## US 380 EIS Methodology and Level of Detail for Analyzing Alternatives - Purpose & Need, Engineering, and Public Input

Screening/Evaluation Category		No Build Alternative	Green Alternative (Existing US 380)	Purple Alternative	Blue Alternative	Gold Alternative	Brown Alternative			
8	Manage Congestion									
Purpose Need	Improve East-West Mobility	How well does the alternative satisfy the identified need?								
Pur	Improve Safety									
	Total Alternative Length Along Centerline	miles								
	Major Utility Conflicts	number and length (feet) of crossings by utility type (large pipelines, major overhead electrical utilities, etc.)								
ring	Estimated Construction Cost (installed facility, ROW, utility relocations, etc.)	millions of dollars								
Engineering	Estimated Construction Cost per Mile (installed facility)	millions of dollars								
Engi	Total Bridge Length	miles								
	Number of New Grade-Separated Interchanges	number								
	Amount of New ROW Required	acres								
Public Input	Input/Comments/Feedback/Acceptance	level of support, general sentiment, specific concerns								

Matrix to be used to compare alternatives in the Draft EIS. Additional categories and level of detail may be added as the study progresses.

US 380 EIS – Coit Road to FM 1827, Collin County, TX

[CSJs: 1035-02-065 and 1035-03-053]

## US 380 EIS Methodology and Level of Detail for Analyzing Alternatives - Environmental Resources

ning/Evaluation Category	No Build Alternative	Green Alternative (Existing US 380)	Purple Alternative	Blue Alternative	Gold Alternative	Brown Alternative				
Residential Displacements	number within project footprint, identify if minority/low-income									
Business Displacements	number within project footprint, identify if minority-owned									
Land Use	acres	acres within footprint by land use category, effects on developable land, creation of uneconomical remnants, conformance with published plans, etc.								
Farmland Impacts	acres of prime and statewide important farmland within footprint potentially converted to non-agricultural use									
Farmland Impacts (separation of farmland from homestead)	number and location of properties, type of separation (main facility, supporting roadway network improvements)									
Community Demographics and Services (EJ, LEP, Title VI)		minority, low-income, disabled, elderly populations within footprint, type and magnitude of effects - displacements (see above), community cohesion, accessibility to community facilities (see below), bicycle/pedestrian issues, emergency services access/travel time								
Community Facilities (schools, places of worship, libraries, etc.)	number, type, ownership, population served									
Visual/Aesthetic Impacts	changes in visual character, sight lines (grade separations), signage, lighting; effects on important views/viewsheds in the project area									
Archeological Sites and Cemeteries	number and proximity of properties to the footprint (cemeteries, recorded sites, high probability areas)									
Historic Properties		number and proximity of properties to the footprint (NRHP-listed and NRHP-eligible properties)								
Protected Lands (Section 4(f), Section 6(f), Chapter 26 properties)		number, ownership, funding, public accessibility, acres within footprint								
Waters of the US - Wetlands		acres within footprint by type (emergent, scrub-shrub, forested) and jurisdictional status								
Waters of the US - Streams and Rivers	number of c	number of crossings and linear feet within footprint by type (ephemeral, intermittent, perennial) and jurisdictional status								
Section 303(d) Waters		proximity of impaired assessment unit (within 5 linear miles of water, watershed, or drains to)								
Floodplains (100-year) and Floodways	acres of each within footprint, longitudinal or perpendicular crossing									
Impacts to Vegetation/Habitat	acres within footprint by type (riparian forest, upland forest, meadow/pasture/old field, etc.) by EMST classification/field verification									
Impacts to Wildlife	species and habitat affected, habitat fragmentation, movement corridors									
Threatened, Endangered, or Candidate Species	species, Federal/State status, potential effects									
State Species of Greatest Conservation Need (SGCN)	species, potential impacts									
Air Quality	do anticipated emissions from future predicted traffic volumes necessitate the need for a conformity analysis, CO analysis, MSAT, or CMP?									
Hazardous Materials	number of potential regulated materials sites and level of risk (low, moderate, high) and proximity to footprint									
Traffic Noise	location and number of sensitive noise receivers that experience an increase in traffic noise levels that approach or exceed the FHWA NAC or that will substantially exceed existing noise levels									
Induced Growth	location and n	location and number of parcels within a defined area of influence (AOI) that may be subject to development/redevelopment induced by the proposed project								
Reasonably Foreseeable/Cumulative Effects	reasonably foreseeable effects of this project in combination with other related actions within the project area									

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