

Denton County Outer Loop EIS - I-35 to DNT - CSJ 0918-46-341 - Methodology and Level of Detail for Analyzing Alternatives

Screening/Evaluation Category		No Build Alternative	Red Alternative	Blue Alternative	Purple Alternative	Gold Alternative
Purpose & Need	Rapid current and projected population and traffic growth	How well does the alternative satisfy the identified need?				
	Higher crash rates than the statewide average					
	Limited mobility due to the lack of contiguous east-west arterials					
Engineering	Total Length Along Centerline (I-35 to DNT)					miles
	Major Utility Conflicts	number and length (feet) of major utility crossings (conflicts) by type (e.g., water or petroleum pipelines, sanitary sewer mains and lift stations, major overhead electrical transmission lines, etc.) and number of proposed relocations				
	Estimated Construction Cost (installed facility, ROW, utility relocations, etc.)	millions of dollars				
	Estimated Construction Cost per Mile (installed facility)	millions of dollars				
	Total Length of Elevated Structures (e.g., bridges, decked roadways)	miles				
	Number of New Grade-Separated Interchanges	number				
	Amount of New ROW Required	acres				
	Residential Displacements	number of homes (single and multi-family) within proposed right-of-way (ROW); identify if minority/low-income residents/tenants				
	Business Displacements	number of business structures/properties within proposed ROW; identify if minority-owned or if specifically serve minority/low-income populations				
Environmental Resources	Land Use	acres within proposed ROW 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 proposed ROW potentially converted to non-agricultural use, include farm/ranch support structures (e.g., outbuildings, arenas, irrigation pivots, etc.)				
	Farmland Impacts (separation of farmland from homestead)	number and location of properties, type of separation (e.g., home separated from outbuildings, fields, pastures), loss of or change in access, etc.				
	Community Demographics and Services (Environmental Justice [EJ], limited English proficiency [LEP], Title VI considerations)	minority, low-income, disabled, elderly populations within and adjacent to proposed ROW by type and magnitude of effects - displacements (see above), changes in neighborhood access, community cohesion, accessibility to community facilities (see below), bicycle/pedestrian connectivity (see below), emergency services access/travel time				
	Bicycle and Pedestrian Facilities	number and type of existing and planned facilities within, crossing, and adjacent to the proposed ROW, ownership, and connectivity to regional systems (existing or planned)				
	Community Facilities (schools, places of worship, libraries, etc.)	number, type, and ownership within community impact study area; populations served				
	Visual/Aesthetic Impacts	changes in visual character, sight lines (grade separations), signage, lighting; effects on important views/viewsheds in the project vicinity				
	Archeological Sites and Cemeteries	number and proximity of properties to the proposed ROW (cemeteries, recorded sites, high probability areas)				
	Historic Properties	number and proximity of properties within the proposed ROW and visual area of potential effects (APE) (e.g., NRHP-listed and NRHP-eligible properties, state-listed properties, historical markers)				
	Protected Lands (Section 4(f), Section 6(f), Chapter 26 properties, Conservation Easements)	number, use, ownership, funding, public accessibility, acres within proposed ROW or proximity to proposed ROW; inclusion in a published plan				
	Waters of the US - Wetlands	acres within proposed ROW by type (emergent, scrub-shrub, forested) and potential jurisdictional status				
	Waters of the US - Streams and Rivers	number of crossings and linear feet within proposed ROW by type (ephemeral, intermittent, perennial) and potential jurisdictional status				
	Section 303(d) Impaired Waters	proximity of impaired assessment unit to the proposed roadway alignment (within 5 aerial miles of, is within the watershed of, drains to, or crosses an impaired water segment)				
	Floodplains (100-year) and Floodways	acres of each within proposed ROW; number of perpendicular crossings; acres of compensatory storage needed to offset flood elevation increase				
	Impacts to Vegetation/Habitat	acres within proposed ROW by type (riparian, upland, meadow/pasture/old field, etc.) based on Texas Parks and Wildlife Department (TPWD) Ecological Mapping System of Texas (EMST) classifications and field verification				
	Impacts to Wildlife	species and habitat affected, potential habitat fragmentation, known wildlife travel corridors				
	Threatened, Endangered, or Candidate Species	federal and state listed species and critical habitats, locations within and adjacent to proposed ROW				
	State Species of Greatest Conservation Need (SGCN)	species, potential effects, applicable TPWD best management practices				
	Air Quality	quantitative analyses for mobile source air toxics (MSAT) and a carbon monoxide traffic air quality analysis (CO TAQA), congestion management process and regional transportation conformity consistency				
	Hazardous Materials	number of potential regulated materials sites and level of risk (low, moderate, high) within and in close proximity to the proposed ROW				
	Traffic Noise	location and number of sensitive noise receptors that may experience an increase in traffic noise levels that approach or exceed the FHWA Noise Abatement Criteria (NAC) and that may experience a substantial increase in noise levels because of the project				
	Induced Growth	location and number of parcels within a defined area of influence (AOI) that may be subject to development/redevelopment induced by the proposed project				
	Indirect and Cumulative Effects	effects of this project in combination with the effects of past, present, and reasonably foreseeable future actions within the study area				
Public Input	Input/Comments/Feedback/Acceptance	level of support, general sentiment, specific concerns				