

APPENDIX H

Responses to Alternatives Comments

Alternatives FAQ

Responses to Cooperating and Participating Agency Comments

Heber Valley EIS FAQ for Alternatives Development and Screening

The following comment and question themes were frequently submitted to the Utah Department of Transportation (UDOT) during the October 5 to November 4, 2021, conceptual alternatives public comment period for the Heber Valley Corridor Environmental Impact Statement (EIS). The FAQ also addresses the results of the alternatives screening process.

Process

1. Were there any common themes in the comments submitted during the conceptual alternatives public comment period?

- UDOT received about 670 individual comment submissions from the public and agencies. Common themes included the following:
 - An east bypass has never been part of the plan; a west bypass has been planned.
 - An east bypass would impact quality of life in existing residential neighborhoods.
 - With an east bypass, there are concerns about the safety of students at four schools in the Mill Road area.
 - A bypass should be placed where it would impact the fewest people.
 - The west side is much less developed (fewer homes and schools).
 - Something needs to be done about congestion.
 - Congestion on Main Street is preferable to impacting so many homes and neighborhoods.
 - The north fields and south fields should be preserved. Please don't impact the fields.
 - There is concern for impacts to natural resources (wetlands, creeks, aquifer, wildlife).
 - A bypass should connect to US-40 farther to the north (River Road) for a long-term solution. Development will continue to the north.

2. What comments will UDOT solicit during the upcoming alternatives screening comment period?

- UDOT is specifically asking for comments related to the alternatives screening process and analysis. The most appropriate and useful comments will be on the information presented in the *Alternatives Development and Screening Report* or fact sheets summarizing this information.

- UDOT has held three public comment periods to solicit input on the purpose and need, the alternatives screening criteria, and the range of alternatives to consider. These comment periods were as follows:
 - Early scoping (August 26 – October 3, 2020)
 - Scoping (April 30 – June 14, 2021)
 - Alternatives (October 5 – November 4, 2021)
- Comments submitted during these comment periods have been reviewed and incorporated as appropriate.
- This is not the appropriate time to comment on concerns related to open space, water quality, visual impacts, wildlife, community impacts, and so on, because the environmental analysis has not been done yet. Impacts to these resources will be included as part of the detailed analysis of alternatives that pass through screening and are evaluated in the Draft EIS. There will be another opportunity for public comment on the detailed analysis when the Draft EIS is published, which is anticipated in early 2023.

3. How were these concepts developed?

- An EIS is required to evaluate the full spectrum of alternatives that could meet the purpose of the project. The purpose of the Heber Valley Corridor Project is to improve regional and local mobility on US-40 from SR-32 to US-189 and provide opportunities for nonmotorized transportation while allowing Heber City to meet their vision for the historic town center.
- To meet the project purpose, alternatives that are not on the US-40 corridor should provide an attractive alternative to US-40, like a relief valve.
- UDOT presented 17 alternative concepts for public and agency review and comment in October 2021. These initial alternative concepts were developed using information from previous studies, public comments received during the early scoping and scoping comment periods, and preliminary traffic analysis conducted by the EIS team.
- UDOT received numerous suggestions during the alternatives public comment period for modifications to the alternatives presented as well as for new alternatives. UDOT evaluated all suggestions to determine whether they were within the study area, were reasonable, were technically feasible, and could meet the project purpose. Based on these suggestions, UDOT modified existing alternatives and developed new alternatives.

4. What is the outcome of the screening process?

- UDOT evaluated the 17 preliminary alternatives initially presented to the public and 6 new alternatives suggested by the public during the October 5 to November 4, 2021, alternatives public comment period. These 23 preliminary alternatives were evaluated using a three-level screening process. Five of the 21 alternatives passed through screening and will be advanced for refinement and detailed analysis in the Draft EIS.
- These 5 alternatives have been renamed in an effort to make the names shorter and more descriptive:
 - WA1 – West Bypass Limited-access Grade-separated (now called Freeway with North US-40)
 - WB1 – West Bypass Parkway At-grade (now called Highway with North US-40)
 - WB2 – West Bypass Parkway At-grade, Realign US-189 (now called Highway with North US-40 and Realigned US-189)
 - WB3 – West Bypass Parkway At-grade, with Northern Extension (now called Highway to SR-32)
 - WB4 – West Bypass Parkway At-grade, with Northern Extension and Realigned US-189 (now called Highway to SR-32 and Realigned US-189)
- Detailed analysis for these remaining alternatives will include refined engineering, cost estimates, and assessment of impacts to the built and natural environments (impacts such as noise, air quality, wildlife, community, economic, construction, and visual, among others).

5. If an alternative is screened out, can it be revisited later in the EIS process?

- When an alternative is screened out, it is eliminated and does not need to be studied any longer. Unless there is new information, alternatives that are screened out would not be revisited later in this EIS process.

6. How are the screening criteria weighted?

- The screening criteria are not weighted. However, alternatives screening takes place in steps. Only alternatives that pass Level 1 screening move to Level 2 screening, and only those that pass both levels will be evaluated in further detail in the EIS.
- The Level 1 screening criteria include measures to evaluate how well alternatives meet the purpose of the project (to improve regional and local mobility and allow Heber City to meet their vision for the historic town center). Alternatives must perform well in all three categories:
 - Local mobility criteria are focused on Main Street traffic operations (intersection operations, travel time, and vehicle queue length).

- Regional mobility criteria are focused on bypass operations, or on US-40 if there is no bypass on the full length of the corridor (travel time, conflict points).
- Heber City's vision criteria are focused on protecting valued places and historic buildings along Main Street and avoiding alternatives that would preclude Heber City from achieving their vision for Main Street (which includes wide sidewalks, pedestrian crossings, and a reduced speed limit) as expressed in adopted plans.
- Alternatives that perform well in Level 1 screening move on to Level 2 screening. Level 2 screening criteria are focused on minimizing impacts to key resources. One resource is not considered more important than another resource; however, there are laws that provide strong protection for waters of the United States and Section 4(f) resources. Level 2 criteria fall into four categories:
 - Impacts to waters of the United States (ditches, streams, canals, and wetlands that qualify for protection)
 - Impacts to Section 4(f) resources [historic properties and recreation resources that qualify for protection under Section 4(f)]
 - Right of way (property acquisition, residential and business relocations)
 - Cost (cost can differentiate between alternatives that perform equally with respect to other measures, but alternatives are generally not eliminated based solely on cost unless an alternative would be so costly that the project would not likely move forward)

7. What will UDOT do in response to the petition to remove alternatives through the north fields?

- UDOT understands that the north fields are an important resource to many people in the community.
- The National Environmental Policy Act (NEPA) process requires that UDOT evaluate a reasonable range of alternatives and provide an opportunity for public input on those alternatives.
 - UDOT received numerous comments during the alternatives comment period (October 5 to November 4, 2021) that a bypass should be extended farther to the north to account for planned development and growth on north US-40.
 - Many comments also expressed concern that a bypass that ties into US-40 at 800 North is not a long-term solution because of that planned growth. UDOT is required to consider these comments.
- The range of alternatives under consideration allows an examination of the impacts and tradeoffs of improving regional mobility by upgrading north US-40 on its existing alignment,

providing a new connection, and comparing those alternatives against not making any improvements.

- Only by evaluating the full range of alternatives can UDOT make an informed decision that will result in the best solution overall.
- Ignoring potential alternatives or dismissing them prematurely would not result in a full examination of impacts and tradeoffs and would leave the process open to legal risk.
- The screening process determines which alternatives will move forward for detailed evaluation and, at this stage, UDOT will eliminate alternatives only based on screening criteria that identify them as clearly not reasonable. Reasonable alternatives are those that are technically and economically feasible, rather than simply desirable.
 - Level 1 screening criteria evaluate how well an alternative meets the project purpose.
 - Level 2 screening criteria evaluate impacts to key resources including wetlands.
- Alternatives that pass through screening will be evaluated in detail in the Draft EIS.
 - The Draft EIS analysis is when detailed impacts to open space, visual impacts, water quality, wildlife, community impacts, and so on, will be evaluated. The results of this detailed evaluation will inform UDOT's selection of a preferred alternative.
 - UDOT can't eliminate alternatives for impacts to these resources during screening because the analysis has not been done yet.

Purpose and Need

8. The traffic delays are projected to increase by only a little more than two minutes in 2050. Are such major improvements even necessary?

- The northbound travel time from US-89 to SR-32 is projected to increase by 2 minutes 35 seconds during the PM peak hour by 2050. However, the southbound travel time from SR-32 to US-189 presents a bigger problem during the PM peak hour.
 - The southbound travel time is expected to more than double—from 8 minutes 20 seconds currently to a projected 17 minutes 40 seconds—if no improvements are made.
 - Multiplying that delay by 2,100 vehicles per hour results in about 327 hours of user delay in the southbound direction during the PM peak hour every day.
- All signalized intersections on US-40 are currently operating at acceptable conditions, but they are expected to operate at failing conditions during the PM peak hour by 2050 if no improvements are made.

- Vehicle queue lengths (vehicles backed up waiting to get through an intersection) during the PM peak hour will increase and spill back to other intersections and onto US-40 north of town where the posted speed is 55 miles per hour, resulting in safety concerns.
 - The southbound vehicle queue at 500 North is expected to be more than a mile long on an average day and could extend to 2.5 miles.
- Increased traffic on Main Street has disrupted the traditional feel of Heber City's downtown and has led to increased noise and pedestrian safety concerns. Increased traffic is incompatible with the vision expressed in Heber City's adopted plans for their historic downtown.
- There is limited designated infrastructure and lack of connectivity with existing infrastructure for nonmotorized transportation (bicyclists and pedestrians) in the Heber Valley. This lack of accommodations creates a low-comfort experience for all but the most confident pedestrians and bicyclists.

9. Is UDOT taking into consideration all the new development planned at the north end of Heber City?

- The Heber Valley EIS is using the Summit County–Wasatch County travel demand model to forecast future traffic. The travel demand model uses population projections developed by the Governor's Office of Management and Budget and the Kem C. Gardner Policy Institute at the University of Utah. These agencies also specify county population control totals which identify the projected population for a county for a given forecast year.
- The planning horizon for the EIS is the year 2050. The travel demand model uses population projections for 2050 that fit within the Wasatch County control total.
- Heber City is expanding to the north and east. Numerous developments have been approved by Wasatch County and Heber City north of downtown Heber City and east of US-40. Heber City has annexed several of these developments, and more annexations are pending. Some of the developments are under construction, but the timing of other developments is uncertain.
- To understand the status of the potential development and implications for future travel demand, UDOT met with Heber City, Wasatch County, and the Mountainland Association of Government in 2020 and again in late 2021 and early 2022 to verify that the best available information is being used for traffic projections.
- The growth anticipated with future development in northeast Heber City exceeds the 2050 projections. The local planning authorities consulted anticipate that some of this growth will occur after 2050. UDOT is using the 2050 projections endorsed by the local planning authorities to develop and compare the alternatives considered in the EIS.

- In addition, a sensitivity analysis has been conducted to consider how well alternatives would function beyond 2050 based on the proposed developments. UDOT's intent is for alternatives to be forward-compatible, meaning that future transportation improvements could be implemented without significant demolition or reconstruction. However, alternatives will be designed to accommodate travel demand in 2050, not beyond.

10. Why are improvements proposed on US-40 north of Heber City? Why are there new bypass alternatives (WA3 and WA4) through the north fields? These alternatives were not shown at the alternatives open house.

- UDOT received numerous comments during the alternatives public comment period regarding planned development and growth north of Heber City. Many people suggested that bypass alternatives should extend farther to the north and connect to US-40 near River Road/SR-32. Others suggested that safety improvements were needed on US-40 north of Heber City.
- West bypass alternatives that connect into the future SR-32 interchange had an effect of reducing volumes on US-40 north of Heber City compared to alternatives that tied into US-40 at the traditional location near 800 North. Some reductions were as much as 20 percent.
- UDOT recently updated its *Roadway Design Manual* (2021) including design standards for center medians. Based on updated standards, the section of US-40 between SR-32 and downtown Heber City should have a median barrier.
- UDOT took a closer look at the area between SR-32 and downtown Heber City and determined that improvements would be needed to meet current design standards and protect regional mobility into the future as identified in the purpose of and need for the Heber Valley Corridor Project.

East Alternatives

11. Why were east-side options considered when they weren't in the past?

- UDOT received comments during both the early scoping comment period and the scoping comment period that an east bypass should be evaluated.
- Heber City and Wasatch County have been considering a west bypass for at least 20 years. Previous planning studies were focused on west bypass alternatives. Planning studies do not require consideration of a reasonable range of alternatives as EISs are required to.
- An EIS must evaluate all reasonable alternatives that could meet the purpose of and need for the project. The purpose of the Heber Valley Corridor EIS is to improve regional and

local mobility on US-40 from SR-32 to US-189 and provide opportunities for nonmotorized transportation while allowing Heber City to meet their vision for the historic town center.

- In addition to public comments suggesting eastern alternatives, UDOT determined that east bypass alternatives fit within the reasonable range that could potentially meet the project's purpose. Based on preliminary traffic data, it appeared that east bypass alternatives could improve regional and local mobility by drawing traffic off US-40. To make sure the study is thorough and defensible, UDOT needed to determine whether east-side options are reasonable in meeting the purpose of the project.
- Ultimately, the eastern options did not attract enough traffic from US-40 to improve traffic through Heber City. For this reason, these alternatives were eliminated in the screening phase.

12. Why were all the east-side alternatives screened out but none of the west-side alternatives?

- Following more detailed traffic analysis, it became clear to UDOT that east bypass alternatives could not attract enough traffic away from US-40 and would not result in acceptable traffic operations on Main Street—a key metric for meeting the purpose of the project. Therefore, the east bypass alternatives were eliminated because they could not meet the project's purpose.
- West bypass alternatives tend to carry more traffic volumes than east bypass alternatives.
 - One of the key contributing factors in this pattern is the greater amount of traffic traveling to and from US-189 compared to south US-40.
 - In 2050, traffic on US-189 immediately south of Main Street is projected to be about 25,000 vehicles per day, whereas traffic on US-40 south of Main Street is projected to be 16,000 vehicles per day. Thus, there is more potential traffic to use a bypass on the west side of Heber City than on the east side. This pattern is similar to traffic conditions now, in which there are 17,000 vehicles per day on US-189 and 6,200 vehicles per day on US-40 south of Main Street.

West Alternatives

13. Why did UDOT eliminate the original alternative extending all the way through the north fields to River Road/SR-32 (WD), then create two new alternatives that extend through the north fields (WB3 and WB4)?

- Alternative WD1 was eliminated because it did not meet the project purpose. Specifically, it did not attract enough traffic away from Main Street to improve local mobility. This is even the case with a 1300 South connection (Alternative WD2).
- The primary reason why neither WD1 nor WD2 could attract enough traffic away from Main Street is that there is not a connection to US-40 near 800 North. WD1 and WD2 connect to US-40 at River Road and 3000 North, and both connections are too far north to attract traffic wanting to access the north end of downtown Heber City.
- UDOT received numerous comments during the alternatives public comment period regarding planned development and growth north of Heber City. Many people suggested that bypass alternatives should extend farther to the north and connect to US-40 near River Road/SR-32.
- Based on the comments received, UDOT created two new alternatives (WB3 and WB4) that extend farther to the north and connect to US-40 near River Road/SR-32. Both of these alternatives also include a connection to US-40 at 800 North. By providing both connections to US-40 (River Road/SR-32 and 800 North), these alternatives attract enough regional and local traffic off Main Street to improve local mobility.
- The alignment of WB3 and WB4 is different from WD1 and WD2 as well. The alignment for WB3 and WB4 is based on minimizing impacts to wetlands.

14. Why is realigning US-189 still being considered? Is it because of the airport?

- No. Decisions regarding the Heber Valley EIS and the Heber Valley Airport Master Plan are independent of each other.
- Realigning US-189 would affect traffic distribution. Past studies identified this as important to making Main Street function acceptably. To be thorough, UDOT needed to re-examine the idea.
- Bypass alternatives with a realignment of US-189 generally resulted in lower Main Street traffic volumes than similar bypass alternatives without the realignment. The realignment of US-189 conveys traffic from US-189 more directly toward a western bypass and adds more distance to a trip to Main Street.

- Realigning US-189 does **not** improve the performance for the west bypass limited-access grade-separated alternative (WA).
 - Although realigning US-189 would reduce the traffic volumes on Main Street (similar to WB and WC), the traffic volumes on SR-113/100 South would increase. Alternative WA offers limited connections with the road network, forcing more vehicles to use 100 South.
 - Heavy traffic volumes entering Main Street at 100 South result in congestion, exacerbated by the offset intersection with Center Street.
- Alternative WA2 (west bypass limited-access grade-separated) was eliminated because it did not meet the project's purpose. It would result in two failing intersections and unacceptable vehicle queue lengths in 2050.

15. Why is a connection so close to residential homes along 1300 South still being considered?

- An east-west connection between the west bypass and US-40 south of downtown Heber City is important to reducing traffic on Main Street and reducing congestion. Without an east-west connection, the west bypass alternatives would not meet the purpose of the project.
 - Without the east-west connection at 1300 South, bypass traffic volumes in the middle section of the bypass would be about 35 percent lower (as evidenced by comparing WD1 to WD2).
 - The middle section of the west bypass alternatives is projected to consistently carry more traffic than the north and south sections.
 - These two findings support the conclusion that west bypass alternatives are important to serving through traffic, regional traffic, and local traffic in the Heber Valley.
- In 2006–2007, Wasatch County and Heber City identified an east-west connection on 1300 South for corridor preservation. This corridor has been represented on adopted transportation plans since then. A segment of the corridor has already been built between Industrial Parkway and US-189.

Environmental and Community Impacts

16. The north fields are important to the community. Why aren't wetlands a screening criterion? If wetlands are so heavily protected, why are there options to put a road through them instead of other parts of the community?

- The Level 2 screening criteria include impacts to wetlands and other waters of the United States such as streams, canals, and ditches.
- UDOT evaluated a range of alternatives to meet the project's purpose and need, including alternatives that would not impact wetlands or that would result in only minor wetland impacts. All of the alternatives that would not impact wetlands were screened out in Level 1 because they did not meet the purpose of the project.
- Alternatives on US-40 through downtown Heber City were screened out either because they would not improve local mobility (operations on Main Street) or because they would not allow Heber City to meet their vision for the historic town center. East bypass alternatives were screened out because they would not improve local mobility (operations on Main Street).
- Only west bypass alternatives were able to meet the purpose of the project (improve regional and local mobility and provide opportunities for nonmotorized transportation while allowing Heber City to meet their vision for the historic town center).
 - In the next phase, UDOT will conduct a more detailed evaluation of environmental impacts, including additional engineering refinement to minimize wetland impacts.

17. How does UDOT compensate residents for property value impacts?

- Every property and property owner's situation is unique. Once the design of a project is determined and the impacts of a project are known, impacted property owners would be contacted by a UDOT right-of-way agent.
- UDOT's right-of-way agents will be available to discuss the process and answer questions once a preferred alternative has been identified. A preferred alternative will be identified in the Draft EIS.
- If property is needed for a project, UDOT must comply with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.
 - UDOT will compensate property owners based on fair market value as determined by a qualified, independent appraiser.
 - The appraiser evaluates the property and also researches the area for properties with similar characteristics that have sold recently.
 - If relocation is required, relocation benefits would apply (to property owners or renters).

- An example of information regarding UDOT's property acquisition process is available here: <https://www.udot.utah.gov/5600SouthEA/downloads/ROW%20Brochure.pdf>.

18. Why aren't detailed cost estimates available with any of these proposals?

- The level of detail of engineering design increases as alternatives move forward through the NEPA process. It is not necessary or efficient to develop detailed design or cost estimates for alternatives that are screened out in Levels 1 or 2.
- A high-level cost estimate is being used to compare alternatives in Level 2 screening.
- Detailed cost estimates will be developed for alternatives that pass Level 2 screening and are evaluated in detail. These cost estimates will be included in the Draft EIS.

19. Can truck traffic be restricted on Main Street? What if a bypass route is designated as US-40 and Heber City takes jurisdiction of Main Street?

- US-40 is included in the National Network, which is a network of approved state highways and interstates for commercial truck drivers in the United States. It is not possible to restrict truck traffic on a road that is included in the National Network.
- UDOT does not have the authority to restrict truck traffic on US-40 to nighttime hours or to require trucks to use an alternate route.
- If a bypass were to be constructed, and if the bypass were to be designated as US-40, it would become the new National Network route. Main Street would no longer be part of the National Network, and jurisdiction could be transferred from UDOT to Heber City. If the new US-40 (bypass) is more than 1 mile from Main Street, it would be possible to restrict some truck traffic on Main Street. Trucks would still be allowed on Main Street for deliveries, access to food, fuel, repairs, and rest. Heber City could implement changes that would make Main Street less desirable for trucks (changes such as slower speeds, more stops, and/or narrower lanes).

Public Involvement

20. Was my suggestion even considered? Where is my alternative?

- Every comment submitted during the October 5 to November 4, 2021, alternatives public comment period was considered by UDOT. Comments are available in Appendix G, *Alternatives Comments*, of the project's *Alternatives Development and Screening Report*.
- Suggestions for new alternatives or modifications to existing alternatives are available in Appendix I, *Preliminary Evaluation of Alternatives Suggested during Alternatives Comment Period*, of the project's *Alternatives Development and Screening Report*. Suggestions generally fell into one of the following categories:
 - Implement new alignments for bypass and one-way-couplet alternatives.
 - Consider different locations for bypass alternatives to connect to US-40 and/or US-189.
 - Consider different locations for and types of connections to the local road network for bypass alternatives (that is, specific type of interchange or intersection at specific locations).
 - Regulate truck traffic.
 - Construct a frontage road or median barrier on US-40 (north of Heber City).
 - Widen US-40 and US-189 south of Heber City, or install a median barrier.
 - Make spot improvements (for example, new traffic signals or pedestrian crossings).
 - Lower the speed limit or implement traffic-calming measures on Main Street.
 - Combine different alternatives.
 - Build an oil pipeline or a railway to haul crude oil (eliminate oil-tanker truck traffic).
- UDOT evaluated each suggestion to determine whether an existing alternative should be modified or a new alternative should be created. Appendix I, *Preliminary Evaluation of Alternatives Suggested during Alternatives Comment Period*, of the project's *Alternatives Development and Screening Report* includes the outcome of this preliminary evaluation. A suggestion was eliminated because it:
 - Would not meet the project's purpose
 - Is not within UDOT's jurisdiction
 - Is being completed as a separate project
 - Is similar to another alternative but would have greater impacts
 - Is included as part of another alternative
 - Will be incorporated into alternatives when they are evaluated in detail in the Draft EIS (for example, pedestrian and bicyclist accommodations)

- Based on comments, UDOT created five new alternatives to carry through the screening process along with the 17 presented at the public meetings in October 2021.

21. How will public comments be used in the EIS process?

- It is important to recognize that, for any NEPA transportation study, comments are not considered an up or down vote on an alternative or action.
- Rather, comments provide the project team with input regarding the environmental analysis or other factors that UDOT should consider in making a final decision.
- To identify a preferred alternative, UDOT will consider an alternative's ability to meet the project purpose, regulatory requirements, and the technical analysis of traffic performance and environmental impacts. Public input from the comment periods is also a consideration used by UDOT to help identify a preferred alternative.

November 3, 2021

EPA COMMENTS

SUBJECT: Heber Valley Corridor – Alternative Concepts Development

FROM: Matt Hubner, NEPA Project Lead; Chris Razzazian, Air and Radiation Division and Nolan Hahn, CWA 404 Program

TO: Naomi Kisen, Environmental Program Manager, UDOT and Craig Hancock, Project Manager, UDOT

The following are comments for your consideration pertaining to the request for input on the Alternatives Concepts Development of the Heber Valley Corridor Draft EIS. We appreciate the opportunity review alternatives and are providing comments based on our review of the provided information and discussions from the September 30 agencies meeting. If you have questions or would like to discuss these comments, please contact me at (303) 312-6500, or by email at hubner.matt@epa.gov.

General and Safety

- We were pleased to see the breadth of alternatives being evaluated for this project. Further, it was useful to hear from UDOT that, though land has already been purchased on the west side of Heber City by the City, it is not driving the direction of alternatives selection. In our scoping comments, we signaled our concern regarding this and the possibility that it could limit the scope of the alternatives. Further discussion on this is below, in the Water/Wetlands section.
- We recommend that accurate counts of existing vehicle traffic, especially heavy haul diesel trucks, be collected. Further, we recommend that counts be conducted not only at peak times or under conditions that are more likely to result in failure conditions. Alternatives selection and analysis in the EIS would be best-served by having a clear picture of the baseline traffic patterns throughout the day and during favorable and unfavorable conditions alike.
- We re-iterate our verbal comments from the September 30 meeting that alternatives diverting traffic from Mainstreet, especially heavy diesel truck traffic, would benefit from two lane service. One lane service would likely not provide optimal peak traffic results and truck traffic would likely impede passenger vehicles during off-peak hours leading to possible congestion. Further, issues of decreased safety are a consideration for undivided single lanes of traffic where passing may occur in the oncoming lane. We recommend these comments be considered to ensure alternatives meet the purpose and need of the project and increase or maintain public safety.

Air Quality

- For alternatives that would involve construction near businesses and residences, we recommend that analyses of air impacts be conducted by calculating and analyzing emissions that would

result from the construction activity. Depending on how and where the project is constructed, emissions during construction may result in the highest impacts on nearby populations.

- Further, if there are potential receptors that could experience increased exposure to traffic resulting from the alternatives, we recommend that UDOT consider whether a more in-depth air quality analysis is necessary to inform decision makers and nearby populations.
- As a part of alternatives development we recommend alternatives provide high level of service (LOS) and avoid failing LOS conditions thereby reducing motor vehicle emissions associated with traffic congestion. We also recommend that the alternatives include other design measures that can improve near roadway air quality such as the use of vegetative barriers (see, <https://www.epa.gov/air-research/recommendations-constructing-roadside-vegetation-barriers-improve-near-road-air-quality>).

Environmental Justice (EJ)

- In addition to analyzing effects of alternatives on the general population, as part of the alternatives development for this project, we recommend that the UDOT analyze any effects alternatives may have on any marginalized communities that could be further impacted by the implementation of an alternative. For instance, if a bypass were to increase traffic, including emissions, and disrupt residential life or impede movement of community members to other parts of the city, we recommend that considerations to ameliorate the impacts of alternative(s) on the community(ies) be incorporated or other alternatives be considered.

Water/Wetlands

- One of our primary concerns regarding this project was the potential for development of a western bypass that would be more likely to impact waterbodies and wetland complexes. As noted above and in our scoping letter, we were concerned that due to the historical purchase of land on the west side of the city, and the secondary cost screening criteria, the alternatives could be narrowly limited to favor selection the western route. The discussion at the September 30 meeting allayed much of these concerns; however, we reiterate that the western alternatives could result in greater wetland impacts and may not be the LEDPA under CWA 404. We were pleased to hear that eastern alternatives were likely more favorable and fit better with the existing traffic patterns. Further, commitments to delineate wetlands and waterbodies in the project area are welcomed and will better inform alternatives selection and development in the EIS.

Comment Response Matrix

Document Title		EPA Alternative Concepts Development Comments		Preparer	
Document Date		November 3, 2021		Organization	EPA
Commenters		Matt Hubner, Chris Razzazian, Nolan Hahn			
Item	Page	Section	Comment	How Addressed	
1	1	General and Safety	We were pleased to see the breadth of alternatives being evaluated for this project. Further, it was useful to hear from UDOT that, though land has already been purchased on the west side of Heber City by the City, it is not driving the direction of alternatives selection. In our scoping comments, we signaled our concern regarding this and the possibility that it could limit the scope of the alternatives. Further discussion on this is below, in the Water/Wetlands section.	UDOT is committed to thorough NEPA process including identification of a broad range of alternatives for evaluation in the screening process.	
2	1	General and Safety	We recommend that accurate counts of existing vehicle traffic, especially heavy haul diesel trucks, be collected. Further, we recommend that counts be conducted not only at peak times or under conditions that are more likely to result in failure conditions. Alternative's selection and analysis in the EIS would be best-served by having a clear picture of the baseline traffic patterns throughout the day and during favorable and unfavorable conditions alike.	<p>Information on traffic data collection, methodology, and analysis is available in the <i>Existing and 2050 No Build Traffic and Safety Analysis</i> Technical Memorandum available on the project website (link: Existing and 2050 No Build Traffic and Safety Analysis). Peak hour traffic volumes are based on a midweek count in August, not a holiday weekend when traffic is heaviest. Rationale for selecting this analysis time period as "a compromise between providing adequate operations for every hour of the year and providing economic efficiency" is described in the memorandum on page 3. The volume and percentage of different types of vehicles and trucks was collected, as described under <i>Vehicle Classification</i> on pages 6-7.</p> <p>As documented in the <i>Existing and 2050 No Build Traffic and Safety Analysis</i> Technical Memorandum available on the project website (link: Existing and 2050 No Build Traffic and Safety Analysis), vehicle classification counts, specifically including oil/gas tanker trucks hauling crude oil from the Uinta Basin, as well as other types of heavy trucks, were collected for peak times of day and non-peak times (see pages 6-7). Traffic volumes were also collected and analyzed for peak seasons of the year as well as off-peak seasons. The investigation of these data led to the conclusion to use an August mid-week time period for analysis as "a compromise between providing adequate operations for every hour of the year and providing economic efficiency." (see pages 3-4)</p>	

Comment Response Matrix

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Document Date		November 3, 2021		Organization	EPA
Commenters		Matt Hubner, Chris Razzazian, Nolan Hahn			
Item	Page	Section	Comment	How Addressed	
3	1	General and Safety	We re-iterate our verbal comments from the September 30 meeting that alternatives diverting traffic from Mainstreet, especially heavy diesel truck traffic, would benefit from two lane service. One lane service would likely not provide optimal peak traffic results and truck traffic would likely impede passenger vehicles during off-peak hours leading to possible congestion. Further, issues of decreased safety are a consideration for undivided single lanes of traffic where passing may occur in the oncoming lane. We recommend these comments be considered to ensure alternatives meet the purpose and need of the project and increase or maintain public safety.	<p>After consideration of public and agency comments and based on further review of guidance and standards, UDOT determined that all bypass alternatives would include two lanes in each direction for the following reasons:</p> <ul style="list-style-type: none"> ● Freeways should have a minimum of two through-traffic lanes for each direction of travel (AASHTO Green Book Section 8.2.4) ● Two lanes in each direction would improve regional mobility and safety by: <ul style="list-style-type: none"> ○ Improving level of service (predicted traffic volumes would result in level of service E on a rural highway with only one lane in each direction) ○ Providing for safe passing opportunities, especially considering slow moving trucks and recreational vehicles ○ Providing lane continuity between S.R. 32 and U.S. 189, eliminating the need to merge down to one lane in two locations 	
4	1	Air Quality	For alternatives that would involve construction near businesses and residences, we recommend that analyses of air impacts be conducted by calculating and analyzing emissions that would result from the construction activity. Depending on how and where the project is constructed, emissions during construction may result in the highest impacts on nearby populations.	Air quality impacts during construction of any of the action alternatives would be limited to short-term increases in fugitive dust, particulates, and local air pollutant emissions from construction equipment. Because construction would be local and short-term, any impacts to individual air quality receptors would also be short-term and will be discussed qualitatively with a focus on mitigation measures to minimize emissions.	

Comment Response Matrix

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Document Date	November 3, 2021			Organization	EPA
Commenters	Matt Hubner, Chris Razzazian, Nolan Hahn				
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5	2	Air Quality	Further, if there are potential receptors that could experience increased exposure to traffic resulting from the alternatives, we recommend that UDOT consider whether a more in-depth air quality analysis is necessary to inform decision makers and nearby populations.	The draft EIS will include a qualitative analysis of air quality impacts of the alternatives and will consider as appropriate potential effects to the health of near-by populations and the environment. Please note this project is located in Wasatch County, Utah which is an attainment area for all criteria pollutants; transportation conformity requirements do not apply. Further, based on FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, the project would have low potential MSAT effects. As such, quantitative analysis of air quality will not be performed.	
6	2	Air Quality	As a part of alternatives development, we recommend alternatives provide high level of service (LOS) and avoid failing LOS conditions thereby reducing motor vehicle emissions associated with traffic congestion. We also recommend that the alternatives include other design measures that can improve near roadway air quality such as the use of vegetative barriers (see, https://www.epa.gov/air-research/recommendations-constructing-roadside-vegetation-barriers-improve-near-road-air-quality).	The purpose of the project is to improve regional and local mobility on U.S. 40 from S.R. 32 to U.S. 189 and provide opportunities for non-motorized transportation while allowing Heber City to meet their vision for the historic town center. Level 1 screening criteria evaluates how well alternatives meet the purpose and need. Level 1 criteria include improving arterial and intersection LOS on Main Street. UDOT has set a goal of maintaining urban roads at LOS D or better during peak travel periods. UDOT will evaluate impacts to air quality for alternatives carried forward in the Draft EIS. If mitigation is appropriate, your recommendation for the use of vegetative barriers will be taken into consideration.	

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7	2	Environmental Justice	In addition to analyzing effects of alternatives on the general population, as part of the alternative's development for this project, we recommend that the UDOT analyze any effects alternatives may have on any marginalized communities that could be further impacted by the implementation of an alternative. For instance, if a bypass were to increase traffic, including emissions, and disrupt residential life or impede movement of community members to other parts of the city, we recommend that considerations to ameliorate the impacts of alternative(s) on the community(ies) be incorporated or other alternatives be considered.	UDOT will identify low-income and minority populations that could be affected by alternatives carried forward in the Draft EIS. The Draft EIS will include a section on Environmental Justice, which will evaluate impacts to any low-income and minority populations identified. If appropriate, mitigation will be proposed.	

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8	2	Water/ Wetlands	<p>One of our primary concerns regarding this project was the potential for development of a western bypass that would be more likely to impact waterbodies and wetland complexes. As noted above and in our scoping letter, we were concerned that due to the historical purchase of land on the west side of the city, and the secondary cost screening criteria, the alternatives could be narrowly limited to favor selection the western route. The discussion at the September 30 meeting allayed much of these concerns; however, we reiterate that the western alternatives could result in greater wetland impacts and may not be the LEDPA under CWA 404. We were pleased to hear that eastern alternatives were likely more favorable and fit better with the existing traffic patterns. Further, commitments to delineate wetlands and waterbodies in the project area are welcomed and will better inform alternatives selection and development in the EIS.</p>	<p>UDOT used Level 2 screening criteria to determine whether any of the alternatives would have substantially greater costs without having substantially greater benefits in meeting the purpose of the project. Costs were estimated for construction and right-of-way at a high level. When estimating the right-of-way cost, UDOT did not differentiate between land that has already been preserved by Heber City and Wasatch County for a corridor and land that has not been preserved. In other words, the preserved corridor did not factor into Level 2 cost estimates.</p> <p>The eastern alternatives are not more likely favorable, nor do they fit better with existing traffic patterns. The traffic analysis available for discussion at the September 30 meeting was preliminary. The preliminary analysis showed eastern alternatives were more effective at pulling trucks traveling on U.S. 40 south of Heber City off Main Street, but that accounts for a small portion of the overall traffic volume. A follow-up email was sent from Naomi Kisen to Matt Hubner on November 8, 2021 to clarify this. UDOT conducted a more detailed traffic analysis in late 2021/early 2022 for screening purposes. A key to understanding why the west side bypass alternatives draw more traffic is to consider the Annual Average Daily Traffic (AADT) on US 189 headed toward Provo as compared to the AADT on US 40 headed southeast out of Heber City. There is nearly 3 times more traffic on US 189 (17,000 AADT) compared to US 40 (6,200 AADT) on average.</p> <p>UDOT conducted an aquatic resources delineation of a preliminary study area in 2021. Based on comments received during the alternatives comment period (October 5 to November 4, 2021) UDOT added new alternatives that go outside the area that was delineated. Data from the 2021 delineation was used for Level 2 screening where available. NWI data, modified based on aerial photography and spot checks in the field, was used for Level 2 screening where delineation data was not available. UDOT plans to conduct an aquatic resources delineation of the expanded study area in 2022 covering alternatives evaluated in detail in the EIS. Delineation data will be used for impact analysis in the Draft EIS.</p>	