



# DEIS Reasonable Alternatives Visual Impacts Assessment Technical Report

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SH 68 from I-2/US 83 to I-69C/US 281

CSJs: 3629-01-001, -002, -003

Hidalgo County, Texas

Texas Department of Transportation – Pharr District

February 2018

**Table of Contents**

|       |                                   |    |
|-------|-----------------------------------|----|
| 1.0   | INTRODUCTION .....                | 1  |
| 2.0   | PROJECT DESCRIPTION .....         | 1  |
| 2.1   | 2014 Modified 2 Alternative.....  | 2  |
| 2.2   | 2014 PSM Alternative.....         | 3  |
| 2.3   | FM 1423 PSM Alternative.....      | 3  |
| 2.4   | No-Build Alternative.....         | 4  |
| 3.0   | VISUAL IMPACTS ASSESSMENT .....   | 4  |
| 3.1   | Methodology .....                 | 4  |
| 3.2   | Visual Quality .....              | 5  |
| 3.3   | Existing Conditions .....         | 6  |
| 3.3.1 | Visual Character.....             | 6  |
| 3.3.2 | Visual Quality.....               | 8  |
| 3.4   | Visual Resources .....            | 10 |
| 3.4.1 | 2014 Modified 2 Alternative ..... | 10 |
| 3.4.2 | 2014 PSM Alternative .....        | 11 |
| 3.4.3 | FM 1423 PSM Alternative .....     | 11 |
| 3.4.4 | No-Build Alternative .....        | 12 |
| 3.5   | Summary of Findings .....         | 12 |
| 4.0   | REFERENCES.....                   | 13 |

**Attachment**

## Attachment A Exhibits

Exhibit 1. Project Location on County Base

Exhibit 2. Project Location on USGS Topographic Base

**List of Tables**

|          |  |    |
|----------|--|----|
| Table 1. | Definition of Key Terms.....   | 5  |
| Table 2. | Anticipated Viewer Response to Landscape Change by Alternative.....      | 8  |
| Table 3. | Visual Quality of Viewsheds by Alternative .....                         | 10 |
| Table 4. | Effect on Visual and Aesthetic Qualities of Surrounding Environment..... | 12 |

## 1.0 INTRODUCTION

The Pharr District of the Texas Department of Transportation (TxDOT) proposes to construct State Highway (SH) 68, a new highway facility from Interstate Highway (I) 2/U.S. Highway (US) 83 to I-69C/US 281, located in eastern Hidalgo County. The proposed project corridor would begin at I-2/US 83 and travel north then west to connect to I-69C/US 281. The total length of the proposed project is approximately 22 miles. **Exhibits 1 and 2 in Attachment A** depict the project study area.

A visual quality assessment was used to determine if implementation of the three reasonable alternatives would be compatible with the visual character of the setting into which they would be introduced. The purpose of this memorandum is to document the methodology, analysis and results of the visual impacts assessment.

## 2.0 PROJECT DESCRIPTION

SH 68, as currently described in the Metropolitan Transportation Plan (MTP) and the Statewide Transportation Improvement Program (STIP), is a proposed four-lane divided rural highway facility with future mainlanes and overpasses.

SH 68 would be constructed in several phases, as funding becomes available. Funding has been secured for Phase I of the project. Funding for future phases has not yet been determined.

Phase I would construct a new four-lane divided rural highway facility from I-2/US 83 to Farm-to-Market (FM) 1925/Monte Cristo Road. The four-lane divided facility would serve as frontage roads for the ultimate facility and consist of two lanes in each direction with shoulders, separated by a grassy median. Future phases would extend the four-lane divided rural highway from FM 1925/Monte Cristo Road to I-69C/US 281, and eventually would complete the ultimate facility by constructing the mainlanes and overpasses. The proposed project is being developed as a non-tolled facility.

The ultimate, controlled-access facility would be contained within a 350-foot typical right-of-way (ROW) width, with up to 400 feet of ROW needed at proposed grade separations. The proposed frontage roads would consist of two 12-foot wide lanes in each direction, with 4-foot wide inside shoulders and 8-foot wide outside shoulders. The frontage roads would include curb and gutter to accommodate drainage requirements. The proposed mainlanes would consist of two 12-foot wide lanes in each direction, with 4-foot wide inside shoulders and 10-foot wide outside shoulders. Mainlanes would be separated by a grassy median. Mainlane overpasses would be provided at major roadway crossings. Proposed future entrance and exit ramps would consist of 14-foot wide lanes, with 2-foot wide inside shoulders and 8-foot wide outside shoulders. The termini at I-2/US 83 and I-69C/US 281 would include proposed

connections to existing frontage roads and proposed direct connector ramps to and from existing mainlanes.

As part of the alternatives analysis and public involvement process for SH 68, study corridors and preliminary alternatives were developed within the approximately 179-square-mile study area for the proposed project. The preliminary alternatives were analyzed and evaluated to identify three reasonable alternatives. These reasonable alternatives, as well as the No-Build Alternative, are being advanced for more detailed analysis to identify a recommended preferred alternative. For more information about the development of the reasonable alternatives and alternatives analysis methodology, refer to the *DEIS Alternatives Analysis Technical Report* on file at TxDOT (TxDOT 2018).

The reasonable alternatives are shown in **Exhibits 1 and 2 in Attachment A** and are described below along with the No-Build Alternative. The alternatives are presented in order geographically, from west to east. All alternatives would have the same ultimate typical as described above.

## **2.1 2014 Modified 2 Alternative**

The 2014 Modified 2 Alternative (light purple route in **Exhibits 1 and 2 in Attachment A**) is approximately 21.7 miles in length and would require an estimated 1,057 acres of ROW. The 2014 Modified 2 Alternative is almost entirely on new location.

This alternative connects to I-2/US 83 approximately 7 miles east of I-69C/US 281, between the FM 1423/Val Verde Road overpass and the North Hutto Road overpass, near the existing intersection of the I-2/US 83 westbound frontage road and Valley View Road. From I-2/US 83, the 2014 Modified 2 Alternative would travel northwest on new location for approximately 3 miles to near Minnesota Road before turning generally northward for approximately 7 miles through the communities of Muniz and San Carlos, continuing north of SH 107.

Approximately 1 mile north of SH 107, near Mile 17 ½ Road, the 2014 Modified 2 Alternative would curve to the west for approximately 2 miles, crossing FM 1925/Monte Cristo Road and Davis Road. North of Davis Road, the 2014 Modified 2 route would run parallel to the west side of Brushline Road for approximately 5 miles. The proposed roadway would then curve to the northwest for approximately 2 miles before running along the north side of the existing FM 490 for approximately 3 miles and connect to I-69C/US 281 near the South Texas International Airport at Edinburg.

Future mainlane overpasses are assumed to be at Ferguson Road, Sioux Road, East Nolana Loop/Earling Road, Owassa Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road,

SH 107, FM 1925/Monte Cristo Road, FM 2812, County Road (CR) 2050/Brushline Road, and Air Cargo Drive.

## **2.2 2014 PSM Alternative**

Like the 2014 Modified 2 Alternative, the 2014 Public Scoping Meeting (PSM) Alternative (orange route in **Exhibits 1 and 2** in **Attachment A**) is almost entirely on new location. The 2014 PSM Alternative is approximately 22.4 miles in length and would require an estimated 1,076 acres of ROW. The 2014 PSM Alternative follows the same new location route as the 2014 Modified 2 Alternative from its intersection with I-2/US 83 to SH 107, a distance of approximately 8 miles, and continues generally northward for another 2 miles to cross FM 1925/Monte Cristo Road.

North of FM 1925/Monte Cristo Road, the 2014 PSM Alternative would curve to the east for approximately 1 mile, approaching Mile 19 N Road, where it would then run parallel to the west side of FM 1423/Val Verde Road for approximately 4 miles. The corridor would then curve to the northwest for approximately 4 miles before running along the north side of the existing FM 490 for approximately 3 miles and connect to I-69C/US 281 near the South Texas International Airport at Edinburg.

This alternative would also pass through the communities of Muniz and San Carlos. Future mainlane overpasses are assumed to be at Ferguson Road, Sioux Road, East Nolana Loop/Earling Road, Owassa Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road, SH 107, FM 1925/Monte Cristo Road, FM 2812, CR 2050/Brushline Road, and Air Cargo Drive.

## **2.3 FM 1423 PSM Alternative**

The FM 1423 PSM Alternative (dark pink route in **Exhibits 1 and 2** in **Attachment A**) is approximately 21.6 miles in length and would require an estimated 1,061 acres of ROW. This alternative would connect to I-2/US 83 approximately 6 miles east of I-69C/US 281.

This alternative would generally follow FM 1423/Val Verde Road northward for approximately 7.5 miles from the intersection with I-2/US 83 to SH 107 in the community of San Carlos. From SH 107, the alternative would continue northward along FM 1423/Val Verde Road approximately 2 miles to FM 1925/Monte Cristo Road. Approximately 1.5 miles north of FM 1925, between Mile 19 Road and Mile 20 Road, the route would then follow the 2014 Modified 2/2014 PSM Alternative route for approximately 11 miles north and west to I 69C/US 281 near the South Texas International Airport at Edinburg.

This alternative would pass through the City of Donna and the community of San Carlos. Future mainlane overpasses are assumed to be at FM 495/Kansas Road, Sioux Road, East

Nolana Loop/Earling Road, Roosevelt Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road, SH 107, FM 1925/Monte Christo Road, FM 2812, CR 2050/Brushline Road, and Air Cargo Drive.

## 2.4 No-Build Alternative

The No-Build Alternative means that the proposed improvements associated with the SH 68 project would not occur. Under this alternative, the existing facilities would operate as they currently do and there would be no new roadway constructed. There would be no relocations or conversion of land to transportation uses, and no adverse environmental or economic impacts with this alternative would occur. However, the No-Build Alternative would not address the purpose and need for the proposed project because it would not improve north-south mobility, increase travel capacity for local and regional traffic, or provide an alternate north-south evacuation route during emergency events.

## 3.0 VISUAL IMPACTS ASSESSMENT

### 3.1 Methodology

Visual impacts are discussed in terms of the effect that the new physical elements would have on landform quality (i.e., the existing natural or man-made landform) and visual resources (i.e., the physical resources, including native vegetation, introduced landscaping, and the built environment that make up the character of the area).

The aesthetic qualities of a community or area are defined by a combination of visual resources and other qualities that define the character of the community and site. Aesthetic effects can be either positive or negative and evaluated based on the context of the project area. Federal and state regulations require that visual impacts assessment consider resources such as Section 106 and Section 4(f) properties; iconic cultural resources such as scientific or natural areas, scenic byways, routes, and vistas; and, vegetation, wildlife, ecological communities, and protected landscapes.

Highways can affect the visual and aesthetic character of surrounding landscapes and the perceptions of the individuals who live within and visit these environments. Federal Highway Administration (FHWA) guidance, *Visual Impact Assessments for Highway Projects* (FHWA 2015), provides a framework for evaluating impacts to visual and aesthetic resources for vehicular highway projects.

Following the guidance established by the FHWA, the existing visual character in the study area are described below. **Table 1** provides the definitions for key terms used for the visual impacts assessment.

**Table 1. Definition of Key Terms**

| Term                | Definition  |
|---------------------|---|
| Aesthetics          | Perception of natural beauty in a landscape.  |
| Landscape unit (LU) | Areas within the area of visual effects (AVE) that have similar visual features and homogeneous visual character. LU is the spatial unit used for assessing visual impacts.   |
| Viewer sensitivity  | The degree to which viewers are sensitive to changes in the visual character of visual resources. Viewer sensitivity is assessed on a scale of low, moderate and high. Viewer sensitivity is the consequence of two factors, viewer exposure and viewer awareness. Sensitivity to views varies among viewer types, which would, therefore, affect the significance of the impact. |
| Viewer exposure     | A measure of the proximity, extent and duration of a viewer to a visual resource. Proximity is the distance between the viewer and the visual resource being viewed. Extent is the number of people viewing the visual resource. Duration is the length of time the visual resource is viewed.  |
| Viewshed            | The surface area visible from a particular location (e.g., an overlook) or sequence of locations (e.g., a roadway or trail).  |
| Visual character    | Description of the visible attributes of a scene or object. This description is an impartial narrative of the components of the landscape and defined by the relationship between the natural environment and built environment.  |

### 3.2 Visual Quality

Developing the existing conditions for visual and aesthetic resources requires two phases. The first phase describes the visual character of the landscape units and assigns a visual quality grade. The existing visual character provides the basis to determine whether any visual impacts would occur. The second phase determines who has views of the proposed project and establishes the viewer sensitivity. Viewers would fall into two primary groups: highway users and highway neighbors. Highway users would have a view *from the road* while highway neighbors would have a view *of the road*.

Using professional judgment, the overall visual quality of the proposed project is assigned one of five categories listed below:

- Low- areas lacking valued or having degraded visual resources with no aesthetically pleasing composition.
- Moderately low- areas containing some visual resources, but lacking a coherent and aesthetically pleasing composition.

- Moderate- areas primarily of visual resources combined in an aesthetically pleasing composition with low levels of disruptive visual detractors.
- Moderately high- areas of visual resources combined in an aesthetically pleasing composition, expressing a sense of place and lacking prominent disruptive visual detractors.
- High- areas comprising visual resources free of disruptive visual detractors and with a strong sense of place.

To assist in determining visual relationships, FHWA guidance has established the following three concepts as valid and reliable criteria to be used for appraisals of visual quality: vividness, intactness, and unity.

- Vividness is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- Intactness is the visual integrity of the natural and man-built landscape and its freedom from encroaching elements.
- Unity is the visual coherence and compositional harmony of the landscape considered as a whole.

### 3.3 Existing Conditions

#### 3.3.1 Visual Character

The study area is relatively flat in topography, ranging from 70 to 300 feet in elevation. Cropland and pastures dominate the landscape followed by residential and commercial development. Other notable landscapes include shrub and brush rangeland and orchards, groves, and nurseries.

Cropland and pastures occur primarily in the northern portions of the study area, bordering FM 490 to the north and FM 1423 to the east. **Figure 1** shows the representative pastureland in the study area.



Figure 1. Photo of representative pastureland in the study area

Residential development consists of dense neighborhoods and rural, large-lot subdivisions. Residential development is concentrated along I-2/US 83 north to FM 2812 and along I-69C/US 281 eastward to Tower Road. Commercial/businesses are largely concentrated in the southern study area near I-2/US 83, with smaller pockets located along SH 107, FM 1925 and FM 2812 in the central study area. **Figure 2** shows the representative residential development in the study area.



Figure 2. Photo of representative residential development in the study area

Agricultural operations occurring throughout the study area includes the production of sorghum, cotton, fruit and vegetables, and livestock ranching. Agricultural properties in the southern study area consist of smaller, segmented parcels, while larger intact parcels are located north of FM 2812. **Figure 3** shows the representative agricultural fields in the study area.



Figure 3. Photo of representative agricultural field in the study area

### 3.3.2 Visual Quality

**Table 2** summarizes the viewer sensitivity and exposure for viewers of the proposed project.

**Table 2. Anticipated Viewer Response to Landscape Change by Alternative**

| Viewer                              | Sensitivity | Alternatives*               |                             |                      |                             |                         |                             |
|-------------------------------------|-------------|-----------------------------|-----------------------------|----------------------|-----------------------------|-------------------------|-----------------------------|
|                                     |             | 2014 Modified 2 Alternative |                             | 2014 PSM Alternative |                             | FM 1423 PSM Alternative |                             |
|                                     |             | Exposure                    | Anticipated Viewer Response | Exposure             | Anticipated Viewer Response | Exposure                | Anticipated Viewer Response |
| Residents of Adjacent Neighborhoods | High        | High                        | Moderate                    | High                 | Moderate                    | High                    | Moderate                    |
| Tourists                            | Moderate    | Low                         | Moderate                    | Low                  | Moderate                    | Low                     | Moderate                    |
| Commuters                           | Low         | Moderate                    | Moderately Low              | Moderate             | Moderately Low              | Moderate                | Moderately Low              |

Note: There would be no change in viewer response to landscape for the No-Build Alternative.

As shown, based on the viewsheds of each reasonable alternative, the viewer sensitivity is the same for all alternatives but the exposure may change. Commuters may have less exposure to the visual changes associated with FM 1423 PSM Alternative because it is located partly on an existing roadway.

Each reasonable alternative was evaluated based on the level of visual relationships and the findings are provided below.

**Vividness:** There are no officially designated national parks and scenic rivers in the study area. The visual character of the study area is varied; some landscape components rate high under the vividness criterion. These components include the Lower Rio Grande Valley National Wildlife Refuge (NWR), Edinburg Scenic Wetlands Unit of the World Birding Center and Valley Land Fund (VLF) conservation easement as they are an example of the south Texas landscape. However, these are not dominant features within the study area; therefore, the study area possesses a low degree of vividness.

**Intactness:** Because of the dominance of cropland and pastureland and large number of unmaintained residential and commercial structures, the study area does not rate highly under the intactness criterion. The mix of croplands and development remind the viewer that the man-made developments have encroached on the south Texas landscape, which was rangeland. The study area possesses a low degree of visual intactness.

**Unity:** Refers to the coherence of the landscape as a whole; all elements of the landscape coming together into a cohesive unit. The degree of success relates to the integration of natural and man-made elements into the landscape. Partly because of the topography of the region, there is a lack of natural landforms that can be used to design man-made developments. There is no unity to development within the study area to land cover patterns. While planned residential and/or commercial development may possess cohesion within a confined proximity, empty lots scattered throughout the study area add to the lack of unity. Existing transportation facilities and utilities also contribute to a lack of unity in visual character. The existing I-2/US 83 and 69C/US 281, along with canal and drainage systems, has created a mark on the landscape. The study area possesses a low to moderate degree of visual unity.

Overall, the low degree of vividness, combined with the low ratings for intactness and unity, resulting in a low degree of existing visual quality for the reasonable alternatives.

**Table 3** provides a comparison of the viewsheds for each reasonable alternative based on the level of visual relationships within each corridor.

**Table 3. Visual Quality of Viewsheds by Alternative**

| Visual Quality | Reasonable Alternatives*    |                      |                         |
|----------------|-----------------------------|----------------------|-------------------------|
|                | 2014 Modified 2 Alternative | 2014 PSM Alternative | FM 1423 PSM Alternative |
| Vividness      | Low                         | Low                  | Moderately low          |
| Intactness     | Low                         | Low                  | Low                     |
| Unity          | Low to moderate             | Low to moderate      | Low to moderate         |

Note: There would be no change in visual quality for the No-Build Alternative.

### 3.4 Visual Resources

Characteristics of the proposed eight-lane controlled access freeway that could have a visual/aesthetic impact include elevated structures/bridges and other vertical elements such as roadway signs and light standards. However, because of the relatively flat nature of the terrain, other than the grade separated locations, potential views of the proposed facility would be limited to adjacent properties.

All reasonable alternatives would include direct connector ramps at the I-2/US 83 and I-69C/US 281 termini as well as connections to existing frontage roads. The interchanges and frontage roads would incorporate safety lighting, which could be considered as a negative effect for visual and aesthetic qualities, especially near residential areas. Design of light fixtures would be completed during the final design phase of project development; if feasible, measures to minimize the effects of the lighting beyond the roadway surface would be examined.

The visual resources within the viewsheds of each of the reasonable alternatives are summarized herein.

#### 3.4.1 2014 Modified 2 Alternative

The 2014 Modified 2 Alternative traverses between the U.S. Fish and Wildlife Service's Lower Rio Grande Valley NWR Goodfields Tract and the VLF conservation easement. Since illumination near these locations may have a negative impact for wildlife, mitigation measures would be evaluated during final design. Measures may include the use of low impact and downward directional lighting to minimize impacts.

Visual resources along this corridor also include Cavazos Cemetery at Vista Bonita/Brushline Road. Implementation of this alternative would negatively impact these resources in the viewshed.

The 2014 Modified 2 Alternative would bridge and completely span eight irrigation features associated with the NRHP-Listed Hidalgo County Irrigation District (ID) #2 and 11 irrigation features associated with the assumed NRHP-eligible Donna ID. These bridge spans would not be considered as a negative impact to these Section 106 resources.

Visual impacts for residential properties would occur at the proposed grade separated locations along the corridor: Ferguson Road, Sioux Road, East Nolana Loop/Earling Road, Owassa Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road, SH 107, FM 1925, FM 2812, Brushline Road, and Air Cargo Drive.

### **3.4.2 2014 PSM Alternative**

The 2014 PSM Alternative would span eight irrigation features associated with the NRHP-Listed Hidalgo County ID #2, 11 irrigation features associated with the assumed NRHP-eligible Donna ID, and three irrigation features associated with the assumed NRHP-eligible Engleman ID. These bridge spans would not be considered as a negative impact.

At the point where the 2014 PSM Alternative diverges from the 2014 Modified 2 Alternative, it could be located immediately east of the VLF conservation easement. Illumination at these locations may have a negative impact for wildlife; mitigation measures would be evaluated during final design and may include the use of low impact and downward directional lighting to minimize impacts.

Similar to the 2014 Modified 2 Alternative, visual impacts for residential properties would occur at the proposed grade separated locations along the corridor: Ferguson Road, Sioux Road, East Nolana Loop/Earling Road, Owassa Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road, SH 107, FM 1925, FM 2812, Brushline Road, and Air Cargo Drive.

### **3.4.3 FM 1423 PSM Alternative**

Visual elements along this corridor include Valverde Memorial Gardens between Earling Road and Eldora Road, Donna North High School between Earling Road and Minnesota Road, Iglesia Cristiana at Roosevelt Road, and Daniel Singleterry Elementary and Patricia S Garza Elementary at Alberta Road.

The FM 1423 PSM Alternative would cross 26 irrigation features associated with the assumed NRHP-eligible Donna ID and 3 irrigation features associated with the Engleman ID; these bridge spans would not be considered as a negative impact to these resources.

Visual impacts for residential properties along the corridor would occur at the proposed grade separated locations: FM 495/Kansas Road, Sioux Road, East Nolana Loop/Earling Road, Roosevelt Road, Alberta Road, Trenton Road, Wisconsin Road, Canton Road, SH 107, FM 1925, FM 2812, Brushline Road, and Air Cargo Drive.

### 3.4.4 No-Build Alternative

The No-Build Alternative would have minimal effect on the visual and aesthetic qualities of the surrounding environment because it would not include the construction, alteration, or improvement to transportation facilities within the study area.

## 3.5 Summary of Findings

The visual effects within the viewsheds of each of the reasonable alternatives are summarized in Table 4.

**Table 4. Effect on Visual and Aesthetic Qualities of Surrounding Environment**

| Reasonable Alternatives     | Visual Resources  | Section 106 Resources   | Visual/Aesthetic Effect  |
|-----------------------------|---|---|--|
| 2014 Modified 2 Alternative | <ul style="list-style-type: none"> <li>USFWS LRGV-NWR Goodfields Tract</li> <li>VLF conservation easement</li> <li>Cavazos Cemetery at Vista Bonita/Brushline Road</li> </ul> | <ul style="list-style-type: none"> <li>8 irrigation features associated with NRHP-Listed HCID #2</li> <li>11 irrigation features associated with assumed NRHP-eligible Donna ID</li> </ul>  | <ul style="list-style-type: none"> <li>Negative effect at NWR, VLF conservation easement and cemeteries.</li> <li>No effect to Section 106 resources</li> <li>Negative effect at grade separated locations.</li> </ul> |
| 2014 PSM Alternative        | <ul style="list-style-type: none"> <li>VLF conservation easement</li> </ul>   | <ul style="list-style-type: none"> <li>8 irrigation features associated with NRHP-Listed HCID #2</li> <li>11 irrigation features associated with assumed NRHP-eligible Donna ID</li> <li>3 irrigation features associated with assumed NRHP-eligible Engleman ID</li> </ul> | <ul style="list-style-type: none"> <li>Negative illumination effect for wildlife at VLF</li> <li>No effect to Section 106 resources</li> <li>Negative effect at grade separated locations.</li> </ul>                  |

**Table 4. Effect on Visual and Aesthetic Qualities of Surrounding Environment**

| Reasonable Alternatives | Visual Resources  | Section 106 Resources  | Visual/Aesthetic Effect  |
|-------------------------|---|--|--|
| FM 1423 PSM Alternative | <ul style="list-style-type: none"> <li>Valverde Memorial Gardens</li> <li>Iglesia Cristiana</li> <li>Donna North High School, Daniel Singleterry Elementary, Patricia S Garza Elementary</li> </ul> | <ul style="list-style-type: none"> <li>26 irrigation features associated with assumed NRHP-eligible Donna ID</li> <li>3 irrigation features associated with assumed NRHP-eligible Engleman ID</li> </ul> | <ul style="list-style-type: none"> <li>Negative effect at cemetery, church and schools</li> <li>No effect to Section 106 resources</li> <li>Negative effect at grade separated locations.</li> </ul> |
| No-Build Alternative    | None  | None   | Minimal effect; since this alternative it does not include construction, alteration, or improvement to transportation facilities within the study area   |
|                         |   |  |  |

The three reasonable alternatives would have an effect on the overall visual and aesthetic qualities along the corridor because of the rural setting of the proposed improvements. However, these impacts would not be considered intrusive. Since the FM 1423 PSM Alternative is located partly on an existing roadway, the visual impacts would be considered the least intrusive of the three build alternatives.

Where reasonable and feasible, mitigation measures that would result in beneficial visual and aesthetic impacts may be programmed if a build alternative is selected. These measures may include aesthetic enhancements, such as landscaping, lighting, and/or decorative details. Aesthetics treatments would be developed during final design and incorporated into the project design as appropriate.

Illumination near wildlife refuges and conservation easements may have a negative impact for wildlife. Mitigation measures would be evaluated during final design and may include the use of low impact and downward directional lighting to minimize impacts.

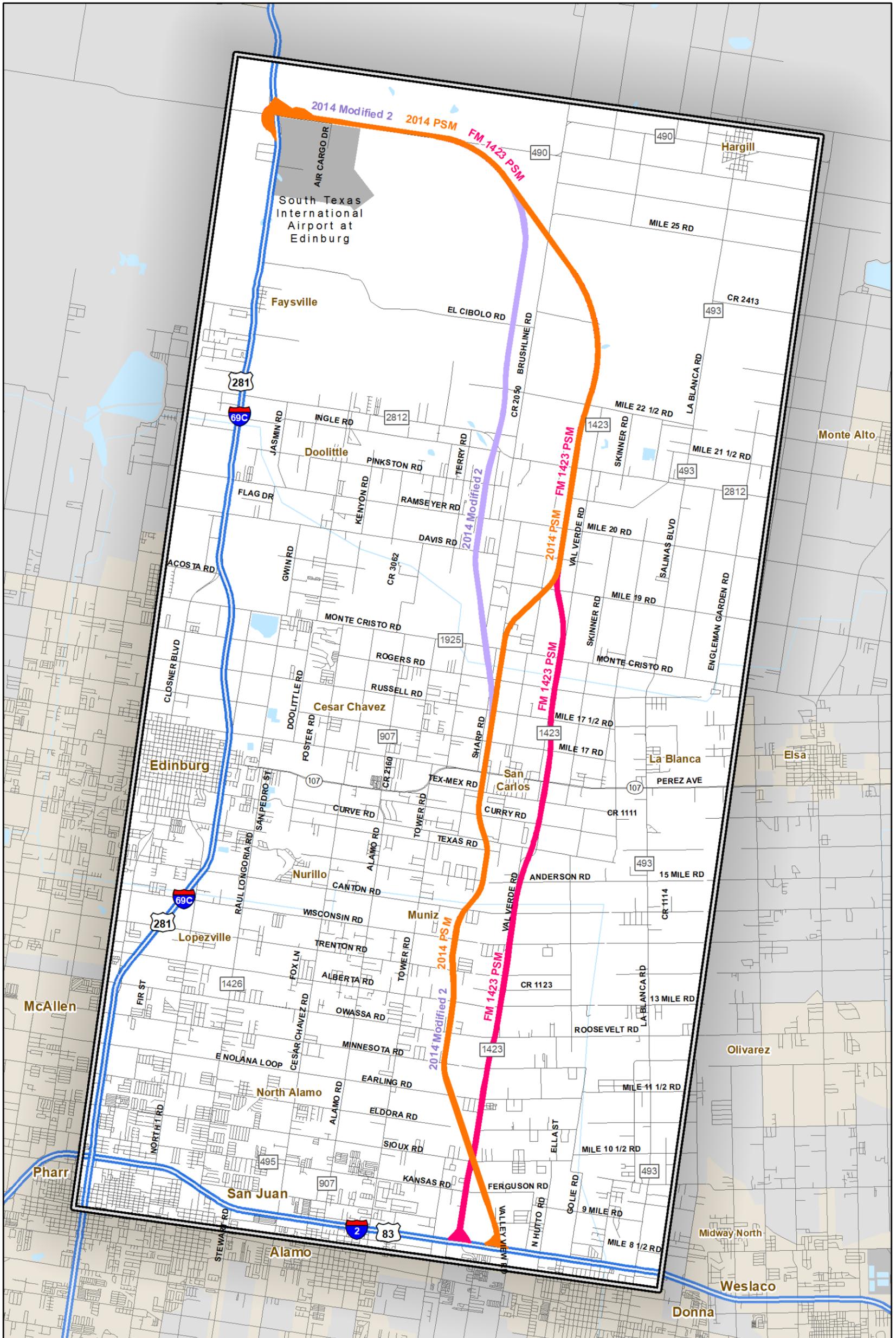
#### 4.0 REFERENCES

Federal Highway Administration (FHWA). 2015 Guidelines for the Visual Impact Assessments for Highway Projects.

Texas Department of Transportation (TxDOT). 2018. DEIS Alternatives Analysis Technical Report, SH 68 from I-2/US 83 to I-69C/US 281, CSJs: 3629-01-001, -002, -003, Hidalgo County, Texas.

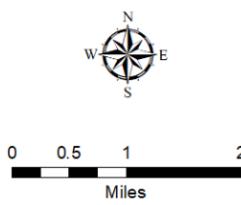
## Attachment A

### Exhibits

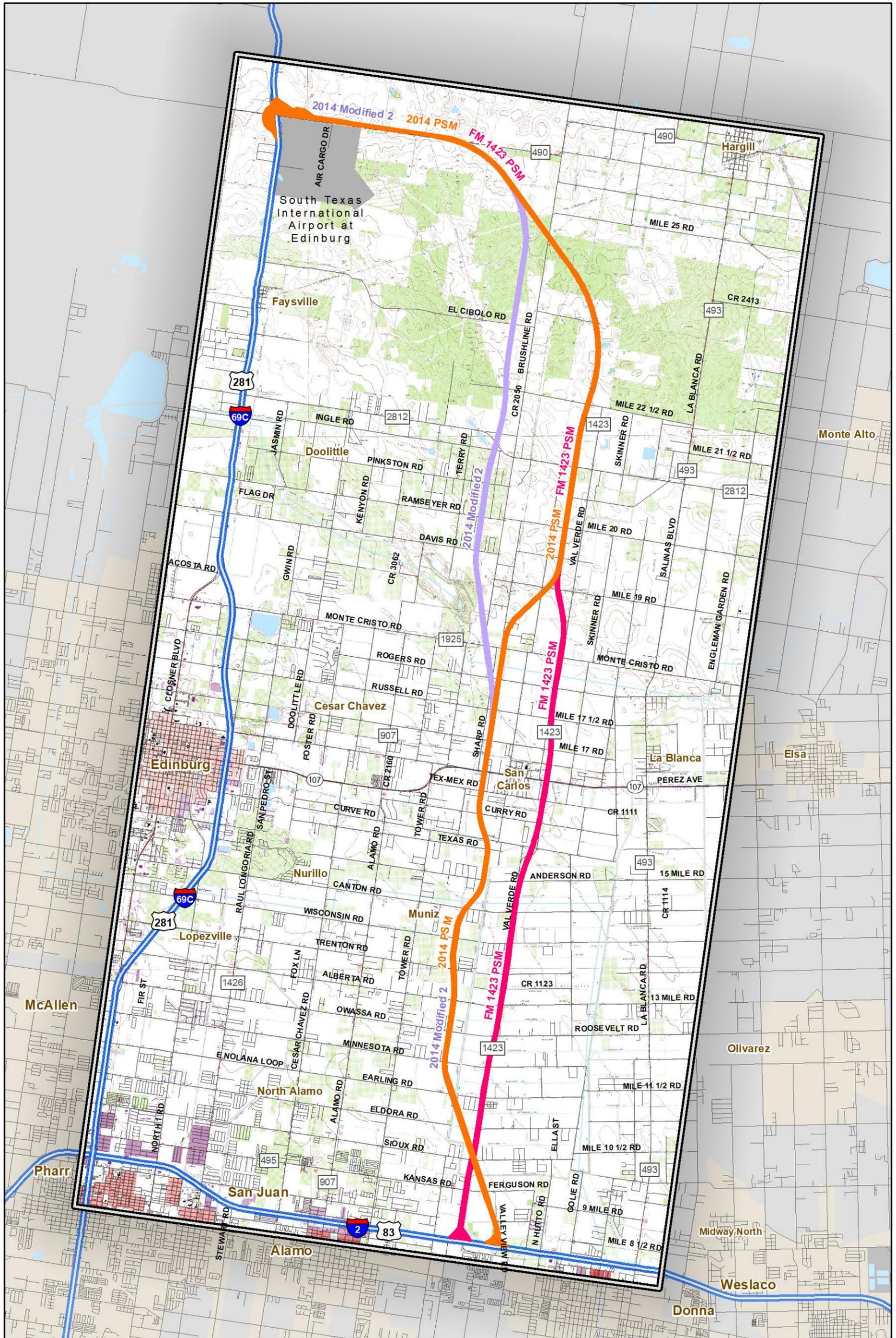


Base Map: ESRI-USA Base Map

- █ 2014 Modified 2 Alternative
- █ 2014 PSM Alternative
- █ FM 1423 PSM Alternative
- Study Area



**Exhibit 1**  
Project Location on County Base  
SH 68 from  
I-2/US 83 to I-69C/US 281  
Hidalgo County, Texas  
CSJs: 3629-01-001, 002, and 003



Base Map: ESRI-USA Base Map

- 2014 Modified 2 Alternative
- 2014 PSM Alternative
- FM 1423 PSM Alternative
- Study Area

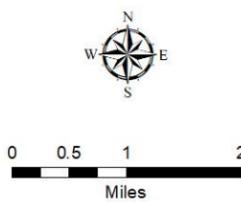


Exhibit 2  
Project Location on  
7.5' USGS Topographic  
SH 68 from  
I-2/US 83 to I-69C/US 281  
Hidalgo County, Texas  
CSJs: 3629-01-001, 002, and 003