

Section 3.5.1, page 25, line 21: For figures 3-7 & 3-8, we recommend incorporating 2010 census data in the Final EIS. Minority and Hispanic/Low income populations have increased substantially in 10 years.

Section 3.5.1, page 26, Figure 3-7: We recommend updating for 2010 Census for minority (race plus Hispanic/Latino) compared to 2010 Davis County in the Final EIS.

Section 3.5.1, page 27, Figure 3-8: We recommend creating one map that represents minority populations (both race and Hispanic/Latino populations) in the Final EIS.

Section 3.5.1, page 28, line 2: ACS 2006-2010 is available at the block group level using the Summary File data. While it is not available via the readily available American Fact Finder website, it is still a reasonable expectation that for this level of analysis.

Section 3.5.1, page 28, Table 3-9: We would expect Sunset City and Census Tract 1253.01 to be equal, as Sunset city encompasses all of 1253.01. If not, please explain.

Section 3.5.1, page 29, line 2: We suggest using low-income and minority populations, rather than Environmental Justice populations in the Final EIS.

Section 3.5.1, page 29, line 4: Census tract 1253.01 and block group 3 are both considerably higher than Davis County for income and minority populations. Specifically block group 3 has the highest percentage of minority populations for the all the block group level data provided. Sunset City, with populations close to I-15 and 1800 north corridor, are likely to experience a greater burden from project activities. We recommend explaining this in the Final EIS.

Section 3.5.1, page 29, line 23: In reference to explaining table 3-11, please explain the intention of percentages of corridor-adjacent survey in reference to US census data. Is this table trying to show that minority and Hispanic/Latino populations have decreased?

Section 3.5.1, page 29, line 28: Previously in this section minority and Hispanic/Latino populations are presented at the block group level. The block groups in Sunset city have high percentages of minority and Hispanic/Latino populations, especially those adjacent to I-15 and the 1800 North corridor. Please clarify.

Section 3.5.1, page 29, Table 3-11: We recommend this table include block group level data in the Final

EIS, as this is how this information was previously presented.

Section 3.5.1, page 29, line 44: We recommend combining minority and Hispanic/Latino.

Section 3.5.1, page 29, line 48: It is unclear if this is identifying that there were no 'minority' populations between 500 W and 1000 West on corridor, or just Hispanic/Latino populations. Please clarify.

Section 3.5.1, page 30, line 18: Update to CT 1253.1.

Section 3.5.1, page 30, line 30: Comparing results from Community Social Assessment with US Census Davis County percentages may not be appropriate. For Sunset City, 8.6% below poverty for a small survey sample compared with Census Tract 5-year data 12.5% may not be meaningful. Is the census tract the reference population or is Davis County? We recommend that this be consistent throughout narrative.

Section 3.5.2, page 30, line 43: Based on the demographic data from census 2010 and ACS 2006-2010, populations in Sunset City have considerably higher minority populations than Davis County. Populations living adjacent to I-15 and 1800 North may be impacted greater than general regional population that may benefit from action alternatives. We recommend consideration of real time local scale air monitoring, addition to screen roadway for view shed and safety, including plantings and/or other urban design features. This could include working with local residents in construction mitigation including hours of operation and routing.

Section 3.5.2, page 31, line 19: We recommend referencing the block group within Census Tract 1253.01 where alternatives A, B, and C residential and commercial relocations would occur. This is block group 2.

Section 3.5.2, page 31, line 20: The area south of 1800 North is block group 3. Please correct in the Final EIS.

Section 3.5.2, page 31, line 43: We recommend that figures 3-9 thru 3-12 use Census 2010 or ACS 2006-2010. This data is mostly represented in 2010 year data previously in section.

Section 3.5.2, page 36, line 43: Populations living in Sunset City, CT 1253.01 block group 2 under any build alternatives will bear high residential relocations. Given the high percentage of minority and Hispanic/Latino populations, as well as higher poverty level for Sunset City, as a whole, those living in this area may not be able to relocate in this community, if desired. We recommend that UDOT work with those who are to be relocated to determine if there is desire to maintain residency in project area. For those that do desire to remain in the project area we recommend UDOT consider providing resources such as grants to help insure this option.

Section 3.5.2, page 31, line 20: Alternatives D, E, and F would have the most relocations in two block groups that have high minority populations, compared to Davis County. Over 60% of residential relocations are in high minority neighborhoods. We recommend that in the Final EIS this area is further

analyzed to support the finding that the project would not cause disproportionately high and adverse effects on any minority or low-income populations.

Section 3.4, page 9, line 13: Please include total number residences are in the on-corridor and off-corridor, regardless of vacancy.

Section 3.4, page 11, Table 3.4: Why are on-corridor and off-corridor survey results compared to each other? We recommend comparing to a reference population, such as Davis County.

Appendix A, page 5: The 2011 social community survey indicates that annual income levels tend to be somewhat lower for corridor adjacent households than is the case in nearby off-corridor neighborhoods or the broader community area. We recommend including this information in EJ section 3.5. This would be useful to include as over 60% is a high percentage of on-corridor residents.