

Appendix A

Key Concepts:

- *Detailed information is provided for each expansion section and relief route proposed in the Ports to Plains Corridor.*
- *The information shown for each expansion section and relief route was used as a basis for many elements in the Corridor Development and Management Plan.*
- *Further planning and detailed design can be aided by the use of the information provided.*

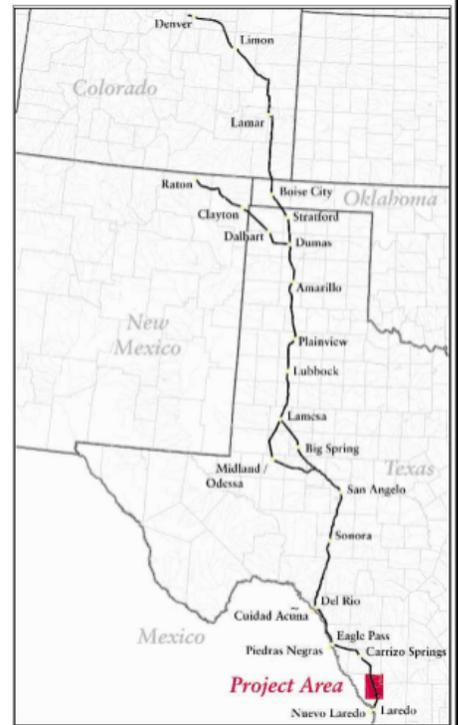


State	Texas	Facility	US 83
From	I 35		
To	Webb/Dimmit County Line		
Length (Miles)	34	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	3.9	Existing Total	2,650
ROW + Utility Cost	2.9	Existing Truck	960
Total Cost	70.4	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	7,100
Condition	Fair	2030 Trucks	1,940
Description			
Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.			
Structural			
Camino Columbia Toll Road- \$1.2M:Direct Connection from NB I 35 to NB US 83 - \$2.6M			
ITS Site Specific Features		ITS Features Per Mile	
Periodic upgrades at 2 traffic signals		Flashing beacon signs, traffic monitoring equipment, oversize mile markers	
ITS Features Installed Per Region			
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support			

Environmental Baseline

This 34-mile section is within 2 watersheds, the Upper Nueces and Middle Nueces. Webb County is home to as many as 24 federal and state protected species that could find habitat in the riparian areas along this section. National Wetland Inventory (NWI) maps show wetlands occurring in 10 places within 200 feet of the existing US 83 centerline. Mapped Zone A floodplains (areas of 100-year flood inundation) and the number of feet of floodplain crossed include the following: Canyon Creek 2 miles south of Webb/Dimmit county line, 1,000 feet; Las Raices Creek 5.5 miles south of Webb/Dimmit county line (by a dam), 400 feet, and 7.25 miles south of Webb/Dimmit county line, 2,000 feet; Tordillo Creek/Tejones Creek 5 miles north of IH-35/US 83, 300 feet; an unnamed drainage 2 miles north of I-35/US 83 interchange and 2 unnamed tributaries, 500 feet; and an unnamed drainage 2,000 feet north of Route 863/US 83 intersection, 400 feet. A roadside park is located 11 miles north of the IH 35/US 87-83 intersection. U.S. Geological Survey maps show no buildings within 300 feet of the roadway centerline. No cultural resources were identified.

Photo of Existing Corridor or Detailed Map



Environmental Impact Analysis

Depending on the ultimate 4-lane design of US 83, up to 304,920 square feet (7 acres) of palustrine wetlands and up to 174,240 square feet (4 acres) of riverine wetlands could be impacted. The project team will need to coordinate with the USACE to avoid and/or mitigate any long-term adverse impacts to these resources, and will need to employ best management practices to protect them during construction and long-term maintenance of the facilities. The project team for this section will also need to work with the US Fish and Wildlife Service (USFWS) and the TPWD to identify local habitats, if any, of the protected species, design mitigation strategies as necessary, and use best management practices to avoid and protect them during construction and long-term maintenance of the facilities.

Environmental Process

Coordination and consultation with several agencies is required, including the USACE, USFWS, TPWD and TxDOT. Early discussions with these agencies and with citizens and property owners along the section will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, an EIS will be necessary.

Detailed Environmental Considerations Map

Ports to Plains Corridor
(IH 35 to Webb/Dimmit County Line)

Corridor

- 2-Lane Highway
- 4-Lane Highway
- 4-Lane Interstate

Other Roads

- Interstate
- US Highway
- State Highway
- Railroad

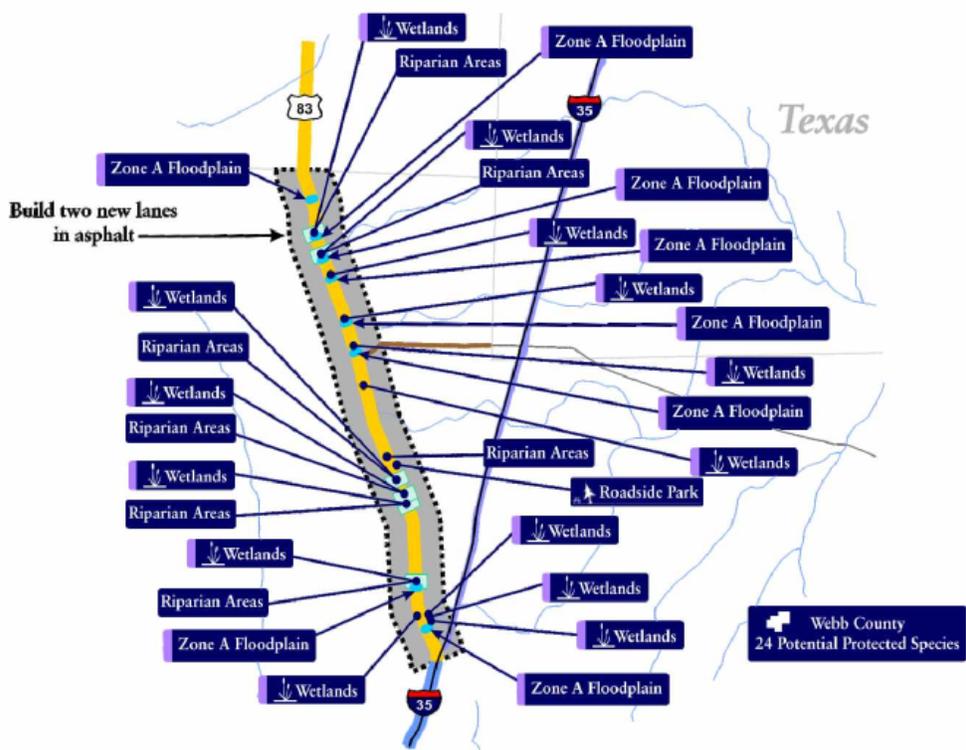
Counties
States
Cities

Distance Within/Adjacent to Corridor

- 100' Of Centerline
- 200' Of Centerline
- 300' Of Centerline
- 500' Of Centerline
- Riparian Areas

Scale: 0 2 4 8 Miles

US 83 Capacity (2 new lanes)
IH 35 to Webb/Dimmit County Line



State	Texas	Facility	US 83
From	Webb/Dimmit County Line		
To	Catarina, FM 133		
Length (Miles)	9	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost	6.4	Existing Total	2,650
ROW + Utility Cost	0.8	Existing Truck	960
Total Cost	23.9	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	5,000
Condition	Fair	2030 Trucks	1,200

Environmental Baseline

This 9-mile section is within the Upper Nueces watershed. It has habitat for Dimmit County's 13 federal and state protected species, many of which could live among the 6 wetlands that NWI maps show within 200 feet of the US 83 centerline. Mapped Zone A floodplains and the number of feet crossed by US 83 occur at San Roque Creek 4 miles south of FM 133/US 83 intersection, 4,000; an unnamed drainage 2.25 miles south of FM 133/US 83 intersection, 1,600; and an unnamed drainage 1/2 mile south of FM 133/US 83 intersection, 1,200. It is possible that this section crosses the route El Camino Real de los Tejas, a newly designated National Historic Trail.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

San Roque Creek Bridge - \$5.3 M; Appurceon Creek Bridge - \$1.1 M

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



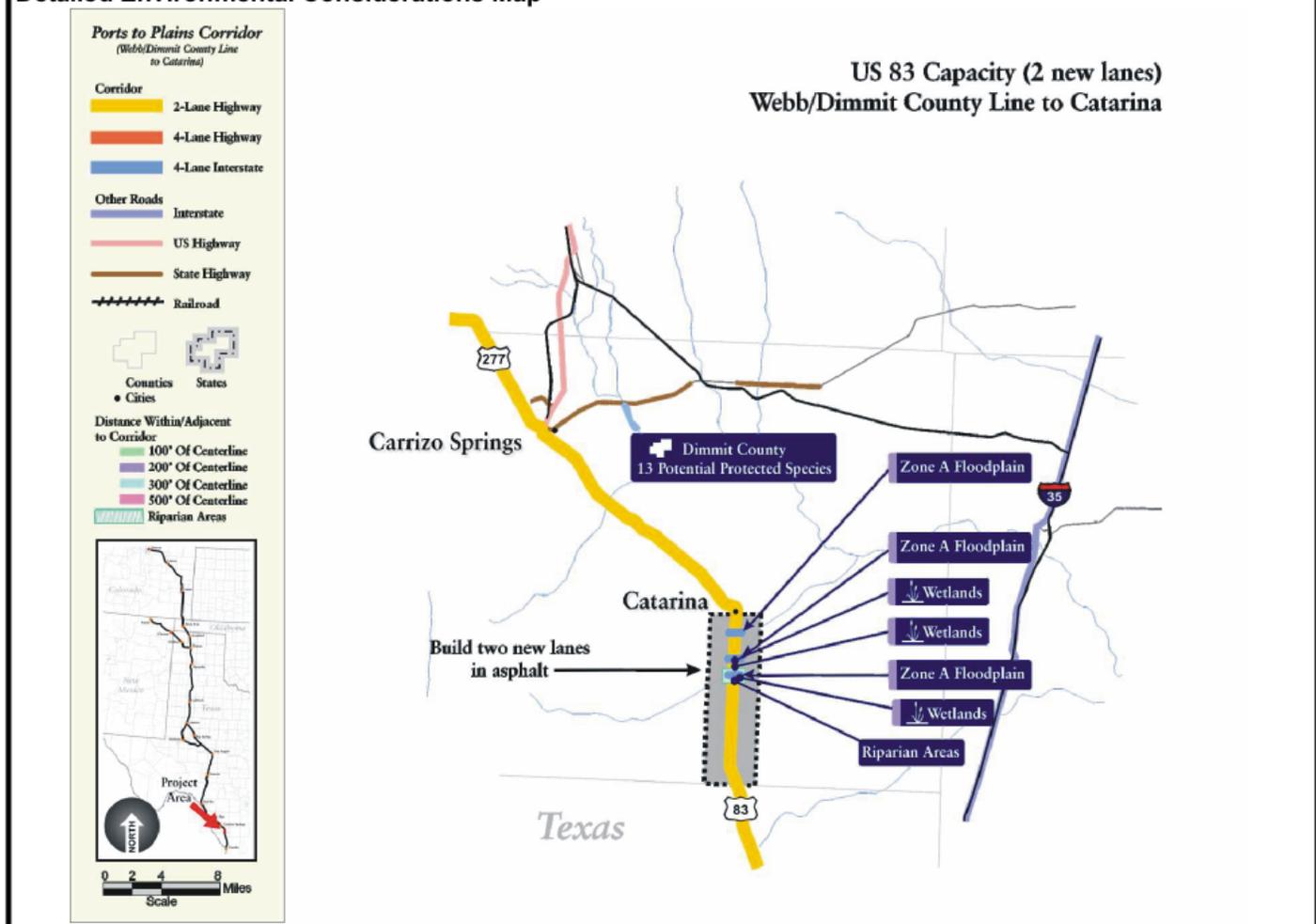
Environmental Impact Analysis

Depending on the ultimate 4-lane design of US 83, up to 87,120 square feet (2 acres) of palustrine wetlands could be impacted. The project team will need to coordinate with the USACE and FEMA to avoid and/or mitigate any long-term adverse impacts to the water and wildlife resources. The project team for this section will also need to work with the USFWS and TPWD to identify local habitats, if any, of the protected species, and design mitigation strategies as necessary. Best management practices will need to be employed to avoid and protect water and wildlife resources and ameliorate any impacts during construction and long-term maintenance of the facilities. The project team will need to coordinate with the National Park Service (NPS) and the SHPO of the Texas Historical Commission (THC) regarding El Camino Real de los Tejas, its location, the potential for impacts, and any required mitigation measures.

Environmental Process

Coordination and consultation with several agencies is required, including the USACE, USFWS, NPS, THC, TPWD and TxDOT, as well as residents and property owners along the section. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found during the EA process, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 83
From	Catarina, FM 133		
To	Carrizo Springs Relief Route		
Length (Miles)	9	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,650
ROW + Utility Cost	0.8	Existing Truck	960
Total Cost	17.5	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	5,000
Condition	Fair	2030 Trucks	1,200

Environmental Baseline

This 9-mile section is within the Upper Nueces watershed. NWI maps show 3 wetlands within 200 feet of the US 83 centerline along this section. The crossing of Appurceon Creek provides riparian habitat. Dimmit County is home to 13 federal and state protected species, some of which could be present. Mapped Zone A floodplains crossed by US 83 include El Moro Creek, which has extensive Zone A floodplains ranging from 400 feet to 2,200 feet in width. Other mapped Zone A floodplain crossings and the number of feet are an unnamed drainage 1 mile north of Catarina on US 83, 4,500 feet; Appurceon Creek 4 miles north of Catarina on US 83, 4,000 feet; and an unnamed drainage 1 mile south of Asherton on US 83, 4,500 feet. It is possible that this section crosses the route El Camino Real de los Tejas, a newly designated National Historic Trail. USGS maps show 7 buildings mostly commercial uses, in Catarina to be within 100 feet of the centerline of US 83. USGS maps show that no other buildings are within 300 feet of the roadway centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

NA

ITS Site Specific Features

NA

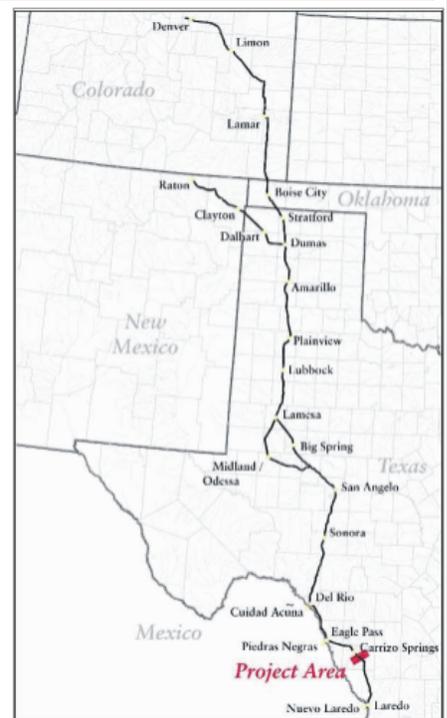
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



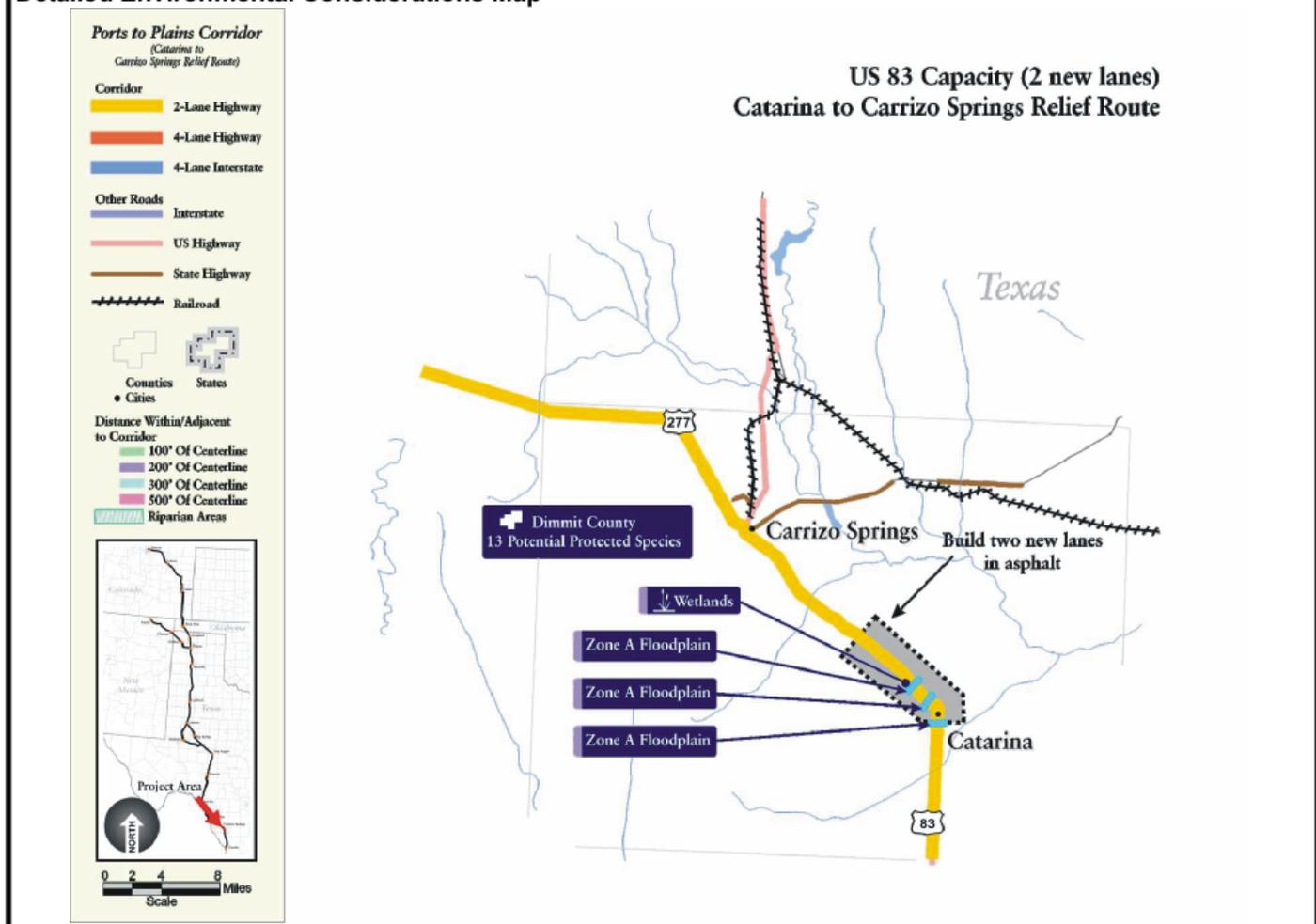
Environmental Impact Analysis

Depending on the ultimate 4-lane design of US 83, up to 87,120 square feet (2 acres) of palustrine wetlands could be impacted. The project team will need to coordinate with the USACE to avoid or mitigate any long-term adverse impacts to these resources. The project team will also need to work with the USFWS and TPWD to identify the presence, if any, of the protected species, and design mitigation strategies as necessary. The existing roadway through Catarina will be striped to a 5-lane configuration, decreasing the likelihood that relocations will occur in there. However, if during final design of this section it is found that any relocation is necessary, a detailed relocation plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The project team will need to employ best management practices to avoid and protect water and wildlife resources during construction and long-term maintenance of the facilities. The project team will need to coordinate with the National Park Service (NPS) and the SHPO of the Texas Historical Commission (THC) regarding El Camino Real de los Tejas, its location, the potential for impacts, and any required mitigation measures.

Environmental Process

Coordination and consultation with several agencies is required, including the USACE, USFWS, TPWD, NPS, THC and TxDOT, as well as with residents and property owners along the section. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found during the EA process, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Carrizo Springs Relief Route		
To	Dimmit/Maverick County Line		
Length (Miles)	17	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost	1.3	Existing Total	3,450
ROW + Utility Cost	1.4	Existing Truck	920
Total Cost	34.7	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	4,990
Condition	Good	2030 Trucks	1,190

Environmental Baseline

This section is 17 miles long and within the Upper Nueces and Turkey watersheds. NWI maps show 8 wetlands within 200 feet of the US 277 centerline. The section crosses 5 intermittent tributaries with riparian habitat. Up to 13 federal and state protected species listed in Maverick County could be present along this section. The rivers or streams with mapped Zone A floodplains and the number of feet of the crossings are Pena Creek 3.5 miles south of FM 191, 200 feet; Rocky Creek 1,000 feet north of FM 191/US 277 intersection, 900 feet; Penedencia Creek 5.25 miles east of the Dimmit/Maverick county line, 1,200 feet; and Cayetano (Katana) Creek 4.25 Miles east of the Dimmit/Maverick county line, 1,600 feet. It is possible that this section crosses the route El Camino Real de los Tejas, a newly designated National Historic Trail. The USGS map for this area shows grave sites adjacent to the section, 3/4 mile east of the Maverick/Dimmit county line and a cemetery (unnamed) north of and adjacent to US 277 between FM 191 and Carrizo Springs. One oil well is within 500 feet of this section, which crosses 1 pipeline. USGS maps show 2 buildings within 300 feet of the roadway centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

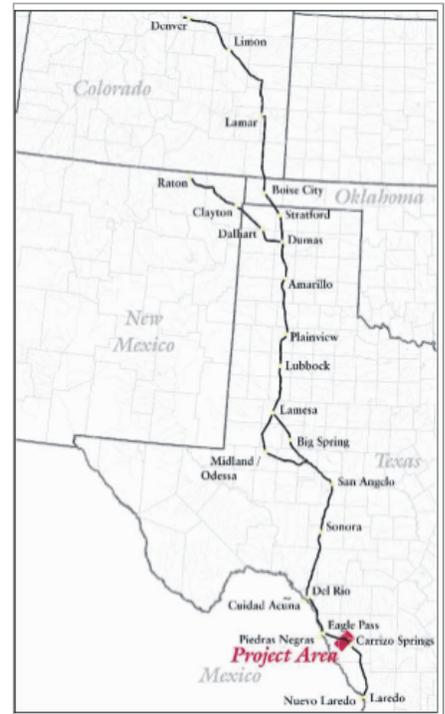
Pena Creek Bridge - \$0.6 M; Penedencia Creek Bridge - \$0.7 M

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



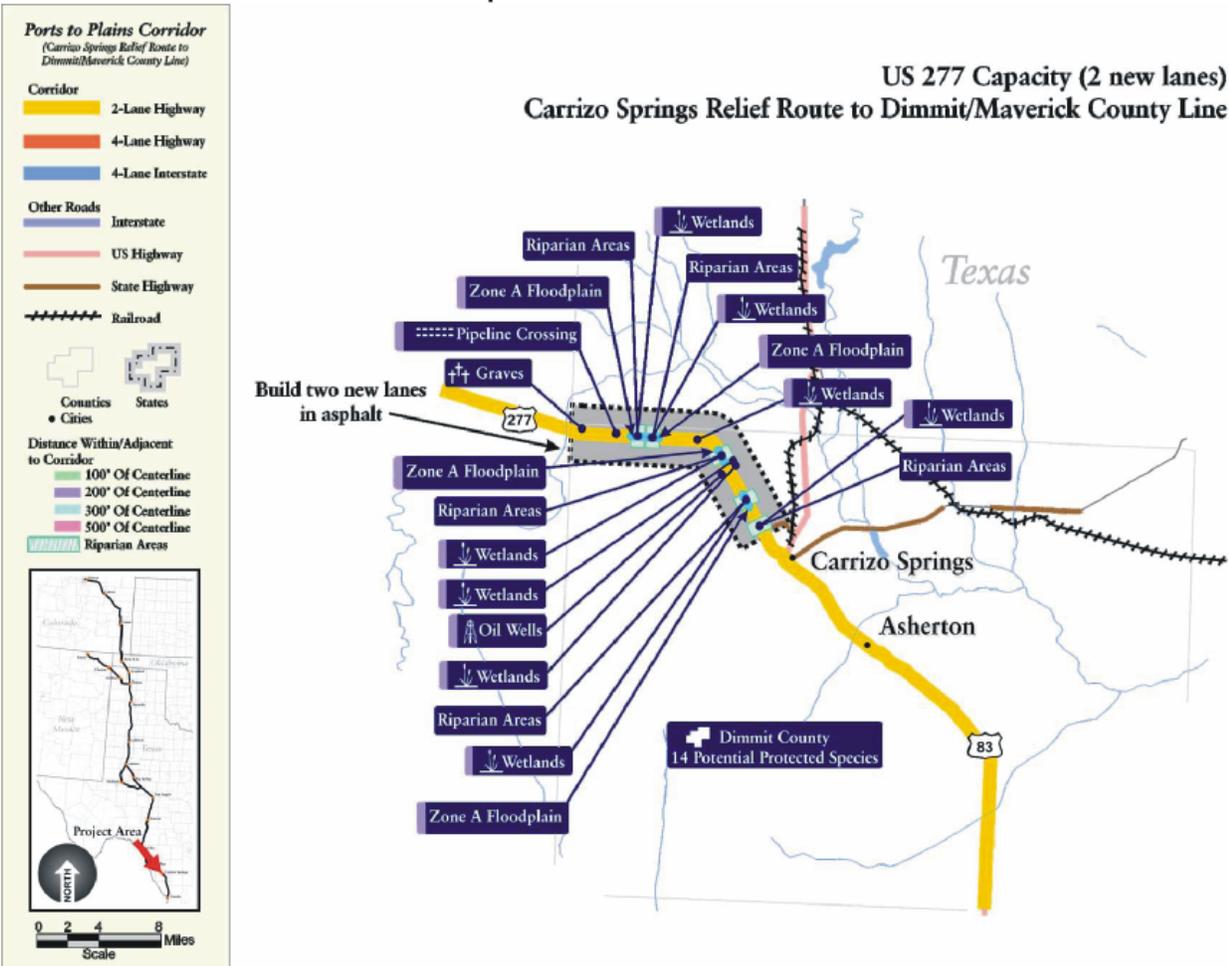
Environmental Impact Analysis

Depending on the ultimate 4-lane design of US 83, up to 130,680 square feet (3 acres) of palustrine and 174,240 square feet (4 acres) of riverine wetlands could be impacted. The project team will need to coordinate with the USACE and FEMA to avoid and/or mitigate any long-term adverse impacts to the water resources. The project team will also need to work with the USFWS and TPWD to identify local habitats, if any, design avoidance and mitigation strategies as necessary. Both the grave sites and the unnamed cemetery could be close enough to the right-of-way to be negatively impacted. The project team will need to work with the SHPO of the Texas Historical Commission (THC) to determine the extent of these sites and to develop an avoidance or mitigation strategy. The project team will need to coordinate with the National Park Service (NPS) and the SHPO of the Texas Historical Commission (THC) regarding El Camino Real de los Tejas, its location, the potential for impacts, and any required mitigation measures. The project team will also need to coordinate with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas, to determine the ownership and specifications of the crossed pipeline and work with them to implement a plan to prevent any damage during construction. The project team will need employ best management practices to avoid and protect the water, wildlife and cultural resources, and to prevent damage to the pipeline during the construction and long-term maintenance of the facilities.

Environmental Process

Coordination and consultation with several agencies is required, including the USACE, USFWS, TPWD, Railroad Commission of Texas, NPS, THC and TxDOT, as well as with residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found during the EA process, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Dimmit/Maverick County Line		
To	Eagle Pass Relief Route		
Length (Miles)	19	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost	1.4	Existing Total	3,450
ROW + Utility Cost	1.6	Existing Truck	920
Total Cost	38.8	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	4,990
Condition	Good	2030 Trucks	1,190

Environmental Baseline

This 19-mile section is within the San Ambrosia-Santa Isabel and Turkey watersheds. NWI maps show 6 wetlands within 200 feet of the US 277 centerline and riparian habitat is found at the crossings of 2 creeks. Comanche Creek also has a 3,000-foot Zone A floodplain located 1,200 feet east of the Maverick/Dimmit county line. This section may harbor some of the 24 federal and state protected species listed for Maverick County. The Sacatosa Oil Field lies just north of this section, 1 pipeline is crossed, and 1 roadside park is adjacent to US 277. USGS maps show no buildings within 300 feet of the roadway centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

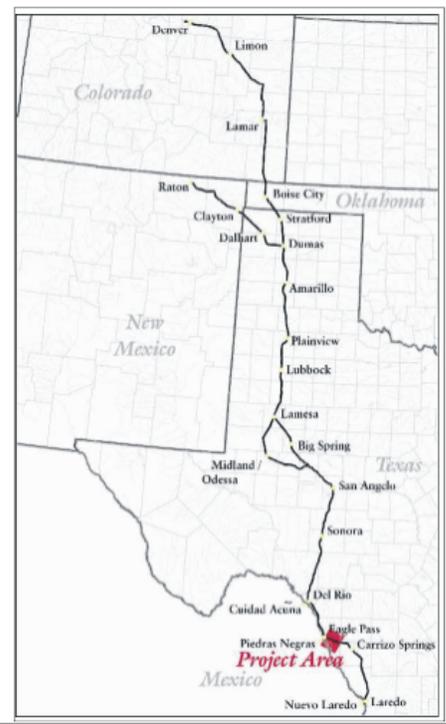
Comanche Creek Bridge - \$0.6 M:Comanche Creek Relief Bridge - \$0.4 M:Crooked Creek Bridge - \$0.2 M:Rosita Creek Bridge - \$0.3 M

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



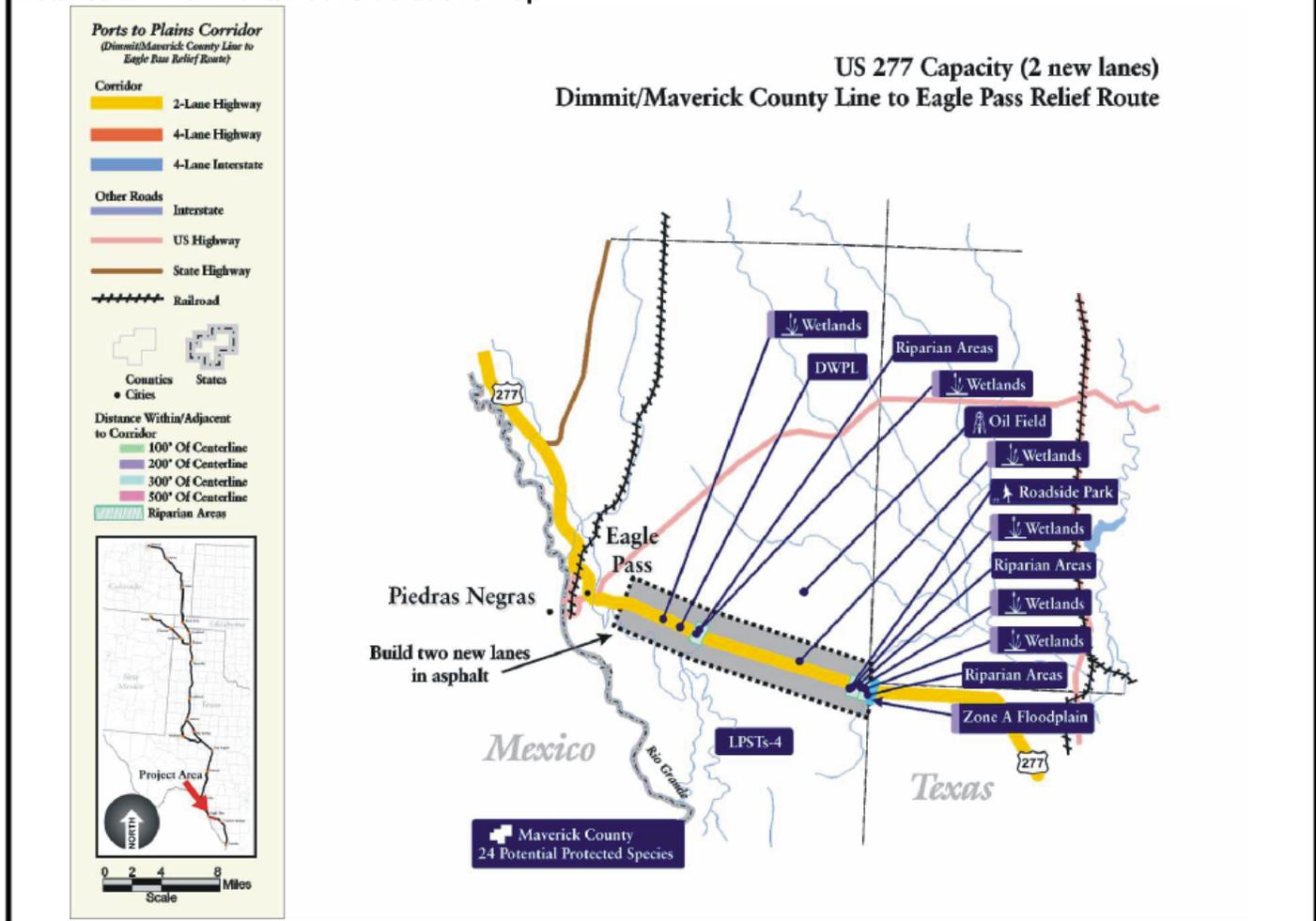
Environmental Impact Analysis

Depending on the ultimate 4-lane alignment, the roadside park could be impacted, as well as up to 304,920 square feet (7 acres) of palustrine wetlands and 174,240 square feet (4 acres) of riverine wetlands. The project team will need to coordinate with the USACE and FEMA to avoid or mitigate any long-term adverse impacts to the water resources, and with TxDOT to avoid or mitigate any encroachment to the park. The project team will need to coordinate with the USFWS and TPWD to identify local wildlife habitats, if any, design mitigation strategies as necessary, and will employ best management practices to protect water and wildlife resources during construction and long-term maintenance of the facilities. The project team will also need to work with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas, to determine the ownership of the oil field and the pipeline and to implement a plan to prevent any damage or contamination during construction.

Environmental Process

Coordination and consultation with several agencies is required, including the USACE, TPWD, USFWS, TxDOT and Railroad Commission of Texas. Early discussions with these agencies as well as with the residents and property owners along the section will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found during the EA process, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Eagle Pass Relief Route		
To	Maverick/Kinney County line		
Length (Miles)	23	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	5.4	Existing Total	2,750
ROW + Utility Cost	2.2	Existing Truck	800
Total Cost	48.9	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,770
Condition	Poor	2030 Trucks	1,510

Environmental Baseline

This 23-mile section is within the Elm-Sycamore watershed and passes through the towns of Normandy and Quemado. The NWI maps show that the section crosses 4 creeks and tributaries, and the Maverick County Canal 4 times. These waters include 6 areas of riparian habitat and 6 palustrine wetlands. This section crosses Las Moras Creek, which the TPWD has designated an Ecologically Unique River and Stream Segment. Approximately 3,000 feet of Quemado Creek is adjacent to the existing roadway. These water resources significantly increase the likelihood of encountering wildlife and some of the 24 federal and state protected species listed in Maverick County that may be supported by these habitats. Four creeks have areas of Zone A floodplains. The location and the number of feet of floodplain crossed include Quemado Creek 3.5 miles south of Quemado, 400 feet; a Canon Grande tributary 2.5 miles south of Quemado, 400 feet; and another Canon Grande tributary 1.5 miles south of Quemado, 400 feet. USGS maps show 56 buildings within 100 feet of the US 277 centerline along this section. There are 2 buildings 1.75 miles north of the Maverick County Canal, 5 in Normandy, 4 between Quemado and the roadside park south of Quemado, 25 in Quemado (approximately 75 percent commercial), and 20 north of Quemado. A total of 153 buildings are 300 feet from the US 277 centerline. USGS maps also show 2 roadside parks adjacent to the section and 2 oil wells within 500 feet of US 277 north of Quemado. In addition, irrigated farmland and orchards are located within 200 feet of US 277 just south of Quemado.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

South Main Canal - \$0.5 M: Quemado Creek Bridge - \$0.7 M: Canyon Grande Creek Bridge - \$0.6 M: Las Moras Creek Bridge - \$1.8 M: North Main Canal Bridge - \$0.5 M: Tequesquite Creek Bridge - \$1.2 M

ITS Site Specific Features

Upgrades at 2 school flashers, and 1 DMS on US 277 SB

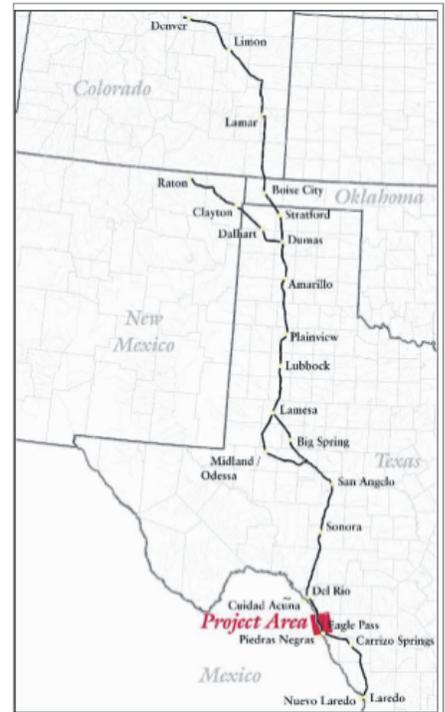
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



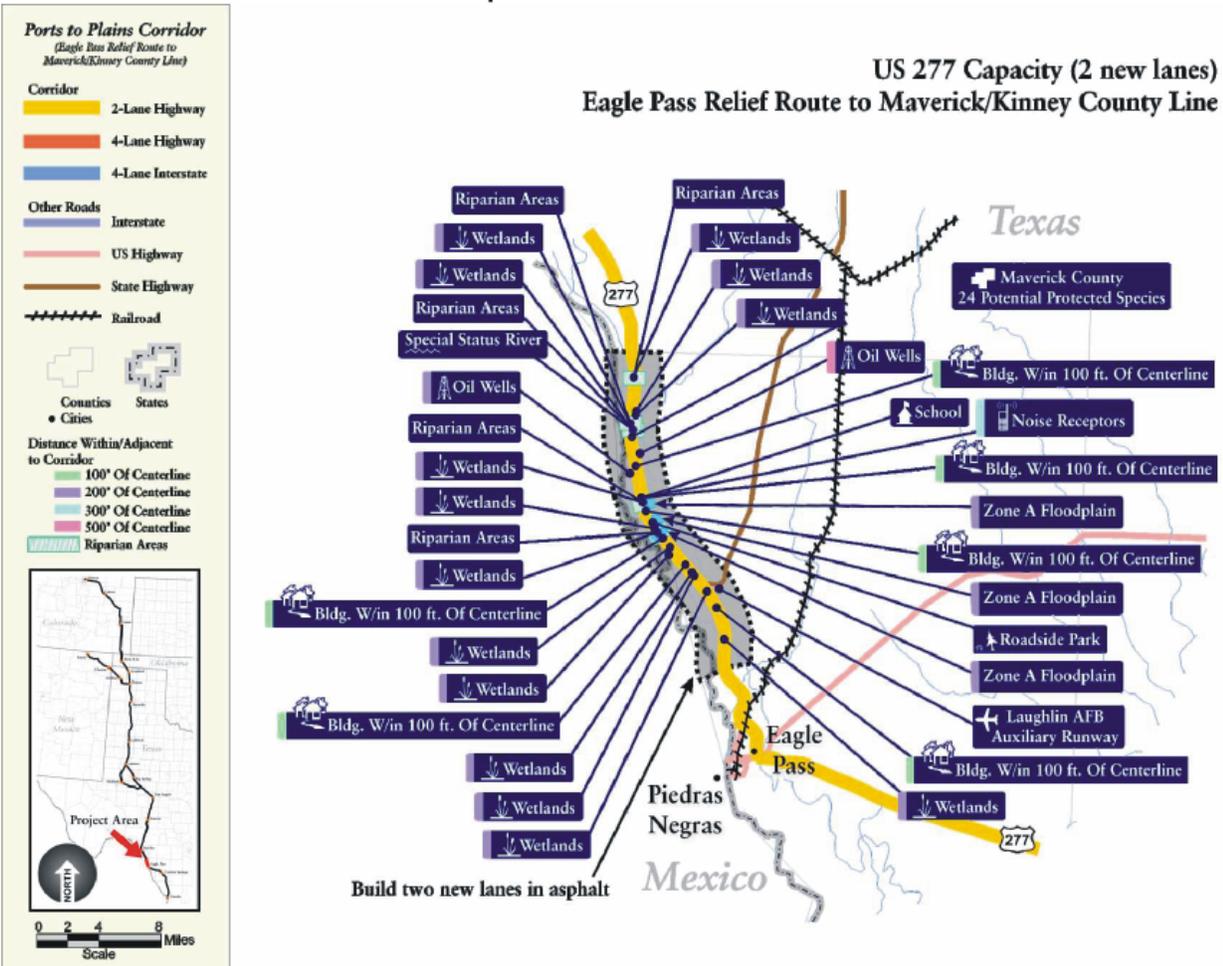
Environmental Impact Analysis

Depending on the ultimate 4-lane design of US 277, up to 304,920 square feet (7 acres) of palustrine wetlands and 392,040 square feet (9 acres) of riverine wetlands could be impacted. The project team will need to coordinate with the USACE and FEMA to avoid and/or mitigate any long-term adverse impacts to the water resources. The project team will need to work with the USFWS and TPWD to identify the local habitats, if any, of the protected species, especially species associated with Las Moras Creek such as the Proserpine Shiner. The team will need to design mitigation strategies as necessary and use best management practices to protect water and wildlife species during construction and long-term maintenance of the facilities. The existing roadway through Quemado and Normandy will be restriped to 5 lanes rather than widened, decreasing the likelihood of relocations in these towns. If during final design of this section it is found that any relocation is necessary, a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is both Environmental Justice guidelines and Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The project team will need to work closely with TxDOT and the towns of Normandy and Quemado to avoid, reduce or mitigate any relocation or encroachments to park facilities, as well as impacts from increased traffic such as noise. The project team will need to coordinate with the Crude Oil and Natural Gas Division of the Railroad Commission of Texas to determine the ownership of the wells within 500 feet of the section and to implement a plan to prevent any damage during construction.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the USACE, USFWS, TPWD, Railroad Commission of Texas and TxDOT. Early discussions with these agencies as well as with residents and property owners along the section will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found during the EA process, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Maverick/Kinney County line		
To	Kinney/Val Verde County Line		
Length (Miles)	14	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost	3.7	Existing Total	2,750
ROW + Utility Cost	1.3	Existing Truck	800
Total Cost	32.0	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,770
Condition	Poor	2030 Trucks	1,510

Environmental Baseline

This section is 14 miles long and is within the Elm-Sycamore watershed. NWI maps show 7 wetlands within 200 feet of the US 277 centerline; all are associated with creek crossings. Pinto Creek is a designated Ecologically Significant River and Stream Segment by the TPWD. Four creeks provide riparian habitat to support the 20 federal and state protected species listed in Kinney County that could be present in this section, including the protected Proserpine Shiner associated with Pinto Creek. Two creeks with mapped Zone A floodplains and the width of floodplain crossed are Cow Creek 2.25 miles south of FM 693/US 83 Intersection, 300 feet; Pinto Creek 2 miles north of FM 693/US 83 intersection, 1,600 feet; and Pinto Creek 2.75 miles north of FM 693/US 83 intersection, 800 feet. USGS maps show no buildings within 300 feet of the roadway centerline. The maps show 1 roadside park that is adjacent to the section.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

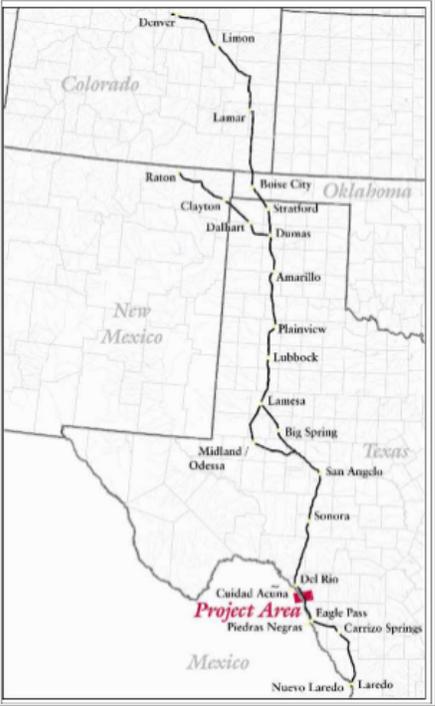
Cow Creek Bridge - \$1.2 M; Pinto Creek Bridge - \$2.5 M

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



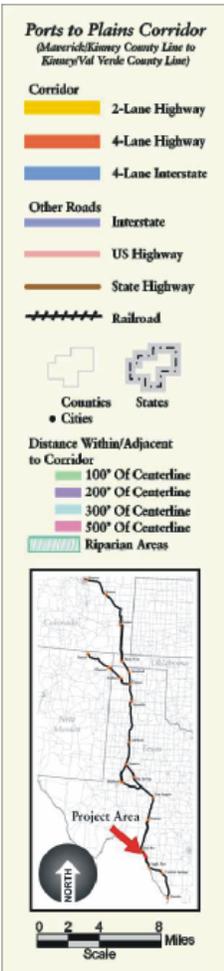
Environmental Impact Analysis

Depending on the final alignment of the ultimate 4-lane design for US 277, up to 87,120 square feet (2 acres) of palustrine wetland and 784,080 square feet (18 acres) of riverine wetland including the ecologically significant Pinto Creek could be impacted. The riparian crossings and the crossing of Pinto Creek increase the likelihood of impacting some of the protected species listed in this county. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. The team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The widening could impact one roadside park. The project team will need to work with TxDOT to avoid any encroachment to the park or mitigate impacts to it.

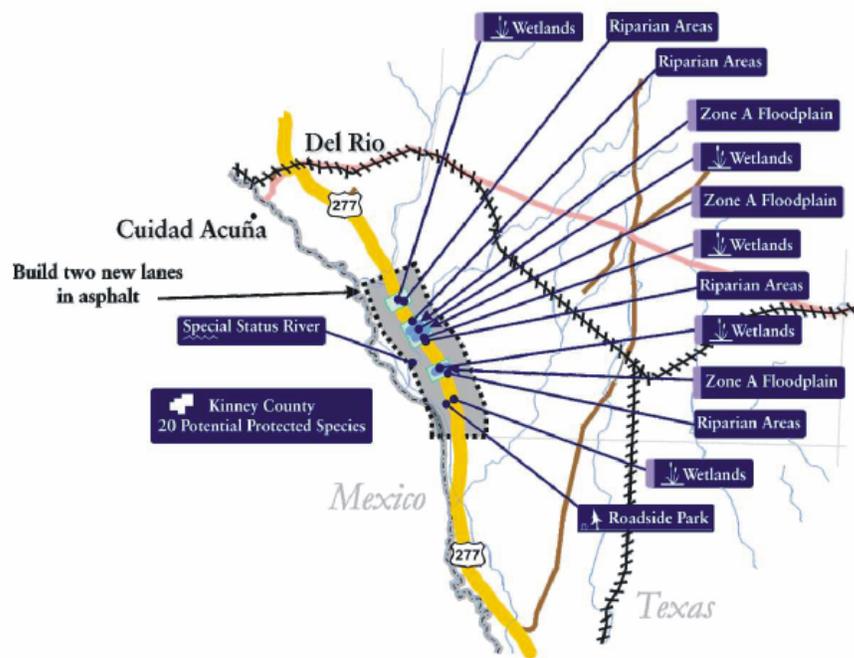
Environmental Process

The resources in this section will necessitate significant coordination with USACE, USFWS, TPWD, TxDOT, and the residents and landowners along the section. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, an EIS will be necessary.

Detailed Environmental Considerations Map



US 277 Capacity (2 new lanes)
Maverick/Kinney County Line to Kinney/Val Verde County Line



State	Texas	Facility	US 277
From	Kinney/Val Verde County Line		
To	Del Rio Relief Route		
Length (Miles)	8	Priority Group	1, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	6.7	Existing Total	2,750
ROW + Utility Cost	0.8	Existing Truck	800
Total Cost	23.0	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,770
Condition	Poor	2030 Trucks	1,510

Environmental Baseline

This 8-mile section is within the Elm-Sycamore watershed. The NW1 maps show 9 wetlands that are within 200 feet of the centerline of US 277. This section crosses Sycamore Creek, which is designated by TPWD as an Ecologically Significant River and Stream Segment. The Proserpine Shiner, Rio Grande Darter and Devils River Minnow, all known to inhabit Sycamore Creek, are among the 27 federal and state protected species listed in Val Verde County that could inhabit the area. The corridor crosses three mapped Zone A floodplains. The creeks and floodplain-crossing distances include Sycamore Creek at the Kinney/Val Verde county line, 1,200 feet; an unnamed drainage 1.25 miles south of Route 317/US 83 intersection, 1,200 feet; and Zorro Creek 1 mile north of Route 317/US 83 intersection, 400 feet. USGS maps show no buildings within 300 feet of the roadway centerline. However, the maps also show 1 park that is adjacent to this section.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

Sycamore Creek Bridge - \$6.7 M

ITS Site Specific Features

NA

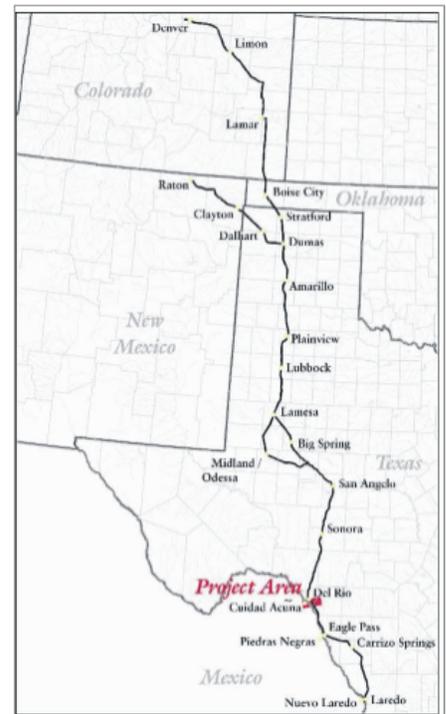
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



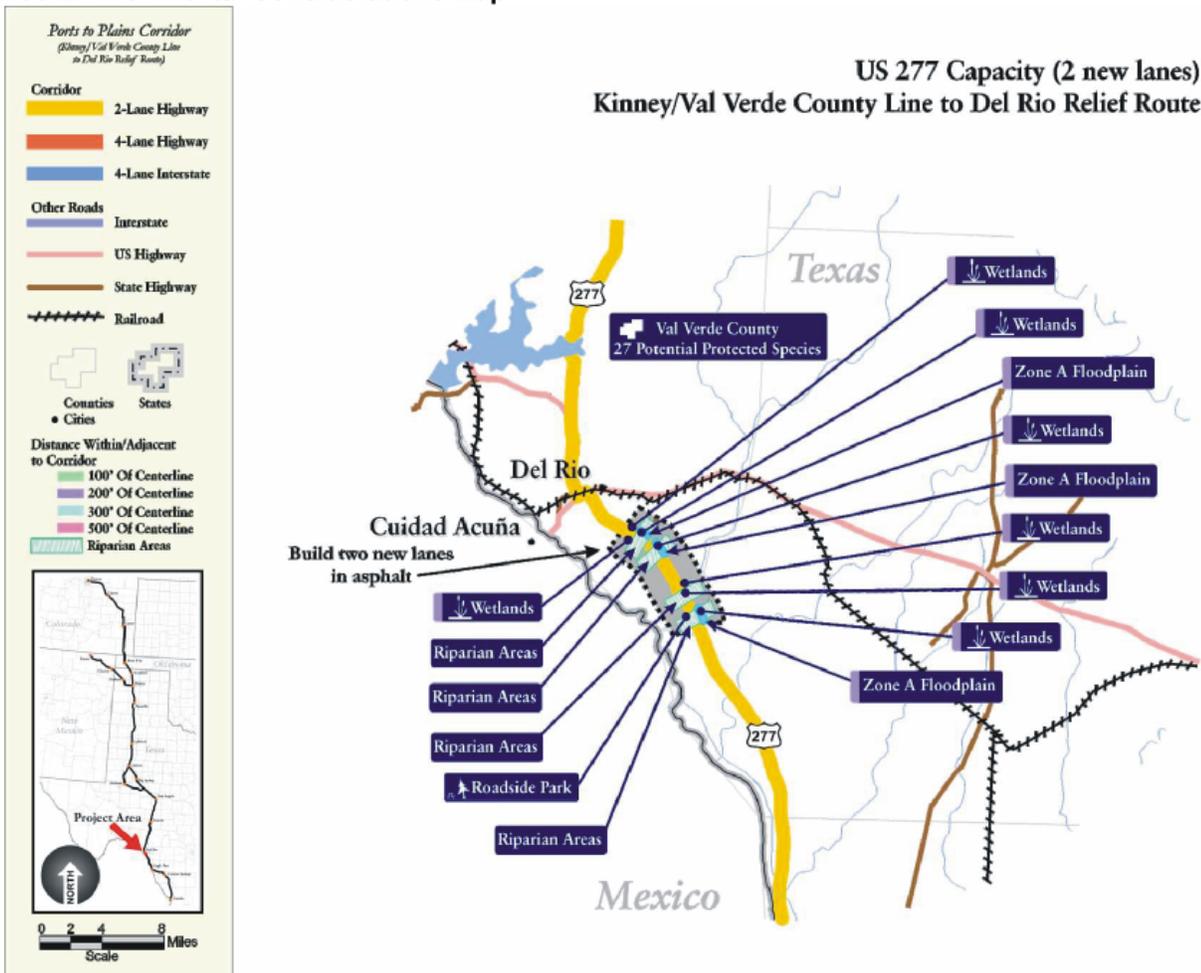
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 277, up to 609,840 square feet (14 acres) of riverine wetlands, including 4 creeks with riparian habitat, and up to 174,240 square feet (4 acres) of palustrine wetlands could be impacted. The creek crossings also include Sycamore Creek, which significantly increases the likelihood of encountering wildlife, especially protected aquatic species associated with this creek. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and their wildlife. The team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The project team will need to work with TxDOT to avoid encroachment to the roadside park or mitigate impacts to it.

Environmental Process

The resources in this section will require coordination with the USACE, USFWS, TPWD, TxDOT, and the residents and landowners along the section. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Del Rio Relief Route		
To	Val Verde/Edwards County Line		
Length (Miles)	55	Priority Group	4, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost	25.6	Existing Total	850
ROW + Utility Cost	4.8	Existing Truck	430
Total Cost	189.9	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	4,220
Condition	Good	2030 Trucks	1,090

Environmental Baseline

This 55-mile section is within the Elm-Sycamore, Lower Devils, and Dry Devils watersheds. The section is parallel to Dry Devils River for more than 11 miles and comes within 200 feet of the river for a distance of at least 5,600 feet. It is also parallel to Vinagrone Draw for over 1 mile and adjacent to it for 600 feet. Bucktrap Draw is parallel to this section for 1.5 miles, with 1,700 feet of the draw within 200 feet of the centerline. Miers Draw and the section are parallel for 7.5 miles, and less than 200 feet apart for a distance of 500 feet. This section also crosses the Amistad Reservoir, which is part of the Amistad National Recreation Area, administered by the National Park Service. Amistad National Recreation Area supports great biodiversity due to its location at the juncture of 3 Texas eco-regions. These wetlands, rivers, creeks and the reservoir provide substantial habitat for up to 27 federal and state protected species that are listed in Val Verde County. USGS maps show 1 building that is within 300 feet of the roadway centerline. This section crosses several FEMA-mapped Zone A floodplains. The floodplains and distance crossed are San Felipe Creek 2.5 miles northeast of the City of Del Rio, 400 -1,600 feet; Amistad Reservoir National Recreation Area 5 miles north of the City of Del Rio, 2,000 feet; an unnamed drainage 1 mile north and south of the Road No. 2/US 277 intersection, 5 floodplains ranging from 200 to 1,200 feet; Carruthers Creek 3 miles north of the US 377/US 277 intersection, 800 feet; Miers Creek and Chaney Creek 3 miles north of the US 377/US 277 intersection parallels US 277 for 6-7 miles creating large areas; Dry Devils River tributary 2 miles north of Loma Alta, 4,200 feet; Dry Devils River 5 miles north of Loma Alta, 8,450 feet; and Dry Devils River 0.5 mile east of Val Verde/Edwards county line, 300 feet.

Description

Expansion from 2-lane to 4-lane divided. Flat and aggressive terrain, reconstruction of existing lanes and construction of new lanes.

Structural

Carruthers Draw Bridge - \$0.7 M:Red Bluff Creek Bridge - \$3.5 M:Chaney Creek Bridge - \$0.8 M:Vinagrone Creek Bridge - \$1.6 M:Mail Trail Creek Relief Bridge - \$1.3 M:Mail Trail Creek Bridge - \$4.5 M: Buffalo Creek - \$7.6M: Amistad Reservoir Bridge - \$5.5M

ITS Site Specific Features	ITS Features Per Mile
1 DMS on US 277 SB	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



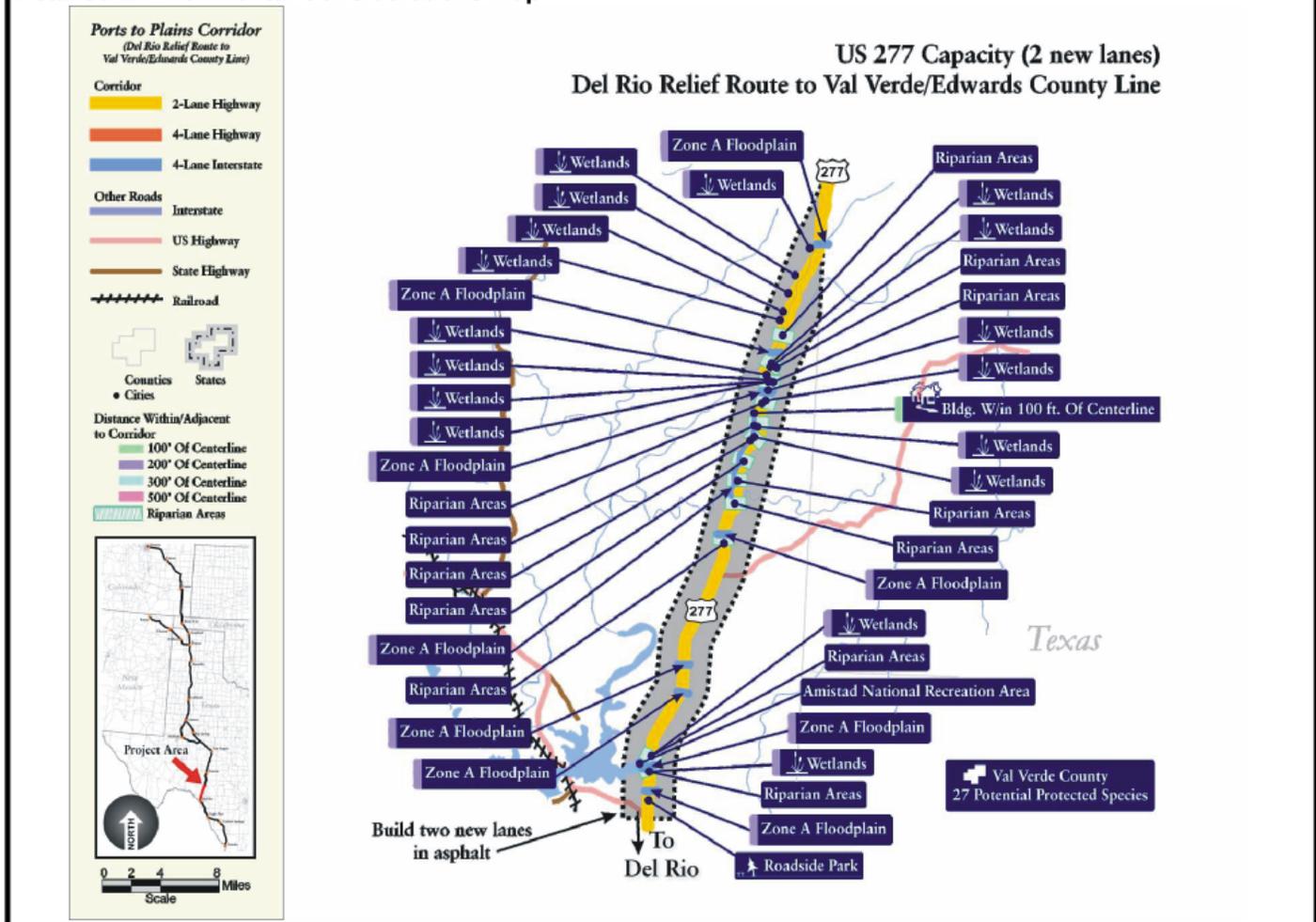
Environmental Impact Analysis

Depending on the final alignment of US 277, up to 87,120 square feet (2 acres) of palustrine wetlands and up to 958,320 square feet (22 acres) of riverine wetlands could be impacted. The project team will need to work with the USACE to delineate the wetlands and develop avoidance and mitigation plans. Eleven riparian areas and the presence of the Amistad reservoir increase the likelihood of encountering some of the protected species listed in Val Verde County. At the Amistad National Recreation Area, a new 2-lane bridge will need to be built parallel to the existing bridge. Expected impacts include increased traffic over the lake and construction impacts such as noise (which might disturb wildlife), and potential erosion that might affect the runoff into the reservoir. The project team must coordinate with the National Park Service, USACE, USFWS and TPWD to develop a mitigation plan to reduce or eliminate impacts to the water resources and their wildlife not only during development and construction of the project, but for the long-term operations and maintenance of the facilities (Note that USFWS may require Section 7 compliance). Best management practices will need to be used to avoid or minimize impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The project team will need to coordinate with the USACE and FEMA to develop floodplain hydraulic studies and avoidance and mitigation measures at the extensive floodplain areas of this section. The project team will need to coordinate with TxDOT to avoid encroachment to the parks or to mitigate the impacts.

Environmental Process

The resources, in this section will necessitate coordination with USACE, FEMA, USFWS, TPWD, the National Park Service, TxDOT, and residents and landowners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EIS would be the most probable NEPA process.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Val Verde/Edwards County Line		
To	Edwards/Sutton County Line		
Length (Miles)	10	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost	2.3	Existing Total	850
ROW + Utility Cost	0.7	Existing Truck	430
Total Cost	36.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	4,130
Condition	Good	2030 Trucks	770

Environmental Baseline

This 10-mile section is within the Upper Devils and Dry Devils watersheds. NWI maps show that wetlands include a crossing of Dry Devils River, but the most significant wetlands are along a tributary of this river that parallels the section for 3 miles. The tributary approaches within 200 feet of the centerline 4 times, for a total proximate distance of 1,600 feet. The Dry Devils River provides riparian habitat, and up to 13 federal and state protected species that are listed in Edwards County could be present along this section of the corridor. The river and its unnamed tributary have extensive areas of Zone A floodplains, with an aggregate width of 6,500 feet split among 7 zones. USGS maps show no buildings within 300 feet of the roadway centerline, but 1 roadside park is adjacent to the section.

Description

Expansion from 2-lane to 4-lane divided. Flat and aggressive terrain, reconstruction of existing lanes and construction of new lanes.

Structural

Dry Devils River Bridge - \$1.6 M; Dry Devils River Relief Bridge - \$0.7 M

ITS Site Specific Features

NA

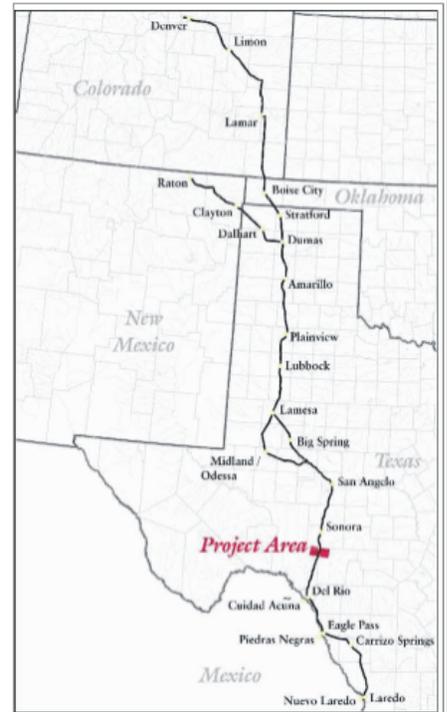
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Impact Analysis

Depending on the final alignment of the ultimate 4-lane US 277 through this complex section, up to 43,560 square feet (1 acre) of palustrine wetlands and 522,720 square feet (12 acres) of riverine wetlands could be impacted. The project team will need to work with the USACE to delineate the wetlands and develop avoidance and mitigation plans, and with USACE and FEMA to maintain to plan all drainage and floodplain crossing structures. The project team will also need to coordinate with the USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and their wildlife. Best management practices will need to be employed to ameliorate or mitigate impacts to water resources and wildlife during construction and long-term maintenance of the facilities. The project team will need to coordinate with TxDOT to avoid encroachment to the park or mitigate any impacts.

Environmental Process

The resources in this section will necessitate coordination with USACE, FEMA, USFWS, TPWD, TxDOT, and residents and landowners along the section. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, an EIS will be necessary.

Detailed Environmental Considerations Map

Ports to Plains Corridor
(Val Verde/Edwards County Line to Edwards/Sutton County Line)

Corridor

- 2-Lane Highway
- 4-Lane Highway
- 4-Lane Interstate

Other Roads

- Interstate
- US Highway
- State Highway
- Railroad

Counties (States)

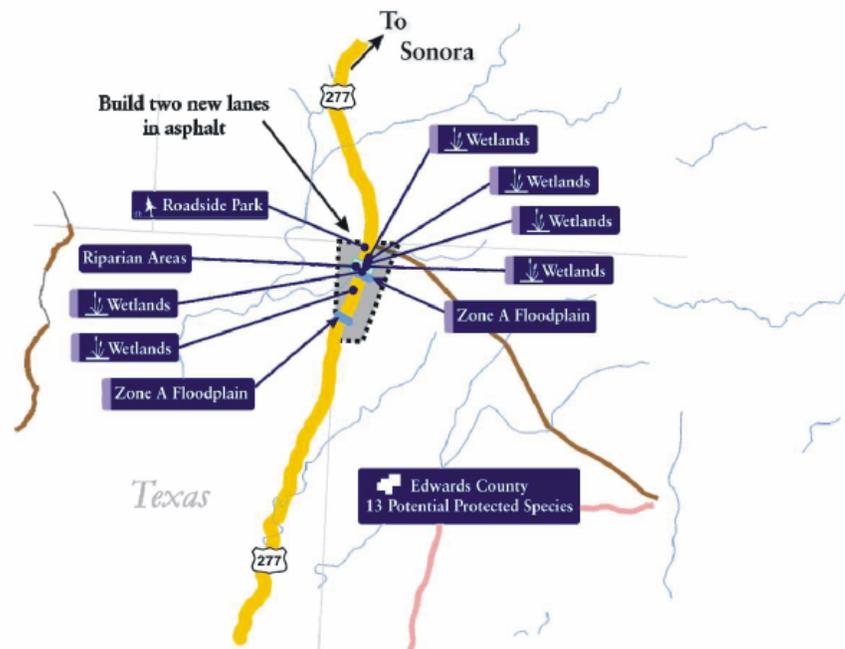
Cities

Distance Within/Adjacent to Corridor

- 100' Of Centerline
- 200' Of Centerline
- 300' Of Centerline
- 500' Of Centerline
- Riparian Areas

Scale: 0 2 4 8 Miles

US 277 Capacity (2 new lanes) Val Verde/Edwards County Line to Edwards/Sutton County Line



State	Texas	Facility	US 277
From	Edwards/Sutton County Line		
To	Sonora Relief Route		
Length (Miles)	20	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost	9.9	Existing Total	1,150
ROW + Utility Cost	1.3	Existing Truck	560
Total Cost	74.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	4,730
Condition	Fair	2030 Trucks	1,030

Environmental Baseline

This 20-mile section is within the Upper Devils watershed. The NW1 maps show 8 wetlands, including 3 river/creek crossings. Four riparian crossings provide habitat for up to 12 federal and state protected species listed for Sutton County. Mapped Zone A floodplains and the number of feet this section crosses are Cauthorn Draw 2.25 and 2.5 miles north of the Sutton/Edwards county line, 200 to 600 feet; Cauthorn Draw 0.5 miles south of the 189/US 277, 200 to 600 feet; Cauthorn Draw 2 miles north of the 189/US 277, 200 to 600 feet; Cusenbary Draw at the intersection of Cusenbary Road/US 277, 5,280 feet; Dry Devils River 1 mile north of Old Juno Road/US 277, 2,200 feet; Dry Devils River 2.5 miles north of Old Juno Road/US 277, 1,600 feet; Dry Devils River 4 miles north of Old Juno Road/US 277, 6,600 feet; and Dry Devils River 2 miles south of City of Sonora, 5,280 feet. USGS maps show that this section crosses 7 pipelines and its centerline is within 100 feet of 1 building 1¼ miles south of Sonora. USGS maps also show 6 buildings within 300 feet of the roadway centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat and aggressive terrain, reconstruction of existing lanes and construction of new lanes.

Structural

Cauthorn Draw No. 2 Bridge - \$1.2 M; Cauthorn Draw No. 1 Bridge - \$1.3 M; East Fork Devils River Bridge - \$2.5 M; Dry Devils River Bridge - \$2.7 M; Sawyers Draw Bridge - \$0.7 M; Shurley Draw Bridge - \$0.5 M; Ward Draw Bridge - \$1.0 M

ITS Site Specific Features	ITS Features Per Mile
1 DMS on US 277 NB	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



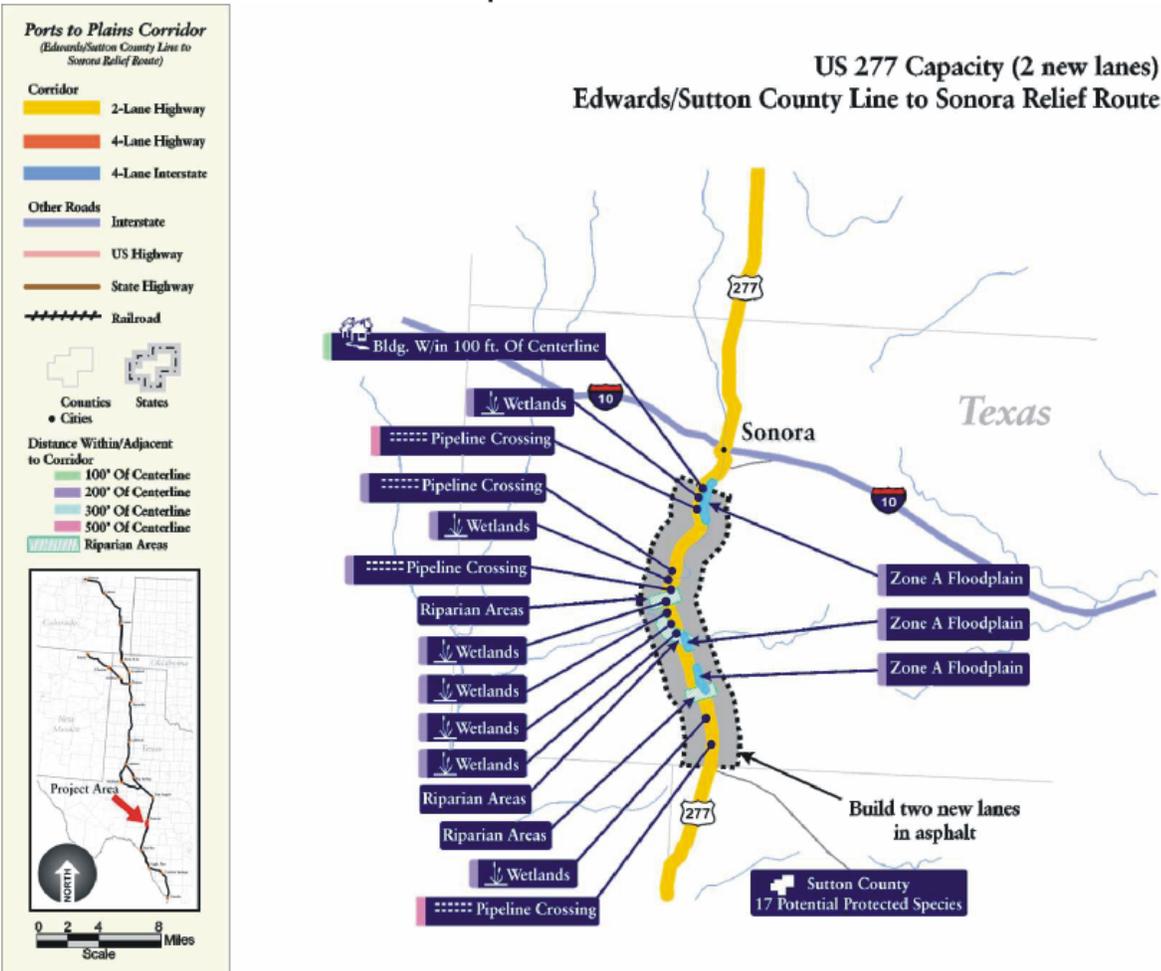
Environmental Impact Analysis

This section is dominated by several floodplain crossings, especially the Dry Devils River. The project team will need to coordinate with the USACE and FEMA to develop floodplain hydraulic studies, plan and design new drainage structures and crossings, and implement avoidance and mitigation measures. Depending on the final design of the 4-lane US 277, up to 217,800 square feet (5 acres) of palustrine wetlands and 130,680 square feet (3 acres) of riverine wetlands could be impacted. The project team will need to coordinate with the USACE, USFWS and TPWD to avoid or minimize impacts to water and wildlife resources at creeks, rivers and riparian areas. To prevent damage and spills at the 7 cross pipelines, the project team will need to coordinate with the Natural Gas Transmission Division of the Railroad Commission of Texas to identify pipeline owner and design pipeline crossings. Best management practices will need to be used to prevent or ameliorate impacts to all resources and the pipelines during construction and long-term maintenance of the facilities.

Environmental Process

The resources in this section will necessitate coordination with USACE, USFWS, TPWD, the Railroad Commission of Texas, and residents and landowners along the section. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Sonora Relief Route		
To	Sutton/Schleicher County Line		
Length (Miles)	8	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost	1.1	Existing Total	2,350
ROW + Utility Cost	1.2	Existing Truck	660
Total Cost	23.1	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,170
Condition	Good	2030 Trucks	1,230

Environmental Baseline

This 8-mile section is within the Upper Devils watershed. While NWI maps show no wetlands within 200 feet of the centerline, the section crosses Meckel Creek, which has riparian habitat. Up to 12 federal and state protected species that are listed in Sutton County could be present in this area. FEMA has not mapped floodplains along this section. USGS maps show that the section crosses 1 pipeline and 1 building is within 100 feet of the roadway center line. The same building is the only one r within 300 feet of the roadway centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat and aggressive terrain, reconstruction of existing lanes and construction of new lanes.

Structural

Meckel Draw Bridge - \$1.1 M

ITS Site Specific Features

Periodic upgrades at 1 traffic signal, and 1 DMS on US 277 SB

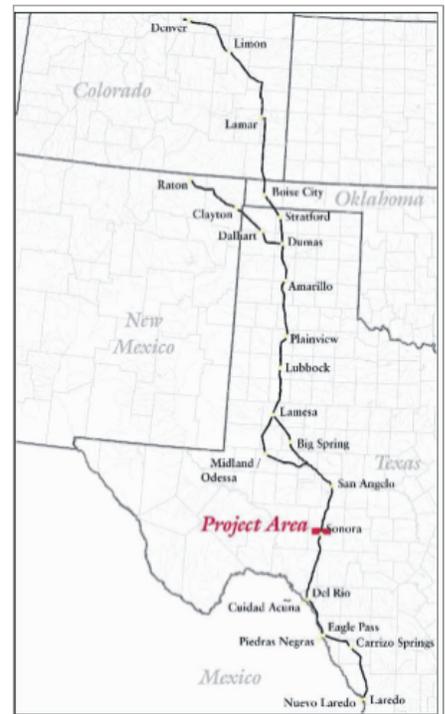
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



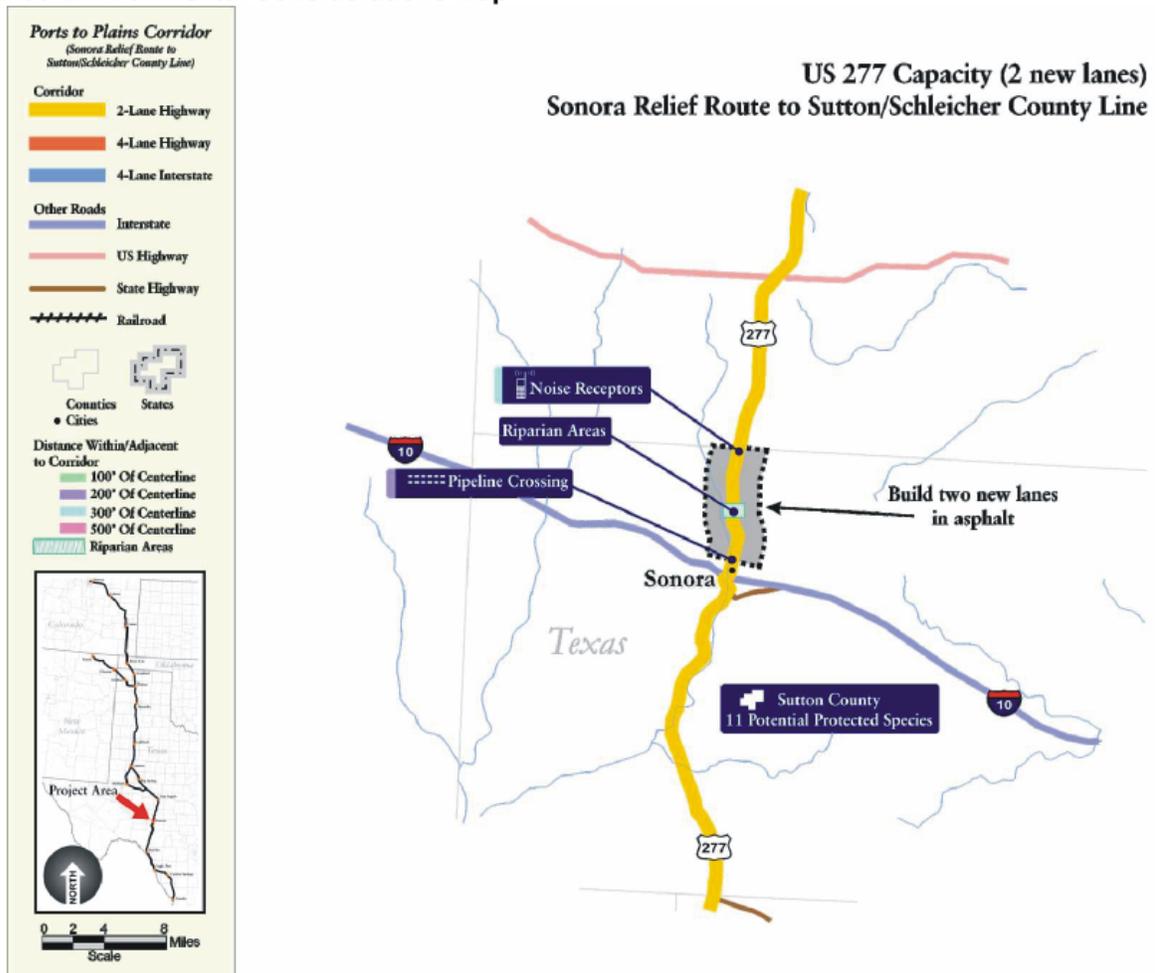
Environmental Impact Analysis

While no floodplains have been mapped, the project team will need to coordinate with USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures for crossed floodplains, if necessary. The project team will also need to coordinate with USACE, USFWS and TPWD to ensure that NWI and USGS maps are correct with regard to water resources and to avoid or minimize any wildlife impacts. To prevent damage and spills, the project team will need to coordinate with the Natural Gas Transmission and Crude Oil & Natural Gas divisions of the Railroad Commission of Texas to identify pipeline owner and design pipeline crossings. Best management practices will need to be used to ameliorate or mitigate impacts during construction and long-term maintenance of the facilities.

Environmental Process

The resources in this section will necessitate coordination with USACE, FEMA, USFWS, TPWD, TxDOT, the THC, the Railroad Commission of Texas, and residents and landowners along the section. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EA would be the most probable NEPA process. If no unavoidable impacts are found during scoping, a CE should be considered.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Sutton/Schleicher County Line		
To	Schleicher/Tom Green County Line		
Length (Miles)	30	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost	3.2	Existing Total	2,550
ROW + Utility Cost	4.5	Existing Truck	740
Total Cost	85.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	5,840
Condition	Good	2030 Trucks	1,300

Environmental Baseline

This 30-mile section is within the South Concho and Upper Devils watersheds and passes through the town of Eldorado. NWI maps show 2 wetlands within 200 feet of the centerline of US 277. Five riparian areas are crossed. These areas provide habitat where up to 13 federal and state protected species listed in Schleicher County could be present. FEMA has not mapped floodplains in this area. According to the previous Ports to Plains Feasibility Study, Schleicher County is known to have among the highest densities of archaeological sites in Texas, especially in areas along water crossings. The Mittel archaeological site (41SL15 and National Register of Historic Places Site--#89002278) is located within 500 feet of the centerline of US 277. This site is important for its information potential and for domestic and funerary artifacts. The site is on private land being used for agriculture. Site 41SL17, near El Dorado, is also within 500 feet of the US 277 centerline. Other sites exist in the vicinity, including a cluster of sites north of Eldorado. The Schleicher County Courthouse (Historic Texas Courthouse) is located at the intersection of US 190/US 277 in Eldorado. This active courthouse is a 1924 classical revival building that received Registered Texas Historic Landmark status in 1991. Other public facilities adjacent to the section are a school, 4 churches, a roadside park, and school athletic fields south of Eldorado. USGS maps show that as many as 63 buildings in Eldorado are within 100 feet from the centerline of US 277. These are among the 176 buildings that are within 300 feet of the roadway centerline. USGS maps also show that the section crosses 3 and 2 pipelines south and north of Eldorado respectively. It also comes within 300 feet of 2 pumping stations. The Neva West Oil and Gas Field is west of US 277, the Huldale Oil Field is east of US 277, and the Eldorado Canyon Gas Field is west of US 277. Two Leaking Petroleum Storage Tank (LPST) sites are located on US 277 in Eldorado. Both cases are closed.

Description

Expansion from 2-lane to 4-lane divided. Flat and aggressive terrain, reconstruction of existing lanes and construction of new lanes.

Structural

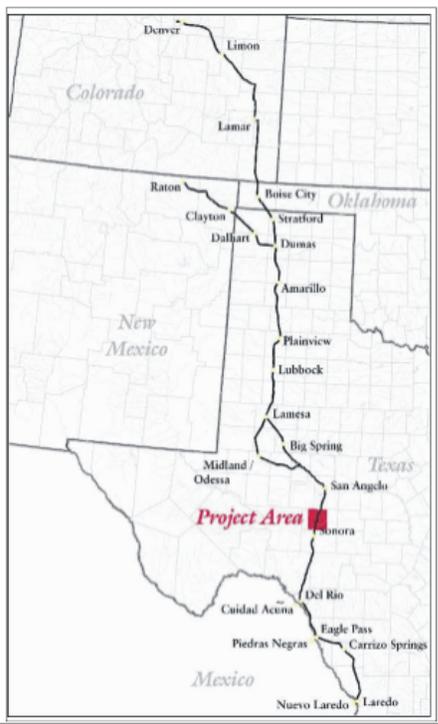
Finnegan Draw Bridge - \$1.2 M: Meador Draw Bridge - \$0.7 M: Indian Draw Bridge - \$1.4 M

ITS Site Specific Features	ITS Features Per Mile
Upgrades at 2 school flashers	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



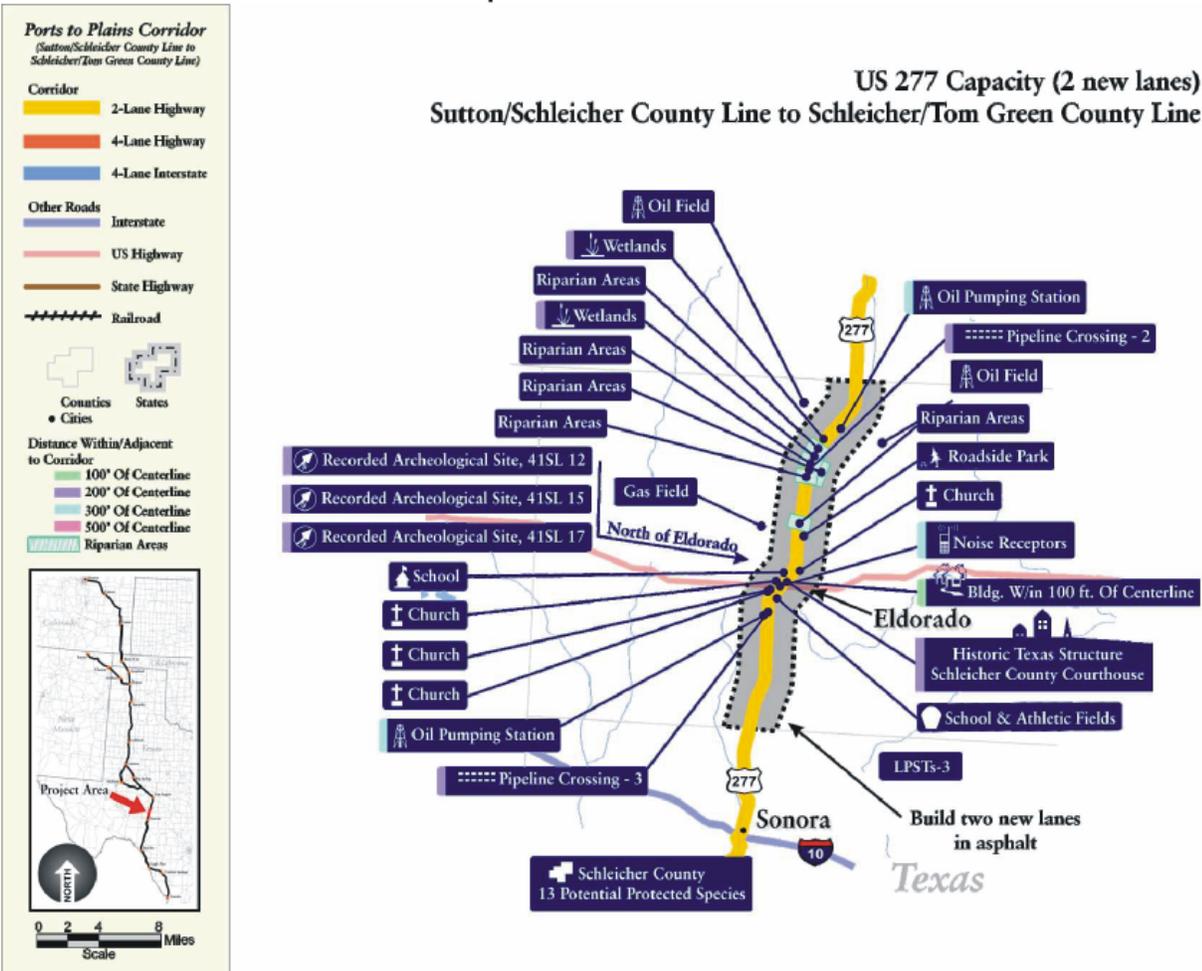
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 277, up to 43,560 square feet (1 acre) of palustrine wetland, 43,560 square feet (1 acre) of riverine wetland and 5 creeks with riparian habitat could be impacted. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains have been mapped, the project team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures, if necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. A cultural resources investigation plan will need to be developed in consultation with the State Historical Preservation Office (SHPO) of the THC, particularly in the vicinity of the identified archaeological sites and the Schleicher County Courthouse. The need for mitigation of adverse impacts on archaeological and historic resources will then need to be decided and planned in consultation with the SHPO of the THC. If necessary, proximity impacts and potential mitigations will need to be coordinated with the agencies responsible for the athletic fields south of Eldorado, and suitable measures will need to be taken to avoid or mitigate potential liability associated with the 2 LPST sites. With regard to the oil and gas well sites, pipeline crossings and oil/gas field crossings, the project team will need to work with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas to determine ownership. The team will then need to work with agency staff and the owner, and use best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities. The existing roadway through Eldorado will be restriped to a 5-lane configuration rather than widened, decreasing the likelihood that relocations will occur in this city. However, if any relocation is necessary, a detailed relocation plan will need to be developed to ensure that the orderly relocation of all displaced persons is both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the TPWD, the THC, TxDOT, TCEQ, USACE, FEMA, USFWS, the Railroad Commission of Texas and the town government of Eldorado, and with residents and property owners along the segment. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EIS would be the most probable NEPA process.

Detailed Environmental Considerations Map



State	Texas	Facility	US 277
From	Schleicher/Tom Green County Line		
To	San Angelo Relief Route		
Length (Miles)	22	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost	11.3	Existing Total	2,550
ROW + Utility Cost	3.3	Existing Truck	740
Total Cost	77.8	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	5,840
Condition	Good	2030 Trucks	1,300

Environmental Baseline

This 22-mile section is within the South Concho watershed. Eleven wetlands were identified on NWI maps within 200 feet of the US 277 centerline; 5 of these are river/creek crossings. The section crosses 4 riparian areas, including a portion of the South Concho River that the TPWD has designated an Ecologically Significant River/Stream Segment. These wetlands, rivers, creeks and riparian areas provide habitat for up to 14 federal and state protected species listed in Tom Green County. The Concho River is home to the protected Concho water snake. No floodplains have been mapped in this section. According to the Ports to Plains Feasibility Study, Tom Green County is in an area known for a high density of archaeological sites, particularly in the vicinity of the South Concho River and its tributary draws. Four known archaeological sites lie within the corridor, and Site 41TG76, is within 1,000 feet of the section's centerline. Any crossings of the South Concho River have a high probability of additional archaeological sites. USGS maps show the DeLong Cemetery, north of Christoval, to be adjacent to the section. USGS maps also show 29 buildings in Christoval, about evenly split between commercial and residential uses, and 6 other buildings north and south of the town are within 100 feet of the US 277 centerline. Fifty-four buildings in Christoval are within 300 feet of the US 277 centerline, including the 29 buildings above; another 3 are north of Christoval and 13 are south of Christoval. USGS maps also show 2 parks and a rodeo ground near Christoval adjacent to US 277. US 277 through Christoval already has 4 lanes, but it is important to note that the TCEQ LPST database lists 2 LPST sites adjacent to US 277 in Christoval (cases closed 1998 and 2002). USGS maps show that this section is also adjacent to the HJ Oil and Gas Field, crosses 2 pipelines and comes within 350 feet of an oil well.

Description

Expansion from 2-lane to 4-lane divided. Flat and aggressive terrain, reconstruction of existing lanes and construction of new lanes.

Structural

Bois D'Arc Draw - \$1.4 M:N Relief Bois D'Arc Draw - \$0.3 M:Draw Bridge - \$0.3 M:South Concho River Bridge - \$7.6 M:Pecan Creek Bridge - \$1.6 M

ITS Site Specific Features

NA

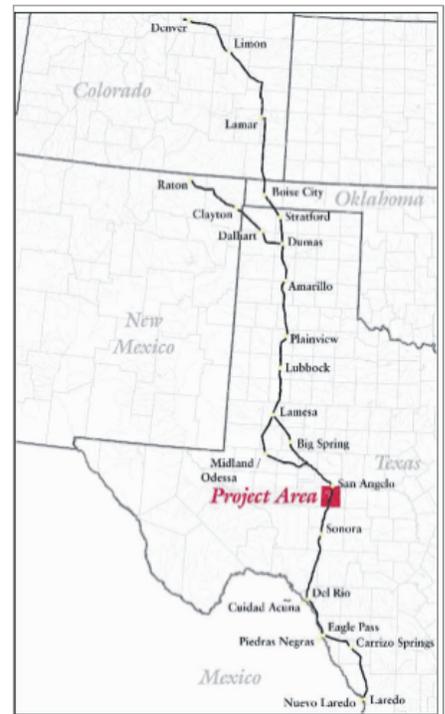
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



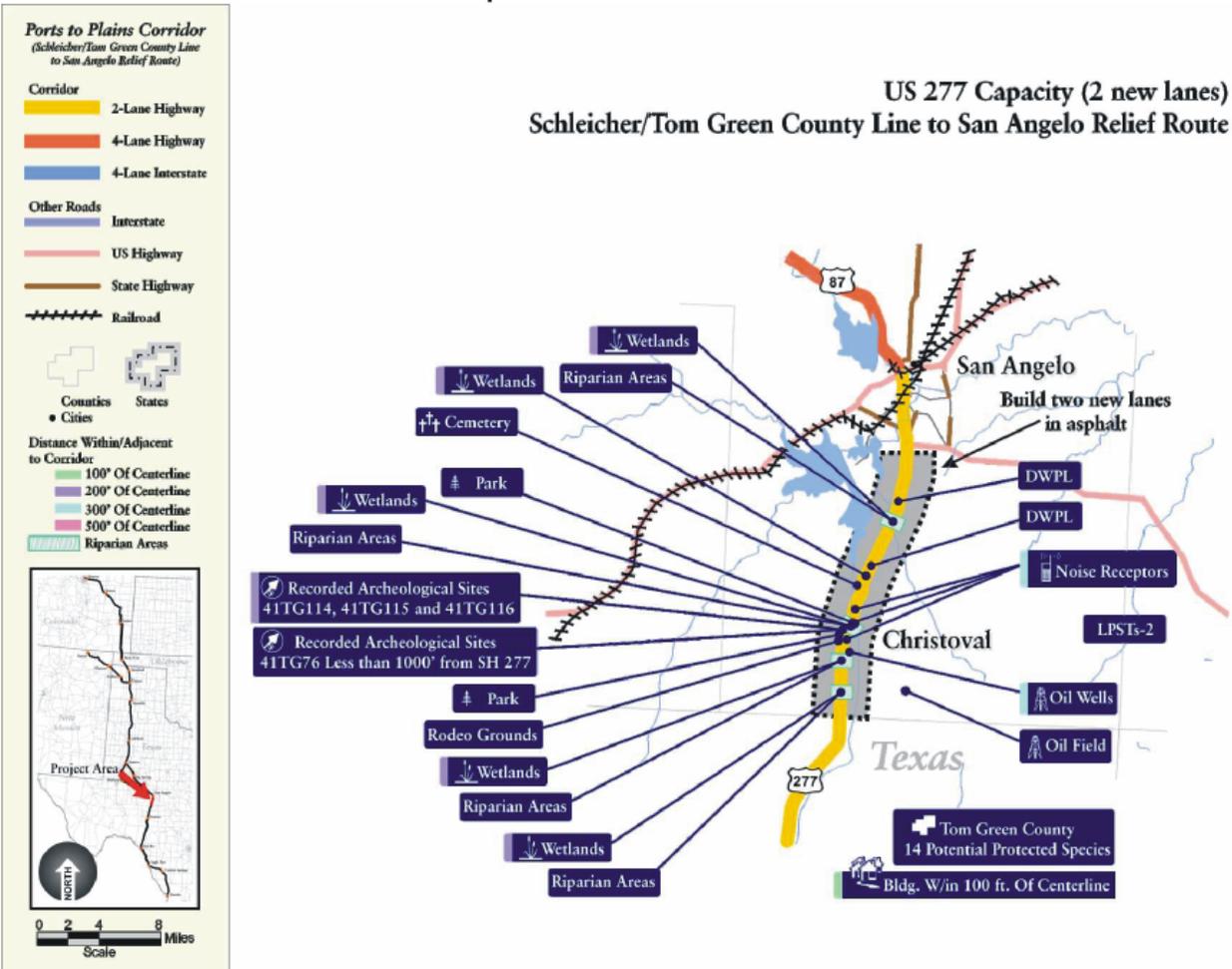
Environmental Impact Analysis

Depending on the ultimate 4-lane design of US 277, up to 174,240 square feet (4 acres) of palustrine wetlands and 130,680 square feet (3 acres) of riverine wetlands could be impacted. The project team will need to coordinate with the USACE to avoid and/or mitigate any impacts to these resources. The South Concho River is an Ecologically Unique River and Stream Segment, and the roadway designers will need to coordinate with the USFWS and TPWD to ensure that the river and species associated with it are not harmed. The project team will also need to work with the USFWS and the TPWD to identify local habitats, if any, of the protected species of this county, and to design mitigation strategies. While no floodplains are mapped in this section, the project team will need to work with USACE and FEMA to plan and design any drainage structures and crossings. A cultural resources investigation plan and the need for mitigation of adverse impacts on historic and archaeological resources will need to be developed in consultation with the State Preservation Office of the THC. Proximity impacts and potential mitigations will need to be coordinated with the agencies responsible for the parks and rodeo grounds in Christoval. The appropriate coordination will need to be done in regard to the LPST sites, oil and gas well sites, and pipeline crossings to avoid or mitigate potential liability associated with contaminated properties. The pre-existence of 4 lanes through Christoval decreases the likelihood that relocations will occur. However, if any relocation is necessary, a detailed plan will need to be developed to ensure that it is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. Best management practices will need to be implemented to control erosion, sedimentation, and storm water runoff in conformance with state and local requirements during construction and long-term maintenance of the facilities, and to prevent any contamination and spills during construction and long-term maintenance of the facilities.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the TPWD, USACE, FEMA, USFWS, THC, TxDOT, TCEQ, and town government of Christoval, and with residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. However, at this time it appears that an EIS would be the most probable NEPA process.

Detailed Environmental Considerations Map



State	Texas	Facility	SH 158
From	Sterling City		
To	Sterling/Glasscock County Line		
Length (Miles)	14	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	1.8	Existing Total	2,350
ROW + Utility Cost	1.5	Existing Truck	740
Total Cost	30.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	4,910
Condition	Fair	2030 Trucks	1,270

Environmental Baseline

This 14-mile section is within the North Concho watershed. The NW1 maps show 3 wetlands within 200 feet of the SH 158 centerline. Riparian habitats at the crossings of 2 creeks increase the likelihood of impacting up to 8 federal and state protected species listed for Sterling County. FEMA has not mapped floodplains in this area, but the USGS gauge at Sterling City for the North Concho River indicates peak flows above 15,000 cubic feet per second (CFS). Peak flows of 15,000 CFS are fairly significant indicating a large floodplain or deep channel. The Sterling County Courthouse, built by the Works Progress Administration (WPA) in 1938, is located on US 87 (same alignment as SH 158 and 163) in Sterling City and is listed among the Historic Texas Courthouses (ID 459). This is an active courthouse designed in the Moderne style. USGS maps show that as many as 67 buildings in Sterling City are within 300 feet of the centerline (potential noise receptors), and of those 35 buildings are within 100 feet of the centerline (95 percent commercial buildings). USGS maps also show that a roadside park, a city park, a hospital, 2 churches, and a rodeo ground are adjacent to this section. USGS maps also show that this section crosses 2 pipelines and is adjacent to the Parochial Bade Oil Field. Four LPST sites (3 closed, 1 active) are located on US 87/SH 158 in Sterling City.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

North Concho River Bridge - \$1.8 M

ITS Site Specific Features

Periodic upgrades at 2 traffic signals and upgrades at 2 school flashers

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 87 (same alignment as SH 158 and 163), up to 174,240 square feet (4 acres) of palustrine wetland, 174,240 square feet (4 acres) of riverine wetland and 2 creeks with riparian habitat could be impacted. The project team will need to work with the USACE, USFWS, and the TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. No FEMA mapping has been done on the floodplain of the North Concho River at Sterling City, but its peak flows indicate that further floodplain analysis may be required and will most likely require a bridge. The project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings, and mitigation measures as necessary. The State Historical Preservation Office of the THC will need to be consulted regarding any potentially adverse impacts to the Sterling County Courthouse and any need for mitigation. The project team will need to coordinate with the agencies responsible for the roadside park, the city park, churches and rodeo ground in Sterling City and TxDOT to avoid encroachment to the facilities or mitigate any proximity or direct impacts. The appropriate coordination will need to be done in regard to the LPST sites to avoid or mitigate potential liability associated with contaminated properties. The project team will need to work with the Railroad Commission of Texas to address the pipeline and oil field crossings, and work with agency staff and the owner. The existing roadway through Sterling City will be restriped to a 5-lane configuration, decreasing the likelihood of relocations in Sterling City. However, if any relocation is necessary, a detailed relocation plan will need to be developed to ensure relocation is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. Best management practices will need to be used to avoid or ameliorate impacts to water, wildlife and cultural resources and to prevent any contamination and spills during construction and long-term maintenance of the facilities.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the USACE, FEMA, USFWS, TPWD, TCEQ, THC, TxDOT, Railroad Commission of Texas and town government of Sterling City, and with residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map

Ports to Plains Corridor
(Sterling City to Sterling/Glasscock County Line)

Corridor

- 2-Lane Highway
- 4-Lane Highway
- 4-Lane Interstate

Other Roads

- Interstate
- US Highway
- State Highway
- Railroad

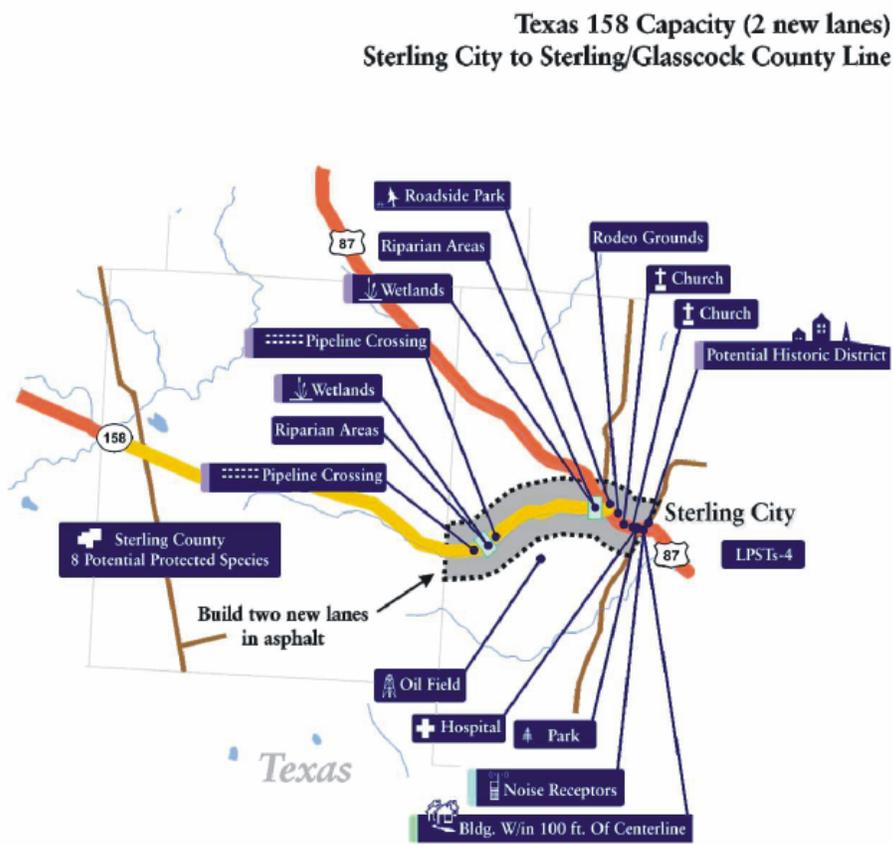
Counties **States**

- Cities

Distance Within/Adjacent to Corridor

- 100' Of Centerline
- 200' Of Centerline
- 300' Of Centerline
- 500' Of Centerline
- Riparian Areas

Scale: 0 2 4 8 Miles



State	Texas	Facility	SH 158
From	Sterling/Glasscock County Line		
To	Glasscock/Midland County Line		
Length (Miles)	30	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,300
ROW + Utility Cost	3.1	Existing Truck	740
Total Cost	59.5	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	4,910
Condition	Fair	2030 Trucks	1,270

Environmental Baseline

This section is 30 miles long and within the Johnson Draw, Mustang Draw, Middle Concho, and North Concho watersheds. The NWI maps show 11 wetlands, including 1 creek crossing, within 200 feet of the SH 158 centerline. Up to 8 federal and state protected species listed in Glasscock County could be present, especially along the 4 riparian crossings. The only FEMA-mapped Zone A floodplain in this section is located at Monahans Draw, 11 miles east of Midland. The corridor crossing will be 750 feet wide. USGS maps show that this section crosses 4 pipelines. The TCEQ lists 2 closed LPST sites along the section in Garden City. USGS maps also show 31 buildings are within 300 feet of the SH 158 centerline including 17 buildings (95 percent commercial uses) that are within 100 feet of the SH 158 centerline. Most of these buildings are in Garden City. The map also shows that 2 roadside parks are adjacent to the SH 158 and the Currie Reservoir/fish hatchery is within 400 feet of this route. The Glasscock County Courthouse and Jail, listed among the Historic Texas Courthouses (Historic Marker #185, 1993) is within 1 block of SH 158 in Garden City. The original courthouse/jail was completed in 1894 (Recorded Texas Historic Landmarks ± 1962). The 2-story stone building was later used only as a jail. The current Classical Revival style Glasscock County Courthouse was built in 1909 and has been in continuous use since 1910. According to the Texas Historic Sites Atlas, it is a small building, solidly built of stone quarried from nearby hills, with walls more than 3 feet thick. The original courthouse/jail structure was replaced by a new jail in 1980.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

NA

ITS Site Specific Features

NA

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



State	Texas	Facility	SH 349
From	Midland		
To	Midland/Martin County Line		
Length (Miles)	7	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,000
ROW + Utility Cost	0.7	Existing Truck	380
Total Cost	13.7	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	2,730
Condition	Fair	2030 Trucks	530

Environmental Baseline

This 7-mile section is within the Johnson Draw watershed and passes through a 5-mile section of Midland, Texas. While the NWI maps show no wetlands within 200 feet of SH 349, up to 8 federal and state protected species listed in Midland County could be present along the corridor, especially at the riparian habitat along Midland Draw. Midland Draw is 11 miles east of Midland and has a Zone AE and Zone X floodplain about 575 feet wide. Zone AE is the flood insurance rate zones that correspond to the 100-year floodplains. Zone X is the flood insurance rate zone that corresponds to areas outside the 1-percent annual chance floodplain, areas of 1-percent annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1-percent annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1-percent annual chance flood by levees. USGS maps show that this section is adjacent to the Azalea Oil Field and crosses 4 pipelines. Nine LPST sites are located along SH 349 between SH 158 and the Midland/Martin county line, all within the City of Midland. Public buildings and facilities that adjoin SH 349 include Hogan Park, Tolbert Park, 2 schools, a church, Midland National Guard Armory and Parkview Hospital. The Valhalla Mausoleum and the Rest Haven Cemetery are also adjacent to the section. Twenty buildings are located within 300 feet of the roadway centerline, including 6 buildings that are within 100 feet of the roadway centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 18 traffic signals and upgrades at 2 school flashers

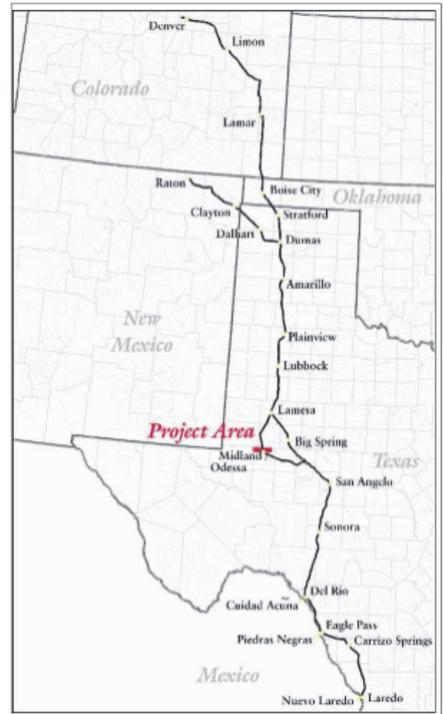
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



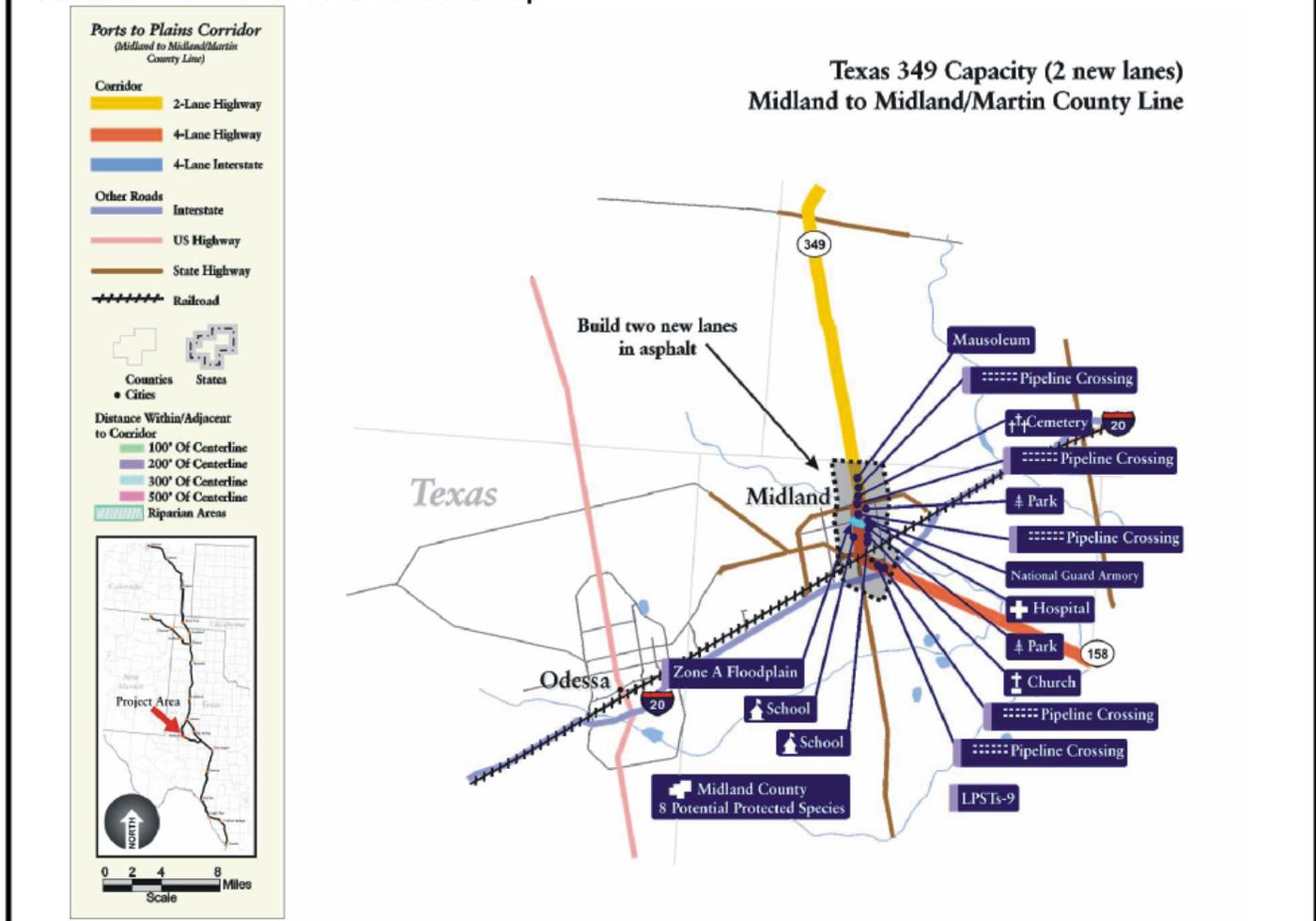
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of SH 349, 1 creek with riparian habitat could be impacted. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the habitat and its wildlife. For the Midland Draw floodplain, the team will need to coordinate with the USACE and FEMA to maintain flows and the base-flood elevations. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. This section is notable for its many built elements. The section through Midland already has 4 lanes and no widening is required, however, as this section is designed and detailed environmental studies are done, adverse impacts, if any, will need to be identified, and potential mitigations coordinated with the agencies and landowners responsible for the various facilities. No relocations are anticipated, but, if any relocation is found to be necessary, a detailed plan will need to be developed to ensure that it is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The 9 identified LPST sites will need to be addressed during detailed environmental study and engineering, to avoid or mitigate potential liability associated with contaminated properties. The project team will need to consult with the TCEQ to prepare a Hazardous Materials Management Plan, if necessary, for the use of any hazardous materials during construction. Best management practices will need to be used to prevent any contamination and spills during construction and long-term maintenance of the facilities. The project team will need to consult with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas in regard to the oil field and pipelines. The team will need to work with agency staff and the owner while using best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the USACE, FEMA, USFWS, TPWD, TCEQ, TxDOT, Railroad Commission of Texas and local government of Midland, as well as with residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	SH 349
From	Midland/Martin County Line		
To	Martin/Dawson County Line		
Length (Miles)	34	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,000
ROW + Utility Cost	3.5	Existing Truck	380
Total Cost	66.7	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	2,730
Condition	Poor	2030 Trucks	530

Environmental Baseline

This 34-mile section traverses an uninhabited area within the Sulphur Springs Draw, Mustang Draw, and Johnson Draw watersheds. NWI maps show 9 wetlands within 200 feet of the section. One has been bisected, leaving a large wetland on each side of the roadway. One riparian crossing helps provide habitat for the up to 8 federal and state protected species listed in Martin County that could be present along this section. FEMA has not mapped floodplains in this area. USGS maps show that this section is adjacent to the Breedlove and Mabee oil fields, comes within 500 feet of the Midland Pumping Station and crosses 4 pipelines. These maps also show 1 roadside park that is adjacent to the roadway, and 9 residential buildings within 300 feet of the roadway centerline, including 3 buildings within 100 feet of the centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

NA

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of SH 349, up to 392,040 square feet (9 acres) of palustrine wetlands and 1 creek with riparian habitat could be impacted. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains have been mapped, the project team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources, and to prevent flow reductions of floodplains during construction and long-term maintenance of the facilities. The project team will need to consult with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas to determine the ownership of the oil fields, pumping station and pipelines. The team will then need to work with agency staff and the owner while using best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities. At the project design level, the project team will need to coordinate with TxDOT to avoid, minimize or mitigate any encroachment to the roadside park. If during final design of this section any relocation is found to be necessary a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the USACE, TPWD, TxDOT and Railroad Commission of Texas, as well as with residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map

Ports to Plains Corridor
(Midland/Martin County Line to Martin/Dawson County Line)

Corridor

- 2-Lane Highway
- 4-Lane Highway
- 4-Lane Interstate

Other Roads

- Interstate
- US Highway
- State Highway
- Railroad

Counties **States**

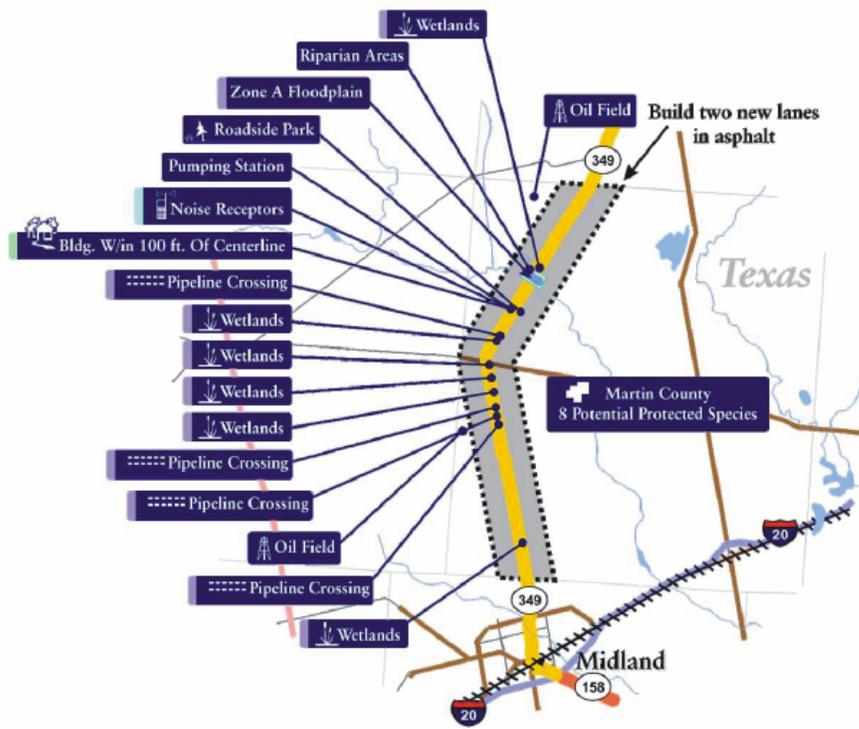
- Cities

Distance Within/Adjacent to Corridor

- 100' Of Centerline
- 200' Of Centerline
- 300' Of Centerline
- 500' Of Centerline
- Riparian Areas

Scale: 0 2 4 8 Miles

Texas 349 Capacity (2 new lanes)
Midland/Martin County Line to Martin/Dawson County Line



State	Texas	Facility	SH 349
From	Martin/Dawson County Line		
To	FM 2052		
Length (Miles)	13	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,000
ROW + Utility Cost	1.0	Existing Truck	380
Total Cost	25.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	2,730
Condition	Fair	2030 Trucks	530

Environmental Baseline

This 13-mile section is within the Sulphur Springs Draw watershed and passes through the town of Patricia. NWI maps show no wetlands within 200 feet of the section, but up to 8 federal and state protected species that are listed within Dawson County could be present. FEMA has not mapped floodplains in this area. USGS maps show that up to 9 residential buildings are within 100 feet of the existing SH 349 centerline. Eight of the buildings are in Patricia and 1 is at the intersection of SH 349/115. Fourteen additional buildings in Patricia are within 300 feet of the SH 349 centerline. The TCEQ lists 2 LPST sites on SH 349 in Patricia. Both cases are closed.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

NA

ITS Site Specific Features

NA

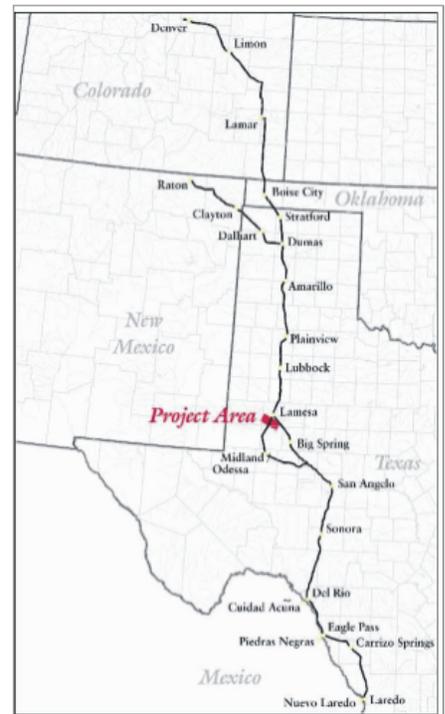
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



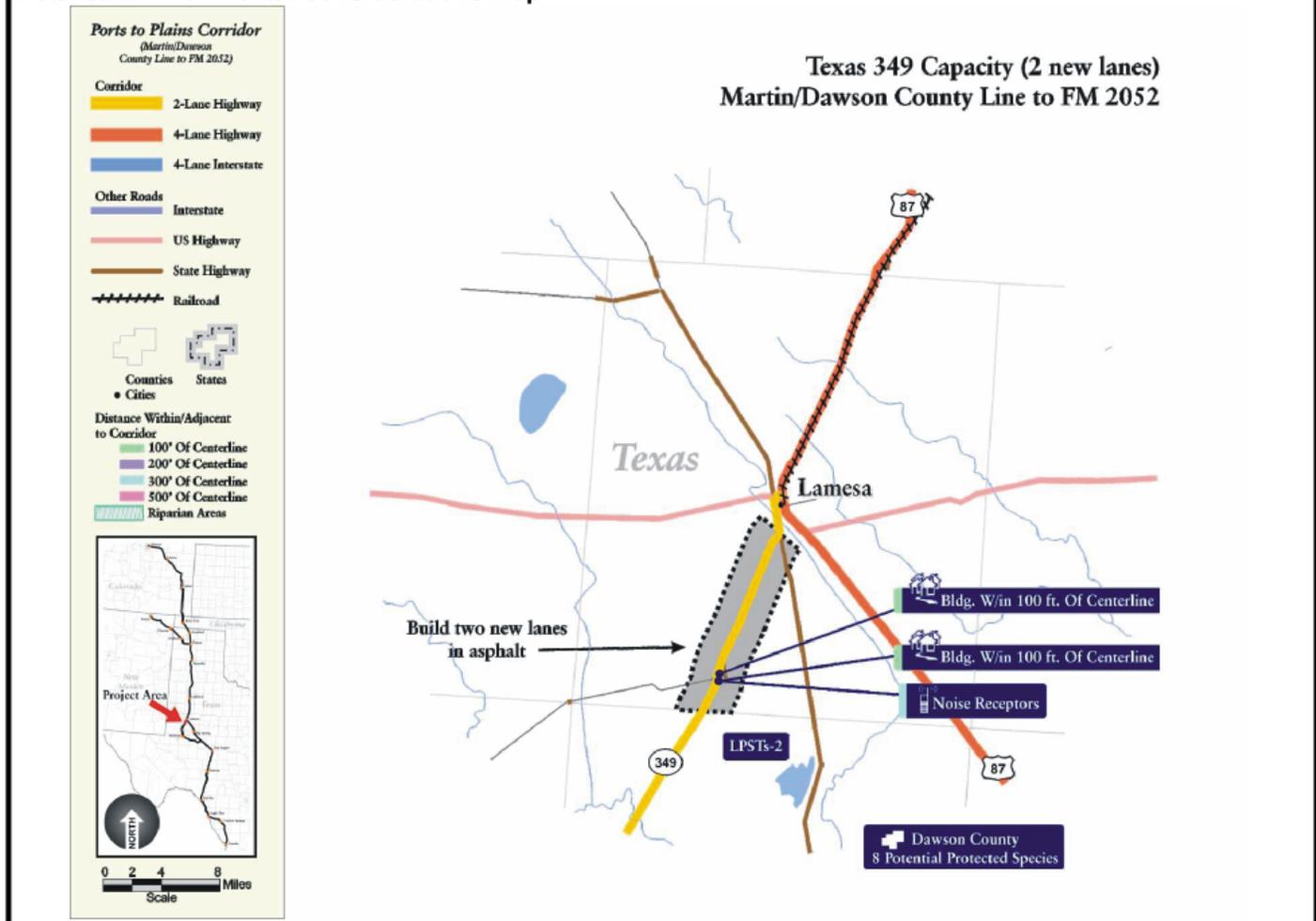
Environmental Impact Analysis

While no floodplains have been mapped in this section, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water resources and wildlife listed in this county during construction and long-term maintenance of the facilities. No widening is planned in Patricia. Instead, the existing roadway will be striped to a 5-lane configuration, decreasing the likelihood that relocations in Patricia will occur. However, if any relocation is necessary, a detailed plan will need to be developed to ensure that it is done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The LPST sites will need to be addressed during the detailed environmental study and engineering to avoid or mitigate potential liability associated with contaminated properties. The project team will need to consult with the TCEQ to prepare a Hazardous Materials Management Plan, if necessary, for the use of any hazardous materials during construction. Best management practices will need to be used to prevent contamination and spills and long-term maintenance of the facilities.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the USACE, TPWD, USFWS, TCEQ, TxDOT and town government of Patricia, as well as with residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	FM 2052
From	SH 349		
To	US 87		
Length (Miles)	2	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	1,350
ROW + Utility Cost	0.2	Existing Truck	330
Total Cost	3.9	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	1,830
Condition	Fair	2030 Trucks	350

Environmental Baseline

This relatively short (2-mile) section, which links US 87 to SH 349 and ultimately Lamesa to Midland, is within the Sulphur Springs Draw watershed. One farmed palustrine wetland was identified within 200 feet of FM 2052. Up to 8 federal and state protected species that are listed in Dawson County could be present along this section. Four buildings are located within 300 feet of the centerline along FM 2052, and 1 building on the south side of the roadway and about halfway through this section is within 100 feet of the centerline. One roadside park adjoins the roadway at the intersection of FM 2052 with US 87. There are no known properties eligible for the National Register of Historic Places (NRHP), archaeological resources, hazardous materials sites or FEMA-mapped floodplains along this section.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

NA

ITS Site Specific Features

NA

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



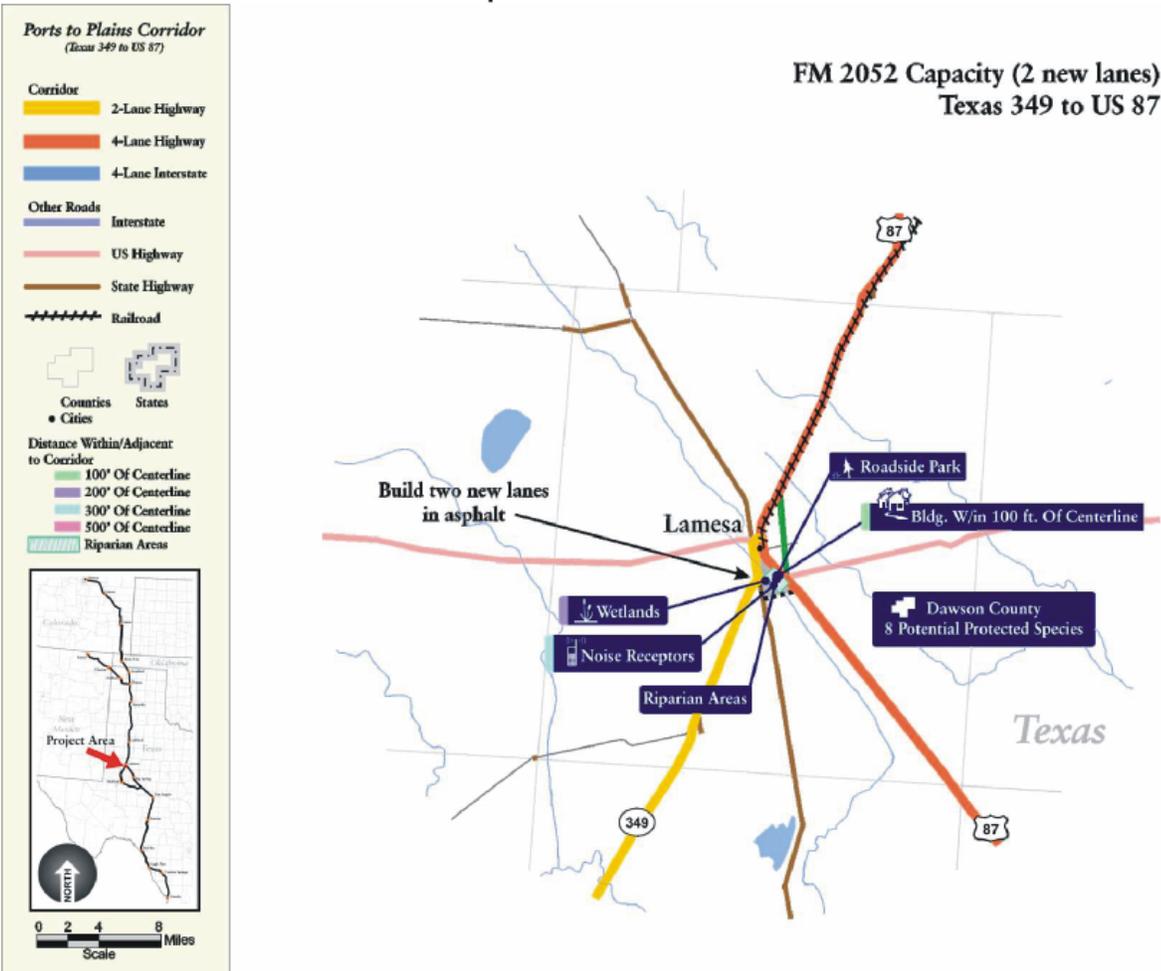
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of FM 2052, up to 43,560 square feet (1 acre) of palustrine wetlands could be impacted. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resource and wildlife. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. SH 349 from Midland will curve to meet the relief route connection at Lamesa. An at-grade intersection will be used as a business route, with a wider median and acceleration/deceleration lanes. Thus, no relocations are anticipated. The impacts of increased traffic noise to the few buildings along FM 2052 will need to be analyzed during the future design and environmental study phase. While no floodplains have been mapped for this section, planning and design of all drainage structures and crossings will require coordination with the USACE and FEMA.

Environmental Process

While the issues along this segment are relatively minimal, coordination and consultation with USACE, FEMA, USFWS, TPWD, and the property owners and residents in the vicinity of this section and Lamesa will be required. Early discussions with the agencies will help to determine the best NEPA action for this section. With no significant environmental effects expected, it is possible that this widening could be accomplished under a CE. However, if scoping reveals uncertainty regarding impacts, an EA will be required.

Detailed Environmental Considerations Map



State	Texas	Facility	US 287
From	Stratford		
To	Sherman/Dallam County Line		
Length (Miles)	9	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	3,050
ROW + Utility Cost	0.8	Existing Truck	1,620
Total Cost	17.5	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,900
Condition	Fair	2030 Trucks	2,610

Environmental Baseline

This 9-mile section is within the Cold Water and Palo Duro watersheds. A historical marker commemorating 'Early Settlers on Coldwater Creek' is located 2 miles north of Stratford. NWI maps show that the section crosses 1 palustrine wetland. Up to 10 federal and state protected species listed for Sherman County could be present. USGS maps show that up to 60 buildings are within 300 feet of the US 287 centerline including as many as 28 buildings in Stratford that are within 100 feet of the US 287 centerline. A roadside park 2 miles north of Stratford (associated with the historical marker) and a municipal park in Stratford are adjacent to this section. The TCEQ lists 1 active LPST that is located along US 287 in Stratford. Irrigated farmland lies within 200 feet of US 287 approximately 1.5 miles northeast of Stratford. This section contains no known NRHP-eligible properties, archaeological sites or FEMA-mapped floodplains.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes.

Structural

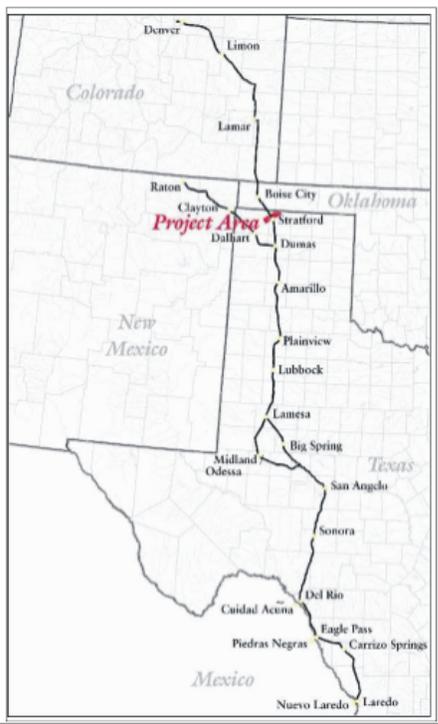
NA

ITS Site Specific Features	ITS Features Per Mile
Periodic upgrades at 1 traffic signal and RR X-ing monitoring	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



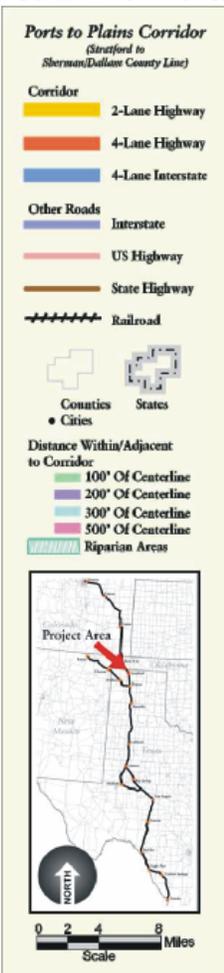
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 287, up to 1 acre (43,560 square feet) of palustrine wetlands could be impacted. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resource and wildlife. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. While no floodplains have been mapped for this section, planning and design of all drainage structures and crossings will require coordination with the USACE and FEMA. A loop relief route is proposed as a alternative to widening US 287 through Stratford, thereby avoiding relocations and other impacts of widening, as well as long term impacts such as noise and disruption of local traffic through town. The 1 identified LPST site will be addressed during the detailed environmental study and engineering to avoid or mitigate potential liability associated with contaminated properties. The project team will consult with the TCEQ to prepare a Hazardous Materials Management Plan if necessary for the use of any hazardous materials during construction. Best management practices will be used to prevent any contamination and spills during construction and long-term maintenance of the facilities. The project team will also need to coordinate with the State Historical Preservation Office of the THC regarding the historical marker and park. The team will work with the SHPO to identify any adverse impacts and implement mitigation plans.

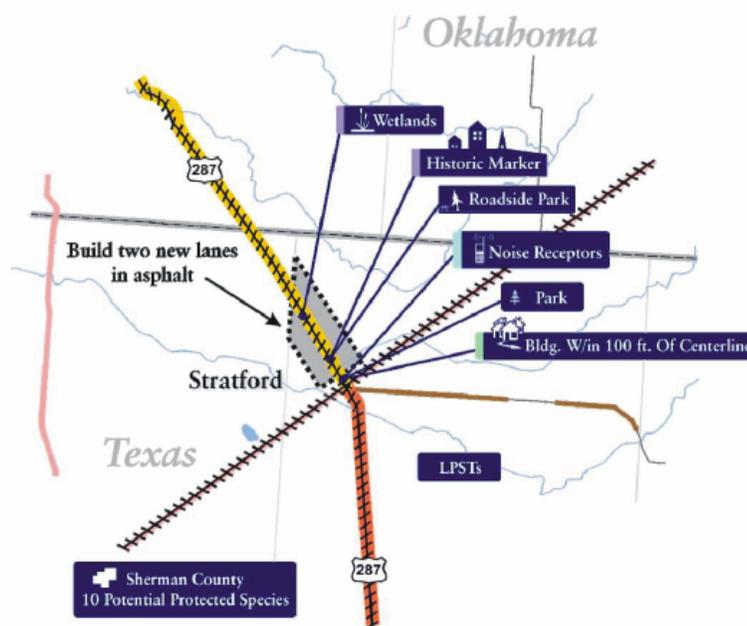
Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the USACE, FEMA, USFWS, TPWD, TxDOT, THC, TCEQ and the town government of Stratford, as well as with residents and property owners. Early discussions with the agencies will help to determine the most probable NEPA process. If it appears that (because of the proposed relief route) relocations and noise will not be an issue, this section might be cleared under a CE. However, if the environmental effects of this project are uncertain, an EA will be necessary.

Detailed Environmental Considerations Map



US 287 Capacity (2 new lanes)
Stratford to Sherman/Dallam County Line



State	Texas	Facility	US 287
From	Sherman/Dallam County Line		
To	Ok/Tx Border		
Length (Miles)	7	Priority Group	A, 2005-2010

Costs (\$Millions)		AADT	
Structure Cost		Existing Total	3,050
ROW + Utility Cost	0.6	Existing Truck	1,620
Total Cost	13.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,900
Condition	Poor	2030 Trucks	2,610

Environmental Baseline

This 7-mile section is within the Upper Beaver, Cold Water and Palo Duro watersheds. NWI maps show 2 wetlands within 200 feet of US 287, and up to 10 federal and or state protected species listed in Dallam County could be present. One residential building within 100 feet of the US 287 centerline, and 3 buildings within 300 feet of the centerline are located northeast of the highway in Kerrick, Texas. No public lands/buildings, NRHP-eligible properties, archaeological resources, hazardous materials sites or 100-year floodplains have been identified along this section.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

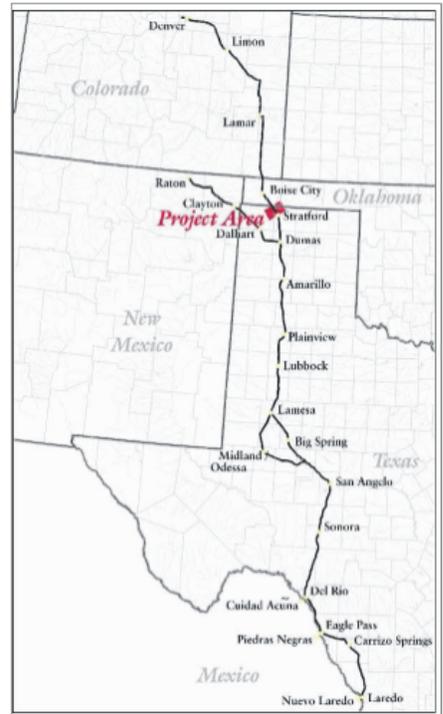
NA

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



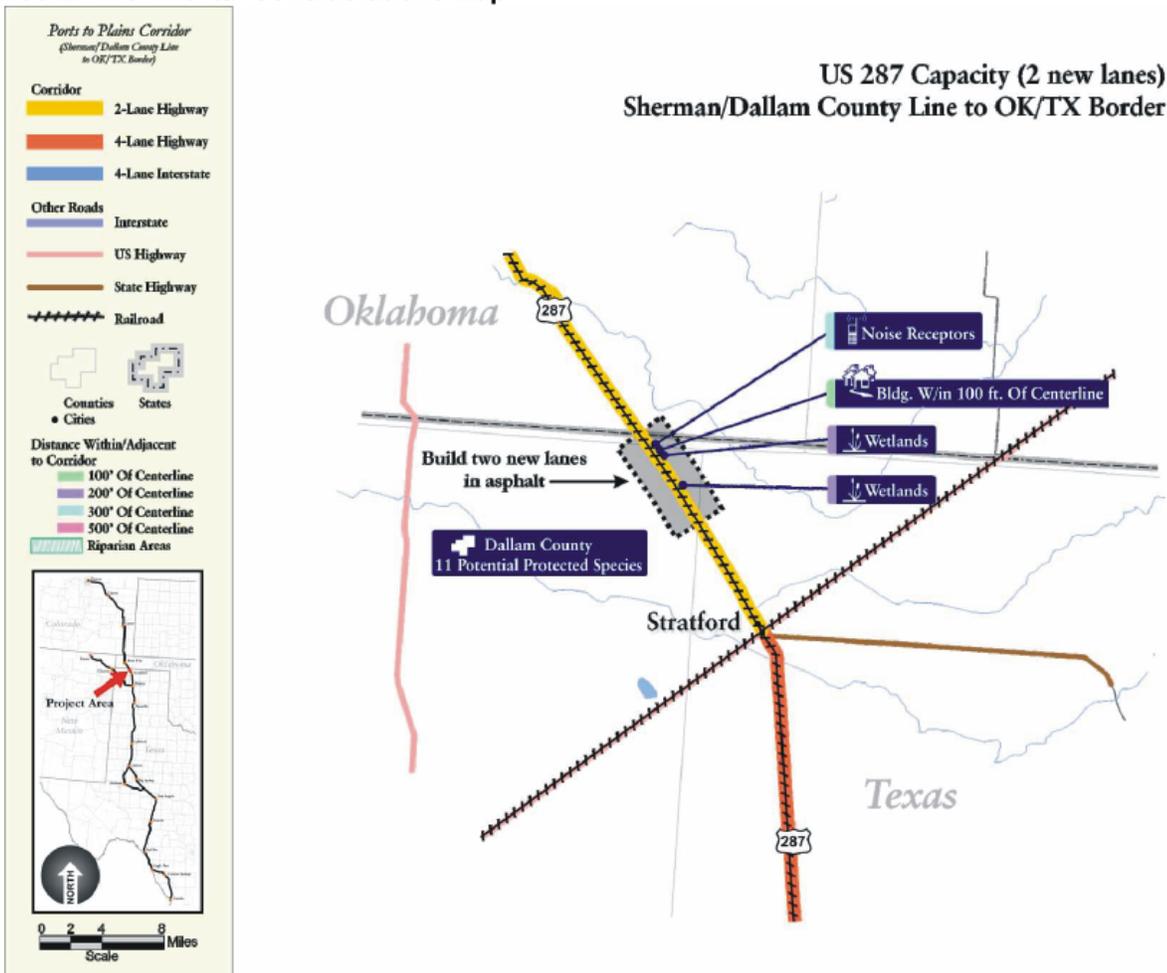
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 287, up to 43,560 square feet (1 acre) of palustrine wetlands could be impacted at 2 locations. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. While no floodplains have been mapped for this section, planning and design of all drainage structures and crossings will require coordination with the USACE and FEMA. Depending on the final design of the ultimate 4-lane alignment of US 287, widening the roadway through Kerrick from 2 to 4 lanes could have short-term impacts during construction, and 1 relocation may be necessary. Design refinements may make it possible to avoid the relocation. However, if during final design it is found that any relocation is necessary, a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

These issues will necessitate coordination and consultation with several agencies, including the USACE, FEMA, USFWS, TPWD, TxDOT, the town government of Kerrick, and residents and property owners. Early discussions with the agencies will help to determine the most probable NEPA process. At this time, it appears that an EA would be the most probable NEPA process. If it is found that the relocation will not be an issue, it is possible that this section could be cleared under a CE. If impacts are unclear, an EA will be necessary.

Detailed Environmental Considerations Map



State	Oklahoma	Facility	US 287
From	Ok/Tx Border		
To	Boise City Relief Route		
Length (Miles)	21	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost	4.5	Existing Total	3,050
ROW + Utility Cost	2.3	Existing Truck	1,620
Total Cost	71.7	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,900
Condition	Good	2030 Trucks	2,610

Environmental Baseline

This 21-mile section is within the Upper Beaver watershed and crosses the Beaver River, 2 wetlands and an unmapped floodplain. As many as 24 federal and state protected species listed in Cimarron County could be present at the Beaver River crossing and in undeveloped or unfarmed areas of grassland. FEMA has not mapped floodplains in this area. USGS maps show that 2 roadside parks adjoin the corridor. No potential relocations or hazardous materials sites have been identified along this section however, 3 buildings south of Boise City are within 300 feet of the US 287 centerline. The Ports to Plains Feasibility Study reported that Oklahoma does not make archaeological site data available to the public, and no historic districts or NRHP-eligible historic properties have been identified.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

Beaver River Bridge - \$4.5 M

ITS Site Specific Features

NA

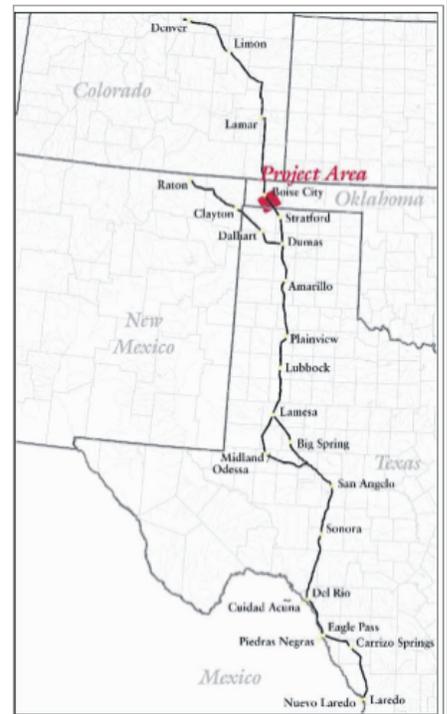
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



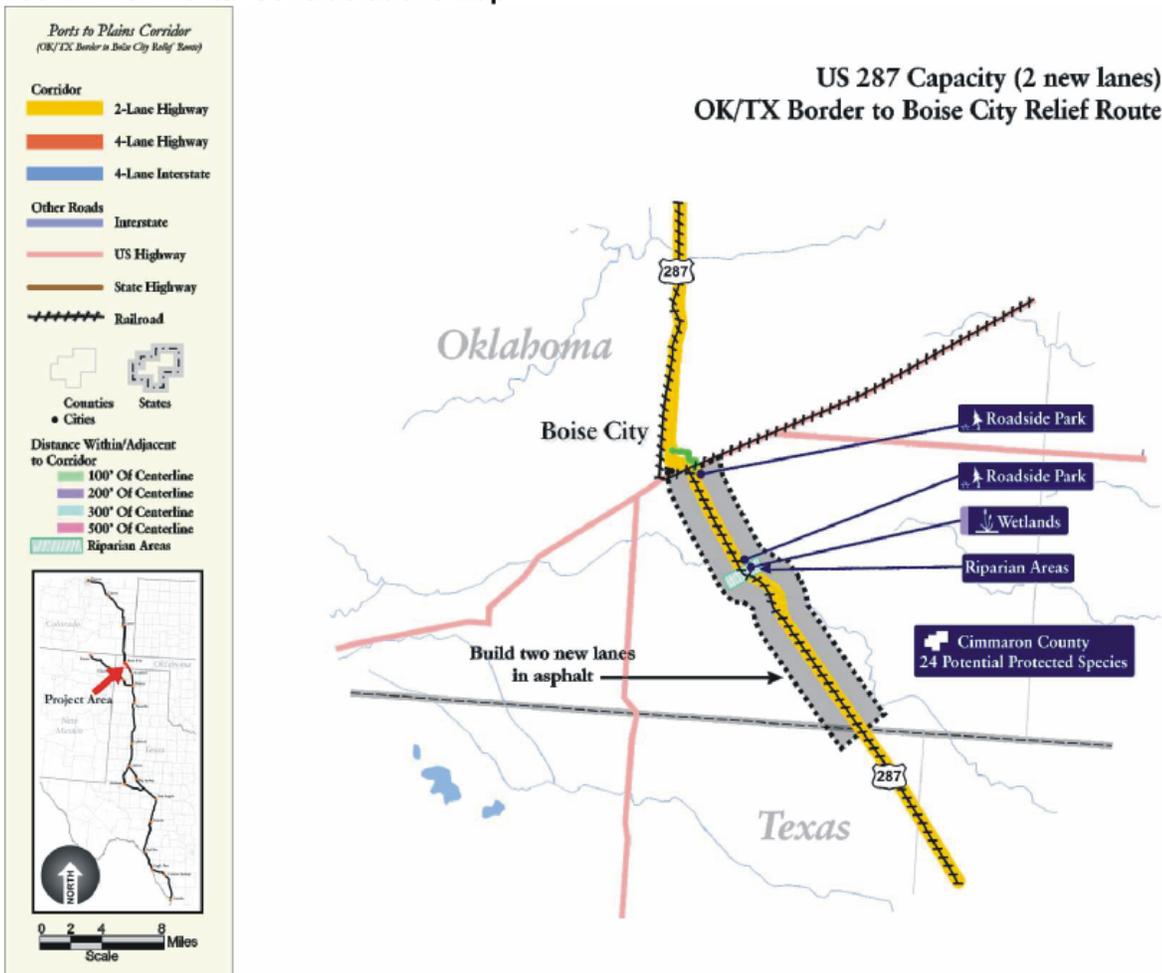
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 287, up to 87,120 square feet (2 acres) of riverine wetlands could be impacted. The project team will need to work with the USACE, USFWS and Oklahoma Department of Wildlife Conservation to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate impacts to these resources during construction and long-term maintenance of the facilities. While no mapped floodplains are in this section, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures, as necessary.

Environmental Process

These issues will necessitate coordination and consultation with USACE, FEMA, USFWS, Oklahoma Department of Wildlife Conservation, Oklahoma Department of Transportation (ODOT), and residents and property owners along the section. Early discussions with the agencies will help to determine whether the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process because the potential for impacts is uncertain. If scoping reveals that insignificant environmental effects are expected, this section, like the section from the Boise City Relief Route to the Oklahoma/Colorado border, may be cleared under a CE. If impacts are unclear, an EA will be necessary.

Detailed Environmental Considerations Map



State	Oklahoma	Facility	US 287
From	Boise City Relief Route		
To	Ok/Co Border		
Length (Miles)	19	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	7.8	Existing Total	2,350
ROW + Utility Cost	2.9	Existing Truck	1,220
Total Cost	69.8	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	7,900
Condition	Good	2030 Trucks	3,140

Environmental Baseline

This 19-mile section is within the Upper Cimarron watershed. It traverses hilly terrain broken by the Cimarron River and its tributaries. Nine wetlands within 200 feet of US 287 were identified, including 3 associated with the Cimarron River crossing. FEMA has not mapped floodplains in the area. Grasslands, wetlands, and riparian areas provide habitat for up to 24 federal and / or state protected species. The Boise City airport is also within 200 feet of this section. There is strong potential for archaeological sites—including open campsites, rock art, quarry sites, bison kill sites and rock art sites—to be present along this portion of the corridor. The Cimarron Branch of the Santa Fe Trail, (not a National Park, but administered by the National Park Service) crosses this section 8 miles north of Boise City; a historical marker and interpretive signs at the site describe the history of the trail. No hazardous materials sites have been identified along this section.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

Creek Bridge-\$0.3 M:Creek Bridge-\$0.1M:Creek Bridge-\$0.5 M:Creek Bridge-\$0.2M:Cimarron River Bridge - \$5.7 M:Creek Bridge-\$0.1 M,Creek Bridge-\$0.2M:Creek Bridge-\$0.2 M:Creek Bridge-\$0.5M:Creek Bridge - \$0.1 M

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



State	Colorado	Facility	US 287
From	Ok/Co Border		
To	Springfield		
Length (Miles)	32	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost	9.1	Existing Total	2,350
ROW + Utility Cost	3.5	Existing Truck	1,220
Total Cost	70.2	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	6,410
Condition	Good	2030 Trucks	3,140

Environmental Baseline

This 32-mile section is within the Bear, Sand Arroyo, North Fork Cimarron and Upper Cimarron watersheds. NWI maps show that 4 wetlands are within 200 feet of the US 287 centerline, and 4 riparian areas are crossed. No FEMA-mapped floodplains are in this section. Up to 10 federal state protected species listed in Baca County could be present. This section crosses the Comanche National Grassland, which covers approximately 203,000 acres in Baca County and serves as a major flyway zone for birds migrating in the spring and fall. The U.S. Forest Service has managed this land since 1954. Irrigated farmland lies within 200 feet of US 287 1 mile south of Campo, and about 7 miles south of Springfield. This section passes through Campo, Colorado. The Ports to Plains Feasibility Study reports that the town of Campo has a potential downtown historic district featuring downtown commercial buildings lining the main street (US 287), and that the area around Campo has a number of archaeological (prehistoric quarry) sites and the potential for more to be discovered. USGS maps show up to 106 buildings are within 300 feet of the US 287 centerline; 23 in southernmost area of Springfield and 83 in Campo, of these up to 70 buildings within 100 feet of the US 287 centerline from Campo to Springfield. Up to 46 of these buildings (about 70 percent commercial) including a church are in Campo. The Campo area also has an adjacent park and an athletic field. Another 21 buildings within 100 feet of the centerline are located in the southernmost portion of Springfield (commercial uses). Four others, including Sandy Soil Church, lie between Springfield and Campo, as does a roadside park. USGS maps show that this section crosses 1 pipeline approximately 4 miles south of Lone Rock Draw. Two oil wells are within 500 feet of US 287: 1 north of Lone Rock Draw and 1 near Sand Arroyo. A hazardous materials release site, closed, is on 1st Street in Campo.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

Draw Bridge - \$0.9 M:Lone Rock Draw Bridge - \$0.5 M: RR Overpass Campo - \$4.4M: RR Underpass Springfield - \$3.3M

ITS Site Specific Features

Upgrades at 2 school flashers and upgrade at RR X-ing

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



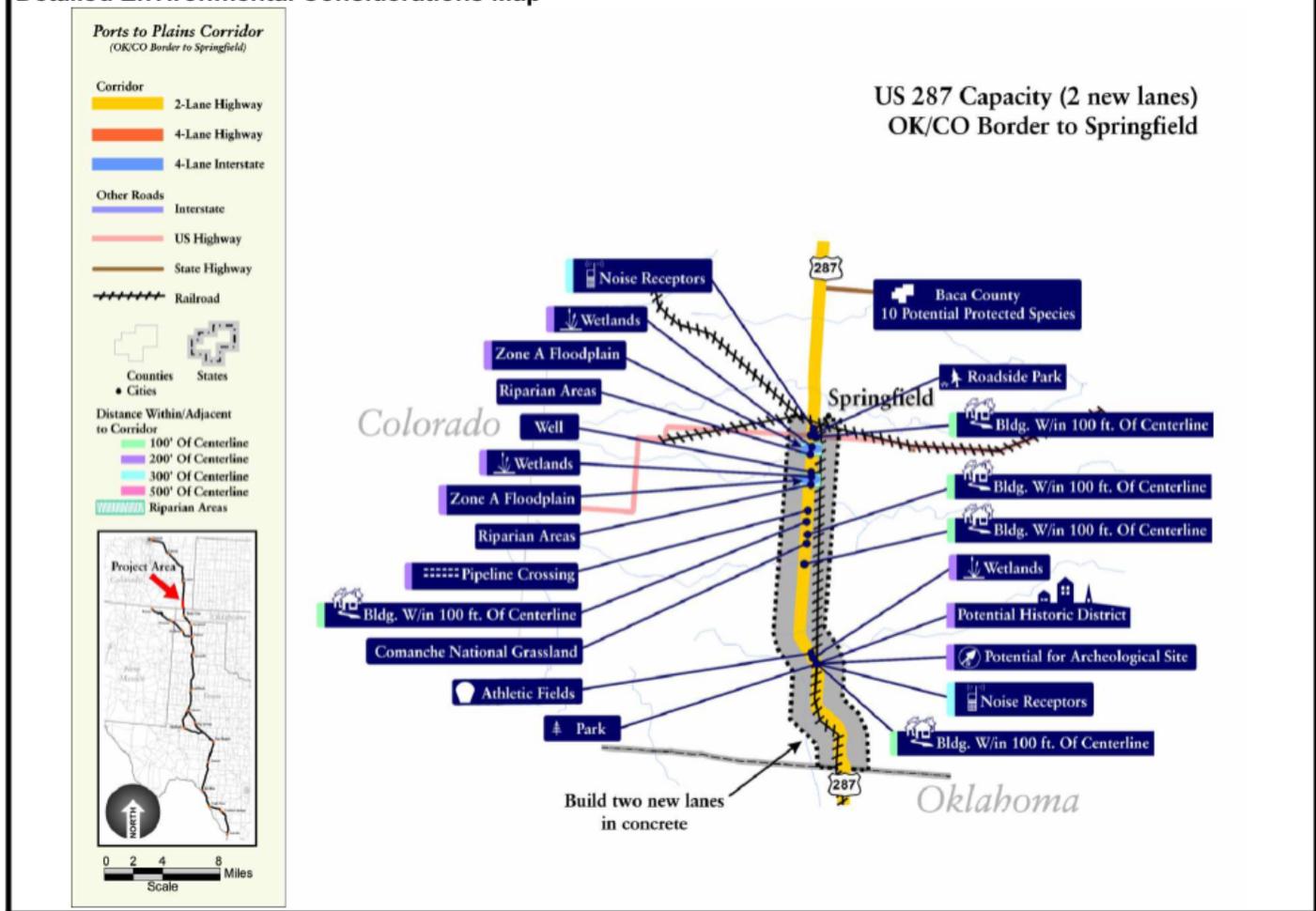
Environmental Impact Analysis

Depending on the ultimate alignment of the 4-lane US 287, roadway improvements could impact up to 87,120 square feet (2 acres) of riverine wetlands, and up to 130,680 square feet (3 acres) of palustrine wetlands. Construction will disturb wildlife, especially at the riparian crossings and along the fences associated with farmlands. The project team will need to work with the USACE, USFWS and Colorado Division of Wildlife (DOW) to develop a plan to reduce or eliminate impacts. While no floodplains have been mapped here, planning and design of all crossings will require coordination with the USACE and FEMA. The project team will need to work with the US Forest Service (USFS), USFWS and Colorado DOW to develop a plan to avoid or reduce impacts to the Comanche National Grasslands. Conceptual engineering plans do not include widening in Campo. Instead, the existing roadway will be restriped to 5 lanes, reducing the likelihood of relocations. Direct impacts to the 21 buildings south of Springfield are also relatively unlikely, since this portion of the section already has 4 lanes. However, if it any relocation is necessary, a detailed plan will be developed to ensure it is done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The project team will need to coordinate with CDOT to minimize or avoid adverse impacts to properties adjacent to US 287 and irrigated farmlands. In addition, a cultural resources investigation plan will need to be developed by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO to determine the potential and extent of Campo's downtown as a historic district, and to ensure that unrecorded prehistoric sites are located and protected. Adverse impacts, if any, will need to be identified during the detailed environmental study, and the need for mitigation of such impacts to cultural resources will be decided and planned in consultation with the SHPO. The USFWS recommends knowledge of the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign be incorporated into the project design and impact analysis. Best management practices will need to be used to ameliorate or mitigate impacts to all resources during construction and long-term maintenance of the facilities.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, FEMA, USFS, CDOW, USFWS, SHPO, CDOT, the town governments of Campo and Springfield, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable significant impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 287
From	Springfield		
To	Baca/Prowers County Line		
Length (Miles)	18	Priority Group	D, 2021-2025
Costs (\$Millions)		AADT	
Structure Cost	6.2	Existing Total	2,600
ROW + Utility Cost	2.0	Existing Truck	1,690
Total Cost	45.7	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	6,410
Condition	Good	2030 Trucks	2,600

Environmental Baseline

This 18-mile section is within the Two Buttes and Bear watersheds. NWI maps show that 2 palustrine wetlands are within 200 feet of the US 287 centerline. The wetlands and five riparian crossings are likely provide habitat for the 10 federal and state protected species listed in Baca County that could be present. This section crosses no FEMA-mapped floodplains, but it does pass through the town of Springfield. The Ports to Plains Feasibility Study reports that Springfield has a potential downtown historic district featuring the commercial buildings that line the main street (US 287). Springfield has 2 registered historic buildings of interest to the corridor. The Commercial Hotel/Hamilton Hotel (State Register 9/10/2003, 5BA.941), located at 1033 Main Street (US 287), is Springfield's longest functioning and oldest surviving hotel. Opened in 1920, the hotel has operated continuously up to the present time, and is currently called the Stage Stop Hotel. The Springfield Schoolhouse/Springfield Masonic Temple, located at 281 West 7th Avenue within 2 blocks of the US 287, is listed in the NRHP (10/05/1977, 5BA.313). This 1889 rural schoolhouse served as a school until 1920, when it became a Masonic Lodge. It is listed under Rural School Buildings in the Colorado Multiple Property Submission on the NRHP listing of property groups relating to one or more historic contexts. USGS maps show 155 buildings are within 300 feet of the US 287 centerline, including 52 buildings along Main Street (US 287) in Springfield that are within 100 feet of the highway centerline. No hazardous materials sites have been identified along this section. The Ports to Plains Feasibility Study reports that there is potential for discovering unrecorded archaeological sites at the crossing of Sand Creek.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

Bear Creek Bridge - \$0.9 M:South Horse Creek Bridge - \$0.9 M:Horse Creek Bridge - \$0.7 M:Trib Horse Creek Bridge - \$0.7 M :Sand Creek Bridge - \$0.8 M:Two Buttes Creek Bridge-\$2.2 M

ITS Site Specific Features	ITS Features Per Mile
Upgrades at 2 school flashers and RR X-ing monitoring	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



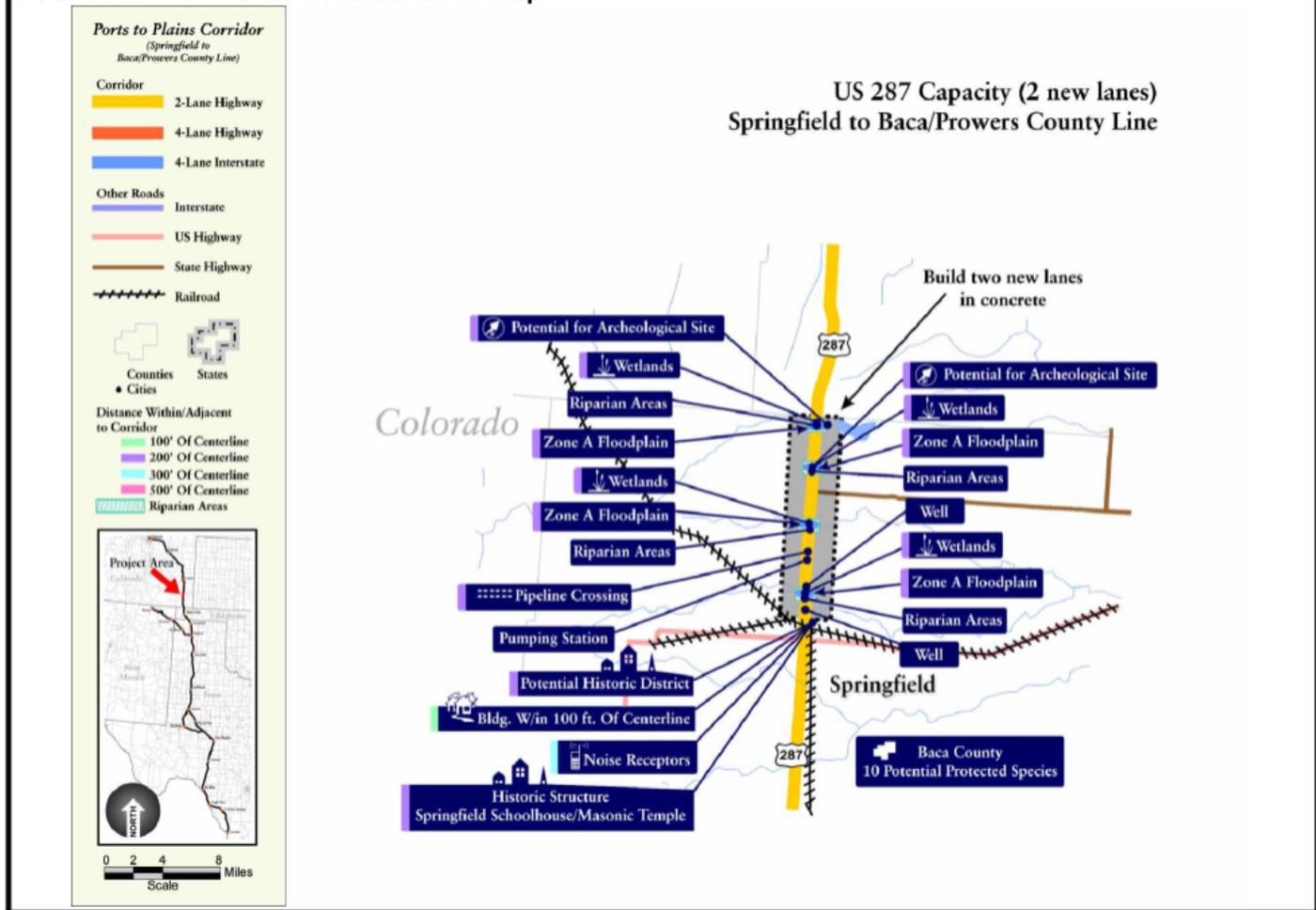
Environmental Impact Analysis

Depending on the ultimate alignment of the 4-lane US 287 in this section, up to 87,120 square feet (2 acres) of palustrine and 87,120 square feet (2 acres) of riverine wetlands could be impacted. Construction activities will disturb wildlife in some areas, especially at the riparian crossings. The project team will need to work with the USACE, FEMA, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains have been mapped for this section, planning and design of all drainage structures and crossings will require coordination with the USACE and FEMA. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. Conceptual plans do not call for any construction along US 287 in Springfield. However, if during final design it is found that any relocation is necessary, a detailed plan will need to be developed to ensure that it is done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. In addition, a cultural resources investigation plan will need to be developed by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO during the planning and design of this section, particularly in the vicinity of the identified archaeological sites at the Sand Creek Crossing, the potentially historic downtown district in Springfield, and the 2 registered historic buildings. The need for mitigation of adverse impacts to these cultural resources will then need to be decided and planned in consultation with the SHPO. Appropriate avoidance and mitigation measures will need to be taken, and best management practices used, to minimize these impacts. The USFWS recommends that the project become familiar with the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under the umbrella of this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign headed by the Southern Rockies Ecosystem Project be incorporated into the project design and impact analysis.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, FEMA, Colorado DOW, USFWS, SHPO, CDOT, the town government of Springfield, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 287
From	Baca/Prowers County Line		
To	Lamar Relief Route		
Length (Miles)	28	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost	1.8	Existing Total	2,600
ROW + Utility Cost	3.1	Existing Truck	1,690
Total Cost	74.9	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	6,410
Condition	Good	2030 Trucks	2,600

Environmental Baseline

This 28-mile section is within the Two Buttes and Upper Arkansas-John Martin Reservoir watersheds. Three wetland areas exist with 200 feet of the US 287 centerline and up to 13 federal and state protected species listed in Prowers County could be present. The section crosses 4 Zone A floodplains. The location and widths of the floodplains crossed are North Butte Creek, 200 feet; Mule Creek, 200 feet; North Mule Creek, 100 feet; and Clay Creek/Horse Creek, 1,200 feet. The Ports to Plains Feasibility Study reports that several areas along this section have a markedly higher potential for archaeological sites than others. A number of rock art sites have been documented around the Two Buttes Reservoir and the Gobblers Knob area. USGS maps show that Pleasant Heights Church and 5 associated buildings, 5.5 miles north of the Prowers/Baca county line, are within 300 feet of the US 287 centerline. USGS maps also show that this section has one pipeline crossing, located 1/2 mile north of Springfield Landing Strip. Other potential hazardous materials sites are the Springfield Pumping Station (1/4 mile south of the landing strip), an oil well 1.5 miles south of Springfield, and a second well 9.75 miles north of Springfield. In addition, the Colorado Storage Tank Information System (COSTIS) of the Colorado Department of Labor and Employment (CDLE) reports that a LUST site and a confirmed release site (both closed) are adjacent to the segment.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

Clay Creek Bridge - \$1.8 M

ITS Site Specific Features

Communication upgrades at rest area, 1 DMS on US 287 NB

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



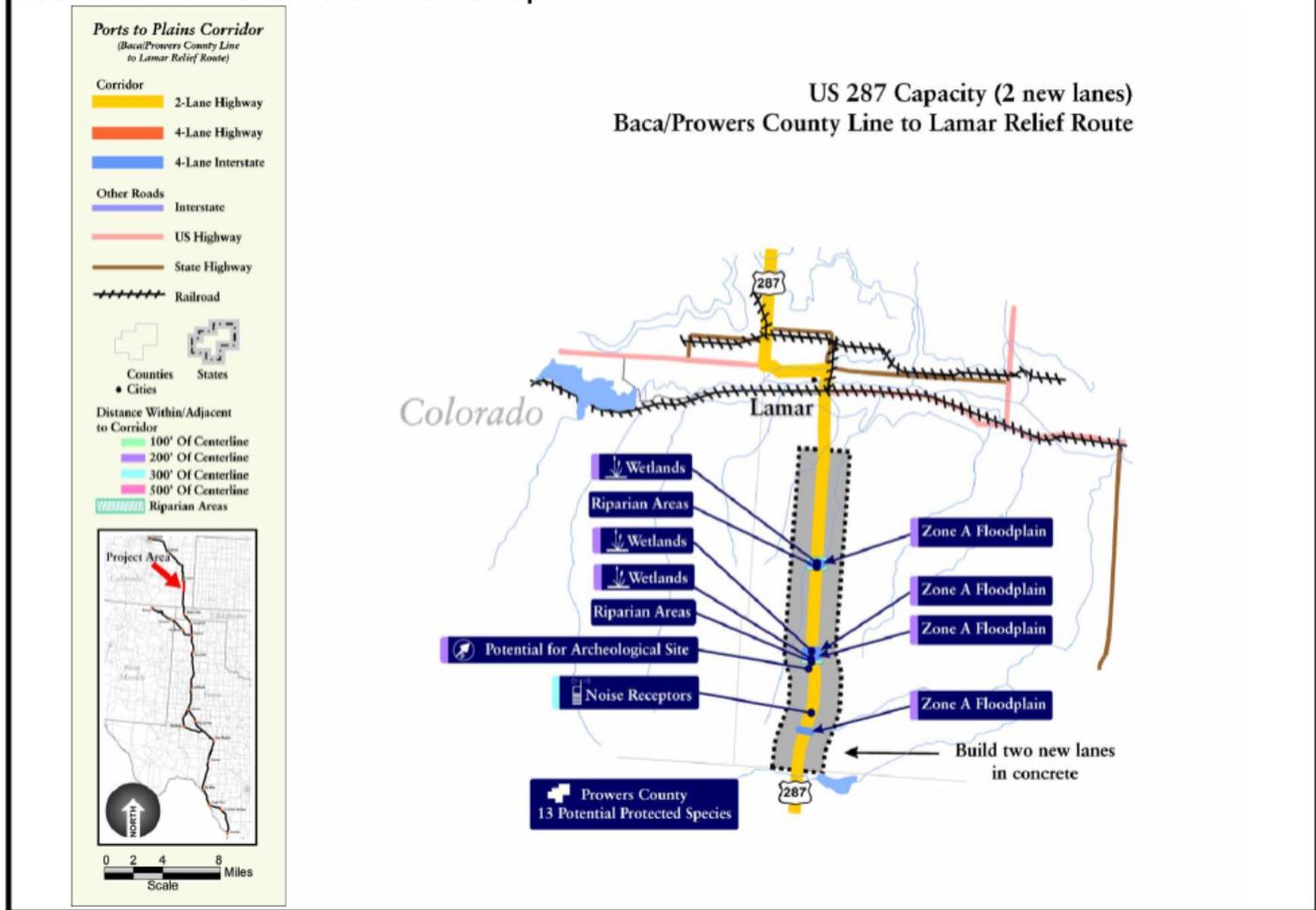
Environmental Impact Analysis

Depending on the ultimate alignment of the 4-lane US 287 in this section, up to 130,680 square feet (3 acres) of riverine wetlands and up to 43,560 square feet (an acre) palustrine wetlands could be impacted. Construction activities will disturb wildlife in some areas, especially at the riparian crossings. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The team will need to work with the USACE and FEMA to develop measures to maintain the floodplain capacity. The USFWS recommends that the project become familiar with the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under the umbrella of this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign headed by the Southern Rockies Ecosystem Project be incorporated into the project design and impact analysis. A cultural resources investigation plan will need to be developed by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO during the planning and design of this section, particularly in the vicinity of the identified archaeological sites at Gobblers Knob and Two Buttes Reservoir. The need for mitigation of adverse impacts on archaeological resources will then need to be decided and planned in consultation with the SHPO. No relocations are expected to be necessary. However, if during final design it is found that any relocation is necessary, a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The project team will need to coordinate with the Division of Oil and Public Safety of the CDLE in regard to the LUST and confirmed release sites.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, USFWS, Colorado DOW, SHPO, CDOT, CDLE, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIA will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 287
From	Lamar Relief Route		
To	Prowers/Kiowa County Line		
Length (Miles)	16	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	1.9	Existing Total	2,900
ROW + Utility Cost	1.8	Existing Truck	1,480
Total Cost	38.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	8,630
Condition	Poor	2030 Trucks	2,570

Environmental Baseline

This 16-mile section is within the Upper Arkansas-John Martin Reservoir watershed. NWI maps show that the section crosses 2 canals and a drainage ditch with 4 areas of riverine wetlands. In addition, it is adjacent to approximately 1,500 linear feet of wetlands along the Fort Lyon Ditch, and as many as 13 federal and state protected species listed in Prowers County could be present. Four hundred feet of Zone A floodplain is crossed at the Wiley Drainage Ditch. No archaeological or hazardous materials sites have been identified along this section. USGS maps show 14 buildings within 100 feet of the US 287 centerline, and no additional buildings are within 300 feet of the US 287 centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

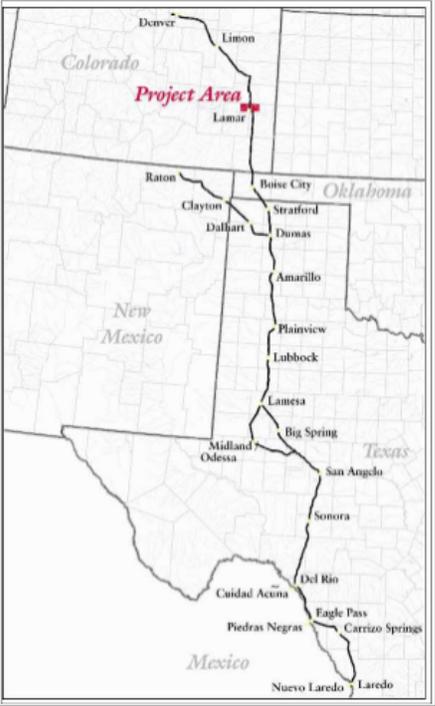
US 50 ML Bridge - \$1.3 M:Fort Lyon Canal Bridge - \$0.3 M:Santana Canal Bridge - \$0.3 M

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



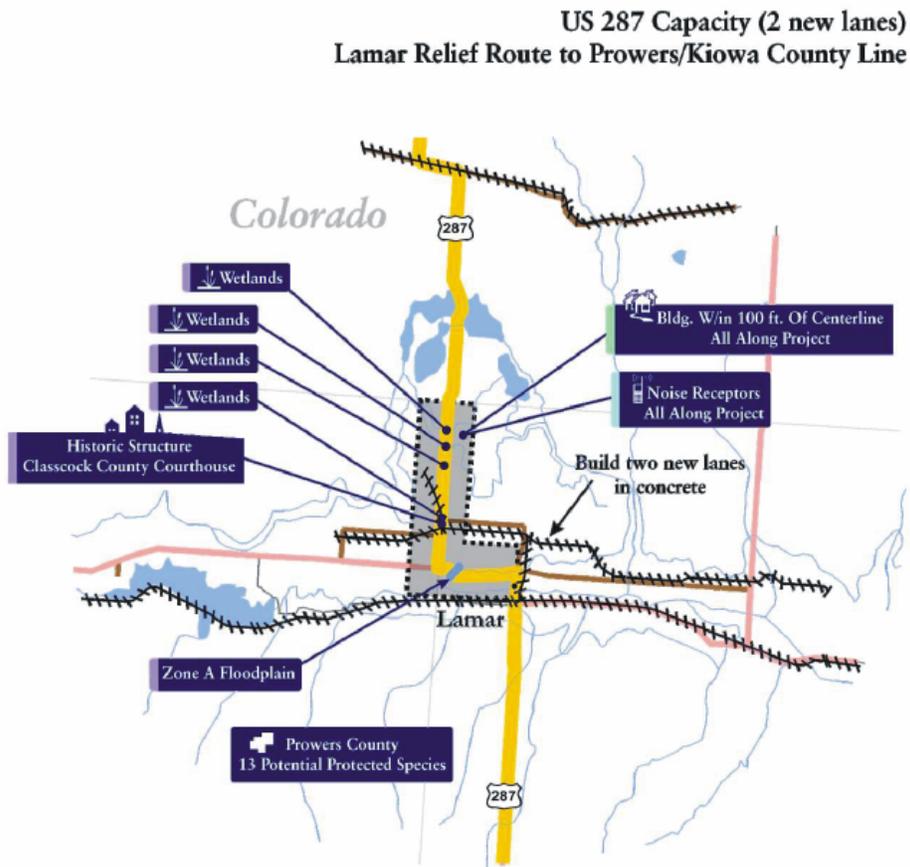
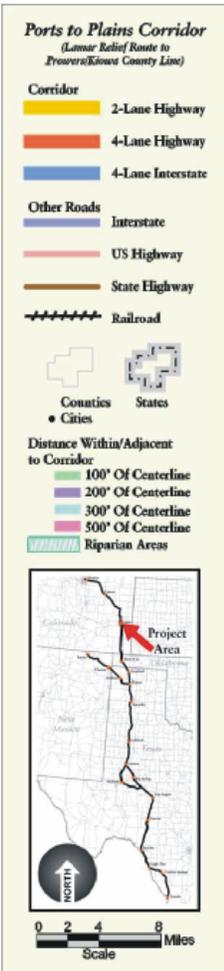
Environmental Impact Analysis

Widening in this section could impact up to 87,120 square feet (2 acres) of potential impacts to riverine wetlands, and construction activities will disturb wildlife in some areas. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. The USFWS recommends that the project become familiar with the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under the umbrella of this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign headed by the Southern Rockies Ecosystem Project be incorporated into the project design and impact analysis. At the project level, coordination with the ditch company will be necessary to ensure that the existing capacity of the Wiley Drainage Ditch is maintained. The project team will need to work with USACE and FEMA to ensure that floodplain capacity is not reduced and that floodplain management or development plans are not impaired. Design refinements may make it possible to avoid all of the buildings within 100 feet of the US 287 centerline. However, if during final design it is found that any relocation is necessary, a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, USFWS, Colorado DOW, CDOT, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 287
From	Prowers/Kiowa County Line		
To	Eads		
Length (Miles)	19	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,900
ROW + Utility Cost	2.1	Existing Truck	1,480
Total Cost	31.8	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	8,630
Condition	Good	2030 Trucks	2,570

Environmental Baseline

This 19-mile section lies within the Upper Arkansas-John Martin Reservoir watershed, but also crosses a small section of the Rush watershed. NWI maps show that 1 riverine wetland is crossed 4.5 miles north of the Prowers/Kiowa county line, and as many as 11 federal and state protected species listed in Kiowa County could be present along the section. It crosses no FEMA-mapped floodplains. The Ports to Plains Feasibility Study reports that there is potential for discovering unrecorded archaeological sites. USGS maps show that the section crosses state-owned and leased land associated with the Queens State Wildlife Area (Colorado DOW). This area is part of the Great Plains Reservoir System in Kiowa County that consists of reservoirs formed by natural depressions within the rolling short-grass prairie. The shorelines of all the reservoirs combined provide the most heavily used habitat for shorebirds, gulls, terns and pelicans in Colorado. USGS maps show 2 buildings within 100 feet of US 287 and 1 roadside park, and that no additional buildings are within 300 feet of the US 287 centerline. The buildings are located approximately 1/2 mile and 1 mile south of SH 96, while the park is south of the project approximately 1/4 mile east of Eads. An oil well is adjacent to this section 3/4 mile south of SH 96, not far from Eads.

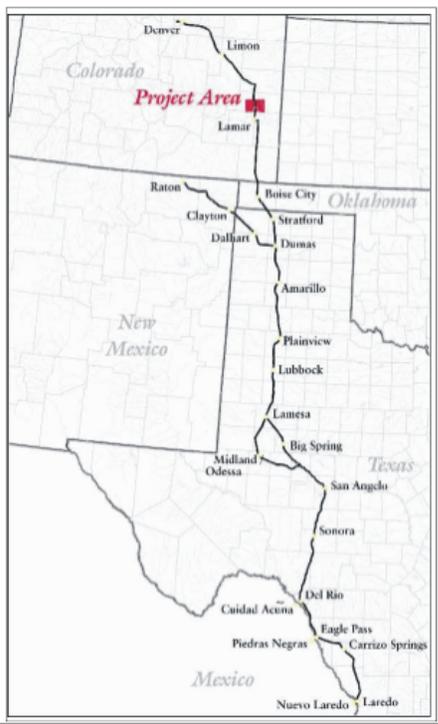
Description
Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in concrete.

Structural
NA

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



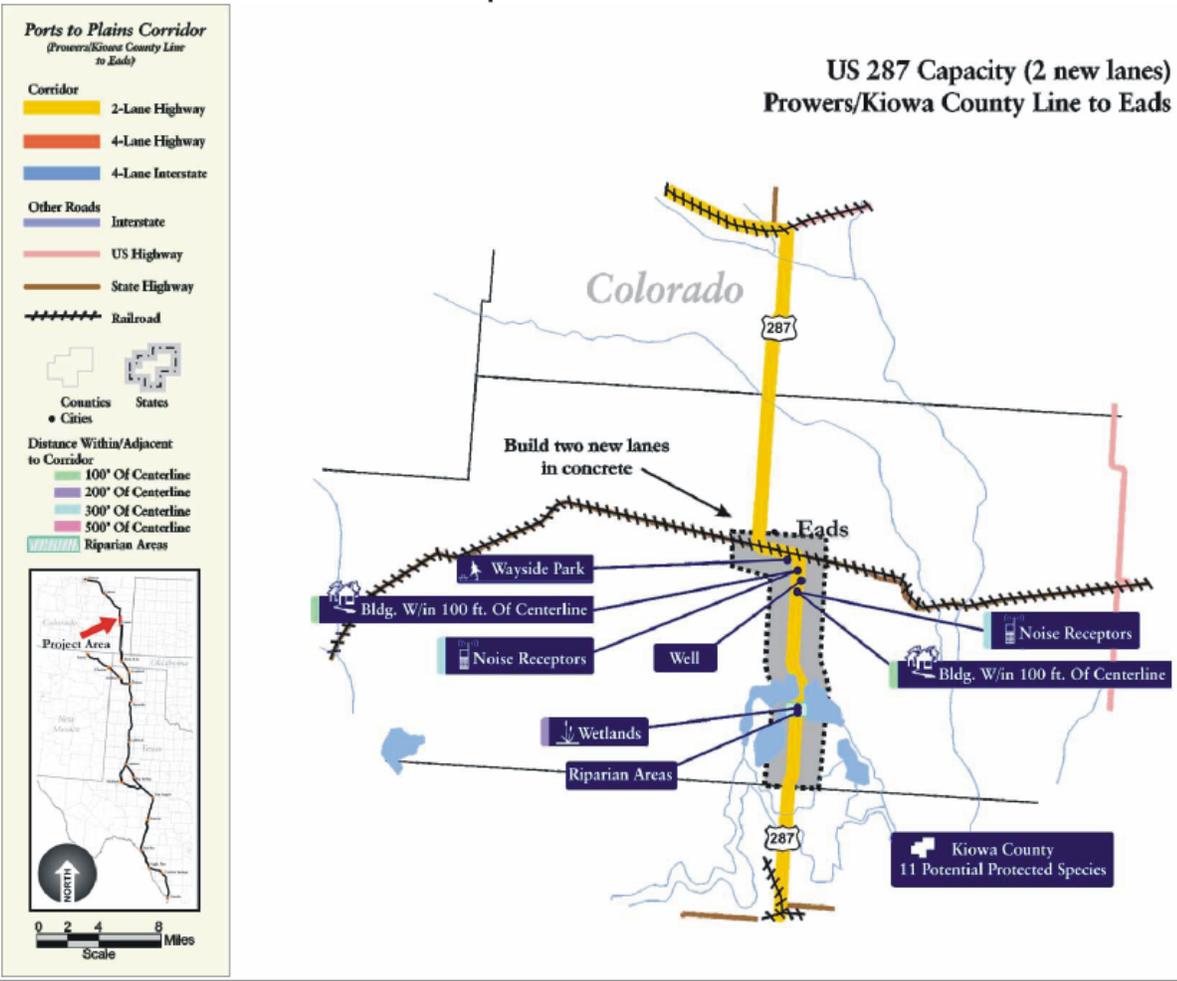
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 287, up to 43,560 square feet (2 acres) of riverine wetlands could be impacted. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. While no floodplains have been mapped, the project team will need to coordinate the design of crossings with USACE and FEMA. The USFWS recommends that the project become familiar with the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under the umbrella of this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign headed by the Southern Rockies Ecosystem Project be incorporated into the project design and impact analysis. A cultural resources investigation plan will need to be developed by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO during planning and design. The need for mitigation of adverse impacts on any cultural resources will then need to be decided and planned with the SHPO. If during final design of this section any relocation is found to be necessary, a detailed plan will need to be developed to ensure that it is done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The project team will need to work with CDOT to determine the design of the roadway widening and the mitigation of any encroachment to the roadside park.

Environmental Process

The potential impacts in this section will require coordination and consultation with several agencies including the USACE, FEMA, USFWS, Colorado DOW, Colorado State Parks, SHPO, CDOT, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. However, if scoping shows that archaeological sites will either be missed or are unlikely to be eligible for NRHP, it may be possible to clear this section with a CE.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 287
From	Eads		
To	Kiowa/Cheyenne County Line		
Length (Miles)	10	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost	5.6	Existing Total	2,900
ROW + Utility Cost	1.1	Existing Truck	1,480
Total Cost	22.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	8,630
Condition	Good	2030 Trucks	2,570

Environmental Baseline

This 10-mile section is mostly within the Rush watershed, but also crosses a section of the Upper Arkansas-John Martin Reservoir watershed. NWI maps show that the section crosses Rush Creek, a riparian habitat, over a distance of approximately 1,300 feet, and at least 2 palustrine wetlands are associated with this area. There are no FEMA-mapped floodplains. Up to 11 federal and state protected species find habitat in Kiowa County and could be present. This section passes through the town of Eads. The Nipps-Bramsgrove Building is on Maine Street, approximately 3 blocks east of US 287 in Eads. It is a 1912 structure with a 1950s facelift, and is in the State Register (05/14/1997, 5KW.56). This section is south of Kit Carson, and The Ports to Plains Feasibility Study reports that there is some potential to discover unrecorded archaeological sites. USGS maps show that up to 100 buildings in Eads are within 300 feet of the centerline of US 287, and of these 40 buildings (40 percent commercial, 60 percent residential) are within 100 feet of the centerline; a fairground is adjacent to the section. The COSTIS database shows 1 LUST site and 1 confirmed hazardous materials release site within the corridor along this segment, both closed. The COSTIS database shows 2 LUST sites, 1 open and 1 closed, located in Eads on US 40.

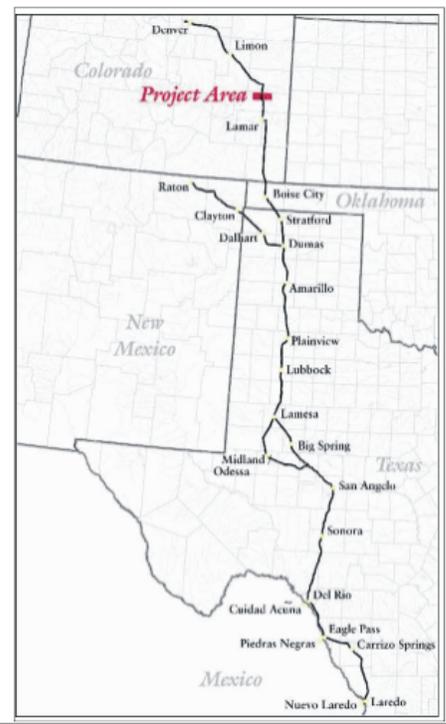
Description
Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in concrete.

Structural
Rush Creek Bridge - \$2.3 M

ITS Site Specific Features	ITS Features Per Mile
Upgrades at 2 school flashers	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



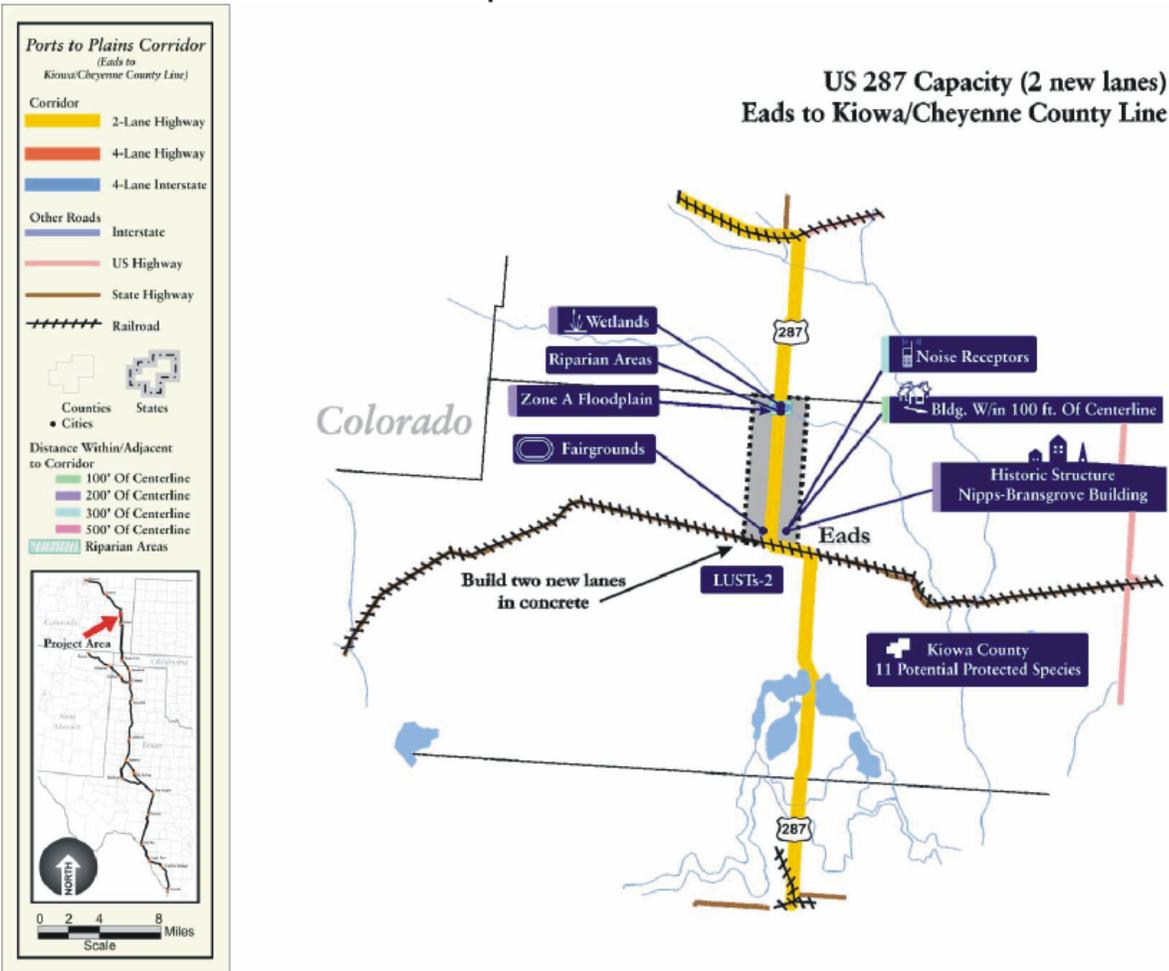
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 287, up to 87,120 square feet (2 acres) of palustrine wetlands could be impacted. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains have been mapped, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures for crossed floodplains, as necessary. The project team will need to coordinate with FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO regarding the Nipps-Bransgrove Building, to develop a cultural resources investigation plan, and to identify any indirect (noise/vibration) adverse impacts and develop mitigation plans for cultural resources. The need for mitigation of adverse impacts on any cultural resources will then need to be decided and planned in consultation with the SHPO. The USFWS recommends knowledge of the Central Shortgrass Prairie Initiative, and that the findings of the Connectivity Campaign (as yet incomplete) be incorporated into the project design and impact analysis. The roadway through Eads will be restriped to 4 lanes (and ultimately 5 lanes), which is expected to reduce the need for relocations. If any relocation is necessary, a detailed plan will need to be developed to ensure that it is done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The LUST and spill sites will be addressed during the detailed environmental study and engineering to avoid or mitigate potential liability associated with contaminated properties. The project team will consult with the CDLE to prepare a Hazardous Materials Management Plan if necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources, and to prevent any contamination and spills, during construction and long-term maintenance of the facilities.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, USFWS, Colorado DOW, FEMA, SHPO, CDLE, CDOT, and the town government of Eads. Early discussions with these agencies and residents and property owners along the section will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 287
From	Kiowa/Cheyenne County Line		
To	Kit Carson		
Length (Miles)	12	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost	7.9	Existing Total	2,900
ROW + Utility Cost	1.3	Existing Truck	1,480
Total Cost	28.2	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	8,630
Condition	Good	2030 Trucks	2,570

Environmental Baseline

This 12-mile section is within the Big Sandy and Rush Watersheds. NWI maps show wetlands in this section associated with the wide crossing of Big Sandy Creek, which provides some of the habitat for the 11 federal and state protected species listed in Kiowa County that may be present. FEMA has not mapped floodplains in this area. South of Kit Carson, the Ports to Plains Feasibility Study reports that there is some potential for discovering unrecorded archaeological sites, particularly around the 1,600-foot crossing of Big Sandy Creek, southeast of Kit Carson. USGS maps show that this section crosses a pipeline and passes within 800 to 1,000 feet of a pumping station. One building is located within either 100 or 300 feet of the US 287 centerline.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in concrete.

Structural

Big Sandy Creek Bridge - \$3.6 M; Kit Carson RR Overpass Expansion - \$4.4M

ITS Site Specific Features

NA

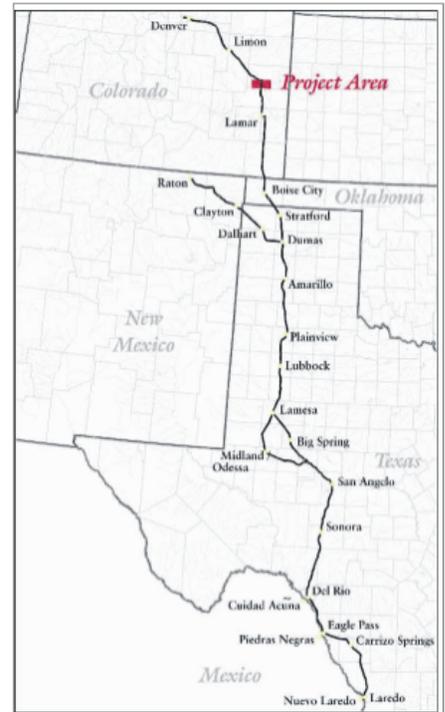
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



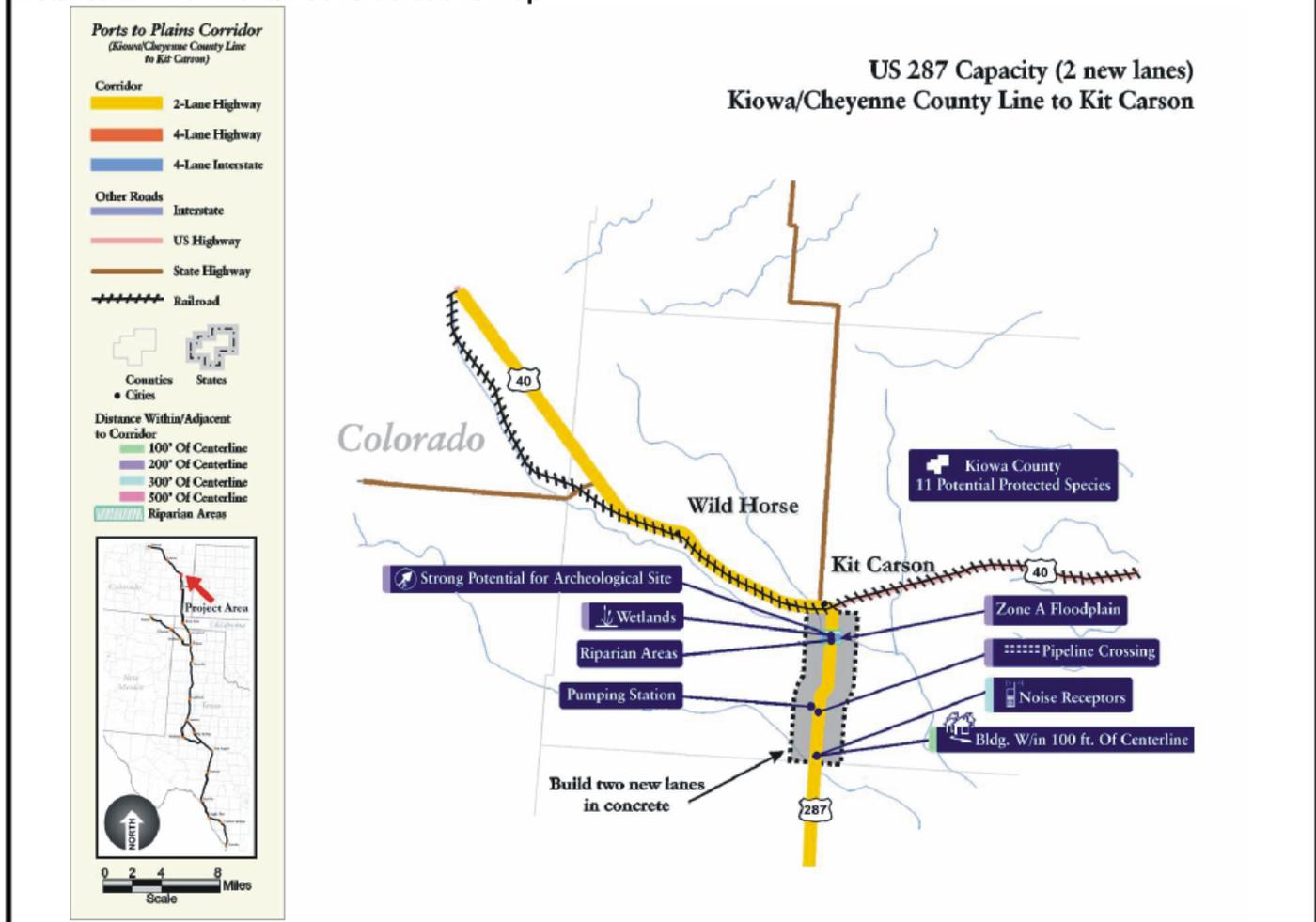
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 287, up to 217,800 square feet (5 acres) of riverine wetland and riparian habitat could be impacted. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resource and wildlife. While no floodplains have been mapped, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings, and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. A cultural resources investigation plan will need to be developed by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO during planning and design, particularly in the Big Sandy Creek area where there is high potential for unrecorded archaeological sites. The need for mitigation of adverse impacts on archaeological resources will then need to be decided and planned in consultation with the SHPO. The project team will need to consult with the CDLE in regard to the crossed pipeline and to prepare a Hazardous Materials Management Plan if necessary for the use of any hazardous materials during construction. Best management practices will be used to prevent any contamination and spills during construction and long-term maintenance of the facilities.

Environmental Process

The potential impacts in this section will necessitate coordination and consultation with the USACE, FEMA, Colorado DOW, SHPO, CDOT, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. However, if scoping shows that archaeological sites will either be missed or are unlikely to be eligible for the NRHP, it may be possible to clear this section with a CE.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 40
From	Kit Carson		
To	Wild Horse		
Length (Miles)	13	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	3,100
ROW + Utility Cost	1.4	Existing Truck	1,210
Total Cost	41.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	8,930
Condition	Fair	2030 Trucks	2,550

Environmental Baseline

This 13-mile section is within the Big Sandy watershed. NWI maps show 1 riverine wetland at the crossing of a tributary to Big Sandy Creek, which also has riparian habitat. As many as 9 federal and state protected species listed in Cheyenne County could be present along this section. The Ports to Plains Feasibility Study reports that 3 historic sites are located within the town of Kit Carson. The Kit Carson Union Pacific Railroad Depot (Kit Carson Museum) is located at US 40/287 and is listed in the Colorado State Register (08/14/2002, 5CH.65). It was constructed in 1904, and is a well-preserved example of a Union Pacific standard plan combination depot. Although moved from its original location by the Kit Carson Historical Society in 1969, it is architecturally important as the most intact Colorado example of this depot type. The Kit Carson Pool Hall is also in the State Register (01/08/1993, 5CH.112) and located within 1 block of US 40 at 2nd and Main Streets. It is a classic brick storefront built in 1915 that typifies 20th century Commercial design. The Union Pacific Pumphouse (State Register 06/14/1995, 5CH.114), at 1st Street in Kit Carson about 2 blocks from US 40, is an unusual example of a masonry railroad utility building, dating from approximately 1880. The building appears to be Colorado's only surviving stone railroad pumphouse. The Ports-to-Plains Feasibility Study, reported that the archaeological data are relatively complete between Hugo and Kit Carson and that the potential for unrecorded sites in the project area is low. USGS maps show up to 75 buildings in Kit Carson that are within 300 feet of the US 40 centerline, of these, 18 commercial buildings are within 100 feet of the centerline. In addition, the Wild Horse solid waste disposal site, located 2 miles east of Wild Horse on US 40, can be found on the CDPHE Hazardous Materials and Waste Management Division Site Locator Mapping Application. However, it is not on the list of Active Solid Waste Facilities maintained by the CDPHE. No FEMA-mapped floodplains are crossed.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

NA

ITS Site Specific Features

Upgrades at 2 school flashers

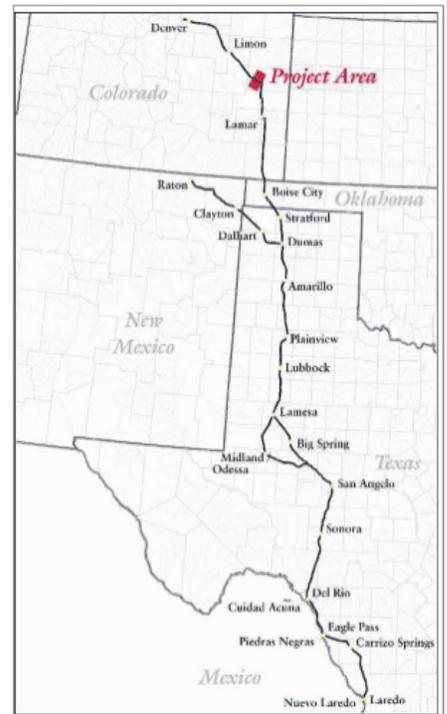
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



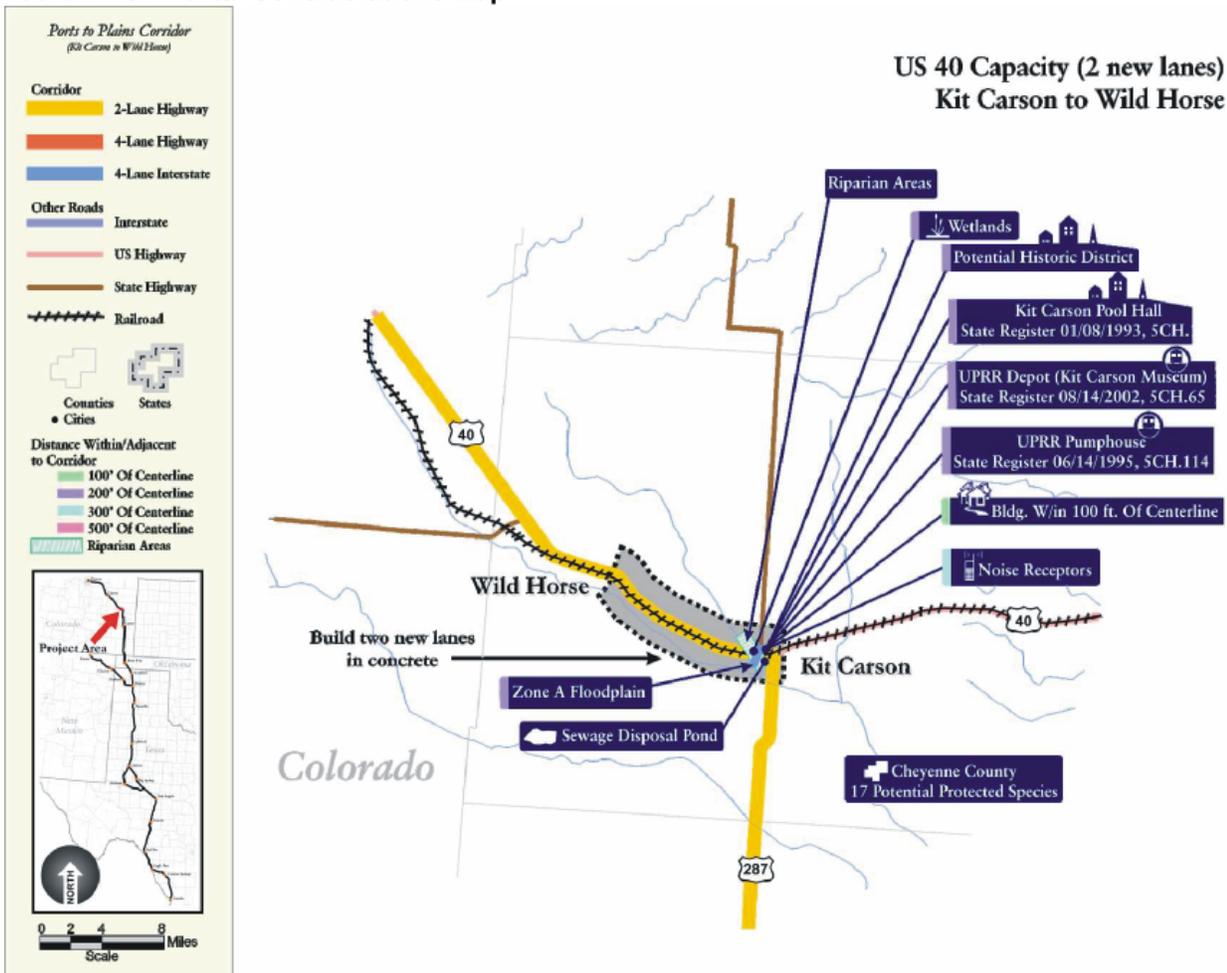
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 40, up to 43,560 square feet (1 acre) of riverine wetland and riparian habitat could be impacted. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to avoid or eliminate impacts to the water resource, riparian areas, and wildlife. While no floodplain has been mapped in this area, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The USFWS recommends familiarity with the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign be incorporated into the project design and impact analysis. The conceptual plans for US 40 through Kit Carson do not include any construction. However, the Kit Carson Union Pacific Railroad Depot (Kit Carson Museum), the only identified cultural resource within 200 feet of the US 40 centerline, could be impacted. At the project team will need to develop a cultural resources investigation plan by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO. The team will also need to coordinate with the FHWA, CDOT staff and SHPO regarding the other registered and potentially NRHP-eligible historic resources in Kit Carson, to identify any adverse impacts and develop mitigation plans as necessary. The LUST sites will need to be addressed with CDLE during environmental study and engineering to avoid or mitigate potential liability associated with contaminated property. The project team will need to coordinate with the CDPHE to prepare a Hazardous Materials Management Plan if necessary. Best management practices will be used to prevent any contamination and spills during construction and long-term maintenance of the facilities.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, FEMA USFWS, Colorado DOW, SHPO, CDOT, CDPHE, CDLE, the town government of Kit Carson, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 40
From	Wild Horse		
To	Cheyenne/Lincoln County Line		
Length (Miles)	10	Priority Group	B, 2011-2015

Costs (\$Millions)		AADT	
Structure Cost	2.2	Existing Total	3,100
ROW + Utility Cost	1.1	Existing Truck	1,210
Total Cost	18.9	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	8,930
Condition	Good	2030 Trucks	2,550

Description
Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in concrete.

Structural
Adobe Gulch Bridge - \$0.8 M: Draw Bridge - \$0.2 M: Arroyo Creek Bridge - \$1.2 M

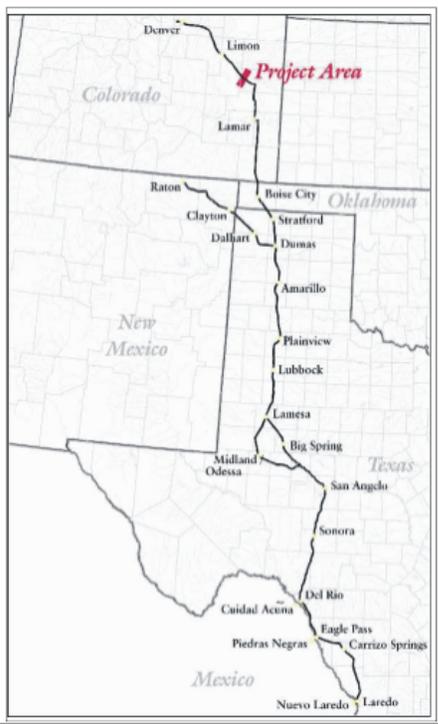
ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Baseline
This 10-mile section is within the Big Sandy watershed. NWI maps show 3 wetlands: 2 associated with the crossings that have riparian habitats, plus 1 palustrine forest. Up to 9 federal and state protected species listed in Cheyenne County could be present along this section. Wild Horse School is located at 8513 US 40/287 and is in the Colorado State Register (12/11/1996, 5CH.122). The building was the only school in Wild Horse from 1912 until 1964. It possesses the distinctive characteristics of the rural schoolhouse. The Wild Horse Mercantile, also in the State Register (06/14/1995, 5CH.116) is located at 15170 5th Street, within 2 blocks of US 40. It was built after the 1917 fire that destroyed the community's entire business block, and was the longest continuously operating commercial establishment in town, serving local customers until the late 1960s. USGS maps show that up to 9 buildings in Wild Horse are within 300 feet of the US 40 centerline, and of these, 6 buildings (all residential) are within 100 feet of the US 40 centerline. The section crosses no FEMA-mapped floodplains, and no hazardous materials sites have been identified.



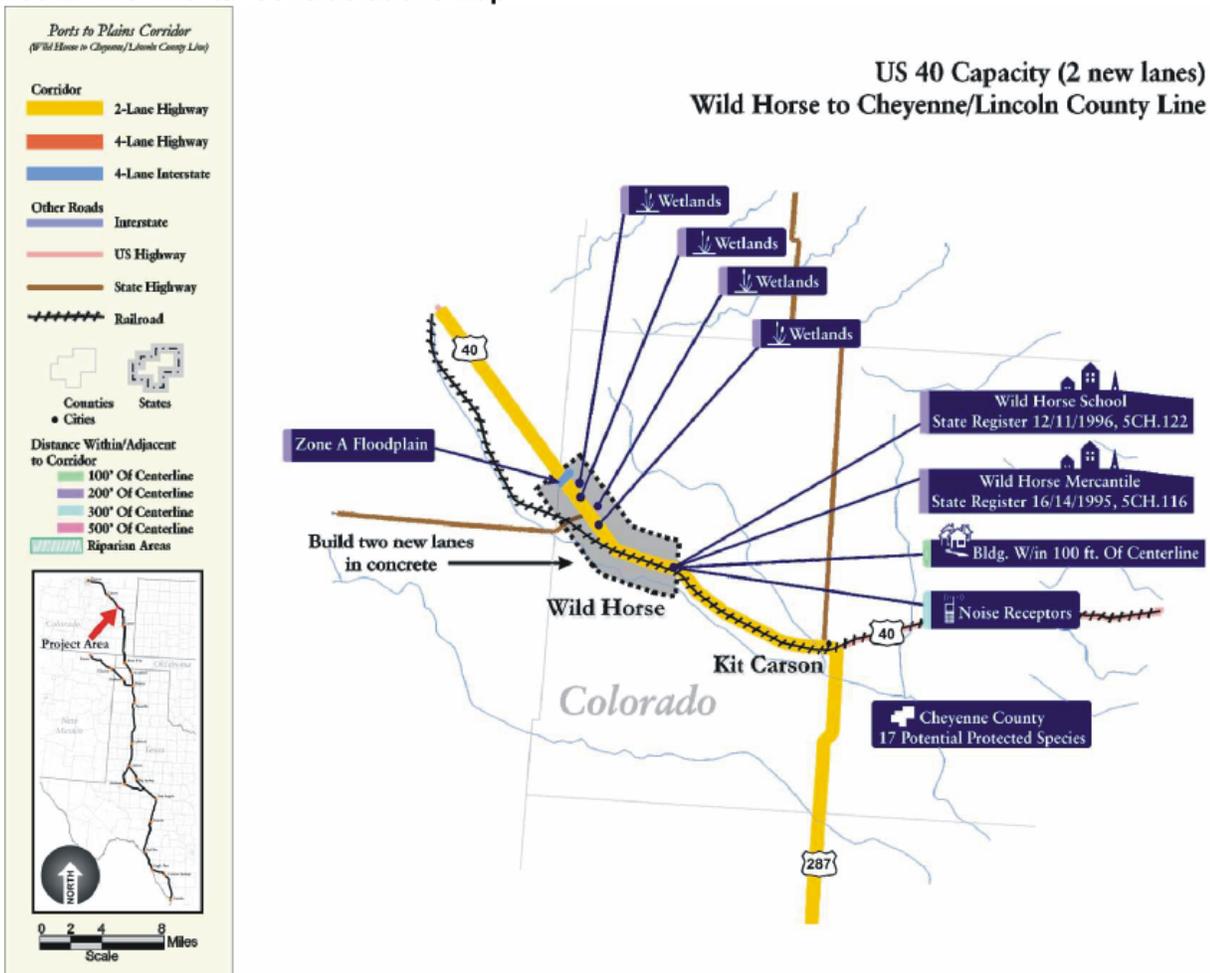
Environmental Impact Analysis

Depending on the final alignment of US 40, up to 43,560 square feet (1 acre) of riverine wetlands and 87,120 square feet (2 acres) of palustrine forest could be affected. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to avoid or reduce impacts to the water resource and wildlife. While no floodplains have been mapped, the team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The USFWS recommends familiarity with the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign be incorporated into the project design and impact analysis. Conceptual plans do not call for construction through Wild Horse, but depending on the final design, the 2 historic sites as well as other nearby buildings could experience direct or proximity impacts such as noise and vibration. The project team will need to coordinate with FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO regarding these historic sites. Within this section, archaeological data appear relatively complete and the potential for unrecorded sites is considered low. However, the team will need to work with the FHWA, CDOT staff, and the SHPO to identify any adverse impacts and develop any necessary mitigation plans.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, Colorado DOW, SHPO, CDOT, and residents and property owners along the section. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 40
From	Cheyenne/Lincoln County Line		
To	Hugo		
Length (Miles)	23	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost	2	Existing Total	3,100
ROW + Utility Cost	2.5	Existing Truck	1,210
Total Cost	75.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	8,930
Condition	Poor	2030 Trucks	2,550

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

Draw Bridge - \$1.1 M; Seven Mile Creek Bridge - \$0.8 M

ITS Site Specific Features

Communication upgrades at rest area

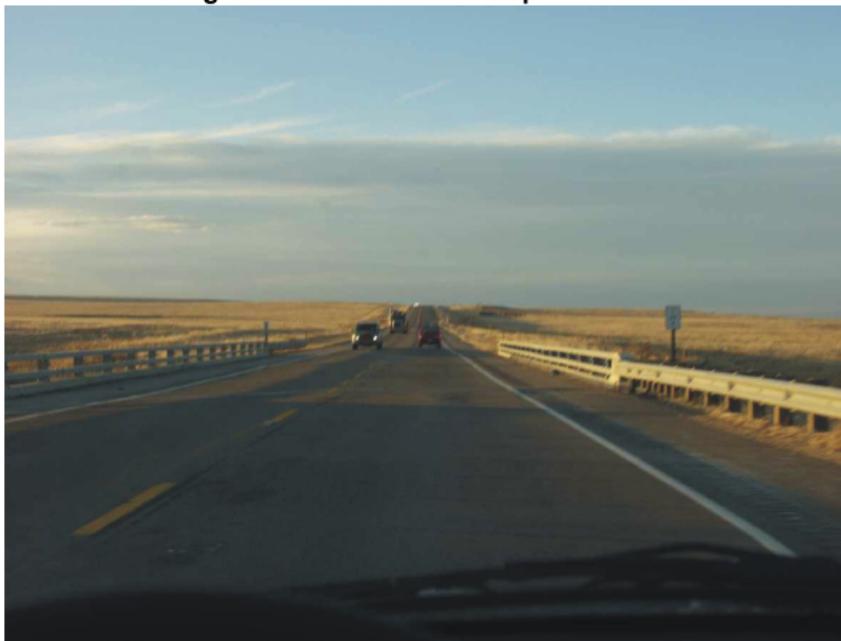
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

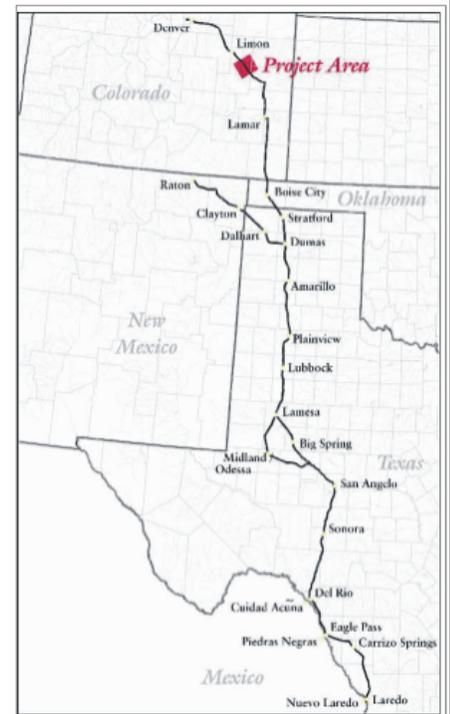
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Baseline

This 23-mile section is within the Big Sandy watershed. Abundant wildlife, including up to 9 federal and state protected species listed in Cheyenne County, may be present due to this section's proximity to Big Sandy Creek for several miles at the Hugo end. NWI maps show 1 palustrine wetland that is within 200 feet of the US 40 centerline. This section crosses no FEMA-mapped floodplains. The Ports to Plains Feasibility Study reports that approximately 7 miles south of Hugo, 2 potentially significant archaeological sites, 5LN132 and 5LN133, are in the vicinity of US 40. It further states that very little information exists on them in the Colorado site data files, but they have been recommended for further testing. Four buildings are within 300 feet of the US 40 centerline, but none are within 100 feet. No hazardous materials sites have been identified in this section.



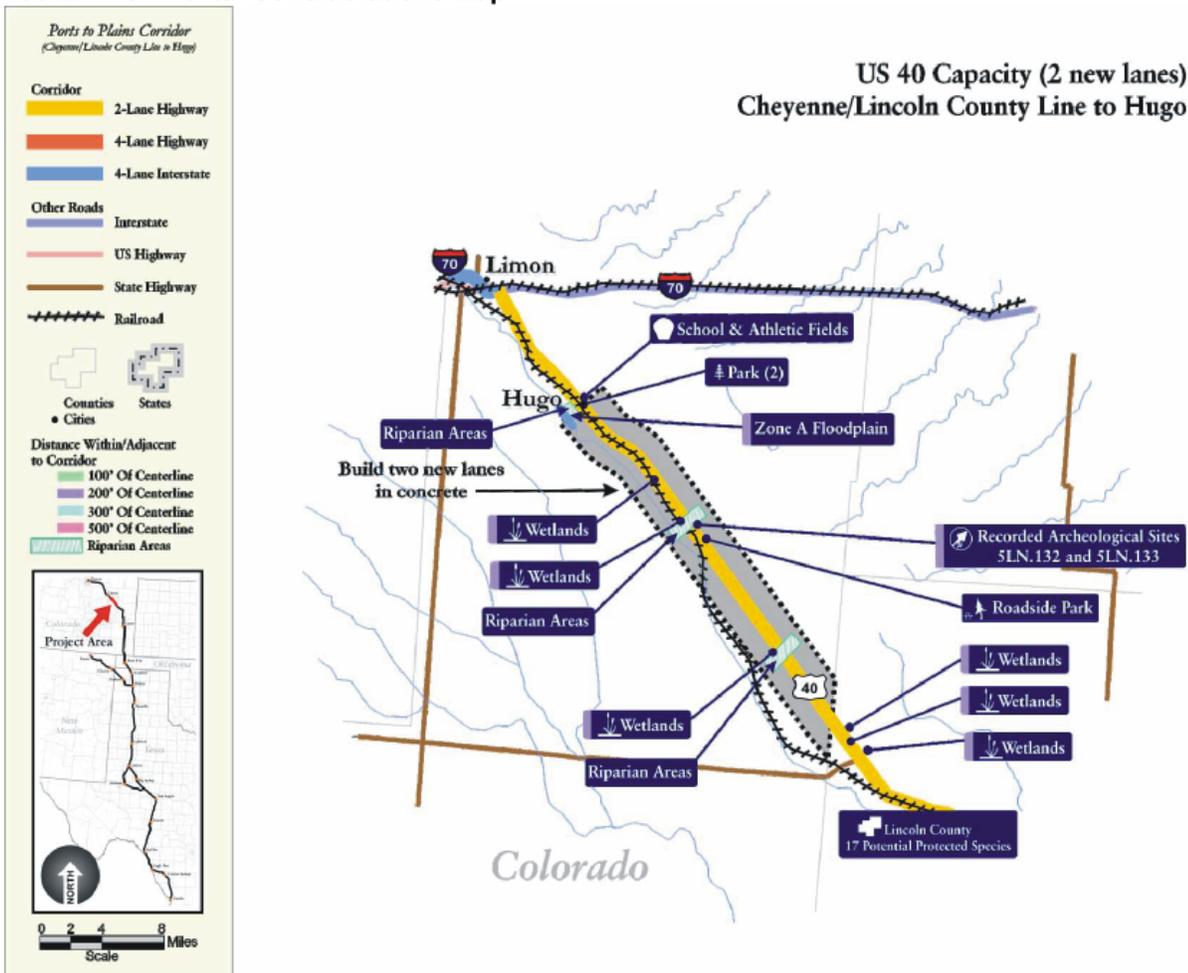
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 40, up to 43,560 square feet (1 acre) of palustrine wetland could be impacted. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains have been mapped, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures along Big Sandy Creek, as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. A cultural resources investigation plan will need to be developed by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO during planning and design, particularly in the vicinity of the identified archaeological sites. The need for mitigation of adverse impacts on archaeological resources will then need to be decided and planned in consultation with the SHPO. The USFWS recommends knowledge of the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign be incorporated into the project design and impact analysis.

Environmental Process

The identified issues will necessitate coordination and consultation with the Colorado DOW, SHPO, CDOT, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Colorado	Facility	US 40
From	Hugo		
To	Limon		
Length (Miles)	16	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,900
ROW + Utility Cost	1.8	Existing Truck	1,130
Total Cost	26.7	AADT Forecast	
Existing Pavement		With Improvements	
Type	Concrete	2030 Total	8,930
Condition	Good	2030 Trucks	2,550

Environmental Baseline

This 16-mile section lies within the Big Sandy watershed. NWI maps show only 1 wetland within 200 feet of the centerline. Big Sandy Creek, a riparian habitat, roughly parallels the existing roadway from Hugo to Limon. Up to 12 federal and state protected species listed for Lincoln County may find habitat along this section. It passes through no FEMA-mapped floodplains. As reported in the Ports to Plains Feasibility Study, Hugo has a possible historic district—a historic commercial and residential downtown in which many of the commercial buildings were constructed of stone in the 1930s and 1940s. The Hugo Union Pacific Railroad Roundhouse (State Register 05/14/1997, 5LN.195) is adjacent to Union Pacific Railroad right-of-way, immediately south of and parallel to US 40. This 1909 roundhouse is associated with the operation and maintenance of the Union Pacific Railroad in eastern Colorado, and is Colorado's most intact Union Pacific example—one of only 4 surviving roundhouses in the state. The Ports to Plains Feasibility Study reports that a high density of archaeological sites occurs along this section. Of interest to the corridor, the Barron Gulch Site (5LN143) north of Hugo is bisected by US 40. USGS maps show approximately 60 buildings in Hugo within 300 feet of the US 40 centerline. Of these, approximately 30 buildings (evenly divided between commercial and residential) are within 100 feet of the centerline. Nine public facilities and buildings in Hugo are adjacent to US 40, including a complex of athletic fields, a fairground, 3 parks, 2 schools and 2 cemeteries. One pipeline is crossed at the northwest edge of Hugo and 1 LUST site on US 40 is listed in the COSTIS database.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, reconstruction of existing lanes and construction of new lanes in concrete.

Structural

NA

ITS Site Specific Features

1 DMS on US 287 NB

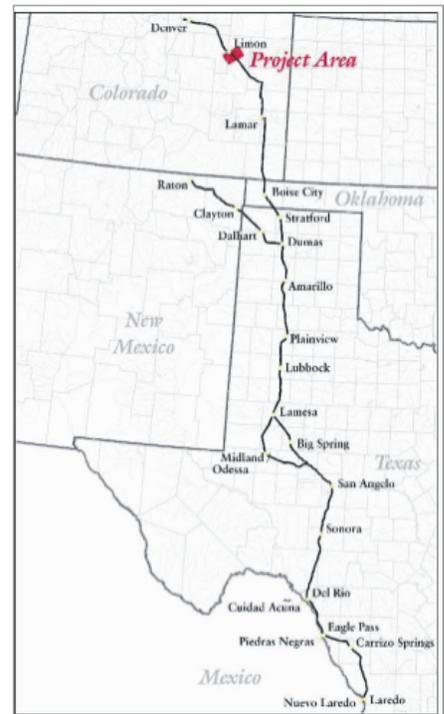
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 40, up to 43,560 square feet (1 acre) of palustrine wetland and 43,560 square feet (1 acre) of riverine wetland could be impacted. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains have been mapped, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain crossings and mitigation measures. The project team will need to coordinate with FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO to develop a cultural resources investigation plan, to address the potential Hugo historic district, adverse effects to the Hugo Roundhouse and the Barron Gulch archaeological site, and to develop mitigation plans (if necessary). Until the cultural resources investigation is completed, it is not possible to state whether any 4(f) impacts can be expected along this section. The USFWS recommends that the project become familiar with the Central Shortgrass Prairie Initiative, and that the findings of the Connectivity Campaign (as yet incomplete) be incorporated into the project design and impact analysis. No construction through Hugo is proposed. Rather, the existing roadway will be restriped to 5 lanes, decreasing the likelihood that relocations will occur. However, if any relocation is necessary, a detailed plan will need to be developed to ensure that it is done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. The pipeline and LUST site will need to be addressed with CDLE during detailed environmental study and engineering to avoid or mitigate potential liability associated with contaminated property, and the project team will need to coordinate with the CDPHE to prepare a Hazardous Materials Management Plan if necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources, and to prevent any contamination and spills during construction and long-term maintenance of the facilities.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, Colorado DOW, SHPO, CDOT, CDLE and CDPHE, the town government of Hugo, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

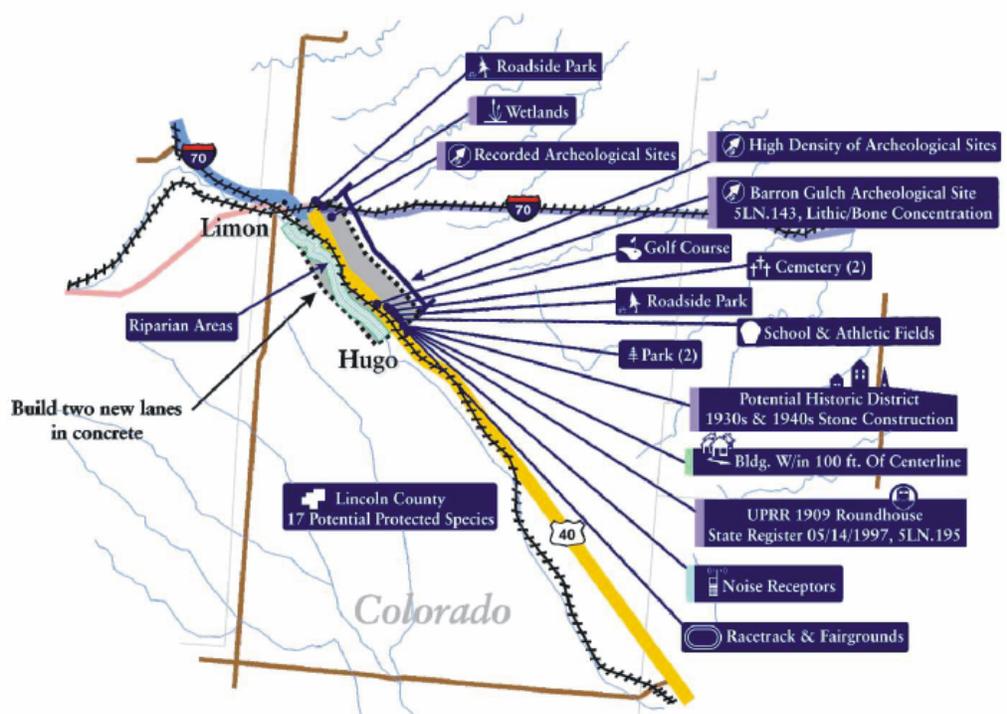
Detailed Environmental Considerations Map

US 40 Capacity (2 new lanes)
Hugo to Limon

Ports to Plains Corridor
(Hugo to Limon)

- Corridor**
 - 2-Lane Highway
 - 4-Lane Highway
 - 4-Lane Interstate
- Other Roads**
 - Interstate
 - US Highway
 - State Highway
 - Railroad
- Counties**
 - States
 - Cities
- Distance Within/Adjacent to Corridor**
 - 100' Of Centerline
 - 200' Of Centerline
 - 300' Of Centerline
 - 500' Of Centerline
 - Riparian Areas

Scale: 0 2 4 8 Miles



State	Texas	Facility	US 87
From	Dumas		
To	Moore/Hartley County Line		
Length (Miles)	9	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	3,550
ROW + Utility Cost	1.3	Existing Truck	1,210
Total Cost	20.4	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,940
Condition	Fair	2030 Trucks	1,100

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in asphalt.

Structural

NA

ITS Site Specific Features

Communication upgrades at rest area

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

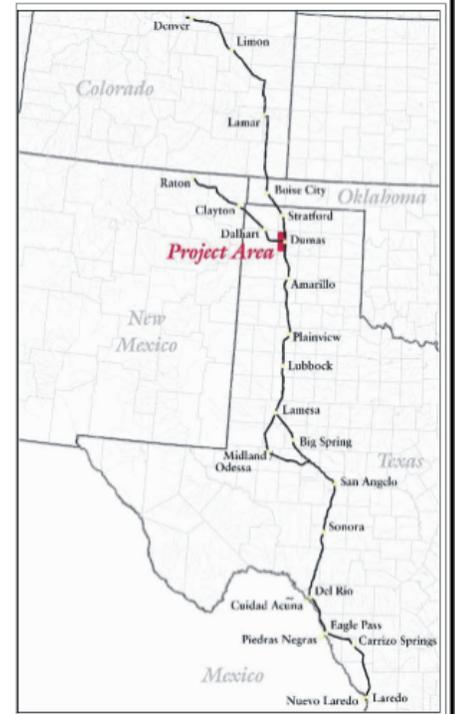
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Baseline

This 9-mile section is in the Palo Duro watershed. In this part of Texas, the landscape is flat and featureless. This section of the corridor contains no FEMA-mapped floodplains. NWI maps show that no rivers or creeks are crossed, and no wetlands occur within 200 feet of the US 87 centerline. However, up to 5 federal and state protected species listed in Moore County may be present along this section. According to the Ports to Plains Feasibility Study, no archaeological sites, state archaeological landmarks, or NRHP properties will be impacted by construction on the Dalhart section. USGS maps show that 17 buildings lie between the railroad tracks and US 87 in Dumas and are within 300 feet of the centerline of US 87; of these, 11 buildings are within 100 feet of the centerline. The TCEQ lists 1 LPST site: AMAS Potash Corporation on North Highway 87 in Dumas.



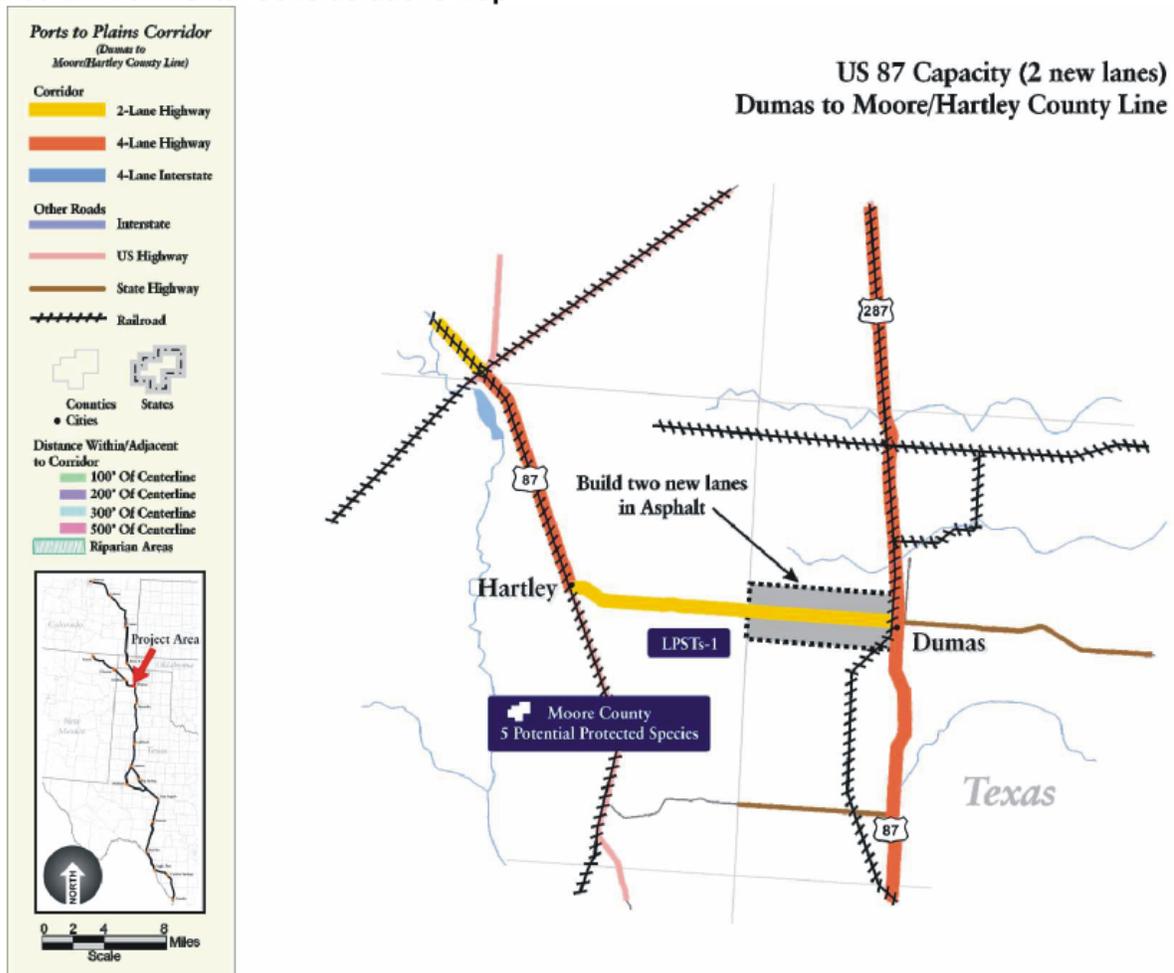
Environmental Impact Analysis

The project team will need to validate the NWI map data regarding the absence of river / creek crossings and wetlands within 200 feet of the US 87 centerline. Coordination will need to be done with USFWS and TPWD regarding local habitats of protected species and other wildlife, and best management practices will need to be used for the protection of water, habitat and wildlife resources and amelioration of any impacts. While no archaeological sites, state archaeological landmarks, or NRHP properties have been identified, the project team will need to coordinate with the State Historic Preservation Officer of the THC to develop investigation, assessment, and mitigation plans with FHWA and TxDOT. The identified LPST site on North US 87 in Dumas will need to be addressed during environmental study and engineering to avoid or mitigate potential liability associated with contaminated property. The project team will need to consult with the TCEQ to prepare a Hazardous Materials Management Plan, if necessary, and will need to be prepared for the use of any hazardous materials during construction. Best management practices will need to be used to prevent contamination and spills during construction and long-term maintenance of the facilities. Depending on the detailed design of this widening, some relocations could occur on the western side of Dumas between the Burlington Northern Santa Fe railroad tracks and US 287. However, no construction is planned in Dumas, thereby reducing the likelihood of relocations due to the project.

Environmental Process

The identified issues will necessitate coordination and consultation with the USFWS, TPWD, TxDOT, TCEQ, the town government of Dumas, and residents and property owners. Early discussions with these agencies will help to determine the most probable NEPA process. Because environmental effects appear to be minimal, a CE may achieve clearance of this section. However, if during scoping the environmental effects are found to be uncertain, an EA will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 87
From	Moore/Hartley County Line		
To	Hartley/Interchange with US 385		
Length (Miles)	12	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	3,550
ROW + Utility Cost	0.7	Existing Truck	1,210
Total Cost	27.8	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	6,940
Condition	Fair	2030 Trucks	1,100

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in asphalt.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 1 traffic signal and upgrades at 2 school flashers

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

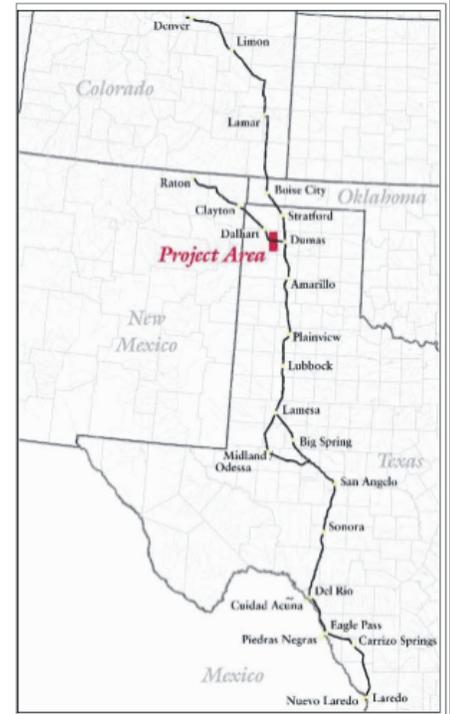
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Baseline

This 12-mile section is in the Palo Duro watershed. NWI maps show 8 wetlands within 200 feet of the US 87 centerline east of Hartley. Up to 10 federal and state protected species listed in Hartley County may be present along the corridor. No rivers or creeks are crossed or adjacent to the project area, and FEMA has not mapped floodplains in this area. USGS maps show that the Hartley rodeo ground is adjacent to this section, and the corridor also crosses 1 pipeline. The TCEQ lists 1 LPST (closed) on US 87 in Hartley.



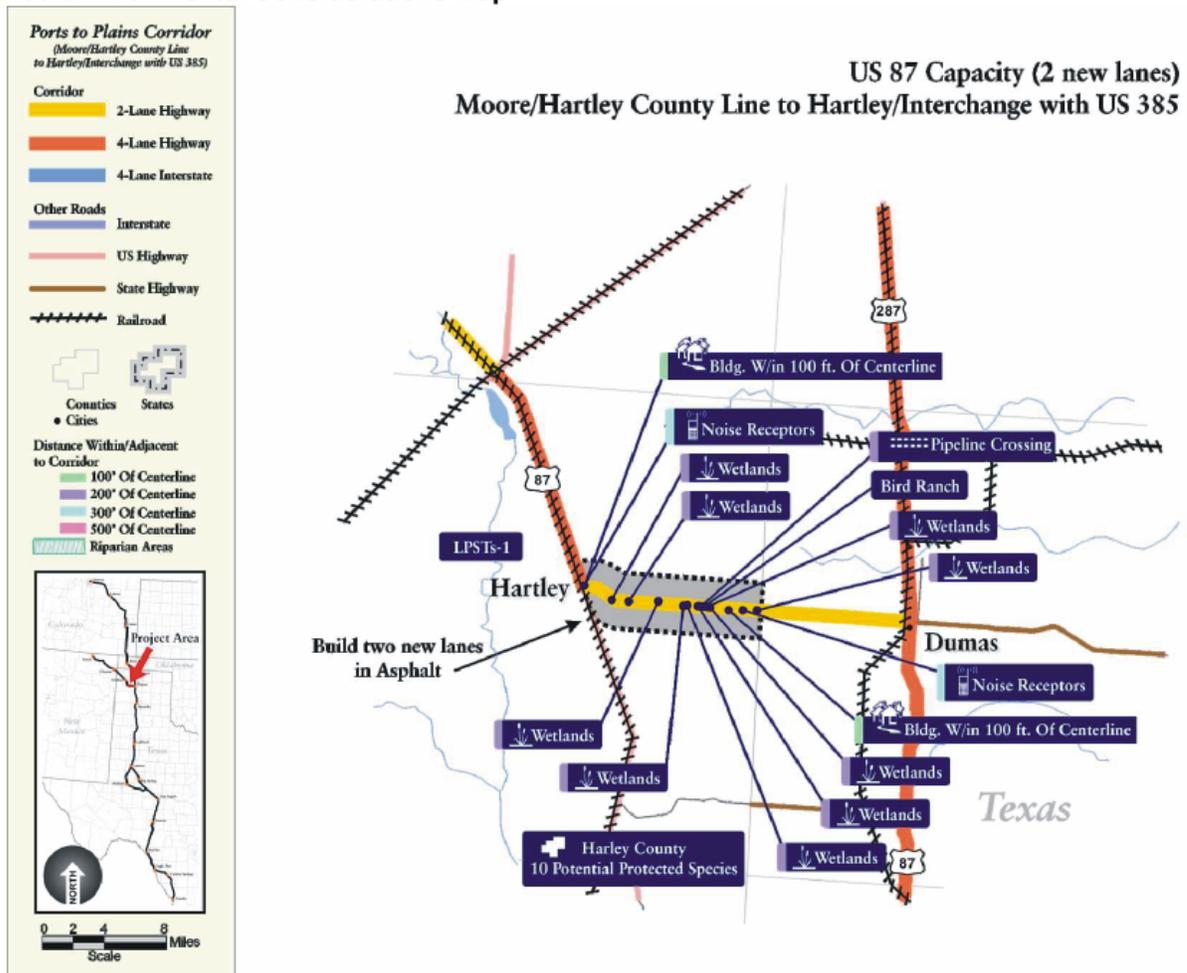
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 87, up to 435,600 square feet (10 acres) of palustrine wetlands could be impacted. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the wetlands and wildlife they may support. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. Also depending on the final design, the Hartley rodeo ground might be impacted. The identified LPST site will need to be addressed during detailed environmental study and engineering to avoid or mitigate potential liability associated with contaminated properties. The project team will need to consult with the TCEQ to prepare a Hazardous Materials Management Plan, if necessary, and will need to be prepared for the use of any hazardous materials during construction. Best management practices will need to be used to prevent any contamination and spills during construction and long-term maintenance of the facilities. The project team will need to work with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas to determine the pipeline's ownership. The team will also need to work with agency staff and the owner, while using best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, USFWS, TPWD, TxDOT, TCEQ, the Railroad Commission of Texas, the town government of Hartley, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	US 87
From	Dalhart Relief Route		
To	Tx/NM Border		
Length (Miles)	35	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	6.7	Existing Total	4,100
ROW + Utility Cost	2.8	Existing Truck	1,160
Total Cost	82.3	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	8,690
Condition	Fair	2030 Trucks	1,990

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in asphalt.

Structural

Rita Blanco Creek Bridge - \$3.5 M:Rita Blanco Creek Bridge - \$3.2 M

ITS Site Specific Features

Periodic upgrades at 1 traffic signal and upgrades at 2 school flashers

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Baseline

This 35-mile section is in the Rita Blanca watershed, and West Rita Blanca Creek (which the corridor crosses twice) is one of the dominant elements of the natural environment in this area. It is associated with the Rita Blanca National Grassland Regional Conservation Area, which is located outside the corridor. West Rita Blanca Creek is designated by the Panhandle Water Planning Area as a Stream Segment with Ecologically Unique Resources, as is Rita Blanca Creek. Up to 10 federal and state protected species listed in Dallam County may be found along the corridor. NWI maps show that 3 wetland areas along this section are associated with West Rita Blanca Creek, and 4 others are located north of Hartley. FEMA has not mapped floodplains along this section. USGS maps show 2 buildings within 100 feet of the centerline of US 87, 1 west of Bolin and 1 near Ware; not other buildings are within 300 feet of the centerline. Many areas of irrigated farmland lie within 200 feet of US 87 along this section. In addition, USGS maps show a roadside park and a solid waste site (landfill) adjacent to this section of US 87 in the Dalhart area.



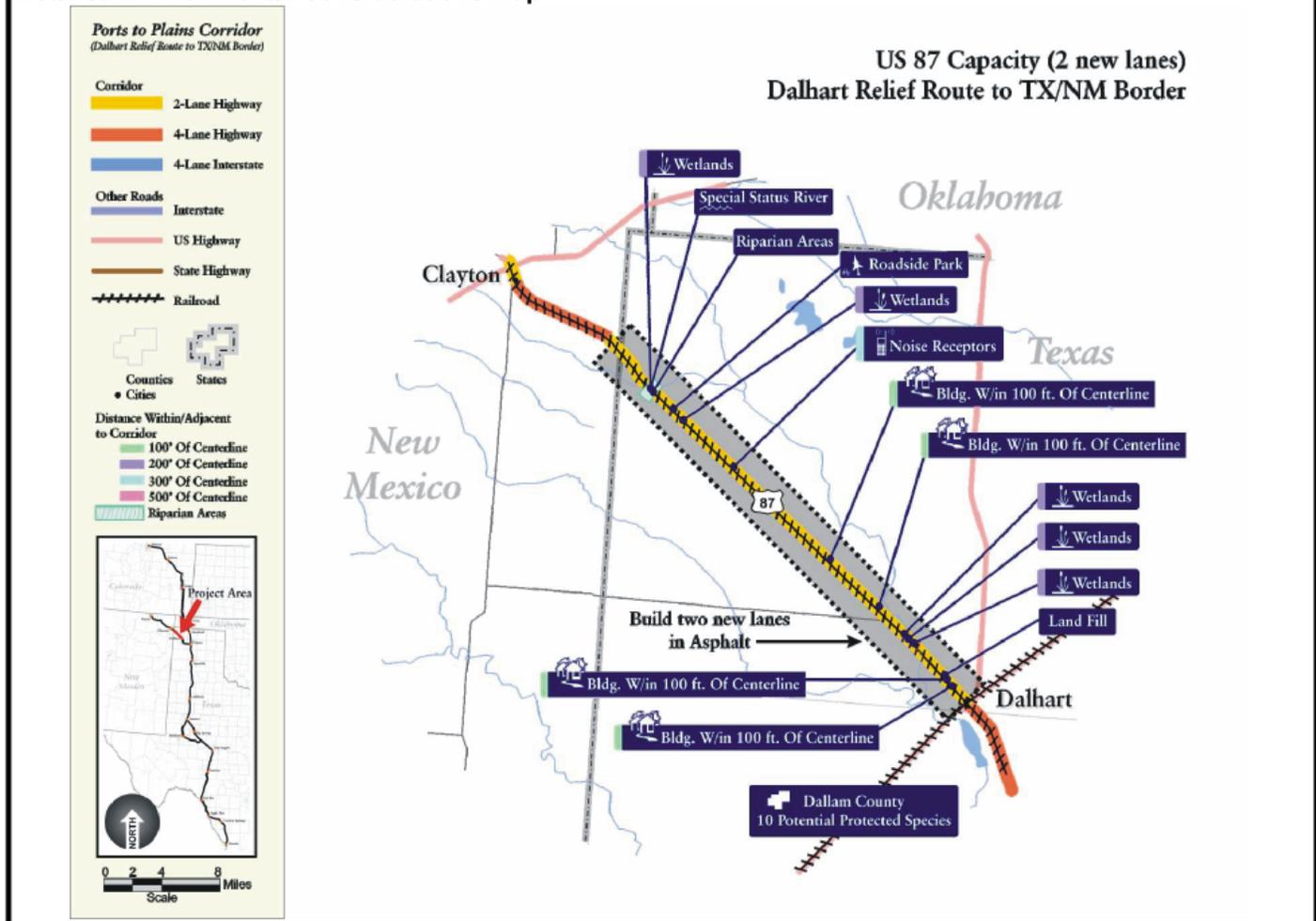
Environmental Impact Analysis

Depending on the final design of the ultimate 4-lane alignment of US 87, up to 174,240 square feet (4 acres) of palustrine wetlands and 87,120 square feet (2 acres) of riverine wetlands could be impacted. The river and other wetlands increase the likelihood of encountering federal and state protected species associated with these natural resources. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains are mapped for this section, the team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures, as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. Impacts could occur if all or part of the landfill, located on US 87 a little over 2 miles northwest of Dalhart, is acquired as part of right-of-way for the project, if existing contamination of soils or groundwater is spread during project construction, or if contaminated property poses a physical danger to construction crews or the general public. The project team will need to consult with the TCEQ to prepare a Hazardous Materials Management Plan, if necessary, for the use of any hazardous materials during construction. Best management practices will need to be used to prevent any contamination and spills. If it is found that any relocation is necessary, a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, TPWD, TxDOT, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	New Mexico	Facility	US 64
From	Clayton		
To	Capulin		
Length (Miles)	52	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost	1.9	Existing Total	2,950
ROW + Utility Cost		Existing Truck	870
Total Cost	78.4	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	3,800
Condition	Fair	2030 Trucks	1,164

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in asphalt. Part of GRIP program.

Structural

Colo.&Southern R/R Bridge - \$0.9 M:Unnamed Waterway Bridge - \$1.0 M

ITS Site Specific Features

Periodic upgrades at 1 traffic signal, upgrades at 2 school flashers, and comm upgrades at the rest area

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Environmental Baseline

This 52-mile section lies within the Cimarron Headwaters and Canadian Headwaters watersheds. In this section, the US Highway 64-87 EA reports no wetlands or surface waters, and the topography does not lend itself to excessive flood volume within confined areas. No wetlands are located within this section, but 5 federal and state protected species are known to find habitat along this corridor. Up to 22 other federal and state protected species could occur as well. The EA reports a historical marker showing where the section crosses the Cimarron Cutoff Branch of the Old Santa Fe Trail (LA 38648). LA 140462 has 2 areas of concentration: Area 1 (associated railroad features with artifacts) and Area 2 (historic railroad grades). This site is immediately west of the intersection of NM 325/US 64-87. Between Capulin and Clayton, 7 buildings are considered eligible for listing in the NRHP, but none are within 200 feet of the US 64 centerline. The EA reports that 27 archaeological sites are in the vicinity of this section, and 10 of these extend into the proposed construction zone. It also reports 7 hazardous materials sites in Des Moines. All are associated with existing or former gasoline stations. A 'Superfund' monitoring well and 4 hazardous materials sites are located along US 87 (First Street) in Clayton. No relocations are anticipated in Grenville or Des Moines. Depending on the final design selected for the project, 1 building on the outskirts of Clayton may be acquired. It is a self-storage building located south of the highway and just west of the Burlington Northern Santa Fe railroad overpass at the west end of Clayton (Alternative 1 in the Draft EA). Alternative 4 (the preferred alternative in the EA) would not require the acquisition of this building, however. The EA states that there is no readily identifiable minority or low-income group at any one place along the corridor, and that adverse impacts to roadside businesses are not expected.

Photo of Existing Corridor or Detailed Map



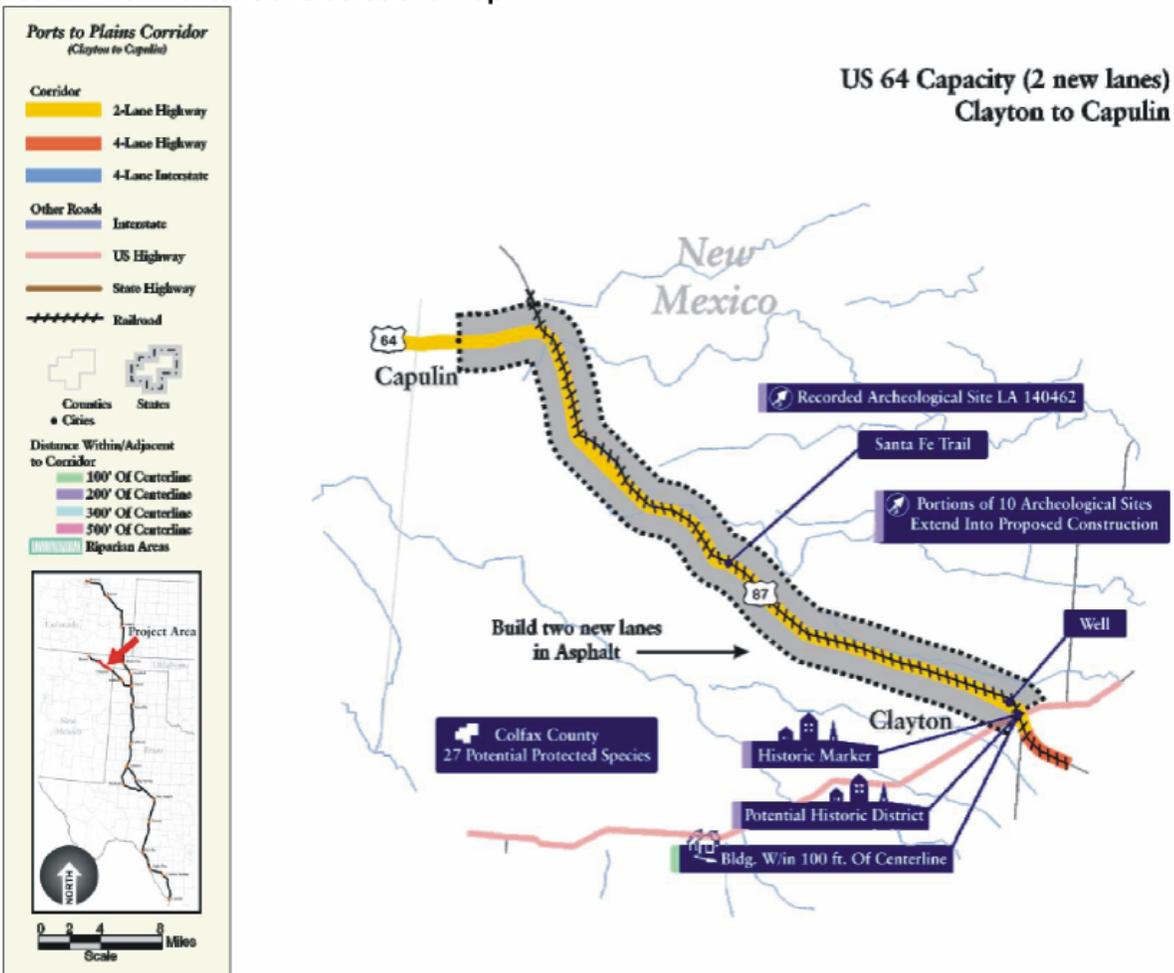
Environmental Impact Analysis

Construction along this segment will impact no wetlands. No NRHP-eligible or potentially eligible structures will be directly or permanently affected, but the EA recommends that temporary fencing be used at the 7 NRHP-eligible cultural resource sites within the construction area to protect them from temporary disturbance (e.g., noise) during construction. Potential adverse impacts to wildlife include loss of habitat, increased vehicle/wildlife collisions and construction effects. However, the EA does not anticipate any adverse permanent impacts to wildlife or federal and / or state protected species. Coordination with USFWS and the New Mexico Game & Fish Department regarding potential impacts will need to continue through design and construction as appropriate. Site LA 140462 Area 1 falls within the proposed construction limits. Improvements at this location are expected to occur to the north of the existing highway and will require approximately 14 feet of additional right-of-way, impacting a portion of Area 1. No NRHP-eligible or potentially eligible structures will be affected. The construction of temporary fencing will need to be used during construction to protect cultural resources within the potential area of effect from disturbance. The Draft EA recommends a program of Archival Data Recovery for this site to minimize adverse effects to the resource. Area 2 will not be impacted. The EA reports that additional investigation of the identified hazardous materials sites will need to be conducted under the direction of the New Mexico Department of Transportation (NMDOT) Environmental Geology Section in the next phase of the project. Results of the testing will need to be used to further refine project alternatives and develop mitigation measures for the project as necessary.

Environmental Process

The Draft EA for this section was completed in May 2004 and a Finding of No Significant Impact was signed on October 26, 2004.

Detailed Environmental Considerations Map



State	New Mexico	Facility	US 64
From	Capulin		
To	Union/Colfax County Line		
Length (Miles)	1	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	2,950
ROW + Utility Cost		Existing Truck	870
Total Cost	1.5	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	3,800
Condition	Good	2030 Trucks	1,164

Environmental Baseline

This 1-mile section is within the Cimarron Headwaters and Upper Beaver watersheds. In this section, the US Highway 64-87 EA reports no wetlands or surface waters, and the topography does not lend itself to excessive flood volume within confined areas. Five federal and state protected species are known to find habitat along this section, and up to 22 other federal and state protected species could occur as well. The EA reports that 3 archaeological sites (LA 140445, LA 140446, and LA 140447) occur in the vicinity of the section, and that 1 building in Capulin, more than 200 feet from the centerline of US 64-87, is considered eligible for listing in the NRHP. The EA also reports that an Initial Site Assessment identified 4 hazardous materials sites associated with gasoline stations in Capulin.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in asphalt. Part of GRIP program.

Structural

NA

ITS Site Specific Features

NA

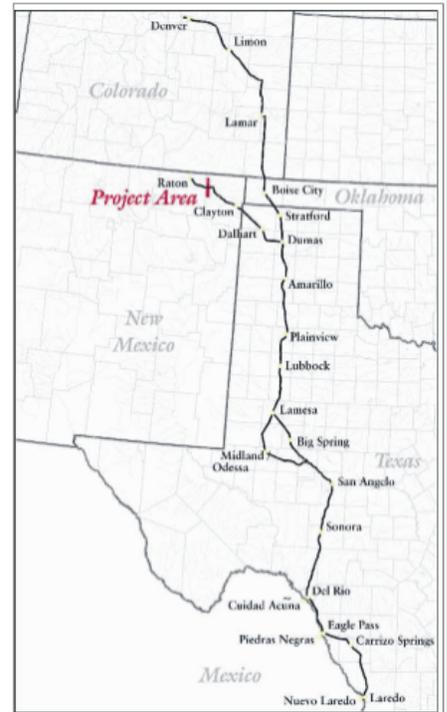
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



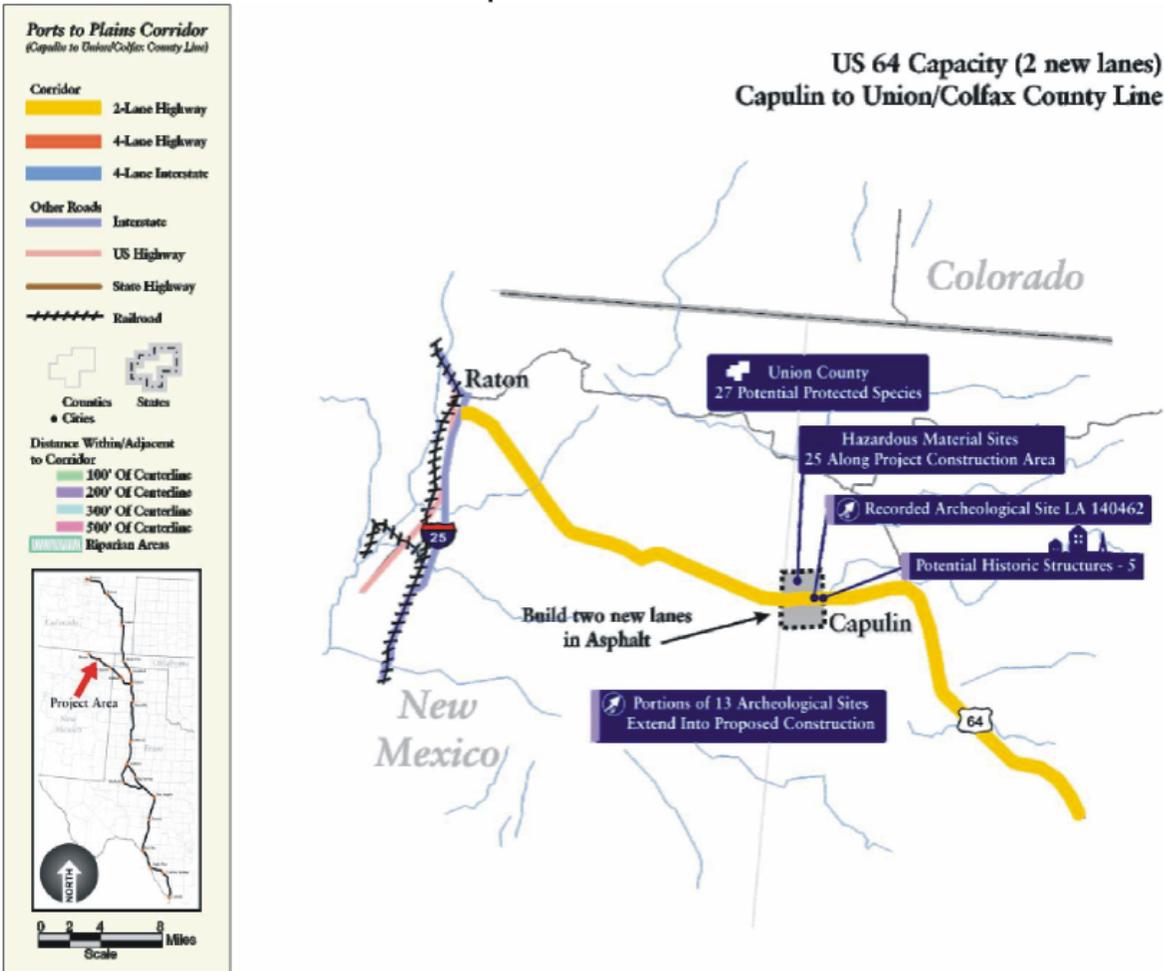
Environmental Impact Analysis

Potential adverse impacts to wildlife include loss of habitat, increased vehicle/wildlife collisions and construction effects. However, the EA does not anticipate any permanent adverse impacts to wildlife or federal and / or state protected species. Coordination with USFWS and the New Mexico Game & Fish Department regarding potential impacts will need to continue through design and construction as appropriate. Archaeological site 140447 is sufficiently remote from the section that no avoidance or mitigations are needed. No NRHP-eligible or potentially eligible structures will be affected. The construction of temporary fencing will need to be used during construction to protect cultural resources within the potential area of effect from disturbance. The EA reports that additional investigation of the identified hazardous materials sites will need to be conducted under the direction of the NMDOT Environmental Geology Section in the next phase of the project. Results of the testing will need to be used to further refine project alternatives and develop mitigation measures as necessary. The EA also states that there is no readily identifiable minority or low-income group at any one place along the corridor, and that adverse impacts to local roadside businesses are not expected. No relocations are anticipated along this section.

Environmental Process

The Draft EA for this section was completed in May 2004 and a Finding of No Significant Impact was signed on October 26, 2004.

Detailed Environmental Considerations Map



State	New Mexico	Facility	US 64
From	Union/Colfax County Line		
To	Raton/I-25		
Length (Miles)	26	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost	4	Existing Total	2,950
ROW + Utility Cost		Existing Truck	870
Total Cost	50.4	AADT Forecast	
Existing Pavement		With Improvements	
Type	Asphalt	2030 Total	3,800
Condition	Good	2030 Trucks	1,164

Environmental Baseline

This 28-mile section is within the Cimarron Headwaters, Upper Beaver, and Rita Blanca watersheds. In this section, the US Highway 64-87 EA reports that 20 wetlands occur within 200 feet of the US 64 centerline, of which 17 are connected to or immediately adjacent to waterways that qualify as Waters of the U.S. Field investigations identified a possible spring within Little Water Creek (milepost 364.9) that is associated with a wetland. Creeks that the corridor crosses in this section are Chicorica, Una de Gato, and Raton. Within the project limits, the 100-year floodplain follows both sides of Raton Creek. The Zone A floodplain associated with Raton Creek is crossed at milepost 349.8, approximately 0.6 miles east of Raton (200-foot wide crossing). Five federal and state protected species are known to find habitat along this section, but up to 22 others could occur. The EA reports that 8 archaeological sites occur within the area of potential effect. No buildings considered eligible for listing in the NRHP are in the immediate vicinity of the proposed improvements. Potential noise receptors are located in the neighborhoods immediately east of Raton. The EA reports that an Initial Site Assessment identified 8 hazardous materials sites associated with gasoline stations within the northernmost 1/2 mile of this section, in Raton.

Description

Expansion from 2-lane to 4-lane divided. Flat terrain, build 2 new lanes in asphalt. Part of GRIP program.

Structural

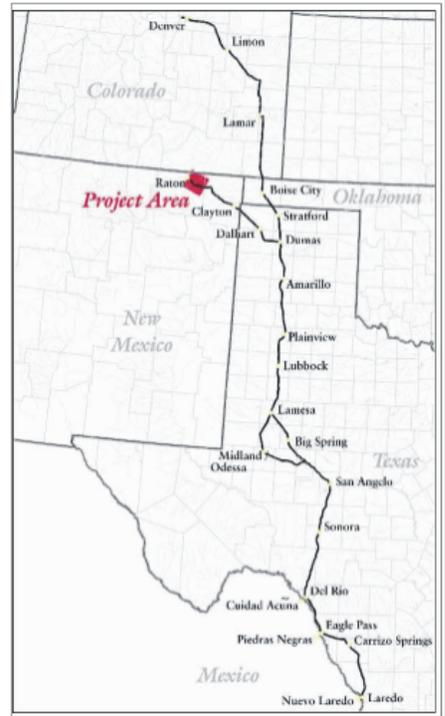
Unnamed Waterway Bridge - \$1.9 M:Una De Gato Creek Bridge - \$1.5 M:Raton Creek Bridge - \$0.6 M

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



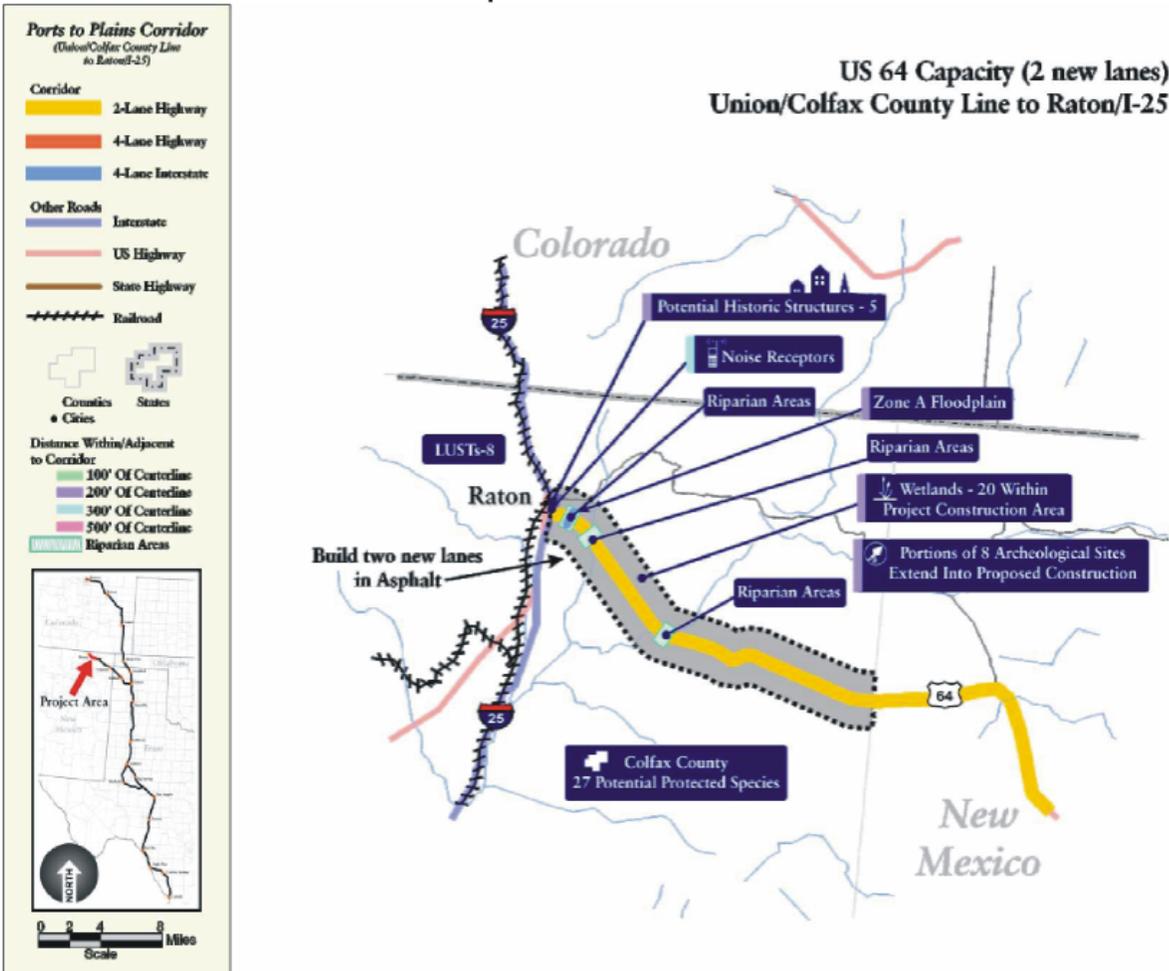
Environmental Impact Analysis

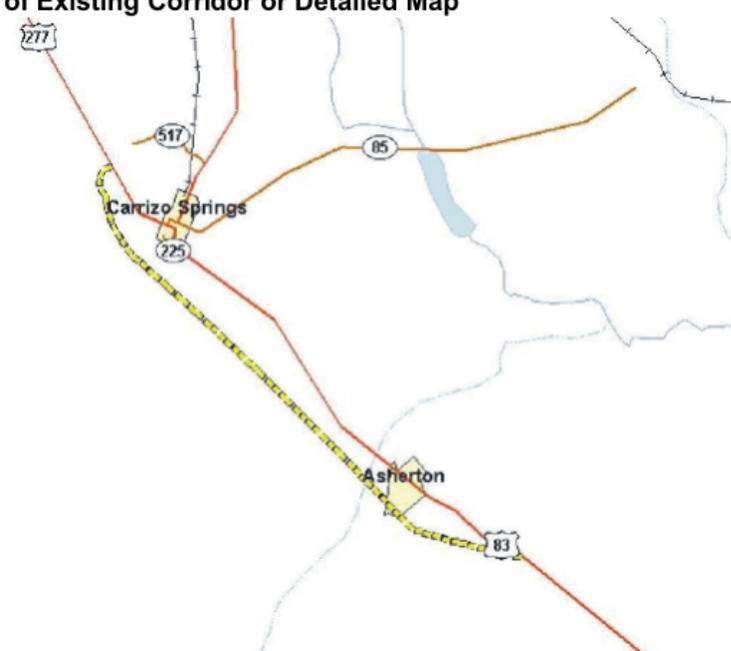
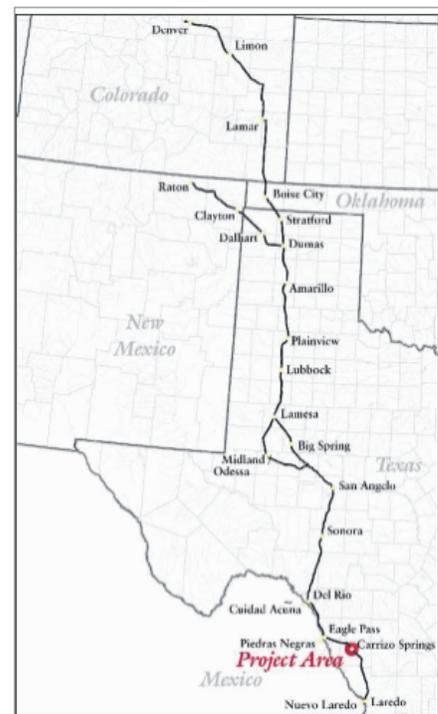
Depending on the ultimate design of the proposed improvements, less than 43,560 square feet (1 acre) of palustrine wetlands could be impacted. Efforts to avoid the spring-fed wetland will need to be made and a wetland mitigation plan will need to be developed in cooperation with the USACE. Best management practices will need to be used to prevent damage or contamination to water resources during construction and long-term maintenance of the facilities. Measures will need to be taken to ensure that floodplain capacity is not reduced and that floodplain management or development plans are not impaired. Potential adverse impacts to wildlife include loss of habitat, increased vehicle/wildlife collisions and construction effects. However, the Draft EA does not anticipate any adverse permanent impacts to wildlife or federal and state protected species. Coordination with USFWS and the New Mexico Game & Fish Department regarding potential impacts will need to continue through design and construction as appropriate. The EA also reports that additional investigation of the identified hazardous materials sites will need to be conducted under the direction of the NMDOT Environmental Geology Section in the next phase of the project. Results of the testing will need to be used to further refine project alternatives and develop mitigation measures as necessary. The EA also states that there is no readily identifiable minority or low-income group at any one place along the corridor, and that adverse impacts to local roadside businesses are not expected. No relocations are anticipated along this section.

Environmental Process

The Draft EA for this section was completed in May 2004 and a Finding of No Significant Impact was signed on October 26, 2004.

Detailed Environmental Considerations Map



State	Texas	Facility	Carrizo Springs Relief Route	Environmental Baseline This 8.6-mile relief route in the Upper Nueces watershed would route traffic through an unpopulated area west of Asherton and Carrizo Springs. NW1 maps show 7 wetlands within 200 feet of the route, all associated with creek crossings. These wetlands and floodplain areas help support up to 14 federal and / or state protected species. Riparian habitat is found at the crossings of 5 creeks. Creeks with mapped Zone A floodplains and the crossing widths are El Moro Creek and a tributary south of Asherton with several floodplains ranging from 400 to 2,200 feet; Barrosa Creek 4 miles north of Asherton, 3,000 feet to 5,500 feet; and Carrizo Creek south of Carrizo Springs, 400 feet. It is possible that this section crosses the route El Camino Real de los Tejas, a newly designated National Historic Trail. The TCEQ database lists 9 LPST sites located along US 83/277, but none are located within 200 feet of the relief route.
From	South of Asherton	To	North of Carrizo Springs	
Length (Miles)	8.6	Priority Group	C, 2016-2020	
Costs (\$Millions)		AADT		
Structure Cost		Existing Total		
ROW + Utility Cost	1.7	Existing Truck		
Total Cost	24.1	AADT Forecast		
Existing Pavement		With Improvements		
Type	NA	2030 Total	3,480	
Condition	NA	2030 Trucks	720	
Description				
An 8.6-mile relief route on the west side of Carrizo Springs. Interchanges at US 277 north, US 87 south, and Ranch Road 2644.				
Structural				
NA				
ITS Site Specific Features		ITS Features Per Mile		
Periodic upgrades at 1 traffic signal until relief route is completed		Flashing beacon signs, traffic monitoring equipment, oversize mile markers		
ITS Features Installed Per Region				
Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support				
Photo of Existing Corridor or Detailed Map				
				

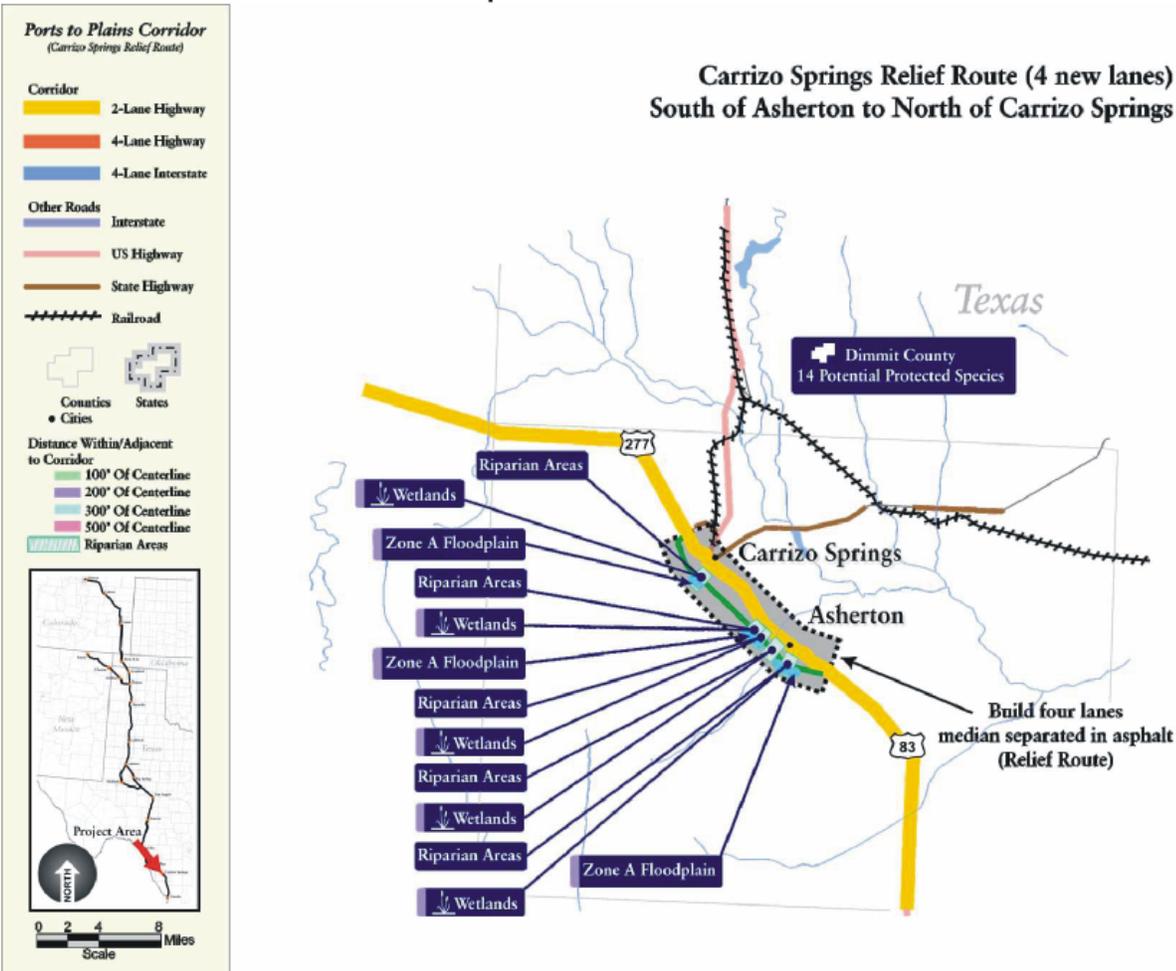
Environmental Impact Analysis

Depending on the final design of the ultimate alignment of this relief route, up to 261,360 square feet (6 acres) of riverine wetland and 5 creeks with riparian habitat could be impacted. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. The team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The project team will need to coordinate with the National Park Service (NPS) and the SHPO of the Texas Historical Commission (THC) regarding El Camino Real de los Tejas, its location, the potential for impacts, and any required mitigation measures.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, TPWD, THC, NPS, TxDOT, the town governments of Asherton and Carrizo Springs, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	Eagle Pass Relief Route
From	Eagle Pass International Bridge		
To	US 277 East of Eagle Pass		
Length (Miles)	9.3	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	1.8	Existing Truck	
Total Cost	41.8	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	4,180
Condition	NA	2030 Trucks	948

Environmental Baseline

This relief route in the San Ambrosia-Santa Isabel watershed. South of US 277, the route crosses 4 canals and tributaries to the Rio Grande River. The Eagle Pass Outer Loop EA (1999) reports no wetlands along this route. Riparian woodland is generally confined to floodplains. Areas with mapped Zone A floodplains and the crossing widths are an Unnamed Creek, 1,200 feet; Rio Grande River, 1,700 feet; and another Unnamed Creek, 1,000 feet. The EA reports that while up to 14 federal and state protected species that occur in Maverick County could be present along the relief route, but the likelihood is remote. The EA also reports an oil well within 200 feet of the alignment. The racial and ethnic distributions along the relief route alignment is reported by the EA to be similar to the county and city. The racial/ethnic distribution of Maverick County is 93 percent Hispanic; 4 percent white; 2 percent American Indian, Eskimo, or Aleut; and less than one percent other (1990 Census). The racial/ethnic distribution of Eagle Pass is 95 percent Hispanic, 4 percent white and less than 1 percent other (1990 Census). The racial/ethnic distribution of the Block Groups of the Locally Preferred Alternative is 93 percent Hispanic, 2.5 percent white, 4.5 percent American Indian/Eskimo/Aleut, and less than 1 percent other (1990 Census). The EA reports that 3 known archaeological sites are within 200 feet of the alignment. Site 42MV237 is a historical bone and trash scatter likely associated with site 41MV2, Fort Duncan. Site 41MB106 is a stratified, Archaic campsite crossed by the alignment along the Rio Grande in the southwestern portion of the project area. The potential for more unrecorded archaeological resources was noted near major creeks and waterways, such as along the alluvial terraces of the Rio Grande. Two Historic Standing Structures are reported to be close to the proposed alignment. These are the Union Pacific Railroad bridge spanning the Rio Grande, which appears to be eligible for the NRHP, and a possibly eligible single dwelling built around 1950.

Description

An 8.4-mile relief route on the east and north sides of Eagle Pass starting at US 277 east of town to US 277 north of town near Elm Creek Drive. Interchanges at US 277 north and east, US 57, and Ranch Road 1588. Grade separation of the UPRR tracks.

Structural

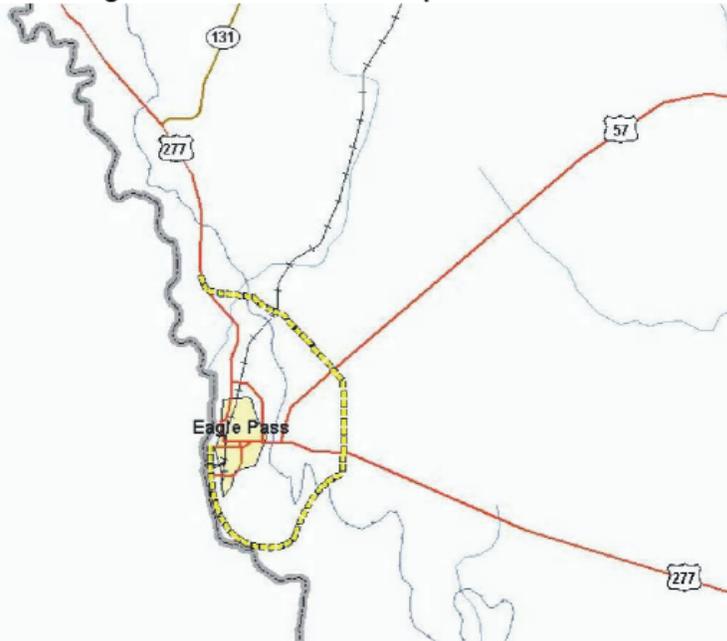
NA

ITS Site Specific Features	ITS Features Per Mile
NA	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



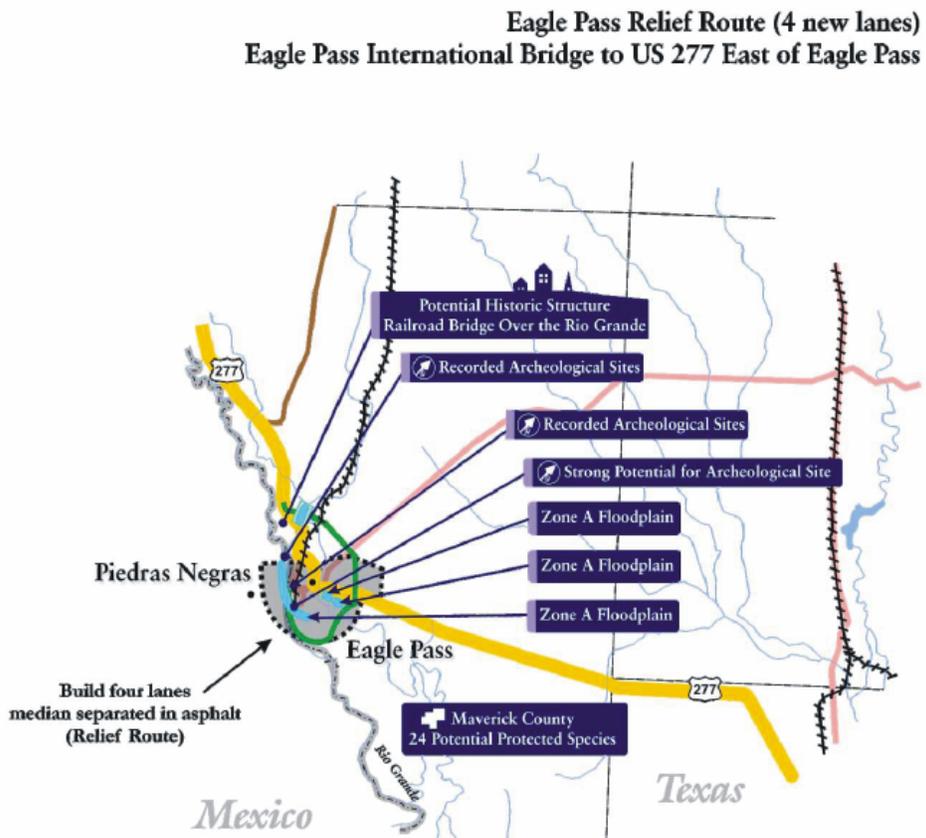
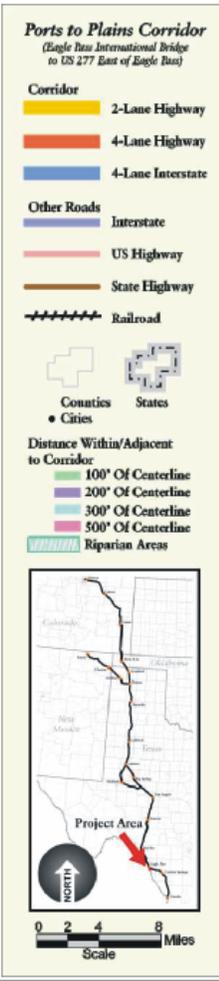
Environmental Impact Analysis

The EA reports that the primary effects of the project on surface water are associated with the disturbance of vegetation and soil cover during construction and maintenance (of the road and rights-of-way). Further, encroachments on the floodplains would not increase the base-flood elevation to a level that would violate applicable regulations. Where the proposed loop crosses a stream or canal in a location not previously disturbed by a roadway, some disruption to the local wildlife territories would occur. The proposed alternative could divide habitat and cut off existing wildlife corridors. There is a possibility of impacts to individual threatened and endangered species (if present) as a result of construction of the proposed project. Coordination with USACE and TPWD will need to continue, and best management practices will need to be used to avoid or minimize any adverse impacts from construction and long-term maintenance of the facilities. Further archaeological work may be necessary at the sites described above, depending on the level of proposed impacts and the final loop alignment. Coordination with the Texas SHPO will need to continue. The standing historic buildings will require continued coordination with the SHPO to establish eligibility for listing in the NRHP. The EA reports that direct impacts are expected to affect 362 acres of open range/pasture lands and 34 acres of floodplain, scrub-shrub/undeveloped land. In addition, one oil well location would be impacted. The EA further reports that while 'individual minority and low-income persons may be affected by the proposed project, it cannot be shown that implementation of any of the 4 alternatives or the No-Build Alternative would cause disproportionate adverse impacts to minority and low-income populations.' This relief route will not cause any displacements (relocations) or impact any neighborhoods.

Environmental Process

This relief route was studied by the Eagle Pass Outer Loop EA (1999), which resulted in a Finding of No Significant Impact (FONSI).

Detailed Environmental Considerations Map



State	Texas	Facility	Eagle Pass Relief Route
From	US 277 East of Eagle Pass		
To	US 277 North of Eagle Pass		
Length (Miles)	8.4	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	1.6	Existing Truck	
Total Cost	61.0	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	4,180
Condition	NA	2030 Trucks	948

Environmental Baseline

This relief route in the San Ambrosia-Santa Isabel watershed would take traffic from US 277 east of Eagle Pass eastward and northward through an unpopulated area to US 277 north of Eagle Pass. The route crosses 2 canals and a minor channel of Elm Creek, which has a small seep identified by the USACE as a wetland. However, the seep is located totally within the stream channel. No flow was detected from the seep area. Riparian woodland found along the major drainages (Elm Creek and irrigation canals) is generally confined to floodplains. Elm Creek has a 1,500-foot Zone A floodplain. The Eagle Pass Outer Loop EA (1999) reports that up to 14 federal and / or state protected species that occur in Maverick County may be impacted, but the likelihood that this will happen along the relief route is considered remote. No federally-listed threatened or endangered plant species are known to inhabit the project area. One oil well is located within 200 feet of the route alignment. The racial and ethnic distribution of persons living within the Census block groups along the relief route alignment is reported by the EA to be similar to that of Maverick County (in which the project is located) and Eagle Pass as a whole. The racial/ethnic distribution for persons living within Maverick County is approximately 93 percent Hispanic; 4 percent white; 2 percent American Indian, Eskimo, or Aleut; and less than one percent other (1990 Census). The racial/ethnic distribution for persons living within Eagle Pass is approximately 95 percent Hispanic, 4 percent white and less than 1 percent other (1990 Census). The racial/ethnic distribution of persons living within the Block Groups of the Locally Preferred Alternative is approximately 93 percent Hispanic, 2.5 percent white, 4.5 percent American Indian/Eskimo/Aleut, and less than 1 percent other (1990 Census). The EA also reports that the potential for more unrecorded archaeological resources was noted near major creeks and waterways, such as along Elm Creek.

Description

A 9.3-mile relief route on the south side of Eagle Pass starting near Fort Duncan Park, crossing Ranch Rd. 1021 near Old Pioneer Road, to US 277 east of town. Interchanges at US 277 east, Ranch Road 1021, and Eidson Rd.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 2 traffic signals until relief route is completed

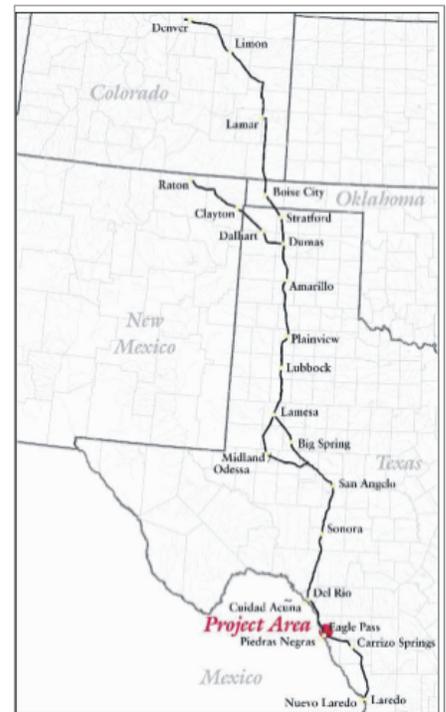
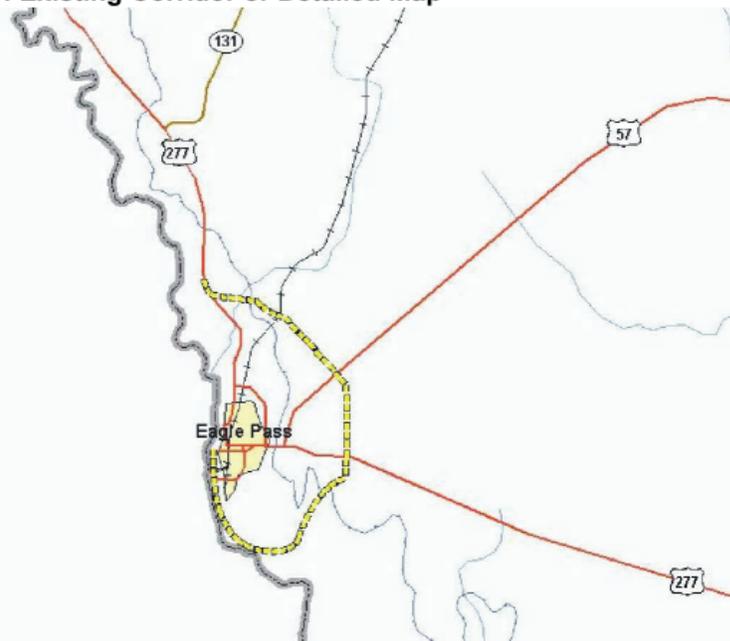
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Impact Analysis

The EA reports that the primary effects of the project on surface water are associated with the disturbance of vegetation and soil cover during construction and maintenance of the road and rights-of-way. Encroachments on the floodplain would not increase the base-flood elevation to a level that would violate applicable regulations. Where the proposed loop crosses a stream or canal in a location not previously disturbed by a roadway, some disruption to the local wildlife territories would occur. The proposed alternative could divide habitat and cut off existing wildlife corridors, and there could be impacts to threatened and endangered species (if present) as a result of construction of the proposed project, but the likelihood of encountering these species is considered remote. Coordination with USACE and TPWD will need to continue and best management practices will need to be used to avoid or minimize any adverse impacts from construction and long-term maintenance of the facilities. Further archaeological work may be necessary at Elm Creek as described above, depending on the final alignment of the loop. Coordination with the State Historic Preservation Office of the THC will need to continue. In addition, the EA reports that while 'individual minority and low-income persons may be affected by the proposed project, it cannot be shown that implementation of any of the 4 alternatives or the No-Build Alternative would cause disproportionate adverse impacts to minority and low-income populations.' This relief route will not cause any relocation or impact any neighborhoods.

Environmental Process

This relief route was studied by the Eagle Pass Outer Loop EA (1999), which resulted in a Finding of No Significant Impact (FONSI).

Detailed Environmental Considerations Map

Ports to Plains Corridor
(US 277 East of Eagle Pass to US 277 North of Eagle Pass)

Corridor

- 2-Lane Highway
- 4-Lane Highway
- 4-Lane Interstate

Other Roads

- Interstate
- US Highway
- State Highway
- Railroad

Counties **States**

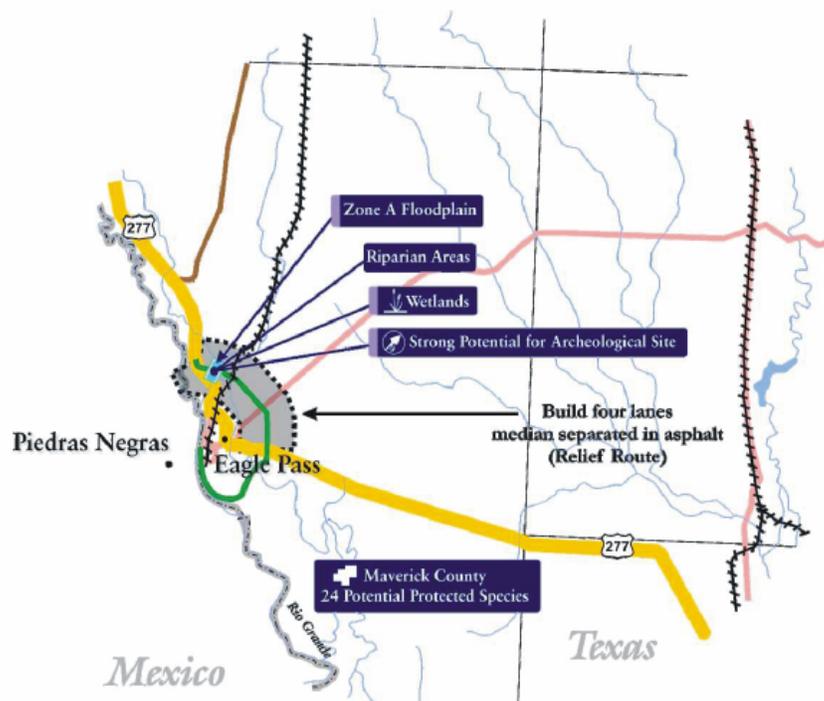
- Cities

Distance Within/Adjacent to Corridor

- 100' Of Centerline
- 200' Of Centerline
- 300' Of Centerline
- 500' Of Centerline
- Riparian Areas

Scale
0 2 4 8 Miles

Eagle Pass Relief Route (4 new lanes) US 277 East of Eagle Pass to US 277 North of Eagle Pass



State	Texas	Facility	Del Rio Relief Route
From	US 277 East of Del Rio		
To	US 277 North of Del Rio		
Length (Miles)	12	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	2.5	Existing Truck	
Total Cost	83.7	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	6,120
Condition	NA	2030 Trucks	1,360

Environmental Baseline

This 12-mile relief route is in the Elm-Sycamore watershed. NWI maps show that 5 wetlands, including 4 related to San Felipe Creek, are within 200 feet. The route crosses the tributaries to this creek, which the TPWD has designated as an Ecologically Significant River/Stream Segment from its confluence with the Rio Grande in Val Verde County upstream to a point 2.5 miles upstream of US 90 in Val Verde County. Among the 26 federal and state protected species listed for Val Verde County that may be present, 3 are associated specifically with San Felipe Creek: the Proserpine Shiner, Devils River Minnow, and Rio Grande Darter. Five creeks with FEMA mapped Zone A floodplains are crossed by or are adjacent to the proposed relief route. The creeks and floodplain crossing widths are Cantu Branch, 400 feet; Cantu Branch (second crossing), 250 feet; San Felipe Creek, 700 feet; San Felipe Creek, 1,050 feet; and Zorro Creek, which is adjacent to relief route. No NRHP-eligible properties, archaeological sites, populated areas or public lands/buildings have been identified along the relief route. The route crosses a pipeline approximately 1 mile north of US 277.

Description

A 12-mile relief route on the east side of Del Rio starting east of Aguirre Street to just north of the US 277/90 split. Interchanges at US 277 north and south, and US 90.

Structural

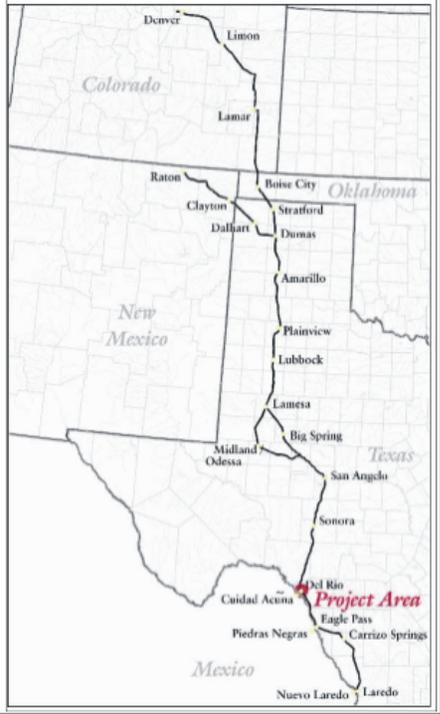
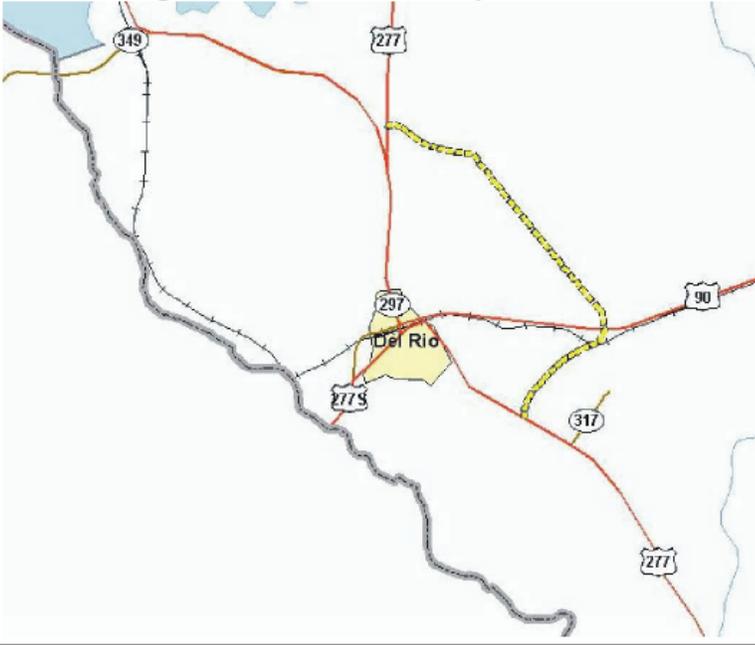
NA

ITS Site Specific Features	ITS Features Per Mile
Periodic upgrades at 11 traffic signals and 2 school flashers until relief route is completed	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



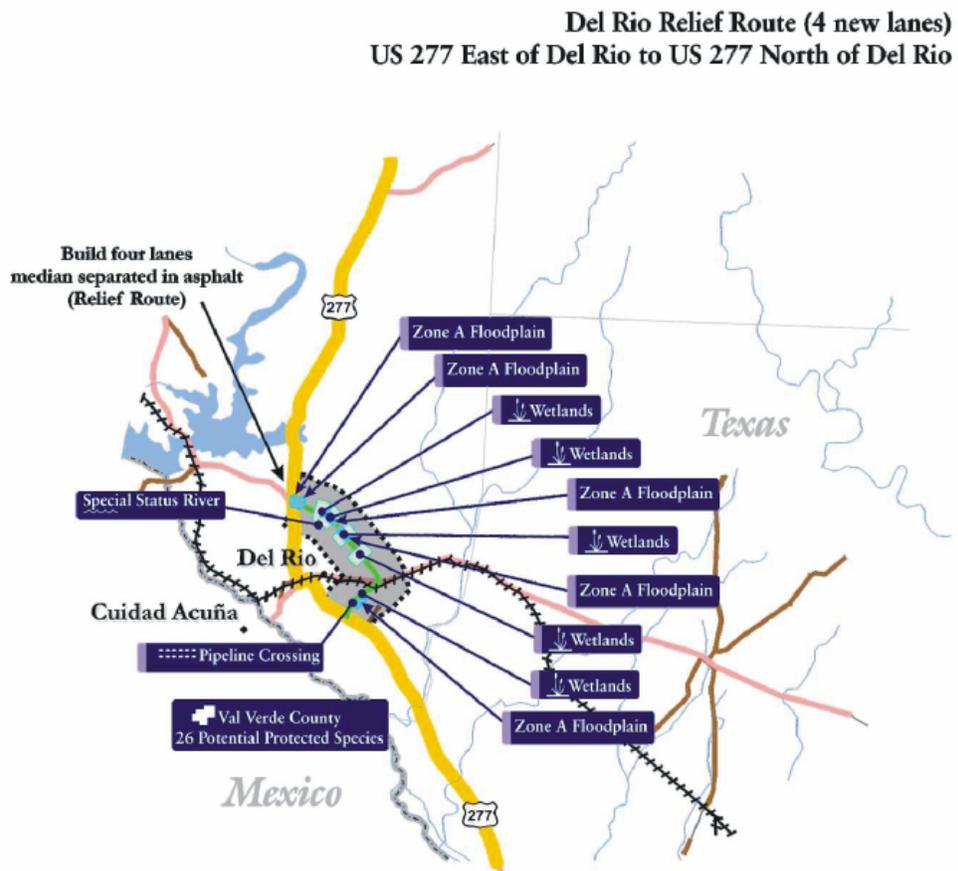
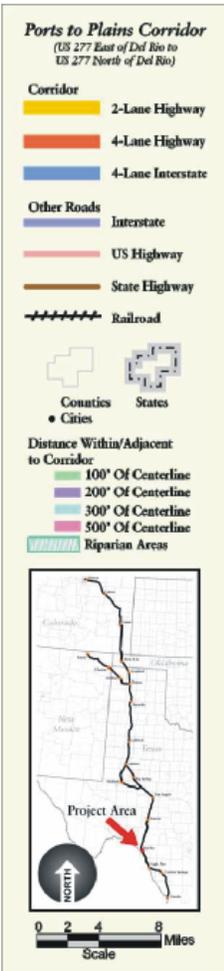
Environmental Impact Analysis

Depending on the final alignment for the Del Rio Relief Route, the project could impact up to 130,680 square feet (3 acres) of palustrine wetlands and up to 43,560 square feet (1 acre) of riverine wetlands associated with San Felipe Creek. This creek is a known riparian habitat harboring federal and state protected species. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to these water resources and wildlife. The team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. With regard to the pipeline crossings, the project team will need to work with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas to determine ownership. The team will then need to work with agency staff and the owner, while using best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, TPWD, TxDOT, Railroad Commission of Texas, town government of Del Rio, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	Sonora Relief Route
From	US 277 South of Sonora		
To	US 277 North of Sonora		
Length (Miles)	4.8	Priority Group	C, 2016-2020
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	1.0	Existing Truck	
Total Cost	27.2	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	3,340
Condition	NA	2030 Trucks	540

Environmental Baseline

This 4.8-mile relief route, which bypasses Sonora to the west, is in the Upper Devils watershed. NWI maps show only 1 palustrine wetland within 200 feet of US 277, but up to 11 federal and state protected species listed for Sutton County may be present. The Dry Devils River and its floodplain is crossed 3 times for a total crossing distance of 3,800 feet. USGS maps show that the route crosses a pipeline, and a gas well 1 mile north of the (south) US 277 intersection could be within 200 feet of the route, depending on the exact alignment selected. No NHRP-eligible properties, archaeological sites, or populated areas that could be impacted by noise or relocations have been identified along this route.

Description

A 4.8-mile relief route on the west side of Sonora. Interchanges at US 277 north and south, and I-10.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 4 traffic signals until relief route is completed

ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Impact Analysis

This route could impact less than 43,560 square feet (an acre) of palustrine wetlands, depending on the final alignment selected. With regard to these wetlands, the project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to water resources and wildlife. The team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. With regard to the gas well site and pipeline crossing, the project team will need to work with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas to determine ownership. The team will then need to work with agency staff and the owner, while using best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, TPWD, TxDOT, Railroad Commission of Texas, town government of Sonora, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map

Ports to Plains Corridor
(US 277 South of Sonora to US 277 North of Sonora)

Corridor

- 2-Lane Highway
- 4-Lane Highway
- 4-Lane Interstate

Other Roads

- Interstate
- US Highway
- State Highway
- Railroad

Counties **States**

- Cities

Distance Within/Adjacent to Corridor

- 100' Of Centerline
- 200' Of Centerline
- 300' Of Centerline
- 500' Of Centerline
- Riparian Areas

Scale: 0 2 4 8 Miles

Sonora Relief Route (4 new lanes) US 277 South of Sonora to US 277 North of Sonora



State	Texas	Facility	San Angelo Relief Route
From	US 277 South of San Angelo		
To	US 87 North of San Angelo		
Length (Miles)	21.3	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	6.0	Existing Truck	
Total Cost	123.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	17,172
Condition	NA	2030 Trucks	2,400

Description

A 21.3-mile relief route on the east side of San Angelo starting near Robby Jones Road, to east of Goodfellow AFB to US 87 north of Grape Creek Road. Interchanges at US 87 north, US 277 south, Chadbourne Street, Paint Rock Road US 67, and US 277 east.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 12 traffic signals until relief route is completed

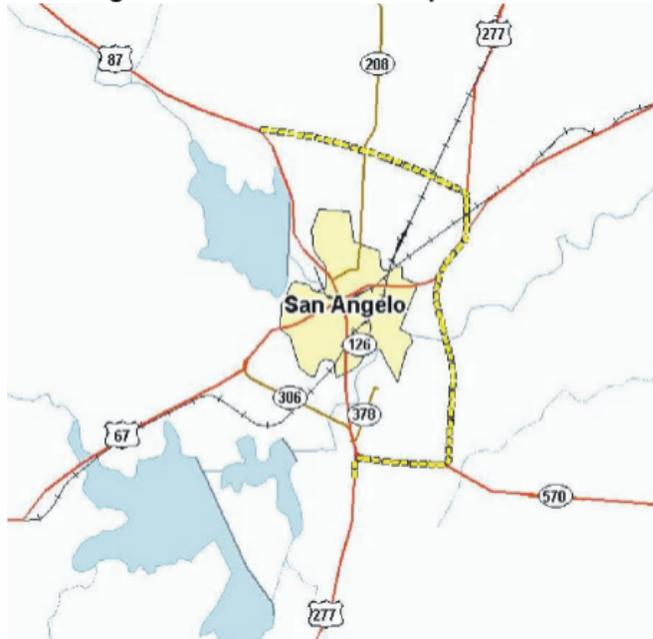
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Baseline

This 21.3-mile relief route, which will take traffic east of San Angelo, is in the Concho watershed. NWI maps show 4 wetlands along the proposed route, including those associated with crossing the Concho River, which is designated an Ecologically Significant River and Stream Segment by the state of Texas. This special designation extends from a point 1.2 miles above the river's confluence with Fuzzy Creek in Concho County upstream to San Angelo Dam on the North Concho River in Tom Green County, and to Nasworthy Dam on the South Concho River in Tom Green County. A riparian habitat exists at the Concho River crossing, and up to 14 federal and state protected species listed for Tom Green County may be present, including the endangered Concho Water Snake. The Concho River has a 1,320-foot Zone AE floodplain (area of 100-year flood inundation as determined by detailed hydraulic analyses), and a 1,760-foot shaded Zone X floodplain (area of minimal flooding). The TCEQ database lists 1 LPST site (closed), that may lie within 200 feet of the route, depending on the final alignment selected. Irrigated farmland is adjacent to the route east of the US 87/US 287 intersection. There are no known NRHP-eligible properties or archaeological sites along this route. No public lands, potential noise impacts or relocations have been identified.



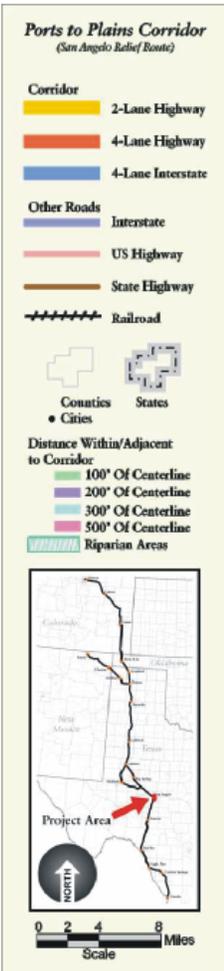
Environmental Impact Analysis

Depending on the ultimate alignment of the relief route, less than 43,560 square feet (an acre) of palustrine wetland and up to 43,560 square feet (an acre) of riverine wetland could be impacted. With regard to these wetlands, the project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to water resources and wildlife. The team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. The LPST site will need to be addressed during detailed environmental study and engineering to avoid or mitigate potential liability associated with contaminated properties. The project team will need to consult with the TCEQ to prepare a Hazardous Materials Management Plan, if necessary, for the use of any hazardous materials during construction. Best management practices will need to be used to prevent any contamination and spills.

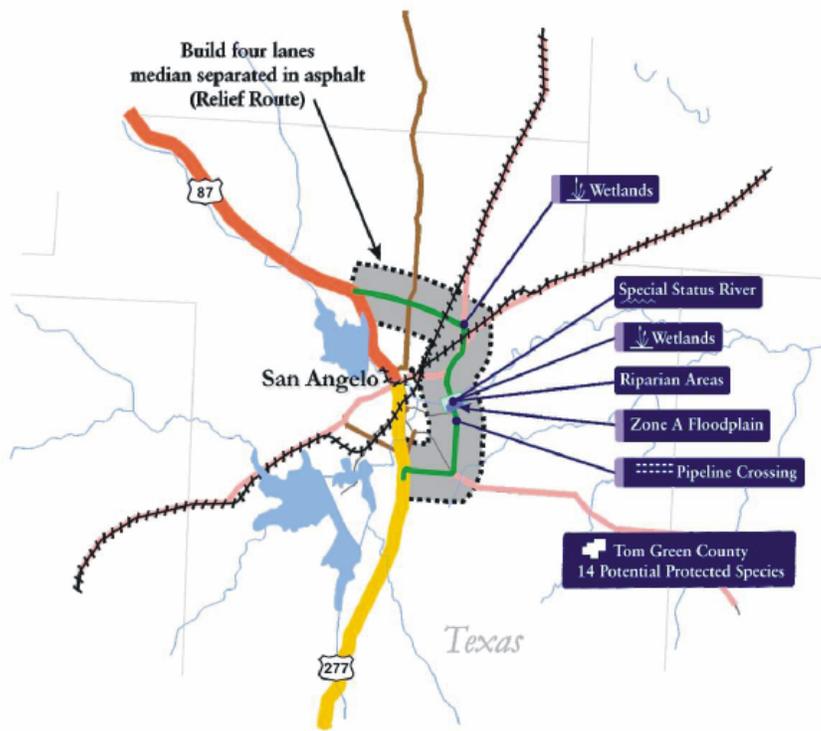
Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, TPWD, TxDOT, TCEQ, the town government of San Angelo, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



San Angelo Relief Route (4 new lanes) US 277 South of San Angelo to US 87 North of San Angelo



State	Texas	Facility	Midland Relief Route
From	IH 20 West of Midland		
To	Texas 349 North of Midland		
Length (Miles)	21	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	4.0	Existing Truck	
Total Cost	116.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	2,420
Condition	NA	2030 Trucks	660

Environmental Baseline

This 21-mile relief route is within the Johnson Draw watershed and bypasses Midland by looping around the city through unpopulated land to the north and west. NW1 maps show that the route crosses an area of playa lakes, passing within 200 feet of 3 lakes and crossing 1. Up to 8 federal and / or state protected species could be present. USGS maps show that the route crosses 5 pipelines. The conceptual alignment does not cross FEMA-mapped floodplains.

Description

A 21-mile relief route on the west side of Midland starting at I-20 five miles west of Loop 250 (near Ranch Road 1788), to SH 349 approximately six miles north of Loop 250. Interchanges at I-20, US 80, SH 191, SH 158, and SH 349.

Structural

NA

ITS Site Specific Features

NA

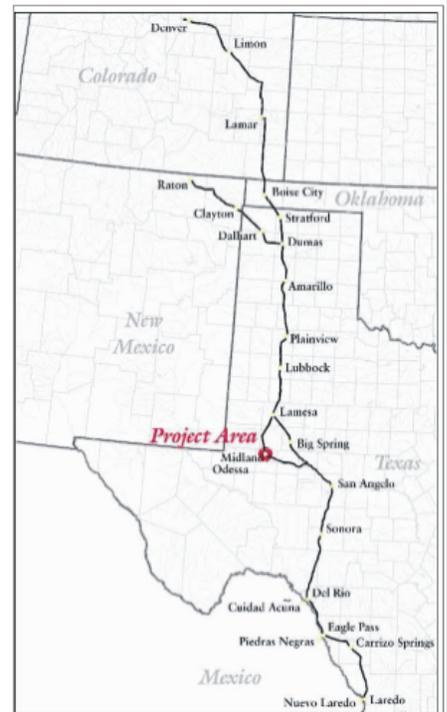
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



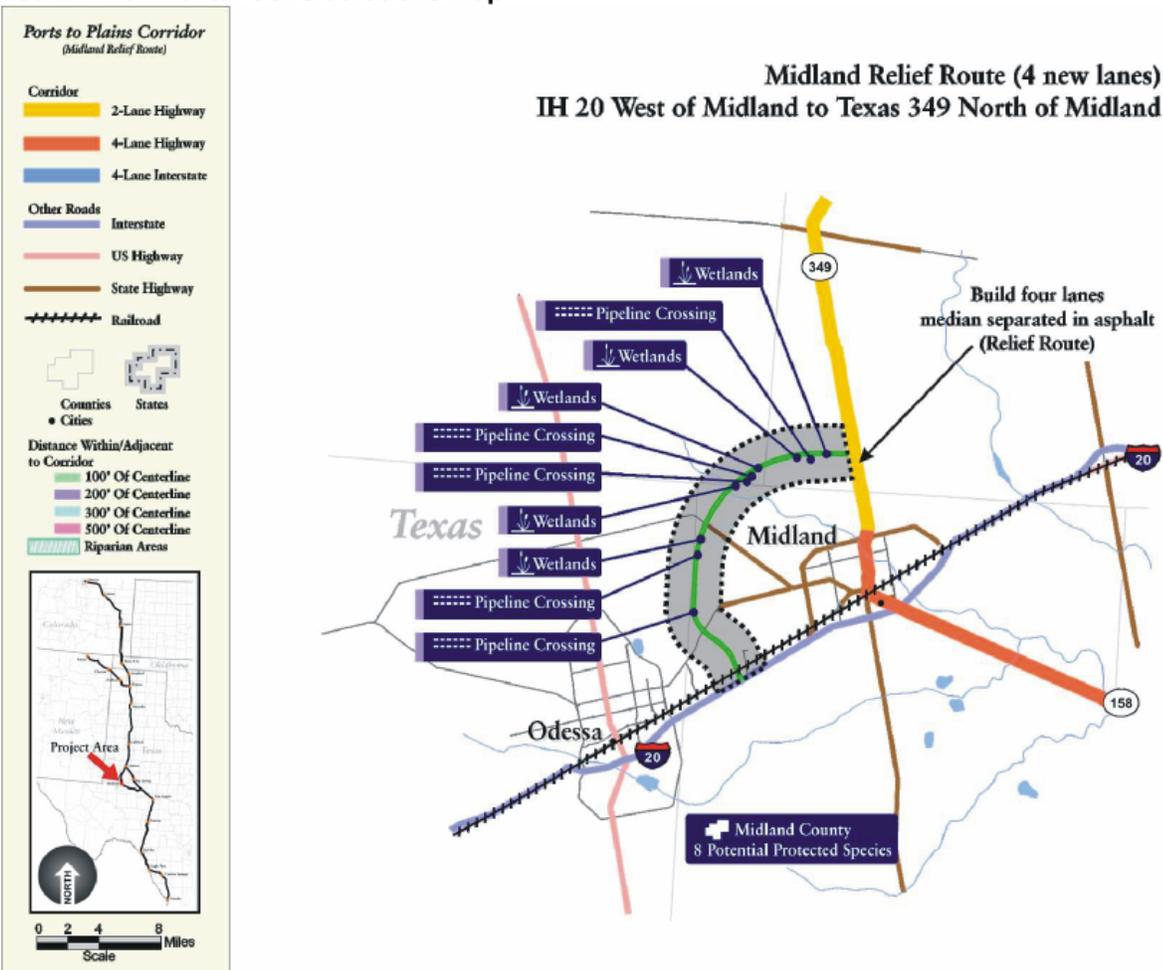
Environmental Impact Analysis

Depending on the final design of the alignment, up to 495,600 square feet (10 acres) of palustrine wetlands could be impacted by construction. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. While no floodplains are mapped along the conceptual alignment, the project team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures, if necessary. With regard to the 5 pipelines, the project team will need to work with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas to determine ownership. The team will then need to work with agency staff and the owner, while using best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, USFWS, TPWD, TxDOT, Texas Railroad Commission, the town government of Midland, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	Big Spring Relief Route
From	US 87 South of Big Spring		
To	US 87 North of Big Spring		
Length (Miles)	13	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	3.0	Existing Truck	
Total Cost	85.5	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	7,240
Condition	NA	2030 Trucks	760

Environmental Baseline

This 13-mile relief route, which will take traffic west and southwest of Big Spring, is in the Beals watershed. NWI maps show 4 wetland areas along the proposed route, including those related to crossing Beals Creek, its Zone A floodplain (2,640 feet wide), and associated lakes. Up to 8 federal and state protected species listed for Howard County may be present. USGS maps show that 6 to 8 buildings lie within 100 to 300 feet of the route in the South Haven area. The maps also show that this route crosses an oil field (near South Haven) and 3 pipelines (1 near South Haven and 1 on each side of SH 176). It also comes within 200 feet of an oil well, approximately 300 feet north of IH 20. There are no other hazardous materials sites, and no NRHP-eligible properties or archaeological sites have been identified.

Description

A 13-mile relief route on the west side of Big Spring starting near Mitchell Road, to west of the airport to the FM 700/US 87 intersection. Interchanges at US 87 north and south, I-20, and SH 176.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 9 traffic signals until relief route is completed

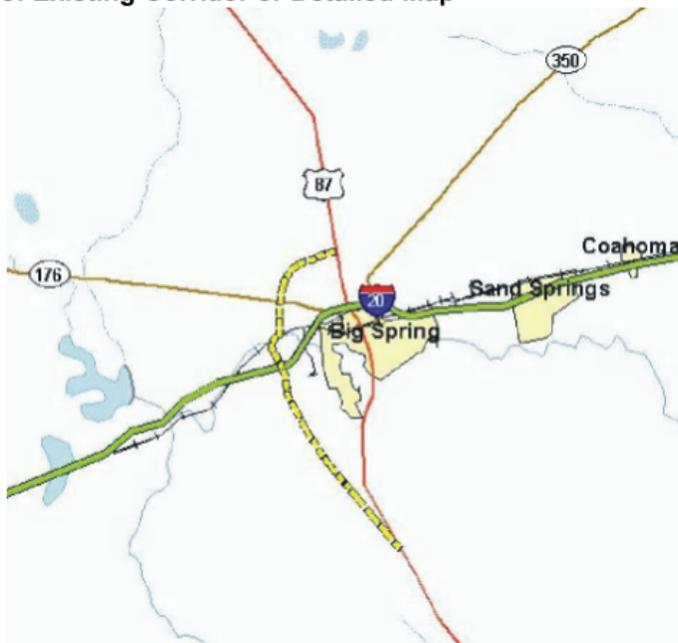
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



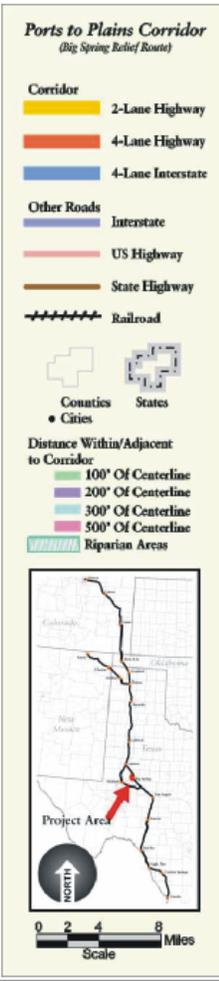
Environmental Impact Analysis

Depending on the ultimate alignment of this relief route, the project could impact up to 43,560 square feet (1 acre) of palustrine wetland and 217,800 square feet (5 acres) of riverine/lacustrine (lake) wetlands. With regard to these wetlands, the project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. The team will also need to coordinate with the USACE to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. Depending on the final alignment of the relief route, up to 8 buildings could be impacted by relocation or noise increases. If during final design it is found that any relocation is necessary, a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. With regard to the oil and gas well sites, pipeline crossings and oil/gas field crossings, the project team will need to work with the Crude Oil & Natural Gas and Natural Gas Transmission divisions of the Railroad Commission of Texas to determine ownership. The team will need to work with agency staff and the owner, while using best management practices to prevent any damage or contamination during construction and long-term maintenance of the facilities.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, TPWD, TxDOT, Railroad Commission of Texas, the town government of Big Spring, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



**Big Spring Relief Route (4 new lanes)
US 87 South of Big Spring to US 87 North of Big Spring**



State	Texas	Facility	Lamesa Relief Route
From	US 87 South of Lamesa		
To	US 87 North of Lamesa		
Length (Miles)	5.8	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	2.0	Existing Truck	
Total Cost	55.5	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	4,080
Condition	NA	2030 Trucks	540

Environmental Baseline

This 5.8-mile relief route east of Lamesa is in the Sulphur Springs Draw watershed, and was recently selected as the Preferred Alternative after a route selection study. (See Appendix B for more on that study.) The proposed route nearly bisects a large wetland approximately 1.75 miles north of the proposed (south) intersection with US 87, and crosses another wetland approximately 1 mile south of the (north) US 87 intersection. Up to 8 federal and state protected species listed for Dawson County may be present along this relief route. Noise increases may be experienced at the southern intersection with US 87, where up to 4 buildings are within 100 to 300 feet of the route. Irrigated farmland is located east of, but not adjacent to, this proposed route. No NRHP-eligible properties, archaeological sites, hazardous materials sites or FEMA-mapped floodplains have been identified along the alignment.

Description

A 5.8-mile relief route on the east side of Lamesa starting at US 180 to Ranch Road 825. Interchanges at US 87 north and south.

Structural

NA

ITS Site Specific Features

NA

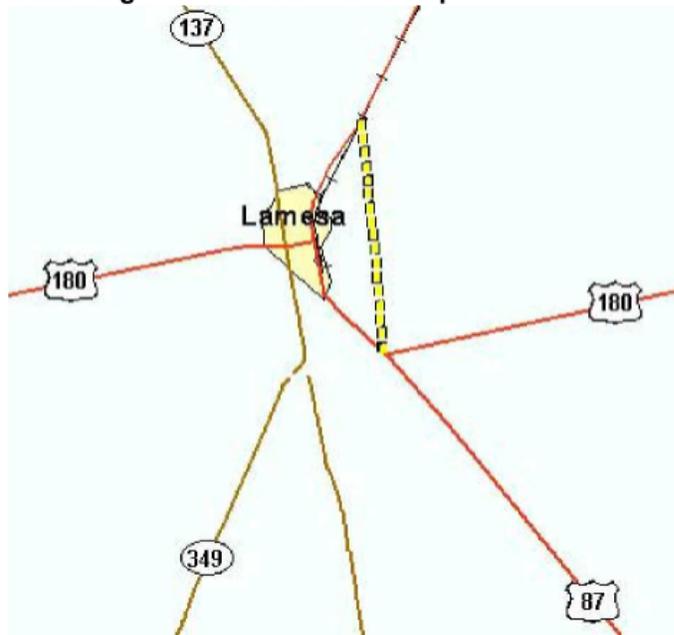
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



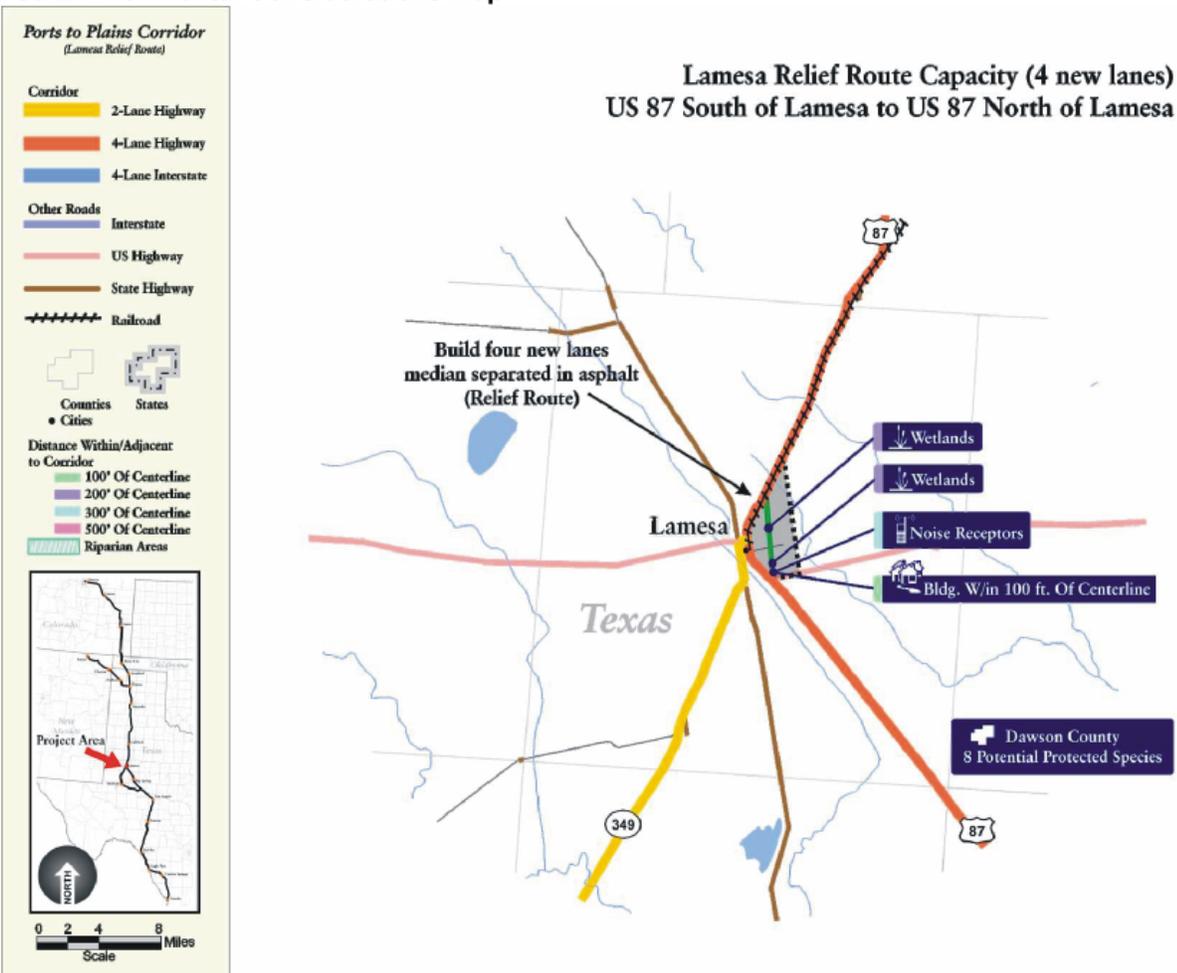
Environmental Impact Analysis

Depending on the final alignment of the preferred alternative relief route, the project could impact up to 784,080 square feet (18 acres) of palustrine wetlands. The project team will need to work with the USACE for a jurisdictional determination. If any area is taken, it may need to be replaced at the site or elsewhere. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. While no floodplains have been mapped, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. Up to 4 buildings are within 100 to 300 feet of the route and could experience project-related impacts, including relocation and increased. If during final design and detailed environmental studies it is found that relocation of these buildings cannot be avoided, a detailed plan will need to be developed to ensure that the orderly relocation of all displaced persons is in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, FEMA, USFWS, TPWD, TxDOT, the town government of Lamesa, and residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	Dumas Relief Route
From	US 287 South of Dumas		
To	US 287 North of Dumas		
Length (Miles)	5	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	1.8	Existing Truck	
Total Cost	18.8	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	8,660
Condition	NA	2030 Trucks	2,640

Environmental Baseline

This 5-mile relief route, which takes traffic west of Dumas, is in the Palo Duro watershed. No wetlands were identified within 200 feet, but up to 10 federal and state protected species listed for Moore County may be present. Two historical markers are located at the southernmost end of the relief route near the relief route/US 287 intersection. Marker 4810 is at the site of a Historic Drift Fence. It was erected in 1969 on the east side of US 287. Marker 2147 commemorates the Geological Riches of Moore County (oil and gas). It was erected in 1970, also on the east side of US 87. Depending on the alignment of the relief route, 1 closed LPST site, Lundberg Industries (Amas Potash Corp.), may lie within 200 feet of the centerline. The route crosses no FEMA-mapped floodplains.

Description

A 5-mile relief route on the west side of Dumas. Interchanges at US 287 north and south, and US 87.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 7 traffic signals, 2 school flashers, monitoring at 2 RR X-ings and improvements at 2 weigh stations until relief route is completed

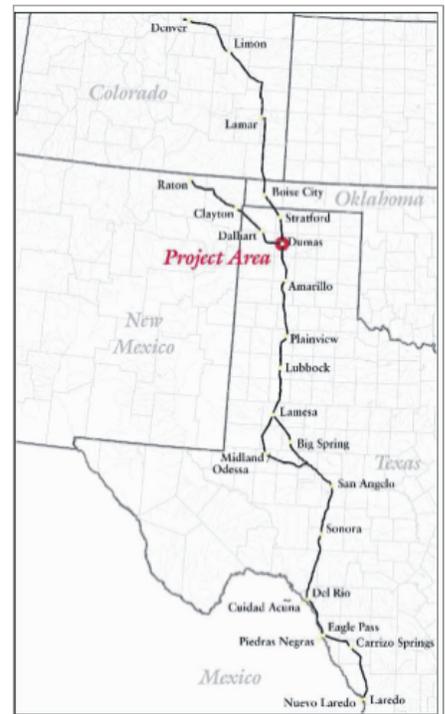
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



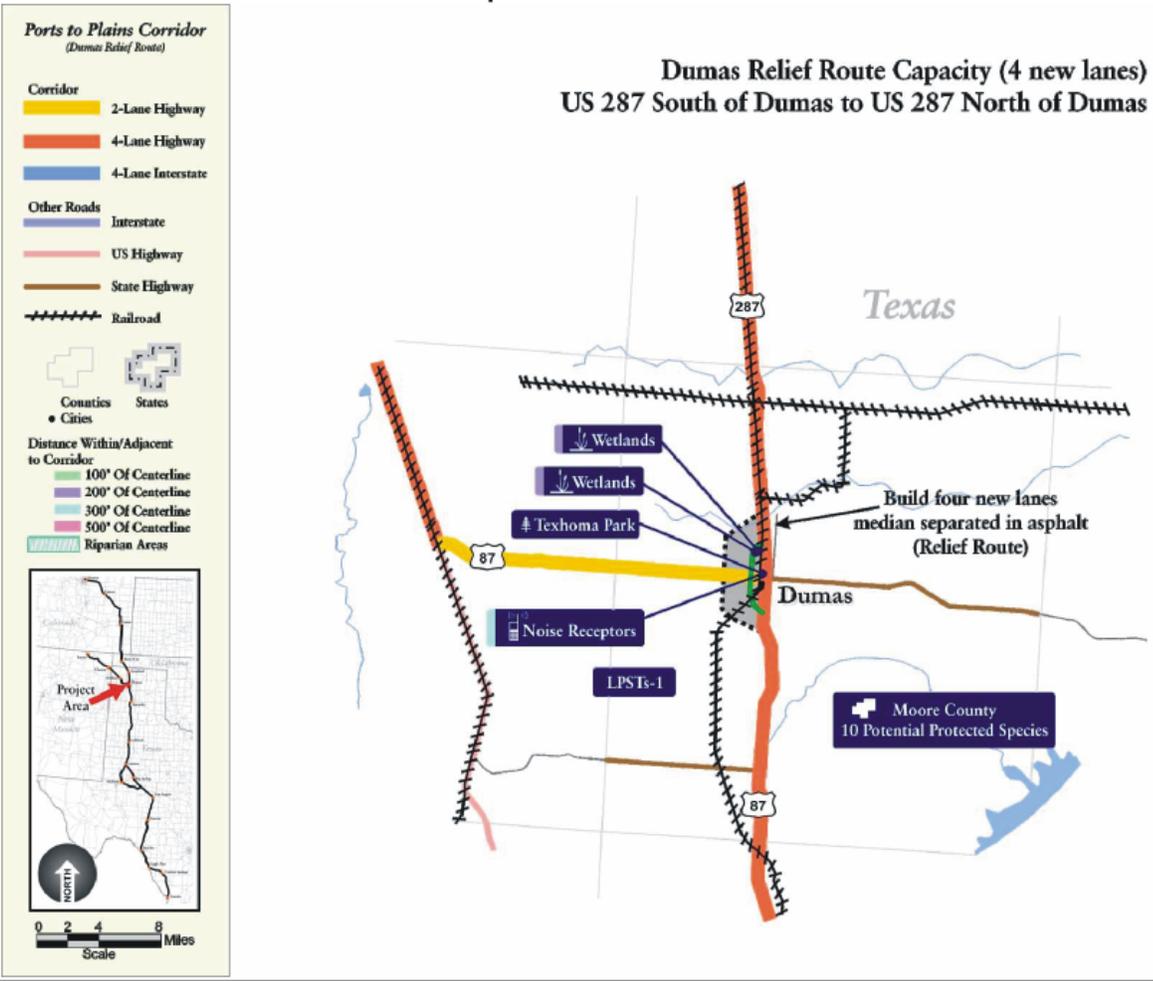
Environmental Impact Analysis

While no floodplains have been mapped, the project team will need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures as necessary. Best management practices will need to be used to ameliorate or mitigate impacts to water and wildlife resources during construction and long-term maintenance of the facilities. At the project level, the project team will need to coordinate with the State Historical Preservation Office of the THC regarding the 2 historical markers, the identification of any adverse impacts and develop mitigation plans. No relocations are anticipated. The identified LPST site will need to be addressed during environmental study and engineering to avoid or mitigate potential liability associated with contaminated properties. The project team will need to consult with the TCEQ to prepare a Hazardous Materials Management Plan, if necessary, and be prepared for the use of any hazardous materials during construction. Best management practices will need to be used to prevent any contamination and spills.

Environmental Process

The identified issues will necessitate coordination and consultation with several agencies including the USACE, FEMA, USFWS, TPWD, THC, TxDOT, TCEQ, the Railroad Commission of Texas, the town government of Dumas, as well as the residents and property owners. Early discussions with the agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	Texas	Facility	Stratford Tx Relief Route
From	US 287 South of Stratford		
To	US 287 North of Stratford		
Length (Miles)	5.2	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	1.5	Existing Truck	
Total Cost	15.9	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	6,850
Condition	NA	2030 Trucks	2,100

Environmental Baseline

This 5.2-mile relief route, which diverts traffic to the west of Stratford, is in the Coldwater watershed. NWI maps show 1 wetland within 200 feet of the conceptual alignment of the relief route. As many as 10 federal and state protected species listed for Sherman County could be present in this portion of the corridor. This route crosses no FEMA-mapped floodplains. No historic or archaeological resources have been identified along this route, and no populated areas lie within 100 or 300 feet. One pipeline comes within 200 feet of it, and several areas of irrigated farmland are located along its northern loop.

Description

A 5.2-mile relief route on the east and north sides of Stratford starting at US 287 1.5 miles south of US 54 to US 54 at approximately Rose Street. Interchanges at US 287 north and south, US 54 east and west, and SH 15.

Structural

NA

ITS Site Specific Features

NA

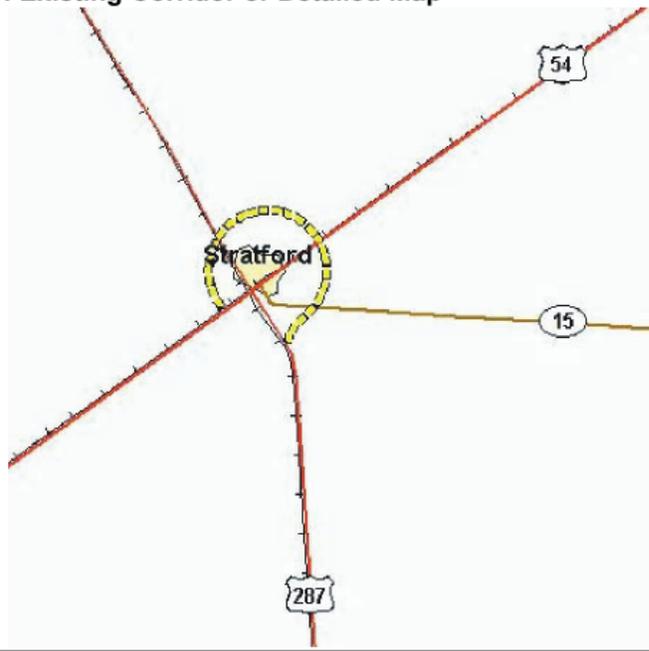
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



State	Oklahoma	Facility	Boise City Relief Route
From	US 287 South of Boise City		
To	US 287 North of Boise City		
Length (Miles)	3.5	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	0.9	Existing Truck	
Total Cost	10.4	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	5,670
Condition	NA	2030 Trucks	2,300

Environmental Baseline

This 3.5-mile relief route within the Upper Beaver watershed takes traffic east of Boise City. NWI maps show 2 wetlands within 200 feet of the route. Up to 24 federal and / or state protected species may be present. USGS maps do not show any buildings within 100 feet of the proposed alignment, and FEMA has not mapped floodplains in this area. No historic resources are listed along this route.

Description

A 3.5-mile relief route on the east side of Boise City. Interchanges at US 287 north and south, and US 56.

Structural

NA

ITS Site Specific Features

Improvements at 2 weigh stations until relief route is completed

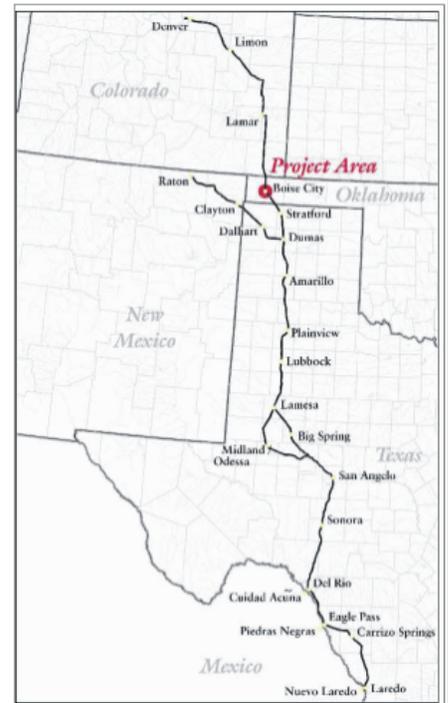
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



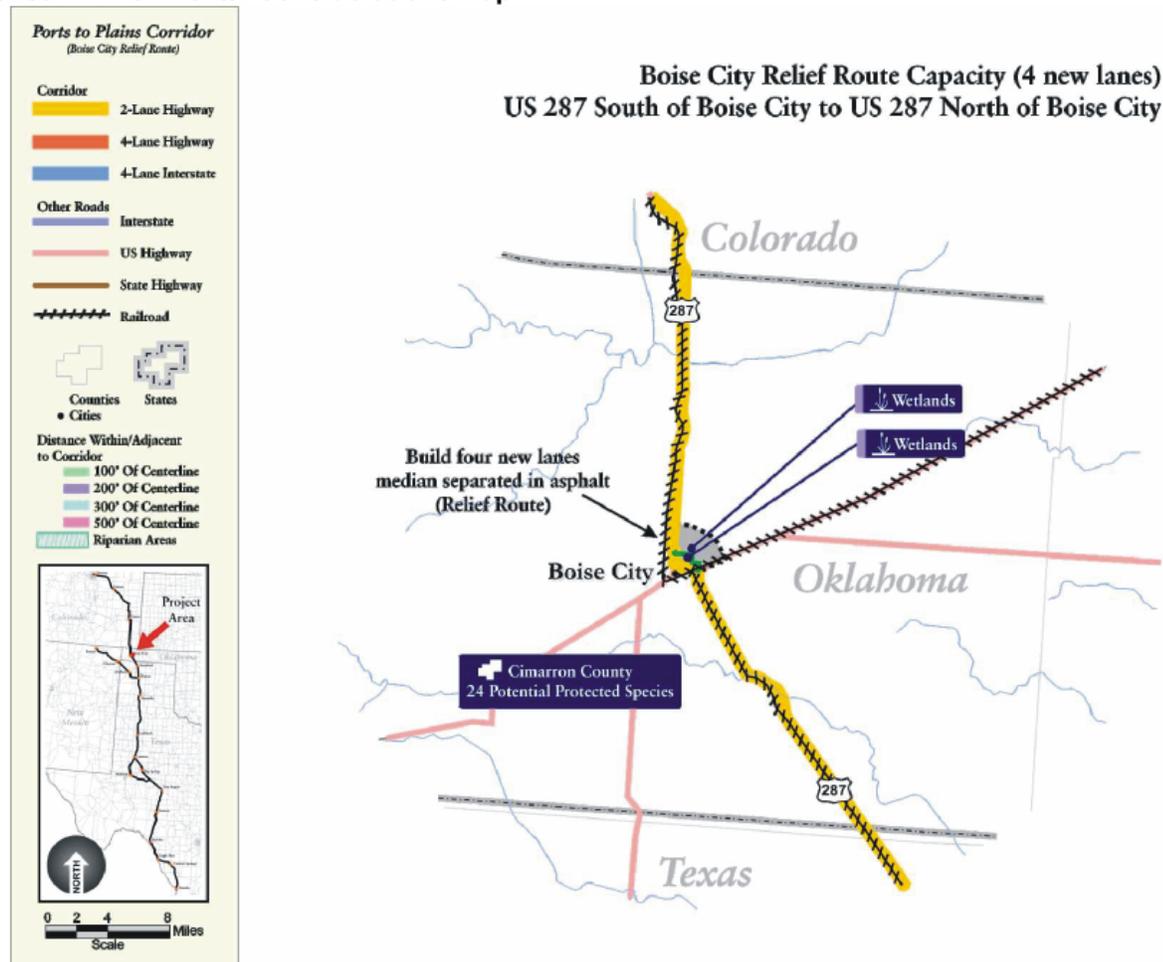
Environmental Impact Analysis

Depending on the final design of the relief route alignment, up to 304,920 square feet (7 acres) of palustrine wetlands could be impacted by construction. The project team will need to work with the USACE, USFWS and Oklahoma Department of Wildlife Conservation to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. An EA is underway on this section. Corridors have been defined including the existing alignment, an east corridor, and a west corridor. Corridor selection is complete with the east corridor selected. The EA will focus on alternative alignments in the east corridor and the do nothing alternative. Phase 1 archaeological/historical investigations are complete. Noise studies were completed with no impacts noted. A "No effect" finding was received from U.S. Fish and Wildlife Service on threatened and endangered species. Potential wetland impacts depend on the alternative and/or alignment selected. An initial public meeting was held with no public controversy.

Environmental Process

It is anticipated that the EA will be completed in 2004.

Detailed Environmental Considerations Map



y

State	Colorado	Facility	Lamar Relief Route
From	US 287 South of Lamar		
To	US 50 North of Lamar		
Length (Miles)	9	Priority Group	A, 2005-2010
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost		Existing Truck	
Total Cost	96.0	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	7,060
Condition	NA	2030 Trucks	2,570

Environmental Baseline

This 9-mile relief route in the Upper Arkansas-John Martin Reservoir watershed takes traffic east of Lamar through unpopulated land. NWI maps show 9 wetlands that are within 200 feet of the proposed route, including crossings of 3 canals, 3 creeks and the Arkansas River. Up to 13 federal and state protected species listed in Prowers County could be present. The CDOT Environmental Branch reports that the alignment goes through a prairie dog colony that supports burrowing owls - a species protected by the Migratory Bird Treaty Act and considered by the Service to be a bird of conservation concern. The route crosses the Arkansas River, which has a 4,600-foot Zone A floodplain. USGS maps show that the route crosses the approximate location of the Old Santa Fe Trail, and that 1 building may be within 100 feet of the proposed route (depending on the final alignment). The Ports to Plains Feasibility Study reports that Lamar has a potential downtown historic district, but the Lamar Relief Route bypasses this area.

Description

The preferred corridor is located on the east side of Lamar and extends approximately 9 miles from the southern end near County Road (C-C) north across the Arkansas River and connects to State Highway (SH) 196 north of Lamar. Interchanges at US 287 south, US 50 and at US 287/50 north.

Structural

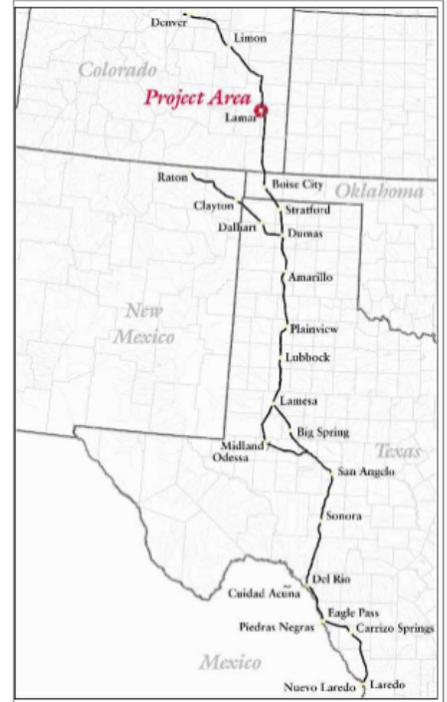
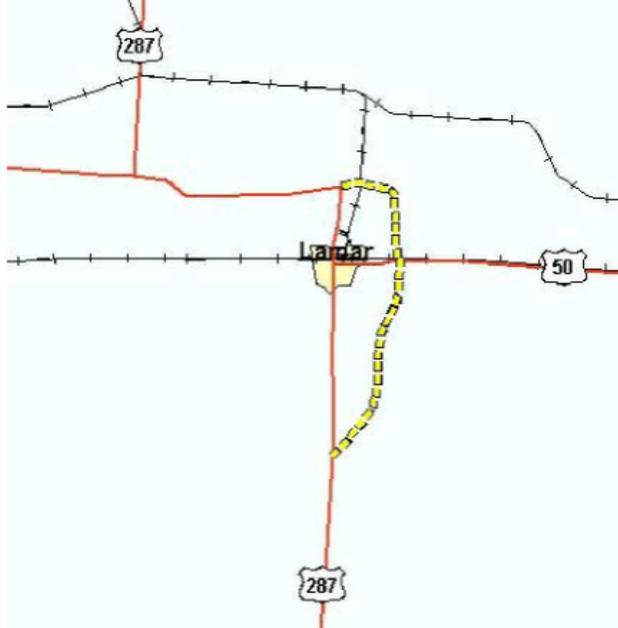
NA

ITS Site Specific Features	ITS Features Per Mile
Periodic upgrades at 6 traffic signals, upgrades at 4 school flashers, and RR X-ing monitoring until relief route is completed	Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



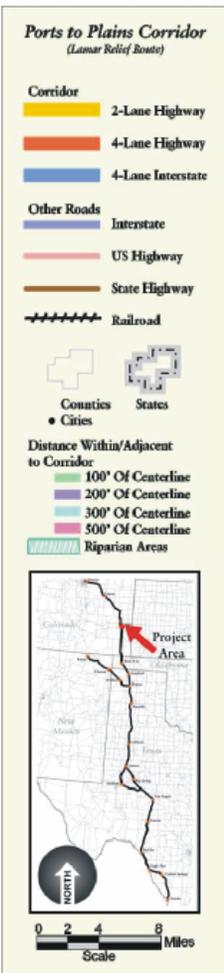
Environmental Impact Analysis

Depending on the final design of the relief route alignment, up to 696,960 square feet (16 acres) of palustrine wetlands and 784,080 square feet (18 acres) of riverine wetlands could be impacted by construction. The project team will need to work with the USACE, USFWS and Colorado DOW to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. The project team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures. With regard to the crossing of the site of the Old Santa Fe Trail and any unrecorded historic sites along this route, the project team will need to coordinate with FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO regarding potential adverse effects and mitigation plans. A cultural resources investigation plan will need to be developed by FHWA, CDOT Environmental Programs Branch, CDOT Senior Staff Archaeologist, and or Staff Historian in consultation with the SHPO during planning and design. The need for mitigation of adverse impacts on archaeological resources will then need to be decided and planned in consultation with the SHPO. Until the cultural resources investigation is completed, it is not possible to state whether any 4(f) impacts can be expected along this section. The USFWS recommends that the project become familiar with the Central Shortgrass Prairie Initiative, even though it is uncertain whether the project will fall under this Initiative. The USFWS also recommends that the findings (as yet incomplete) of the Connectivity Campaign be incorporated into the project design and impact analysis.

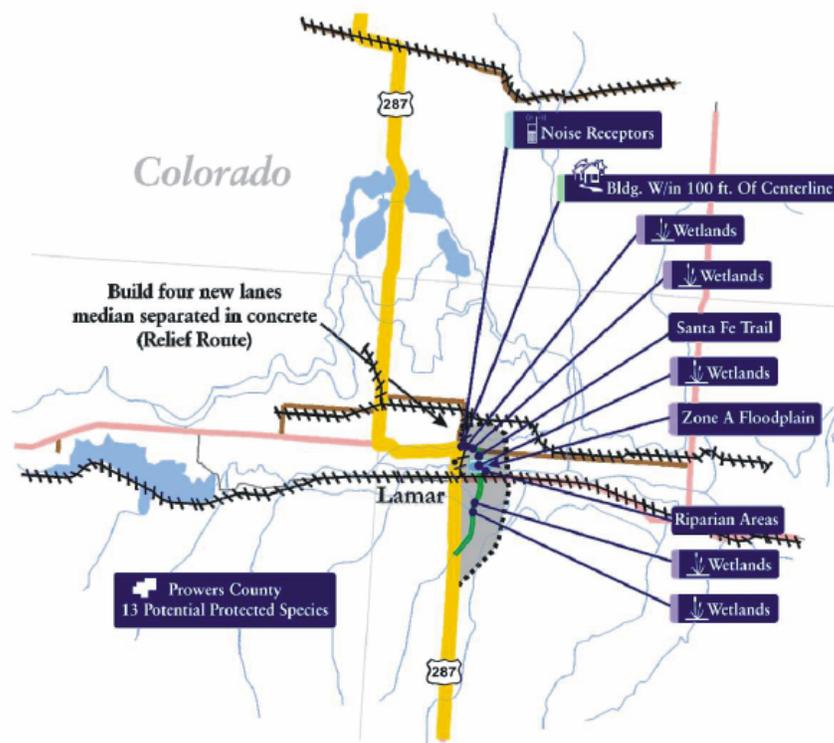
Environmental Process

This section has been studied under an EA process, US 287 at Lamar. The study is still in progress. The EA draft has been submitted to the Region 2 Environmental unit for their review. The review is expected to be complete by early Spring of 2005 and completion of the EA is anticipated in Summer of 2005.

Detailed Environmental Considerations Map



**Lamar Relief Route Capacity (4 new lanes)
US 287 South of Lamar to US 87 North of Lamar**



State	Texas	Facility	Dalhart Relief Route
From	US 87 South of Dalhart		
To	US 87 North of Dalhart		
Length (Miles)	6.6	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	2.4	Existing Truck	
Total Cost	19.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	7,400
Condition	NA	2030 Trucks	1,140

Description

A 6.6-mile relief route on the east side of Dalhart starting at US 87 at Ranch Road 281 to US 87 at Ranch Road 172. Interchanges at US 87 north and south, US 54, and US 385.

Structural

NA

ITS Site Specific Features

Periodic upgrades at 2 traffic signals, and upgrades at 2 school flashers until relief route is completed

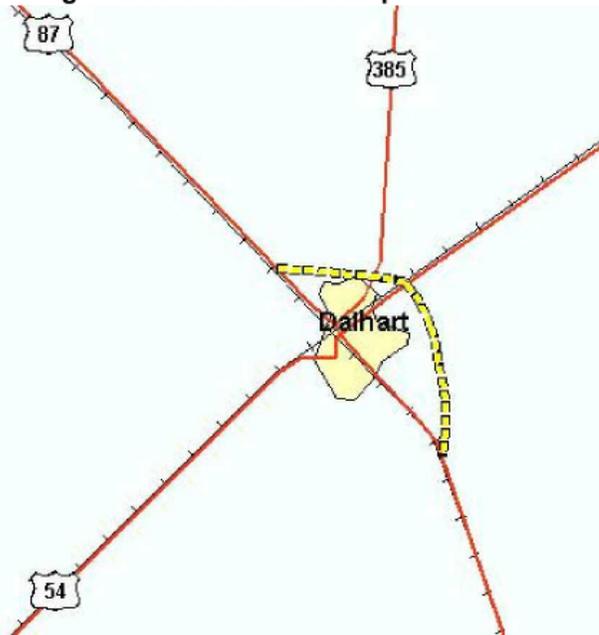
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



Environmental Baseline

This relief route in the Rita Blanca watershed is 6.6 miles long and bypasses Dalhart on the north/northeast through irrigated farmlands. NWI maps show 3 wetlands within 200 feet. Up to 10 federal and state protected species listed in Dallam County may find habitat along this section, including those associated with the nearby Rita Blanca National Grassland Regional Conservation Area. USGS maps show 4 buildings that are located within 300 feet of the proposed route including 2 buildings that are within 100 feet of the proposed route. The proposed relief route crosses several floodplains. Their location and the crossing widths are Concho River 2,400 feet north of Paint Rock Road, 800 feet of Zone X and 600 feet of Zone AE; Concho River, adjacent to Zone X for 2,800 feet, an Unnamed drainage north of the Atchison Topeka and Santa Fe Rail Line Zone A adjacent to US 277 for 3,800 feet and crossed for 1,400 feet; an Unnamed tributary Zone A, 200 feet; Lake Creek 200 feet north of Robbins Road, 200 feet Zone X and 500 feet Zone A; and West Fork Lake Creek, 1200 feet north of Robbins Road 100 feet Zone X and 1,000 feet Zone A.



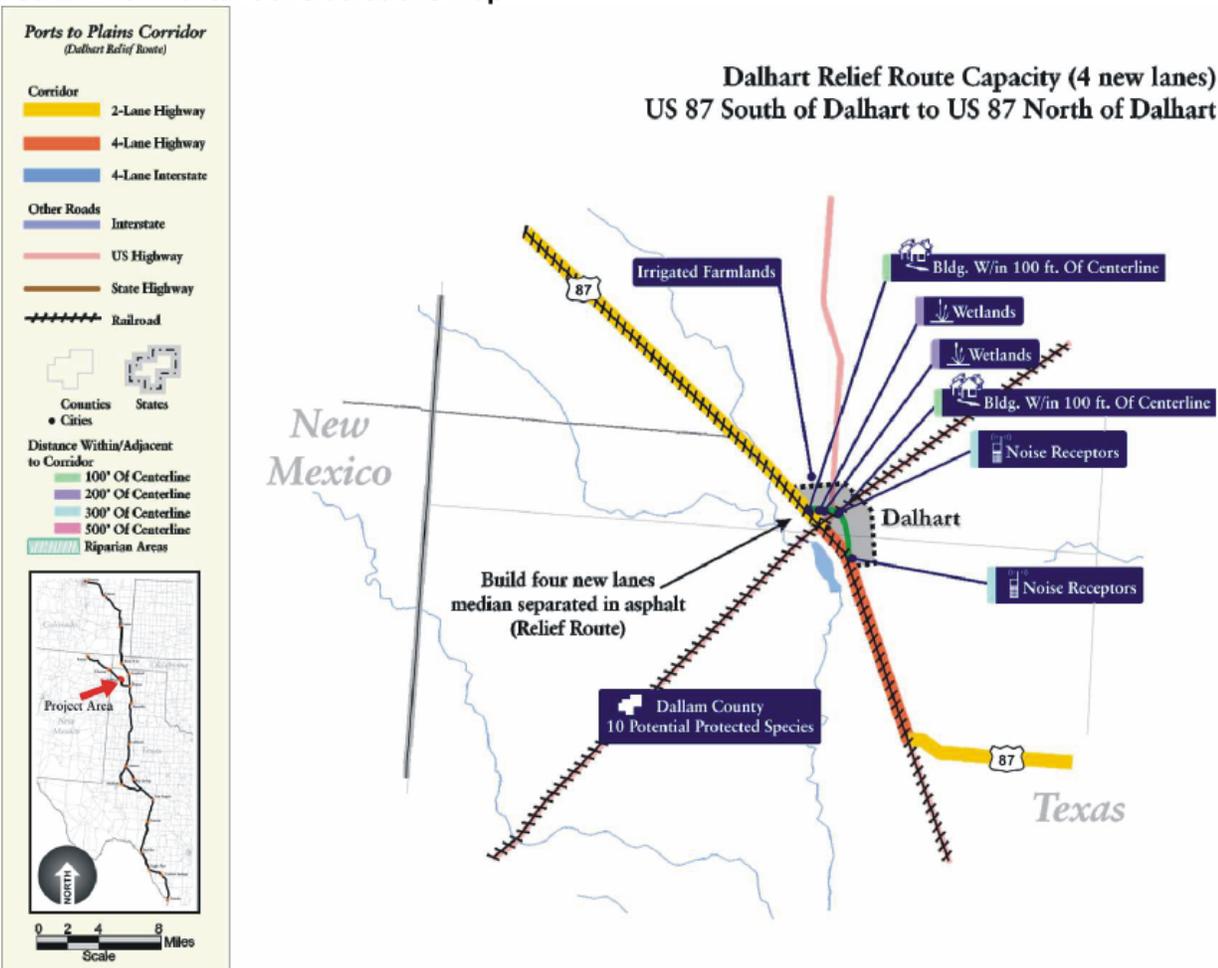
Environmental Impact Analysis

Depending on the final design of the relief route alignment, up to 130,680 square feet (3 acres) of palustrine wetlands could be impacted by construction. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. The project team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures. The northern 2/3 of the route, and the eastern leg of the route cross irrigated farmlands. Depending on the final alignment, 2 or more irrigation systems could be impacted. If during final design it is determined that acquisition of irrigated farmland is necessary, a detailed plan will need to be developed to ensure that acquisitions are done in accordance with the Farmland Protection Policy Act of 1985 and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended. Farmlands are also important to wildlife. Best management practices will need to be used to minimize or eliminate impact to the farmlands and the habitats they provide. If during final design it is determined that acquisition of these buildings is necessary, a detailed plan will need to be developed to ensure that acquisitions are done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

The identified issues will necessitate coordination and consultation with the USACE, USFWS, TPWD, TxDOT, the town government of Dalhart, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



State	New Mexico	Facility	Clayton Relief Route
From	US 87 East of Clayton		
To	US 64 West of Clayton		
Length (Miles)	3.8	Priority Group	B, 2011-2015
Costs (\$Millions)		AADT	
Structure Cost		Existing Total	
ROW + Utility Cost	0.4	Existing Truck	
Total Cost	19.6	AADT Forecast	
Existing Pavement		With Improvements	
Type	NA	2030 Total	2,570
Condition	NA	2030 Trucks	660

Environmental Baseline

This 3.8-mile relief route in the Rita Blanca watershed traverses agricultural fields and undeveloped land to the east of Clayton. The route crosses 2 small tributaries to Perico Creek, with 2 associated wetlands. Five federal and state protected species are known to find habitat within the vicinity, but up to 22 others could occur. One building is located at each terminus of the route. The conceptual alignment does not cross FEMA-mapped floodplains.

Description

A 3.8-mile relief route on the east side of Clayton to be located near Princeton Avenue and ending northwest of Clayton on US 64 near the rail crossing. Interchanges at US 64 south, US 56, and US 64 north. Grade separation of RR tracks.

Structural

NA

ITS Site Specific Features

Upgrades at 2 school flashers

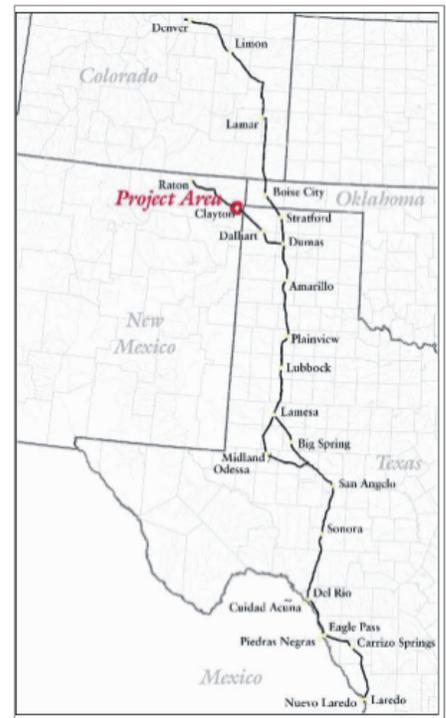
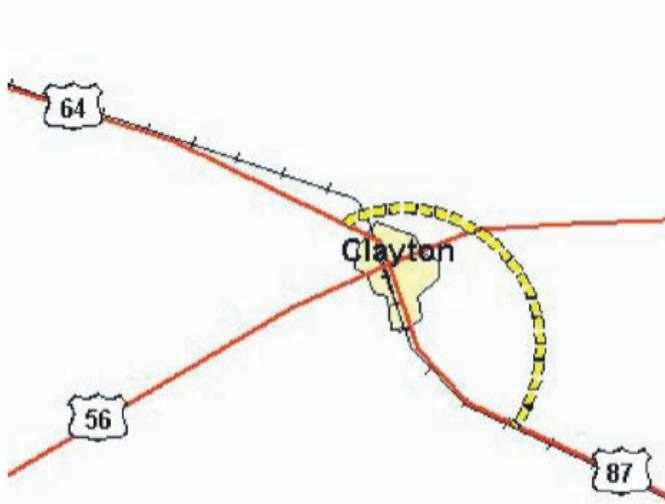
ITS Features Per Mile

Flashing beacon signs, traffic monitoring equipment, oversize mile markers

ITS Features Installed Per Region

Weigh station/inspection upgrades, incident response trailers, communications dispatch equipment upgrades, 511 system upgrades, Traffic Management Center operations support

Photo of Existing Corridor or Detailed Map



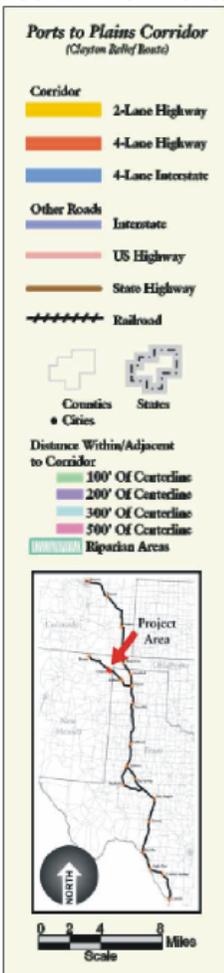
Environmental Impact Analysis

Depending on the final design of the alignment, up to 43,560 square feet (1 acre) of palustrine wetlands could be impacted by construction. The project team will need to work with the USACE, USFWS and TPWD to develop a plan to reduce or eliminate impacts to the water resources and wildlife. Best management practices will need to be used to ameliorate or mitigate such impacts during construction and long-term maintenance of the facilities. While no floodplains are mapped along the conceptual alignment, the project team will also need to coordinate with the USACE and FEMA to plan and design floodplain structures, crossings and mitigation measures, if necessary. One building at each end of the route may be a candidate for relocation. If during final design it is determined that acquisition of these buildings is necessary, a detailed plan will need to be developed to ensure that acquisitions are done in accordance with both Environmental Justice guidelines and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended.

Environmental Process

These issues will necessitate coordination and consultation with the USACE, USFWS, New Mexico Game & Fish Department, NMDOT, the town government of Clayton, and residents and property owners. Early discussions with these agencies will help to determine whether an EA or EIS is the best NEPA action for this section. At this time it appears that an EA would be the most probable NEPA process. If unavoidable impacts are found, however, an EIS will be necessary.

Detailed Environmental Considerations Map



Clayton Relief Route Capacity (4 new lanes) US 87 East of Clayton to US 64 West of Clayton

