

TEXAS DEPARTMENT OF TRANSPORTATION

ALTERNATIVES ANALYSIS MATRIX











SPUR 399 EXTENSION - US 75 TO US 380

CSJs 0364-04-051, 0047-05-058, 0047-10-002

| SCREENING/EVALUATION CATEGORY | METRIC | PURPLE ALTERNATIVE West of the airport | ORANGE ALTERNATIVE East of the airport | NO-BUILD ALTERNATIVE | KEY TAKEAWAYS |
|-------------------------------|---|---|--|---|---|
| Hazardous Materials | | 12 sites (8 low risk, 3 moderate risk, 1 high risk) | 12 sites (7 low risk, 4 moderate risk, 1 high risk) | N/A | The high risk site for both alternatives is the closed North Texas Municipal Water District/McKinney Landfill. |
| Farmland Impacts | | 167 acres Prime/Statewide Important Farmland | 166 acres Prime/Statewide Important Farmland | No conversion of prime or statewide important farmland would occur. | Impacts to Prime/Statewide Farmland are relatively similar for the Build Alternatives. |
| Induced Growth | | Low potential to induce growth Redevelopment potential is low due to size and location of parcels and current ownership or lease. Redevelopment to commercial or light industrial uses that desire both highway and airport access would occur on vacant parcels and remnant parcels after acquisition (input from City of McKinney). | Low to moderate potential to induce growth Land in agricultural use, not constrained by floodplains and other commitments south and east of the Airport, would be target for light-industrial development (warehousing, distribution, intermodal freight facility) with highway access and proximity to the Airport. Growth potential is even greater if the Airport completes airfield and terminal expansions that are dependent on having access on eastern side of the Airport. | roadways where vacant parcels are present and utilities are or can be provided to support continued regional growth. The potential for induced growth along US 380 would be greater than along SH 5 due to the density of existing development along SH 5. | The potential for induced growth within the study area is limited by the extent of currer and planned development and limitations placed on future development of vacant land by the presence of floodplains and lack of utilities east of the Airport. |
| Traffic Noise | Number of Impacted Receptors that Approach/Exceed the Respective Noise Abatement Criteria (NAC) under the Build Condition in 2050 | 183 receptors | 159 receptors | N/A | |
| | Number of receptors that have substantial increases in noise levels in 2050 | 46 receptors | 41 receptors | N/A | |
| | Number of locations where noise abatement is determined feasible and reasonable | 1 noise barrier along SH 5 considered reasonable and feasible 1 noise barrier is planned for construction at the High Point Manufactured Home Community as a part of TxDOT's SH 5 Improvement project. This barrier could be lengthened and/or made taller to provide the appropriate noise reduction benefit needed to address the Spur 399 Ext. improvements. | | 1 noise barrier is planned for construction as a part of TxDOT's SH 5 Improvement project | |
| Air Quality Impacts | | Regardless of the Build Alternative, Mobile Source Air Toxics are expected to decline substantially in the future due to federal regulations on vehicles fuels, fleet turnover, and the increased use of electric vehicles. Regardless of the Build Alternative, the project would be in a nonattainment area and will be evaluated for consistency by FHWA. Additional details are available in the DEIS document. | | | |
| Visual and Aesthetic Impacts | | Changes resulting from construction of the Purple Alternative would be most noticeable to those living in neighborhoods west of Airport Drive changing the visual character of the industrial area. The elevated freeway would form a physical and visual barrier between the neighborhoods to the west and the Airport and parklands to the east. | Grade separations, elevated roadway sections, ramps, signage, and safety lighting would be introduced east of the Airport, changing the rural character of the area. The elevated sections of the freeway would preclude views of the surrounding landscape from locations along the corridor. | No change | |