



## **Alternatives/Options Evaluation Criteria Descriptions**

### **ENGINEERING IMPACTS**

- Roadway Design Factors: Summary of highway design geometric features including items such as shoulder widths, clearance under bridges, etc.
- Drainage Considerations: Summary of impacts to the drainage culverts under I-10.
- Traffic Operations in 2040: Summary of modeled level of traffic operations in 2040.
- Safety: Indicators of anticipated safety implications for each alternative/option.
- Constructability / Maintenance of Traffic: Ease of construction and the impacts to traffic during construction.
- Utility Considerations: Summary of expected utility impacts and probability and/or severity of outages for relocations for each alternative/option.
- Maintenance / Maintainability: Ease and relative cost of maintaining each alternative/option.

### **ENVIRONMENTAL**

- Floodplain: Area of impact to floodplains, measured in Acres.
- Jurisdictional Waters of the U.S.: Area of impact to Waters of the U.S. under the jurisdiction of the US Army Corps of Engineers. Can be canals, rivers, washes, measured in Acres.
- Water Resources: Impacts to features such as canals, irrigation channels, and wells.
- Noise: Summary of whether noise from the proposed action is expected to exceed the FHWA Noise Abatement Criteria, and if so, what mitigation may be required.
- Air Quality: Determines whether the proposed action would conform to emission budgets of air pollutants not in attainment in the study area, and if the proposed action would cause or contribute to new air quality violations. If the proposed action conforms and would not cause new violations, it is said to be in conformity.
- Visual: Assesses the degree of change of the proposed action's compatibility, which is the environment's ability to absorb the proposed project in scale, form, and material. It also assesses viewer sensitivity (viewers to and in the project corridor and their duration of exposure) to the change the project creates.
- Hazardous Materials: Summarizes the presence of known hazardous materials potentially impacted by the alternative/option.
- Land Use: Identifies existing land use in the study area (residential, commercial, etc.) and evaluates future planned land use that may be needed for a long-term I-10 transportation use. Future land use is based on community land use plans in the study area.
- Local Businesses: Identifies businesses in the study area (commercial, industrial, etc.) and evaluates whether any business would need to be fully or partially acquired or would be otherwise affected by the alternative/option (access, circulation, etc.).
- Local Communities: Identifies residential areas and community facilities near the alternative/option (schools, churches, hospitals, parks, etc.) and evaluates whether any residences or community facilities would need to be fully or partially acquired, or would be otherwise affected by the improvements (access, circulation, noise, visual, etc.). In addition, the process identifies any minority or low income populations near the proposed improvements and evaluates whether the proposed improvements would result in a



# I-10 | LOOP 202 TO SR-387 WILD HORSE PASS CORRIDOR

disproportionally high adverse impacts, as compared to the study area population as a whole.

- **Biological Resources:** Assesses potential for, and impacts to, threatened and endangered species, special status species (including Tribal species), and these species' habitat. Also evaluates impacts to native plants and migratory birds.
- **Prime & Unique Farmlands:** Identifies the impacts to important rural lands needed to produce food, feed, fiber, forage, and oilseed crops, whether or not they are used for that purpose today.
- **Archeological Resources:** Assesses the magnitude of impacts for each alternative/option to archaeological resources that have been determined eligible for listing on the National Register of Historic Places based on their potential to yield important information on the history and/or prehistory of the study area.
- **Traditional Cultural Properties (TCPs):** Assesses the magnitude of impacts for each alternative/option to properties eligible for listing on the National Register of Historic Places based on their associations with the cultural practices, traditions, beliefs, arts, crafts, or social institutions of a living community.
- **Section 4(f) and Section 6(f):** Assesses impact to Section 4(f) properties which are publicly owned recreational resources, wildlife and waterfowl refuges, and National Register-eligible archeological and historic properties (these do not need be publicly owned). Also assesses impacts to Section 6(f) resources which are recreational properties that receive Land and Water Conservation Fund grants.

## **COST**

- **Design and Construction Costs:** Estimated cost in 2020 dollars to design and construct the alternative/option.
- **Right of Way/Easement Costs:** Relative costs of additional right of way/easements needed to construct the alternative/option. Costs are not quantified at this point in the evaluation but are generally considered proportional to the quantity of new right of way/easement, summarized below.
- **Utility Costs:** Estimated cost in 2020 dollars to relocate or adjust the impacted utilities summarized in the Utility Impacts criterion noted above.

## **RIGHT OF WAY/EASEMENT\***

- **New Permanent Easement or Right of Way:** Area of additional new permanent easement or right of way required for the proposed improvements of each alternative/option, measured in Acres.
- **Temporary Easements:** Area of additional new temporary easement required to construct the proposed improvements of each alternative/option, measured in Acres. Following construction, the temporary easement areas revert back to the property owner.
- **Residential Relocations:** Number of residential units that must be acquired and relocated to construct the alternative/option.
- **Business/Billboard Relocations:** Number of businesses or billboards that must be acquired and relocated to construct the alternative/option.

\*All four of the right of way/easement criteria will be calculated separately for tribal lands, allotment lands, and off-community land.