

**GRAYSON COUNTY SPUR ROAD**  
**From County Road 60 (CR 60) To Farm to Market Road 121 (FM 121)**  
**Evaluation Matrix for Conceptual Alternatives**

**ALTERNATIVE ALIGNMENTS**

Note: The No-Build Condition is also an alternative and will be used to compare to Build alternatives.  
All build alignments are subject to future refinements <sup>1</sup>.

See the notes for an explanation of the terms and basis for impacts used in this table. →	Units	Green Alignment	NTTA Adopted Alignment (2011)	Red Alignment	Blue Alignment	Notes
<b>ENGINEERING / DESIGN FEATURES</b>						
Alignment Length	miles	4.03	4.23	4.32	4.37	The linear distance between south and north termini (e.g., CR 60 to FM 121) along the centerline of the alternative.
Length on Existing Parallel Roads	miles	0.42	0.83	0.51	0	The linear distance of each alternative located on existing roadways that are also parallel with the alternative.
Length on New Location	miles	3.61	3.4	3.81	4.37	The linear distance of each alternative not located on existing roadways (Criteria Note 1 less Criteria Note 2).
Estimated Total ROW Area <sup>2</sup>	acres	195.4	205.1	209.5	211.9	The approximate amount of total right-of-way (ROW) area each alignment will require, calculated using a ROW width of 400 feet throughout the entire length of the alternative (i.e., length as shown in Item 1 above). The estimated total ROW area does not include ROW required at interchanges due to ramping and connections.
<b>SAFETY, MOBILITY &amp; CONGESTION RELIEF</b>						
Improves North/South Travel Level of Service	Y/N	Y	Y	Y	Y	Does this alternative improve north/south level of service relative to SH 289? If the alternative provides additional capacity that is parallel to SH 289, then a "Y" is noted.
Improves Access for Emergency Service & Transit	Y/N	Y	Y	Y	Y	Does this alternative improve access for emergency services (e.g., hospitals and police/fire stations) and transit?
Allows Railroad Expansion	Y/N	Y	Y	Y	Y	Does this alternative allow railroad expansion by not running parallel to existing tracks?
Existing Railroads Crossed by ROW	#	0	0	0	0	Number of railroads that are crossed by each alternative.
<b>SOCIAL AND ECONOMIC IMPACTS</b>						
Displaced Residential Structures in ROW	#	0	0	0	0	The number of potential residential displacements as a result of the implementation of each alternative. Impacts of the alternatives will be refined and reduced, if possible, upon selection of a preferred route and further refinement of that alignment. Residential structures were identified using 2015 aerial photographs. Mobile homes were not considered because they can be relocated.
Displaced Commercial & Non-Residential Buildings in ROW	#	0	0	0	0	This is similar to "Displaced Residential Structures" in the evaluation process used to rate alternatives. This applies to commercial enterprises (including agricultural barns) and non-business community facilities such as places of worship. Commercial and non-commercial buildings were identified using 2015 aerial photographs.
Displaced Utility Stations	#	0	0	0	0	The number of known utility stations displaced by each alternative. These were identified using 2015 aerial photographs and 2017 U.S. Department of Homeland Security geospatial data.
Additional Residences within 500 feet of ROW	#	2	3	3	0	The number of additional homes (based on 2015 aerial photographs) that are in close proximity (i.e., within 500 feet) of the alignment's edge of ROW. This distance is expected to include all residences that could potentially be affected by traffic noise from the proposed roadway.
Property Owners within ROW	#	10	7	6	5	This reflects the total number of property owners (based on the 2017 Grayson County Appraisal District GIS data) within the location of the alternative alignment's proposed ROW, excluding city, county and state owned road ROW.
Pipelines Crossed by ROW	#	0	0	0	0	The total number of known petroleum product pipelines (natural gas and/or oil based on the Railroad Commission of Texas Public GIS Viewer [Map]) that the proposed alignment would cross.
Petroleum Product Wells in ROW	#	0	0	0	0	The total number of known petroleum product wells (based on the Railroad Commission of Texas Public GIS Viewer [Map]) within the ROW.
Com. Towers/Trans. Lines in/Crossed by ROW	#	0	0	0	0	The total number of known communication towers (based on the 2017 U.S. Department of Homeland Security geospatial data) within the ROW, or power transmission lines crossed by the alignment's proposed ROW.
Schools, Golf Courses, Other Public Facilities	#	0	0	0	0	The total number of known school properties (based on the 2015 Texas Education Agency geospatial data), golf courses (based on the ESRI GIS database and online directories), and other public facilities (based on geospatial data from the Grayson County Appraisal District and Texoma Council of Governments) crossed by the alignment's proposed ROW.
HAZMAT Sites in/within 500 feet of ROW	#	0	0	0	0	This identifies possible impacts to known potential hazardous material sites within 500 feet of the proposed ROW. The potential hazardous material sites identified using the Environmental Protection Agency and TCEQ's databases.
<b>ENVIRONMENTAL IMPACTS</b>						
Streams Crossed by ROW	#	5	3	4	5	The number of streams crossed by the alignment. Only major waterways shown on U.S. Geological Survey topographic maps were counted, as this is an initial approximation of streams that are likely to fall within the jurisdiction of the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.
ROW within 100-Year Floodplain	acres	29.8	4.2	14.7	2.4	The amount of ROW located within 100-year floodplains as based on Federal Emergency Management Agency Flood Insurance Rate Maps. Bridged sections of highway are more costly to construct.
NRCS-Financed Lakes in ROW	acres	0	0	0	0	The area affected by flood control lakes constructed by the Natural Resources Conservation Service.
Other Open Water in ROW	acres	2.0	0.2	0.2	1.2	The area of bodies of open water (i.e., lakes or ponds), other than Natural Resources Conservation Service lakes, that would be included within proposed ROW.
Wetlands in ROW	acres	0.4	0.2	0.4	0.4	This provides an estimate of impacts on potential emergent wetlands as identified in U.S. Fish and Wildlife Service National Wetland Inventory.
Forest in ROW	acres	2.2	0	3.7	0	An estimate of potential impacts to forested areas within the ROW of each alternative. Forests were identified using year 2015 aerial photography of the study area.

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Park or Recreation Area in ROW	acres	0	0	0	0	The amount of known/mapped public parks or recreation areas within the ROW of each alternative. Public parks or recreation areas were identified using 2017 Grayson County Appraisal District geospatial data and 2017 Texoma Council of Governments geospatial data.
Historic Sites in/within 500 feet of ROW	#	0	0	0	0	This identifies the number of listed historic sites located in or near (i.e., within 500 feet, or area of potential effects) of the proposed ROW for each alternative. The listed historic sites were identified using Texas Historical Commission's Historic Sites Atlas Map.
Cemeteries in/within 500 feet of ROW	#	0	0	0	0	This identifies the number of known/mapped cemeteries located within or near (i.e., within 500 feet) the proposed ROW for each alternative. The known/mapped cemeteries were identified by using the Texas Historical Commission's Historic Sites Atlas Map, USGS topographic maps, and the TXGenWeb Cemetery data for Grayson County.

**Explanatory Notes for Evaluation Matrix for Conceptual Alternatives**

1. In the course of final design of alternatives, procedures to avoid, minimize or mitigate negative impacts may resolve potential impacts to environmental or cultural resources.
2. Reference in the evaluation matrix to the right-of-way (ROW) for an alternative route applies a width of 400 feet (i.e., 200 feet either side of roadway centerline) throughout the length of the proposed roadway. In addition, impacts for some features have been noted when occurring within 500 feet from the edge of ROW (i.e., 700 feet either side of the centerline).