Texas Department of Transportation

FACILITATING INTERMODAL MOVEMENT:

Enhancing Truck Parking for Houston's Rural Communities and Coastal Ports

May 2024

Multimodal Projects Discretionary Grant (MPDG) Program

1. Project Description

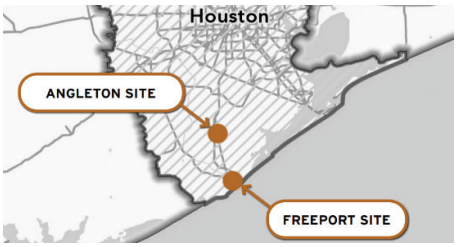
The Texas Department of Transportation (TxDOT) is requesting $22,253,040 from the **FY 2025 – 2026 Multimodal Project Discretionary Grant** under the **Rural Surface Transportation Grant (Rural)** program as shown in **Table 1.** The primary objective for this funding is to construct two freight intermodal facilities that provide rest stops, truck parking, and affordable multimodal options for moving goods and people within a systemwide network in the rural area of Southeast Texas near its coastal ports. The two intermodal facilities are in the rural cities of Freeport and Angleton, where freight plays a huge role in economic growth and job creation.

Table 1 Rural Grant Eligibility

Facility	Rural Eligibility	Population
Freeport Site	Located on **FM 1495** (minor arterial) and new walking infrastructure on **Cherry St., a City of Freeport Designated Truck Route**, this intermodal facility will facilitate goods movement at Port Freeport supporting agricultural, commercial, and energy industries served by this coastal port.	10,696
Angleton Site	This project is **located within 0.23 miles of SH 35** which is on the TxDOT Texas Highway Freight Network and will serve as an intermodal facility which provides truck parking, increased access to jobs, and support to the agricultural, commercial, and energy industries served by coastal ports.	19,429

Statement of Work

Figure 1 Rural Project Location

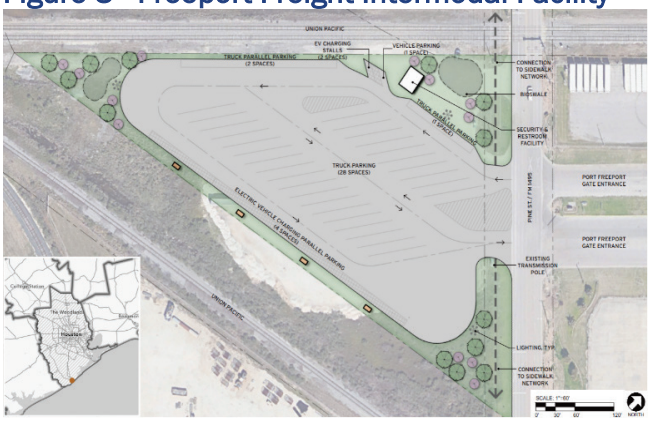


Both sites, shown in **Figure 1**, were selected based on preliminary engineering and stakeholder engagement.

Freeport Freight Intermodal Facility

Through an innovative partnership, the Freeport freight intermodal facility will be built on 8.1 acres of Port Freeport property, located along the Texas Gulf Coast in the City of Freeport (Census 2020 Population: 10,696). Port Freeport, ranked the sixth fastest growing port in the chemical industry, is of regional economic significance. The Freeport freight intermodal facility will primarily support staging and drayage truck parking needs for Port Freeport for 2 to 4 hours at a time and no more than 24 hours. It will facilitate intermodal access into or out of Port Freeport and significantly improve freight movement along FM 1495 (minor arterial) on both the Intermodal Connector and the Critical Freight Corridor. The truck parking, queueing and staging needs are outlined in the 2024–2025 Texas Port Mission Plan. As seen in **Figure 3**, the Freeport site is located directly across from the Port Freeport entrance and the Freeport intermodal facility will serve as a first stop to improve logistics and access for trucks headed to the port. Construction will include paving an existing gravel lot with 121,400-square-foot 12-inch reinforced concrete paving, striping, and safety high mast lighting for 31 truck parking spaces, 4 EV truck charging stations, and 3 passenger vehicle parking spaces (two will be EV charging stations).

Figure 3 Freeport Freight Intermodal Facility



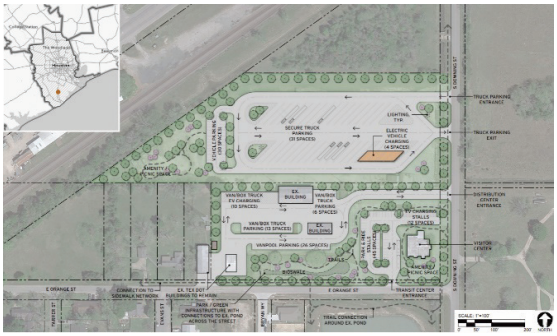
Construction will also include a new 800-square-foot small office building and restrooms. Port Freeport will staff the office and interact with truckers to improve freight logistics at port facilities. The parking site is in a triangular parcel bound by Union Pacific Railroad (UPRR) on the north, Pine St. on the east, and UPRR on the south. A fence will be installed to separate the site from UPRR.

Figure 2 Freeport Walking Infrastructure

As shown by **Figure 2**, TxDOT is also proposing a pedestrian railroad crossing and 6-foot concrete waking infrastructure that connects to food establishments, healthcare destinations, transit services, as well as a bus shelter at E. 8th St./Cherry St. The first sidewalk starts at FM 1495 and runs north to 4th St. The second starts on FM 1495 and runs west on E. 8th St. to Cherry St. It is also located in **Census Tract 6644** which is a Rural Area, Historically Disadvantaged Community, and Area of Persistent Poverty.

Angleton Intermodal Facility

Figure 4 Angleton Intermodal Facility



The Angleton intermodal facility will be constructed on existing TxDOT right-of-way (ROW), restoring and modernizing a 10.3-acre area office in the rural City of Angleton (Census 2020 Population: 19,429), which is the county seat of Brazoria County, Texas. Shown in **Figure 4**, the Angleton site will serve as an intermodal facility consistent with TxDOT's REAL Plan, a blueprint for building an intermodal regionwide transportation system in Southeast Texas. The Angleton intermodal facility will helps fill the need for secure overnight truck parking and provides short-term parking in the distribution center for light-duty trucks. The Angleton intermodal facility supports multimodal choices (freight, carpool/vanpool, park-and-ride, transit) to the six disadvantaged rural areas of Angleton, Brazoria, Lake Jackson, Clute, Richwood, and Freeport, with the goal of improving the movement of freight, reducing vehicle and freight emissions and supporting access to jobs. Construction of the north part of the Angleton intermodal facility will include new concrete paving, striping, safety lighting, and a new secure truck parking facility for truck drivers and local owner-operators with 31 truck parking spaces, 4 EV truck charging stations and 30 vehicle spaces. Construction of the south part of the site will include 3,000-square-foot 10-inch reinforced concrete paving, striping, and safety lighting, 19 truck light-duty parking spaces and 10 EV light-duty truck charging stations for local delivery vehicles, as well as 26 vanpool and 45 park-and-ride spaces, with 12 EV charging stations for passenger

vehicles. The project will restore and modernize existing covered structures for small delivery truck/van package sorting and improvements to the existing building on the southeast corner of the site for a 4,500 square-foot visitor/transfer center. Other improvements include a 10-foot-wide concrete shared-use path (300 feet in length) with connections to the adjacent neighborhood and new 6-foot-wide concrete walking infrastructure around the site (1,700 feet in length) that incorporates Universal Design and protects non-motorized users from safety risks. Other improvements for non-motorized users include ADA curb ramps, high-visibility crosswalks, a pedestrian hawk signal, signage, as well as 114 large trees (30 gallon) and 22 ornamental trees (15 gallon). The Angleton Site is in **Census Tract 6624,** designated as a Rural Area and adjacent to an Area of Persistent Poverty. The site is rectangular and bordered by UPRR on the north, S. Downing St. on the east, and E. Orange St. on the south and is located within 0.23 miles of SH 35. Dynamic message signs (DMS) will improve freight access to and from SH 35.

Both sites will also include bioswales for drainage and a truck parking availability system (TPAS) that incorporates weigh-in-motion (WIM) sensors to count trucks entering/exiting and provides real time parking availability information through a data feed/API that will be available through TxDOT's ConnectSmart and other third-party applications. They will also include two DMS to increase drivers' awareness of the availability of safe, secure parking.

History & Broader Context

The proposed truck parking solutions are a result of valuable input from regional, local, and not-for-profit stakeholders, and data-driven analysis from four different plans, as follows:

- TxDOT's REAL Plan outlines person trips associated with the entire transportation system capacity, aggregating the capacities of all modes, with the goal to connect and efficiently move goods and people via managed express lanes and multimodal hubs.
- Southeast Texas Truck Parking Action Plan currently under development, this plan is tiering from a prior 2020 Statewide Truck Parking Study to identify and prioritize truck parking needs (opportunity sites) in Southeast Texas.
- The 2020 Texas Statewide Truck Parking Study found that the year 2050 forecasted truck parking demand statewide is 170% over 2018 capacity.
- The 2018 Texas Freight Mobility Plan first identified shortage of safe, authorized truck parking as a high priority need for the State of Texas.

These planning efforts are consistent with the Rural Opportunities to Use Transportation for Economic Success (ROUTES) Initiative, which "prioritizes the needs of rural America by supporting rural transportation policy and equitable access for rural and Tribal communities that face challenges relating to transportation safety, mobility, and economic development."

Work Completed

A preliminary environmental screening was conducted for both sites and a 15% design complete was developed for the Freeport Site, including general estimates of the types and quantities of materials. The Freeport Site included development of existing contours and vertical and horizontal geometry of roadway connections. OpenRoads Designer was then used to design the sites including street tie-in locations, new/improved walking infrastructure; drainage plans; grading; proposed surface model; proposed typical sections; and proposed earthwork.

Transportation Challenges to Be Addressed

Criteria	Transportation Challenges	Freeport Site	Angleton Site
Safety	▪ Higher than statewide Truck-related injury crash rate by 23% ▪ Higher than statewide Truck fatality rate by 16% for all modes ▪ Vulnerable population exposure to trucks on local streets while trucks drive excessively looking for parking	▪ Provides Universal Design walking infrastructure that protect non-motorized users (Improving Safety for Pedestrians and Bicyclists Accessing Transit) ▪ Provides lighting—reduces risk	
		▪ Provides staging area truck parking spaces with a rest area ▪ Reduces truck related injuries by 26% caused by fatigue, distraction, inattention, and unsafe parking	▪ Provides truck parking spaces, rest area, visitor center and picnic area ▪ Reduces truck-related injuries by 21% caused by fatigue, distraction, inattention, and unsafe parking
State of od Repair	▪ Lack of intermodal facilities ▪ Lack of walking infrastructure ▪	▪ Creates freight parking in a rural community/Area of Persistent Poverty census tract ▪ Provides new walking infrastructure for first/last mile connectivity	▪ Restores and modernizes TxDOT area office to a Freight Intermodal Facility ▪ Maintains the condition & safety of infrastructure in existing footprint
Economic Impacts	▪ Few good-paying jobs ▪ No tourism or recreational opportunities ▪ Existing facilities insufficiently support the high growth rate of 3.62% truck traffic demand	▪ Promotes locally inclusive economic development by improving the systemwide connectivity	▪ Creates green areas, tree canopies, picnic areas, walking infrastructure connected to trails for recreational opportunities
		▪ Provides truck parking & amenities to support freight movement & freight economic development, creating good-paying jobs ▪ Reduces VMT—extends the service lifetime of the pavement	

Criteria	Transportation Challenges	Freeport Site	Angleton Site
Climate Change, Resilience, and the Environment	▪ Designated moderate & severe non-attainment area for the 2015 and 2008 8-hour ozone standards ▪ Heat island effects	▪ Provides Universal Design walking infrastructure to transit network ▪ Reduces truck VMT by 16.7 million vehicle miles over the 25-year operating period (2028–2052)	▪ Incentivizes modal shift to reduce passenger VMT by 3.1 million vehicle miles each year ▪ Provides carpooling/ridesharing, park & ride, and transit
		▪ Provides EV charging stations for trucks and passenger vehicles—aligns with NEVI Plan ▪ Creates green area & tree canopies—reduces CO_2 & heat island effect ▪ Stormwater management improvements through bioswales—improves infrastructure resilience	
Equity, Multimodal Options, and Quality of Life	▪ Limited affordable travel modes ▪ Limited access for truck drivers to rest areas, safe/legal parking with amenities ▪ Heat island effects	▪ Provides Universal Design walking infrastructure with trees/shade and bus shelter to protect non-motorized transit users	▪ Provides affordable modes of transportation to access jobs and community resources (e.g., food), carpool/vanpool, and transit ▪ Provides access to trails & picnic areas, beneficial for public health
		▪ Sites remove trucks parked on local roads, shoulders, and on/off ramps.	
Mobility and Community Connectivity	▪ Limited access to multimodal options for local communities ▪ No intermodal/multimodal options for truck drivers	▪ Provides streamlined drayage operations ▪ Installs Universal Design walking infrastructure to critical locations connecting to: Food Mart, medical services and transit	▪ Provides local communities and truckers with access to multimodal options: carpool/vanpool, and transit
Innovation	▪ No real-time truck parking/EV charging information available ▪ Limited refueling options for low-carbon travel modes	▪ Develops a truck parking availability system (TPAS) to reduce truck drivers' time looking for parking ▪ TPAS connects to ConnectSmart app for parking availability & reservation ▪ Truck parking spots reserved through the ConnectSmart mobile app	

2. Project Budget

The Texas Department of Transportation (TxDOT) is requesting $22,253,040 from the **FY 2025–2026 Multimodal Project Discretionary Grant** under the **Rural Surface Transportation Grant (Rural)** program. The primary objective for this funding is to construct two freight intermodal facilities that provide rest stops, truck parking, and affordable multimodal options for moving goods and people within a systemwide network in the rural area of Southeast Texas near its coastal ports. The two intermodal facilities are in the rural cities of Freeport and Angleton, where freight plays a huge role in economic growth and job creation.

Previously Incurred Costs

As of April 19, 2024, TxDOT has incurred approximately $78,000 to develop 15% schematic designs for the Freeport Site and approximately $50,000 to develop a conceptual design for the Angleton Site. All funds to date have been spent on preconstruction activities.

Sources, Uses, and Availability of Funds

TxDOT requests both sites be considered for Rural funding. Both sites are in Rural Areas and one of the sites (Freeport) is also in an Area of Persistent Poverty and Historically Disadvantaged Community. TxDOT is seeking an 80% federal share of funding through MPDG as shown in Table 2Table 2.

Table 2 Project Budget by Source of Funds for MPDG Request

Funding Source	Freeport Site	Angleton Site	Total Funding
MPDG Funds	$7,026,480	$15,226,560	$22,253,040
Other Federal Funds	–	–	–
Non-Federal Funds	$878,310	$3,806,640	$4,684,950
Port Freeport Local Match	$878,310	–	$878,310
Total Cost	**$8,783,100**	**$19,033,200**	**$27,816,300**

Budget Allocation for Urbanized Area, Area of Persistent Poverty, or Historically Disadvantaged Community

As shown in **Table 3**Table 3, the Freeport Site is in **Census Tract 6644** which is an Area of Persistent Poverty and a Historically Disadvantaged Community. The Angleton Site is in a Rural Area that is adjacent to and will benefit an Area of Persistent Poverty.

Table 3 Project Costs by 2020 Census Tract

2020 Census Tract(s)	Project Costs per Census Tract
Census Tract 6644[1] — Freeport Site	$8,783,100
Census Tract 6624 — Angleton Site	$19,033,200
Total Project Cost	**$27,816,300**

[1] Historically Disadvantaged Community and Area of Persistent Poverty.

Finally, 100% of the project costs will be spent in a Rural Area as designated in the 2020 Census and shown in **Table 4.** ***Further, the City of Freeport (Census 2020 Population: 10,696) and the City of Angleton (Census 2020 Population: 19,429), are both small rural communities.***

Table 4 Project Costs by Urban/Rural Designation

Urban/Rural	Project Costs
Urban (2020 Census-designated urban area with a population greater than 200,000)	$0
Rural (Located outside of a 2020 Census-designated urban area with a population greater than 200,000)	$27,816,300
Total Project Cost	**$27,816,300**

Contingency Amount

The budget for this project includes $4,428,900 in contingencies in 2024 dollars, which is approximately 16% of the total budget. TxDOT has determined this amount is sufficient to cover unanticipated cost increases based on the current level of design. In the unlikely event that the project budget evolves to exceed planned expenditures and contingency amounts, TxDOT has developed a Plan to Address Potential Cost Overruns.

Plan to Address Potential Cost Overruns

PHASE 1

VALUE ENGINEERING STUDY

TxDOT includes a Value Engineering (VE) study as a standard part of its project development process. TxDOT policy requires that each VE study include and document seven unique phases:[1]

1. **Information**—Gather project information, commitments, and restraints.
2. **Function Analysis**—Analyze project to understand required functions.
3. **Creative**—Generate ideas to improve performance, enhance quality, and lower project costs.
4. **Evaluation**—Evaluate feasible ideas for development.
5. **Development**—Develop the selected alternatives into fully supported recommendations.
6. **Presentation**—Present VE recommendations to stakeholders.
7. **Resolution**—Evaluate, resolve, document and implement all approved recommendations.

[1] Source: TxDOT Manual System, Project Development Process Manual, Section 6: Value Engineering.

PHASE 2

PRIORITIZE INVESTMENTS

The 2024 Texas Unified Transportation Program provides a framework for identifying and allocating funds to address cost overruns for projects ready for letting. Pursuant to a legislative mandate, each TxDOT district receives a minimum of $2.5 million in discretionary funds to address overruns, with additional funding distributed through an allocation formula. The Texas Transportation Commission may supplement the funds allocated to individual districts on a case-by-case basis to cover project cost overruns.

PHASE 3

PURSUE ADDITIONAL FUNDING

TxDOT has developed a tested strategy for securing additional funds for major projects. Since 2020, TxDOT has secured 13 discretionary grants totaling $198 million. The projects, and many more in prior years, have had all additional costs covered by TxDOT. In the event of a major cost overrun for this project, which could not be resolved through Phases 1 and 2, TxDOT would deploy a combination of tools to secure the required funding. TxDOT would entertain all avenues to make the project whole and secure sufficient financing to proceed.

Level of Design and Cost Estimates

Cost estimates were prepared to a 15% design complete milestone for the Freeport Site and conceptual design for the Angleton Site. The total construction costs for the project are **$27,816,300 in 2026 dollars** as shown in **Table 5**. For this MPDG application, TxDOT is requesting **$22,253,040** in 2026 dollars as shown in **Table 2** and in the Benefit Cost Analysis spreadsheet.

Table 5 Construction Cost Estimates by Site

Cost Category	Freeport	Angleton	Total
Civil–Roadway–Parking	$2,624,930	$5,874,300	$8,499,230
Drainage	$156,914	$505,360	$662,274
Pavement Markings	$10,778	$15,360	$26,138
Landscaping	$76,394	$410,390	$486,784
Illumination	$45,000	$150,000	$195,000
Electric Truck Charging Station	$706,800	$706,800	$1,413,600
Electric Vehicle Charging Station	$46,600	$512,600	$559,200
Structural	$422,000	$2,000,000	$2,422,000
MISC: WIM Sensors, Security Gate, Recreational Amenities, TPAS ITS Equipment, DMS Equipment/Install, Pedestrian Hawk Signal, Additional Roadway Improvements	$1,504,140	$1,947,000	$3,451,140
Mobilization	$1,286,800	$2,788,200	$4,075,000
Contingency	$1,398,400	$3,030,500	$4,428,900

Cost Category	Freeport	Angleton	Total
2024 Total Project Cost	$8,278,756	$17,940,510	$26,219,266
2025 Total Project Cost	$8,527,200	$18,478,800	$27,006,000
2026 Total Project Cost (YOE)	**$8,783,100**	**$19,033,200**	**$27,816,300**
2027 Total Project Cost	$9,046,600	$19,604,200	$28,650,800

Cost Share or Non-Federal Funding Match

TxDOT is seeking an 80% federal share of Rural funding through MPDG as shown previously in Table 2. The 20% match will be covered by a contribution from Port Freeport and by TxDOT using funding from a combination of the following sources:

- State motor vehicle fuels tax.
- State vehicle registration fees.
- Oil and gas severance taxes (Proposition 1).
- General sales and use tax, motor vehicle sales, and rental tax (Proposition 7).

The State of Texas is a stable and dependable funding partner committed to maintaining the existing system and building new infrastructure to encourage economic growth. If TxDOT is awarded the $22,253,040 in MPDG funds requested for this project, TxDOT commits the $5,563,260 from a combination of these state funds to complete the funding package for these much-needed truck parking projects and has ***secured a local private match from Port Freeport in the amount of $878,310.***

3. Outcome Criteria

The Texas Department of Transportation (TxDOT) is requesting $22,253,040 from the **FY 2025 – 2026 Multimodal Project Discretionary Grant** under the **Rural Surface Transportation Grant (Rural)** program**.** The primary objective for this funding is to construct two freight intermodal facilities that provide rest stops, truck parking, and affordable multimodal options for moving goods and people within a systemwide network in the rural area of Southeast Texas near its coastal ports. The two intermodal facilities are in the rural cities of Freeport and Angleton, where freight plays a huge role in economic growth and job creation.

Criterion #1: Safety

When truck drivers are tired or reach the limit of how long they can legally drive, **they often must choose whether to park illegally or drive illegally**. Truck drivers face these decisions on a regular basis. "Falling asleep at the wheel" has been identified as a common experience at some point in a truck driver's career, which was reported by 18% of 569 truck drivers surveyed.[2] Fatigue has been a major contributor to inattentive driving behaviors.

Reduces Fatalities and/or Serious Injuries

Access to safe parking allows truck drivers to handle personal or business communications and enjoy meals safely during a long trip. Otherwise, truck drivers may choose to text, talk on the phone, eat, etc. while driving—activities that will distract them from dynamic road situations. Like fatigue, distraction has also been identified as a major risk factor associated with truck crashes.[3]

During the 2014–2022 period, there was an average of 112 crashes involving trucks within a 20-mile radius of the two proposed truck parking locations annually, 33% of which are caused by truck drivers' inattention, fatigue, distraction, and unsafe parking, resulting in 21% of the total injuries. Trucks parked in unsafe locations contributed to 11 crashes. Truck drivers' drowsy, distracted, and inattentive driving behaviors have caused 15 serious injuries in

Jason's Law

"Jason's Law is named in honor of Jason Rivenburg. On March 4, 2009, Jason stopped for a delivery in Virginia and then headed toward a delivery destination in South Carolina. While only 12 miles from the delivery location, he needed to find parking to rest through the night as his arrival location was not yet open to receive deliveries. Jason did not have a safe place to park. Jason learned from truckers familiar with the area that a nearby abandoned gas station was a safe location to park and proceeded to park there for the night. Tragically, he was attacked and murdered at this location while he slept, with his killer taking both his life and just $7.00 he had in his wallet."

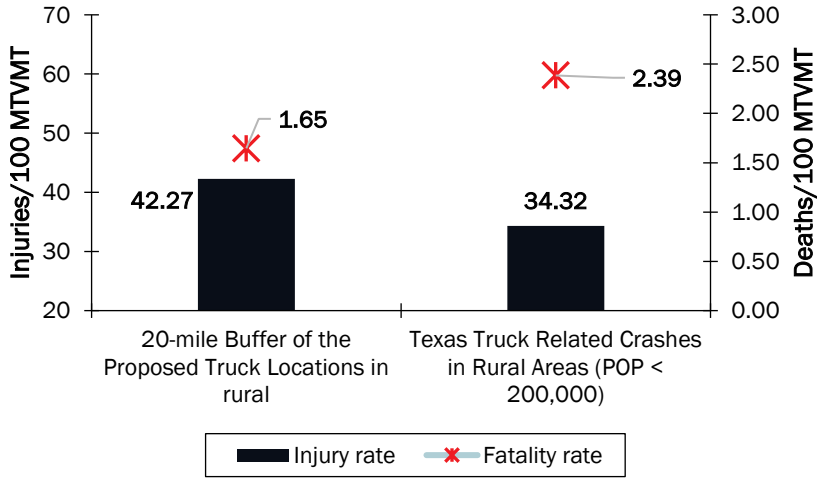
[2] Source: Effect of Driver Fatigue on Truck Accident Rates, 1995.

[3] Source: Driver Fatigue and Distraction Monitoring and Warning System, Phase I | FMCSA (dot.gov).

the study area. These crashes and injuries could be prevented through the proposed truck parking locations.

Compared to the statewide level in Texas, truck drivers in this area have been experiencing a higher risk of fatal and injury crashes. As **Figure 5** shows, the injury rate in this area is 42.27 injuries per 100 million Truck Vehicle Miles Traveled (MTVMT), which is 23% higher than the statewide 34.32 injuries per 100 MTVMT.

Figure 5 Combined Safety Performance within a 20-mi Buffer of Proposed Sites

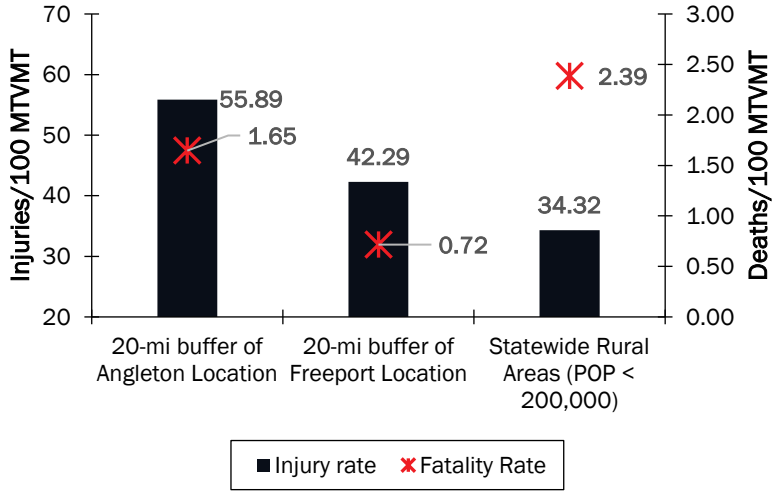


Sources: CRIS database and TxDOT Roadway Inventory annual report (2014–2022)

The truck fatality rate of 1.65 deaths per 100 MTVMT in this area is lower than the statewide 2.39 deaths per 100 MTVMT in rural areas. However, the area's fatality rate is still **15.9%** higher than the statewide fatality rate of 1.42 deaths per 100 million VMT for all vehicles on Texas roads.

Likewise, the injury rate of the individual truck parking location areas is significantly higher than the statewide rate of 34.32 injuries per 100 MTVMT by **63%** and **23%**, respectively, as shown in **Figure 6**. The fatality rates of the two-location areas are all lower than the statewide 2.39 deaths per 100 MTVMT.

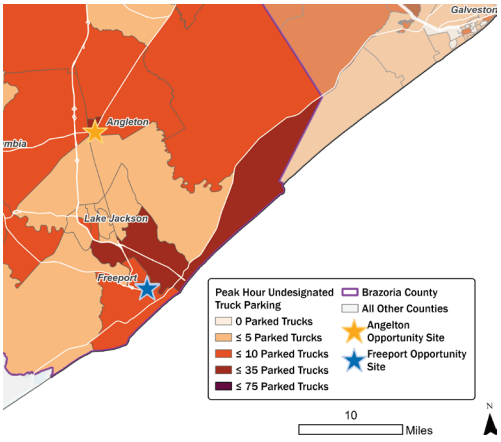
Figure 6 Safety Performance of Each Individual Sites



Sources: CRIS database and TxDOT Roadway Inventory annual report (2014–2022)

The higher risk of truck-related crashes has been attributed to the rapidly increasing demand for freight movement in the area. From 2014 to 2022, the truck daily vehicle miles traveled (DVMT) in this area has increased annually at an average of 3.62%, which is **23%** higher than the statewide truck DVMT growth rate of 2.93% in rural areas. The two proposed truck parking sites in this rural area will help reduce crashes involving truck drivers' inattention, fatigue, distraction, and unsafe truck parking, thereby lowering the

Figure 7 Southeast Texas Parking Demand



crash risk for truck drivers as well as improving safety for the traveling public. According to the needs assessment truck parking demand phase of the Southeast Texas Regional Truck Parking Action Plan shown in **Figure 7**, both the Freeport and Angleton communities have high peak hour undesignated truck parking. The freight intermodal facilities with truck parking submitted in this application represent two priority sites, based on the results of preliminary engineering, out of 16 identified in the action plan.

The Angleton intermodal facility also includes an area for overnight freight parking. This increased perception and reality of personal safety for truck drivers will be enhanced with surveillance cameras at this location. Meanwhile, residents benefit from reduced truck parking on public streets and neighborhoods.

Protects Non-motorized Users

Both Intermodal Facilities include new walking infrastructure to protect non-motorized users, that incorporate Universal Design, and includes the addition of high visibility crosswalks, 6-foot walking infrastructure, safety lighting and trees for shade. Poor visibility and blind spots make it difficult to spot pedestrians. Increasing visibility with continental crosswalks, which are highly visible retroreflective pavement markings in low light and at night, is important to alert drivers to watch out for non-motorized users. New walking infrastructure at the Freeport intermodal facility will protect non-motorized users and separate them from traffic, as well as provide a crossing of the UPRR tracks. This is particularly important at the Freeport intermodal facility, as FM 1495 has a high volume of truck traffic. The walking infrastructure will complete a gap in the current network and connect to the bus stop at E. 8th St. and Cherry St., which will be enhanced with a new bus shelter to protect transit-dependent residents and incentivize modal shift.

Both intermodal facilities include safety lighting as well as other infrastructure like picnic areas, trails, and public restrooms that enhances recreation and tourism opportunities. The Angleton intermodal facility includes a Visitor Center to enhance tourism opportunities throughout the day in City Angleton, which is the Brazoria County Seat.

Criterion #2: State of Good Repair

A new freight intermodal facility with truck parking will be constructed on both the Freeport and Angleton sites in rural areas, respectively, which will be maintained in a state of good repair by TxDOT and Port Freeport.

Restore and Modernizes Existing Core Infrastructure

For the Freeport Site, the local road E. 8th St. (major collector) from FM 1495 to Cherry St. will be improved through a complete street approach including: 6-foot walking infrastructure, Universal Design including curb ramps, 24 shade trees, and a new bus shelter where there was none before. Both the E. 8th St. sidewalk and the proposed walking infrastructure along

FM 1495 protect non-motorized users from safety risks in a Historically Disadvantaged Community and Area of Persistent Poverty.

Figure 8 Existing Conditions at Freeport Site, June 2022

Image Source: Google Maps, June 2022.

The existing surface at the Freeport Site is not paved (**Figure 8**). Restoring and modernizing this site to support freight drayage and staging area needs includes paving an existing gravel lot with new 121,400-square-foot 12-inch reinforced concrete paving for 35 truck parking spaces (4 of which are EV) and three vehicle parking spaces (two of which are EV), striping, and safety high mast lighting, as well as new restrooms and office space to improve access to Port Freeport and reduce unsafe queuing and parking on FM 1495, an intermodal connector and H-GAC designated Critical Freight Corridor. This new freight intermodal facility in a rural area will lead to an improvement in the state of good repair, extend the service life to 30 years and provide non-motorized user accessibility.

Figure 9 Existing Angleton Transit Transfer Site

The Angleton intermodal facility includes the renovation and modernization of an abandoned TxDOT Area Office (**Figure 10**) that had met its useful life, including three buildings currently on the site that will have a new service life of 30 years. The proposed TxDOT-owned parcel will be modernized into a regional intermodal facility to provide truck parking and provide multimodal options in this underserved rural area by, including walking infrastructure, park-and-ride, vanpool/carpool, and access to transit. It will also include a distribution center for light duty trucks. One of the buildings will be transformed into a Visitor Center to promote tourism opportunities and will replace, as a regional transfer site, the existing Connect Transit Transfer location shown in **Figure 9**.

Figure 10 Existing Conditions at Angleton Site, May 2022

Image Source: Google Maps, May 2022.

The Angleton intermodal facility is critical for the rural areas of south Brazoria County that incentivizing modal shift, and promotes low-cost, convenient multimodal options. TxDOT will also partner with others to deploy a series of campaigns to promote modal shift. The proposed

improvements will provide multimodal mobility investments and address disparities by increasing equitable access to rural communities. The Angleton Site, after the improvements, will have a new service life of 30 years and will be maintained in a state of good repair by TxDOT. This is a one-of-a-kind opportunity to provide an intermodal facility within the existing footprint of a restored and modernized TxDOT-owned area office.

Current and Future Vulnerabilities

When trucks cannot find authorized parking as they reach the end of their shift, they most often park on the shoulders of the roadways and ramps or on local roads. This leads to damage to the infrastructure and safety hazards due to poor visibility. Trucks parking on shoulders cause the pavement to deteriorate and can lead to edge failure and ruts along the road. In turn, pavement damage can lead to unsafe operating conditions for the motoring public and threaten future transportation network efficiency, mobility of goods and people, and economic growth. Some TxDOT districts report the need for shoulder reinforcements and repairs on a regular basis, costing in the hundreds of thousands of dollars annually. Money spent on these repairs is taking away from needs in other areas.

Criterion #3: Economic Impacts, Freight Movement, and Job Creation

Economic Impact

Increase Public and Private Investments

By deploying freight intermodal facilities, the project will provide enhanced capacity and will reduce delays to promote the efficient movement of goods through Port Freeport, the nation's 6th largest chemical port. Reduced transportation costs will reduce the cost of doing business, encouraging investment and job creation. The Freeport freight intermodal facility will provide the necessary parking capacity to address the anticipated growth in Freeport's economy and support job creation, while reducing unsafe queuing along FM 1495 and parking on local roads. The combined impact of this project and other port improvements will increase multimodal efficiency making it more attractive to shippers seeking to expand or relocate operations in the region. Similarly, the Angleton intermodal facility will provide much needed overnight parking for owner-operators who play a critical role in the movement of freight throughout Gulf Coast ports which, in turn, play a critical role in the United States' ability to compete globally and are critical to the movement of crude oil and petroleum.

Enhance Recreational and Tourism Opportunities

The Angleton intermodal facility, which is in close proximity to Angleton's downtown, will increase accessibility to year-round countywide events at the Brazoria County Fairgrounds. Due to the site's proximity to the County Fairgrounds, the site can also be leveraged for event management, as well as to promote events encouraging tourism while also reducing automobile dependance incentivizing people to use transit to access major events. The park-and-ride can be utilized as off-site parking when County Fairground parking is full. During those major events, the freight parking in the intermodal facility can be utilized for staging needs. Sponsoring major County events like the rodeo and providing a pleasant experience to attendees can attract new visitors and benefit other business in the City of Angleton. The Angleton intermodal facility can help reduce a high level of non-recurring congestion on local roads due to major countywide events while promoting tourism opportunities and events at the Visitor Center.

Freight Movement

Improve Intermodal Freight Mobility, Reliability, and Efficiency

Truck parking is a fundamental requirement of freight and logistics operations. The freight intermodal facilities in this application will improve supply chain efficiency in the region, reducing costs and increasing economic competitiveness. The intermodal facility designs in this application recognize the many reasons drivers need to park by accommodating both short-term and overnight parking. Additionally, the facilities are located near major intermodal freight generators to support the efficient movement of goods. The Freeport and Angleton intermodal facilities impact not only support regional businesses relying on trucking, but also the port and rail facilities served by trucks. ***The combined regional impact of improved multimodal efficiency will be more attractive to shippers seeking to expand or relocate operations in the region.***

The addition of these facilities is expected to result in a savings of 299,643 vehicle hours traveled (VHT) from 2028 to 2052, valued at a total of $5,579,608 in discounted 2022 dollars. This reduction results in decreased congestion and improved mobility for goods and all transportation users. Mobility and connectivity for truck, marine, and rail freight will also be enhanced by improved parking efficiency. The American Transportation Research Institute (ATRI) found that drivers lose an hour of productivity each day from stopping early to ensure they find parking.[4] When drivers are confident they have a safe place to rest, additional trips to and from intermodal facilities can be made each day.

Supports the Development of Coastal and Inland Ports

For the Freeport intermodal facility, freight parking will also improve the Port Freeport's gate management logistics to address increasing truck demand, which will reduce unsafe queuing and parking on local roads and along FM 1495. The office space at the Freeport Site will be staffed with Port Freeport employees to confirm paperwork and to provide instruction and directions to truck drivers accessing secure port facilities which are immediately across the street. This will expediate access to and from Port Freeport for nationally relevant import/exporters like Tenaris, Dole, Del Monte, Chiquita, and Volkswagen, among others. The project will positively impact the regional economy and job creation by improving the reliable movement of goods due to increasing coastal port activity in the Gulf of Mexico. The Freeport intermodal facility will also help support increased activity at Port Freeport. In 2024, Volkswagen Group of America is opening a $114 million import facility in Freeport on 120 acres. At full capacity, the facility will be able to handle as many as 140,000 vehicle imports per year from production hubs in Mexico and Europe. Del Monte Fresh Produce Co. also announced they are moving their importing operation from the Port of Galveston to Port Freeport. These developments alone will increase freight in the region significantly.

The drayage operations common at port and rail facilities are often served by owner-operators: truck drivers who own and manage their own business rather than serving as a member of a large fleet. The $13,039,391 vehicle operation cost savings gained due to the development of the Freeport Site will directly lower the cost of business for local truck drivers, allowing individuals to earn more. Additionally, the lower cost of business and higher

[4] Source: https://truckingresearch.org/2016/12/atri-truck-parking-case-study/.

earning potential makes the profession more attractive within the region, potentially attracting more drivers to alleviate the truck driver shortage.

The Angleton intermodal facility serves a very different purpose. It provides critical overnight parking for owner/operators who work in the region and need a place to park in between trips. This additional overnight parking will also support operations at nearby inland and coastal ports.

Job Creation

High Quality Job Creation and Support of Good-Paying Jobs

The proposed improvements will also help create high-paying jobs during the project construction period in this rural area of Southeast Texas. According to an analysis conducted using TREDIS[5], the Project Capital Costs will generate 60 jobs (combined direct, indirect, and induced) annually over the 2026-2028 construction period. These jobs will add $4.6 billion in labor income, generate $6.2 billion in GSP, and yield $0.7 million in tax revenue, annually, over the project construction period. The top three industries that stand to benefit the most from job creation during the project construction period are construction (53% of total jobs), professional services (18% of total jobs), and accommodation and food services (9% of total jobs). The Project Capital Cost will also go towards supporting high-paying jobs in the construction industry ($96,000 in wages and benefits, on average, per employee) and manufacturing industry ($110,000 in wages and benefits, on average, per employee).

The park-and-ride facility at the Angleton intermodal facility will help improve employees access to Dow in the City of Clute via low-cost multimodal options like carpools/vanpools and transit. Approximately 357 people in Census Tract 6623, an Area of Persistent Poverty, currently commute to Dow, and another 179 people just south of the proposed site also commute to Dow. By providing better access to lower cost multimodal options the Angleton intermodal facility will help increase opportunities for this rural community.

Workforce Training Programs

Texas is a right-to-work State. Under Texas Labor Code, a person cannot be denied employment because of membership or non-membership in a labor union or organization. TxDOT encourages the use of apprenticeship and labor management training programs for both vendors and their own staff through the use of training courses like Leadership One, which “is designed to develop the skills of motivated, emerging leaders and empower them to address the challenges of TxDOT’s ever-changing environment.”

TxDOT allows contractors to delineate their own parameters for the use of apprenticeships. The Texas Workforce Commission offers a variety of incentives for employers offering apprenticeship opportunities to skilled laborers. The TxDOT ConnectU2Jobs program, operated by the TxDOT Civil Rights Division in conjunction with FHWA, partners with organizations that represent people of color and other historically disadvantaged communities. Partner organizations connect applicants to good-paying construction jobs, including justice-involved young adults.

---

[5] Source: Cambridge Systematics, Inc. Analysis Based on Outputs from the TREDIS Economic Model for Texas

Criterion #4: Climate Change, Resilience, and the Environment

Emissions Reductions

Significantly Reduces Greenhouse Gas Emissions

The proposed freight intermodal facilities are expected to significantly reduce vehicle emissions through the year 2052 as a result of modal shift and electrifying supports. Both sites are fully within the Houston-Galveston-Brazoria County Non-Attainment Area for Ground-Level Ozone (O3). As shown in **Table** 6, the proposed project will result in a 14.1-ton reduction in NOX and a 0.6-ton reduction in VOC which are required for the creation of ground-level O3.

Further, the project will reduce 0.1 tons and 0.1 tons of PM10 and PM2.5, respectively. While PM10 can get deep into people's lungs, PM2.5 is more toxic as it can get into the bloodstream, posing the greatest risk to public health.

Table 6 Air Pollutant Emission Reductions (2028–2052) in Metric Tons

VMT Emissions Reductions from 2028–2052 (tons)							
Site	CO	CO2	NOX	PM10	SOX	VOC	PM2.5
Angleton	0.2	449	0.4	0.0	0.0	0.0	0.0
Freeport	6.0	13,768	13.6	0.1	0.1	0.6	0.1
TOTAL	**6.2**	**14,217**	**14.1**	**0.1**	**0.1**	**0.6**	**0.1**

Supports Shift to Electric Zero-Emission Transportation / Project Identified in State Carbon Reduction Strategy

As required by the National Electric Vehicle Infrastructure Formula Program, TxDOT developed the Texas Electric Vehicle Infrastructure Plan. One of the key goals of the plan is to "work with rural counties and small urban areas to install Direct-Current (DC) Fast Charge stations at or near county seats across the state." The proposed improvements advance several of the strategies outlined in the U.S. National Blueprint for Transportation Decarbonization and in TxDOT's Texas Statewide Carbon Reduction Strategy**.** The strategies are shown in **Table 7** alongside specific measures incorporated in the projects.

Table 7 Carbon Reduction Goal Alignment

TXDOT Carbon Reduction Strategy	National Blueprint Strategy	Both Projects' Components
Employ advanced technologies to improve traffic flow and operations	Promoting travel demand management	▪ ConnectSmart app, TPAS technologies to improve traffic flow and operations through real-time system data/user interaction.
Support access, availability, and safety of bicycling and walking	Improving active mobility	▪ Each site will include walking infrastructure and connectivity to adjacent sidewalk infrastructure to improve pedestrian safety and encourage non-motorized travel.
Shifting demand to other transportation mode	Encouraging pool riding	▪ 26 vanpool parking spaces are expected to result in 1,033 average daily passengers: at an annual savings of $1,485,498.

TXDOT Carbon Reduction Strategy	National Blueprint Strategy	Both Projects' Components
Park-and-ride facility establishment	Promoting public transportation	▪ New park-and-ride is expected to result in 137 average daily transit passengers with an annual savings of $50,908.
Support electric vehicle adoption: electric vehicle infrastructure installation	Transitioning to zero emission vehicles and fuels	▪ 8 EV truck charging stations, 10 EV van/box truck charging stations, and 12 passenger EV charging stations; annual savings of about $266,104 between 2029 and 2035 and $551,772 between 2036 and 2053.
National Blueprint Strategy		**Freeport Project Components**
Strategies that reduce CO2 emissions at ports	Optimizing the movement of goods	▪ Facilitate staging/drayage needs at Port Freeport—reduces the amount of VHT/VMT. ▪ It is expected that over 25 years, the proposed project will reduce VMT by 19,444,442.

Plan to Monitor the Impact on GHG Emissions

While there is no baseline air quality data for the two project sites, TxDOT plans to monitor the impact of GHG reductions related to the use of the EV charging stations for freight and passenger vehicles. The usage of these assets will be monitored and reported on a quarterly basis to identify associated GHG reductions. Additionally, the projects are in the Houston-Galveston-Brazoria County Non-Attainment Area for Ground-Level Ozone (O3) and subject to regular Transportation Conformity evaluations. While these are at a regional scale, the hope is that reductions will help meet conformity goals.

Uses Low-Carbon Construction Methods

Both sites include tree planting. Table 8 outlines the emission reduction benefits of adding these trees. In Freeport, 24 trees will be planted along the E. 8th St. sidewalk to make access to transit more walkable and convenient with shade. At the Angleton intermodal facility, grass will cover 81,000 square feet of the original existing paved area; this green space with walking infrastructure will be accessible to the community. The increased green area will reduce the impervious cover and help with soil stabilization.

Table 8 Tree Planting Emission Reductions (2029–2052) in Metric Tons

Intermodal Facilities	Live Oaks	Crepe Myrtles	CO2	NO2	SO2	PM2.5
Angleton	114	24	762.73	0.14	0.08	0.07
Freeport	37	12	345.50	0.05	0.05	0.05
TOTAL	**151**	**36**	**1,104.36**	**0.19**	**0.13**	**0.12**

Resilience and the Environment

Identified in a Resilience Improvement Plan

As shown in **Table 7**, the intermodal facilities proposed in this project advance several of the strategies outlined in the **U.S. National Blueprint for Transportation Decarbonization** and in TxDOT's **Texas Statewide Carbon Reduction Strategy.**

Improves Disaster Preparedness in Vulnerable Areas

Both facilities could be used to improves disaster preparedness as staging areas by Federal Emergency Management Agency (FEMA) disaster relief personnel, equipment and vehicles immediately preceding and in the aftermath of hurricanes, which are prevalent in the Southeast Texas region. These intermodal facilities are just outside Special Flood Hazard Areas as designated by FEMA, where resources will be safe from the harshest elements, yet close enough to move in quickly after the storm passes. Initial coordination with FEMA was conducted to ensure the sites' viability to be used in this capacity.

Incorporates Nature-Based Solutions

Both intermodal facilities will include **bioswales** to manage stormwater runoff and remove automotive pollution. This type of biofilter is particularly effective on the edges of parking lots to treat stormwater runoff. Additionally, both intermodal facilities include tree planting. The Freeport intermodal facility will add 37 Live Oak trees and 12 Crepe Myrtles, and the Angleton intermodal facility will add 114 Live Oak trees and 24 Crepe Myrtles. After 10 years, the estimated tree canopy for Live Oak and Crepe Myrtles are 60 and 38 square feet, respectively. The trees at both intermodal facilities would significantly increase tree coverage in these communities with lower tree canopies. Currently, the City of Freeport and Angleton have 23% and 2—4% tree canopy, respectively.

Criterion #5: Equity, Multimodal Options, and Quality of Life

Area of Persistent Poverty or Historically Disadvantaged Community

The Freeport intermodal facility is located in Census Tract 6644 which is a Rural Area, Historically Disadvantaged Community, and an Area of Persistent Poverty. The Angleton intermodal facility is in Census Tract 6624 designated as a Rural Area and immediately adjacent to, but not within, an Area of Persistent Poverty.

Adopted Equity and Inclusion Program

TxDOT is committed to creating a diverse and inclusive workforce through policies and commitments to attain fairness and equality of opportunity. TxDOT continues to maintain and improve its Equal Employment Opportunity (EEO) Program, Title VI/ Nondiscrimination Program, On-the-Job Training Program (trains women, minorities, and disadvantaged individuals for entry into journey-level positions), and Disadvantaged Business Enterprises (DBE) programs. TxDOT also maintains policies and programs towards compliance of the Civil Rights and American Disabilities Act.

Comprehensive Policies to Promote Hiring of Underrepresented Populations

TxDOT has meaningfully sought community input through early coordination with state and local stakeholders, including Calhoun County, the Port of Victoria, the Port of West Calhoun, the U.S. Coast Guard, and the Army Corps of Engineers (**Table 10**). This project will also be among the first to utilize TxDOT's new Strategic Public Engagement Guidance.

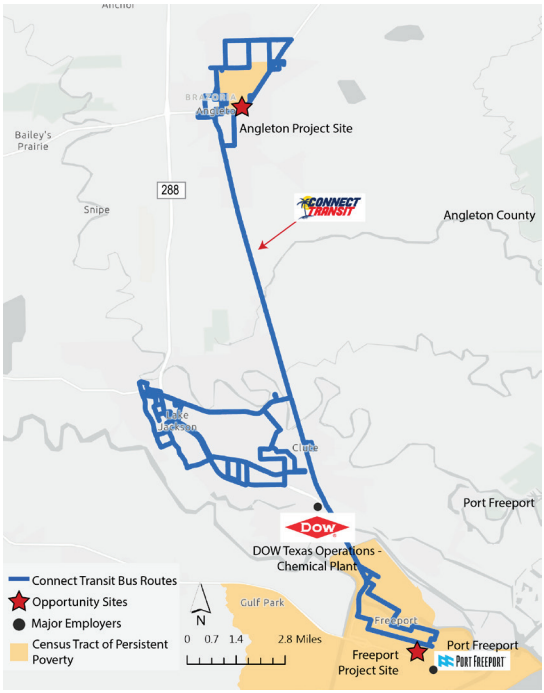
TxDOT will continue to engage with diverse people and communities to ensure equity considerations and community input and ownership, particularly among disadvantaged communities, through all stages of the project including planning, development, and implementation of transportation investments.

Multimodal Mobility Investments that Redress Past Barriers or Create New Connections

The proposed Universal-Design walking infrastructure at the Freeport intermodal facility will provide access to jobs with major employer Port Freeport and incentivizing modal shift in walking and transit for work-related trips. The walking infrastructure will also provide a critical non-motorized user connection across the UPRR tracks to the north of the Freeport intermodal facility. By removing this barrier and providing for a safer crossing, TxDOT will improve non-motorized travel opportunities for truck drivers and the community at-large.

The Angleton intermodal facility provides an array of mobility options to this rural area, linking walking with other modes of transportation, such as park-and-ride, and vanpool/carpool – multimodal options that are currently not available in this rural community, as shown in **Figure 11**. In addition, the Visitor Center will help target campaigns to enhance recreation and tourism opportunities, incentivize carpooling/ridesharing, transit, and non-motorized trips in these rural areas. There are few public transit routes serving suburban and rural cities. Because transit accessibility significantly affects residents' mode choice (GAO et al., 2013), the proposed Angleton intermodal facility is critical to allow people to drive to the site, park, and access the transit system. Also, the conveniently located park-and-ride near residential areas will reduce automobile dependance and incentivizing modal shift to ride sharing via carpools/vanpools or transit. The target population is commuters who rely on their own vehicles for daily commuting. With improved safe and convenient access to vanpool, carpool, and transit, residents reduce automobile dependance and increase modal shift. Given the percentage of lower income people in these rural communities, additional connections and safety improvements will also help to lower the transportation cost burden for resource-constrained residents. In addition, people movement by transit is usually more affordable for all classes of households.

Figure 11 Sites Connected by Connect Transit



Includes Improved Walking and Bicycling Infrastructure

Both intermodal facilities improve walking and bicycling infrastructure for the communities. The Freeport intermodal facility includes two critical sidewalk connections. Along E. 8th St., the Universal Design walking infrastructure will connect the community to Connect Transit Bus Stop 53 at E. 8th St and Cherry St. to improve community access to citywide destinations, such as the elementary and high school campus, library, pharmacy, downtown, and trails for recreation. This sidewalk will provide new Universal Design walking infrastructure with access to jobs with major employer Port Freeport and promote walking and transit for work-related trips. Tree plantings along this sidewalk will provide shade and

comfort during summer months. Also, once the new walking infrastructure are constructed, surrounding businesses will become accessible to the nearby community including neighborhood convenient stores, a health clinic, retail, among others. In addition, the project will improve the local fixed-route bus stop at E. 8th St. and Cherry St. by adding a bus shelter where there was none before. By providing better access to lower cost transportation options like walking, vanpool/carpool and transit the proposed improvements will help reduce the transportation cost burden for this rural underserved community while increasing multimodal options for people living in the area. It will also reduce SOV trips in the Houston-Galveston-Brazoria County Air Quality Non-Attainment Area.

As part of The REAL Plan "People System," Angleton (the county seat) was identified as a Suburban Transfer Hub within the district-wide transportation system. The Angleton intermodal facility, with truck parking, park-and-ride, and vanpool/carpool, promotes non-SOV trips for long-distance commutes between the rural cities of Angleton, Lake Jackson, Clute, Richwood, and Freeport, as well as work commuter trips to major employers such as Dow, Port Freeport, and Brazoria County. For example, 357 people in Census Tract 6623, an Area of Persistent Poverty, currently commute to Dow Chemical Company in Clute, Texas, and another 179 people just south of the Angleton Site also commute to Dow.[6] The proposed improvements provide residents with the opportunity to connect to carpools/vanpools system and transit. This, in turn, improves systemwide, multimodal connectivity. In addition, the Angleton intermodal facility's Visitor/Transit Center will help target campaigns to grow carpooling/vanpool, transit, and non-motorized trips in these rural areas.

Figure 12 Freeport Site Quality of Life and Community Connectivity Map

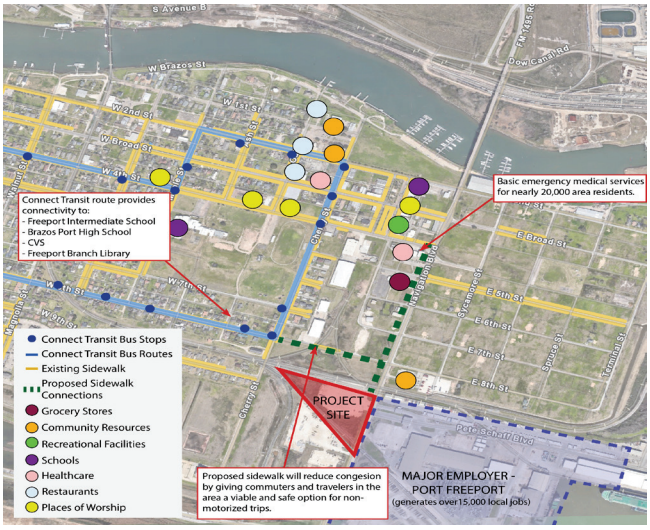
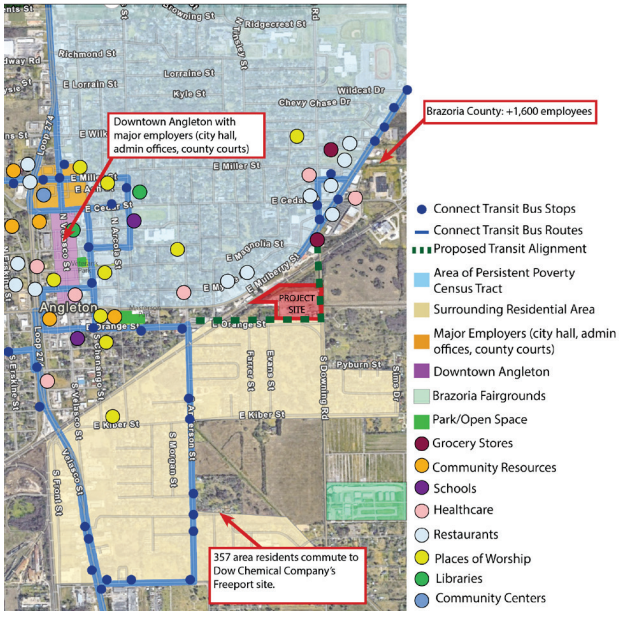


Figure 13 Angleton Site Quality of Life and Community Connectivity Map



6 Source: LEHD Origin-Destination Employment Statistics (LODES) 2002–2020, U.S. Census, summarized by H-GAC.

Improved Freight Access to Disadvantaged or Underserved Communities

The Freeport and Angleton intermodal facilities will improve quality of life for truck drivers and other community members alike by thoughtfully integrating the region's significant freight activity with other community needs as shown in **Figure 13** and **Figure 12.** Notably, intermodal facilities like Port Freeport and the Angleton UPRR facility rely significantly on locally-based truck drivers for short-haul service who need a place to park their truck for rest breaks or when off-duty at home. Trucks are currently parking in adjacent Areas of Persistent Poverty and Historically Underserved Communities. By providing parking, TxDOT will provide relief to residential areas burdened by undesignated truck parking.

Searching for truck parking adds to the daily stresses faced by truck drivers already managing complex customer and transportation logistics. The intermodal facility designs included in this application add truck parking supply to reduce the stress of searching for parking and provide relief to residential areas. The intermodal facilities also provide amenities that can be enjoyed by truck drivers as well as the local community. Improved quality of life for truck drivers in the region will echo not only through the trucking industry but through the households and community's drivers inhabit.

Criterion #6: Innovation Areas: Technology, Project Delivery, and Financing

The intermodal facilities identified for this grant application are in direct alignment with the 2020 Texas Statewide Truck Parking Study plan to execute the vision for creating a network of available and accessible next generation truck parking that integrates smart technologies.

Innovative Technologies

EV Charging Stations

As shown in **Table 9,** both intermodal facilities include designated EV charging stations to support the transition to zero emission vehicles in rural areas with proximity to port activities. TxDOT will ensure the EV infrastructure complies with applicable sections of the National Electric Vehicle Infrastructure (NEVI) Standards and Requirements (23 CFR Part 680) as well as the Texas Statewide NEVI guidance.

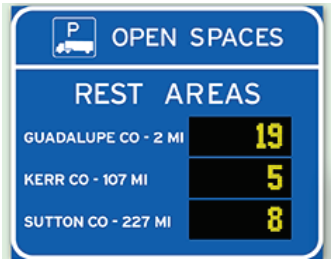
Table 9 EV Charging Station Types and Totals

Sites	Truck EV Spaces	Van/Box Truck EV Spaces	Passenger Vehicle EV Spaces
Angleton	4	10	12
Freeport	4	0	2

Truck Parking Availability System

A 2002 study on the adequacy of truck parking by FHWA recommended using Intelligent Transportation Systems (ITS) to provide truckers with real-time information on the location and availability of parking spaces. TxDOT currently has a Truck Parking Availability System (TPAS) on I-10 and is looking to expand the system to better support the trucking industry. Using Dynamic Message Signs (DMS), smartphone and in-cab applications, websites, and other traveler information sites, TPAS gives truck drivers and dispatchers

Figure 14 Dynamic Message Signs

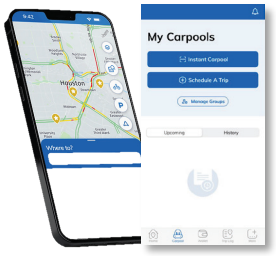


real-time information, helping them make safe parking decisions (Error! Reference source not found.). To help truck drivers better plan their trips, TxDOT plans to deploy parking availability technology and connect both proposed intermodal facilities to the broader TPAS system.

ConnectSmart App

TxDOT already has an award-winning trip planning app for the Houston area called ConnectSmart (**Figure 15**). The purpose of the app is to reduce traffic by connecting all travelers to the best travel options, routes for their trip, and parking availability. ConnectSmart will be leveraged to help truck drivers identify freight routes, existing truck parking locations, amenities, availability of parking spaces, and reserve parking spaces. In addition, the ConnectSmart App will also assist interested people in matching with others going their route for vanpooling/carpooling. Finally, Mobility Wallet, part of the app, is an integrated platform that allows users to purchase transit tickets and provides incentives typically not accessible in rural areas.

Figure 15 ConnectSmart



Innovative Financing and Partnerships

One of the innovative aspects of the project is that TxDOT plans to construct the Freeport intermodal facility on Port Freeport property. In exchange for this capital investment, Port Freeport will enter a Memorandum of Understanding (MOU) with TxDOT to provide operations and maintenance (O&M) costs in perpetuity for the Freeport Site. This innovative financing agreement with Port Freeport will save TxDOT substantial funding while still enabling the department to help meet the truck parking demand in the region, increase safety, provide excellent amenities and services, and ensure a State of Good Repair for the truck parking intermodal facility over time. Additionally, there are strong partnerships and collaborations in place to ensure the sustainability of the mobility and parking improvements proposed. The local jurisdictions (City of Angleton, City of Freeport, and Brazoria County), Connect Transit, METRO STAR Vanpool and local civic groups are strongly advocating for the proposed multimodal mobility solutions. Additionally, TxDOT has conducted significant stakeholder coordination as demonstrated in **Table 10**.

Grant Partners

PORT FREEPORT TxDOT conducted significant engagement with Port Freeport. The strong TxDOT—Port Freeport collaboration and partnership are evident by the Port Freeport property being utilized for the Freeport Site and their commitment to ongoing maintenance and operation of the Freeport Site.

METRO STAR Regional Vanpool is an enthusiastic project partner in support of the Angleton intermodal facility. Before the intermodal facility is open to the public, METRO STAR Vanpool will target campaigns to grow vanpool/carpooling in these rural areas. The METRO STAR Account Executive who covers the cities of Angleton, Jackson, and Clute has had several conversations with major employer Dow in the past and coordination will continue to grow vanpool services as the designated vanpool parking spaces become available. METRO STAR Vanpool also foresees growing vanpool/carpool from this rural area to Pearland to the north

to accommodate commuter trips to the Medical Center Area and the cluster of life science companies providing greater access to high-paying jobs.

TxDOT has met and coordinated with Connect Transit, which is operated by the Gulf Coast Transit District, to discuss the addition of the park-and-ride and new transfer location and they are fully supportive of the proposed Angleton Suburban Transfer Hub. If this project receives MPDG funds, Connect Transit will reroute their transit route to incorporate the Angleton intermodal facility as the new transfer center to connect to the regional transit system. The existing Connect Transit Transfer Point is a bus stop with zero amenities to support ridesharing.

Table 10 Outreach and Engagement

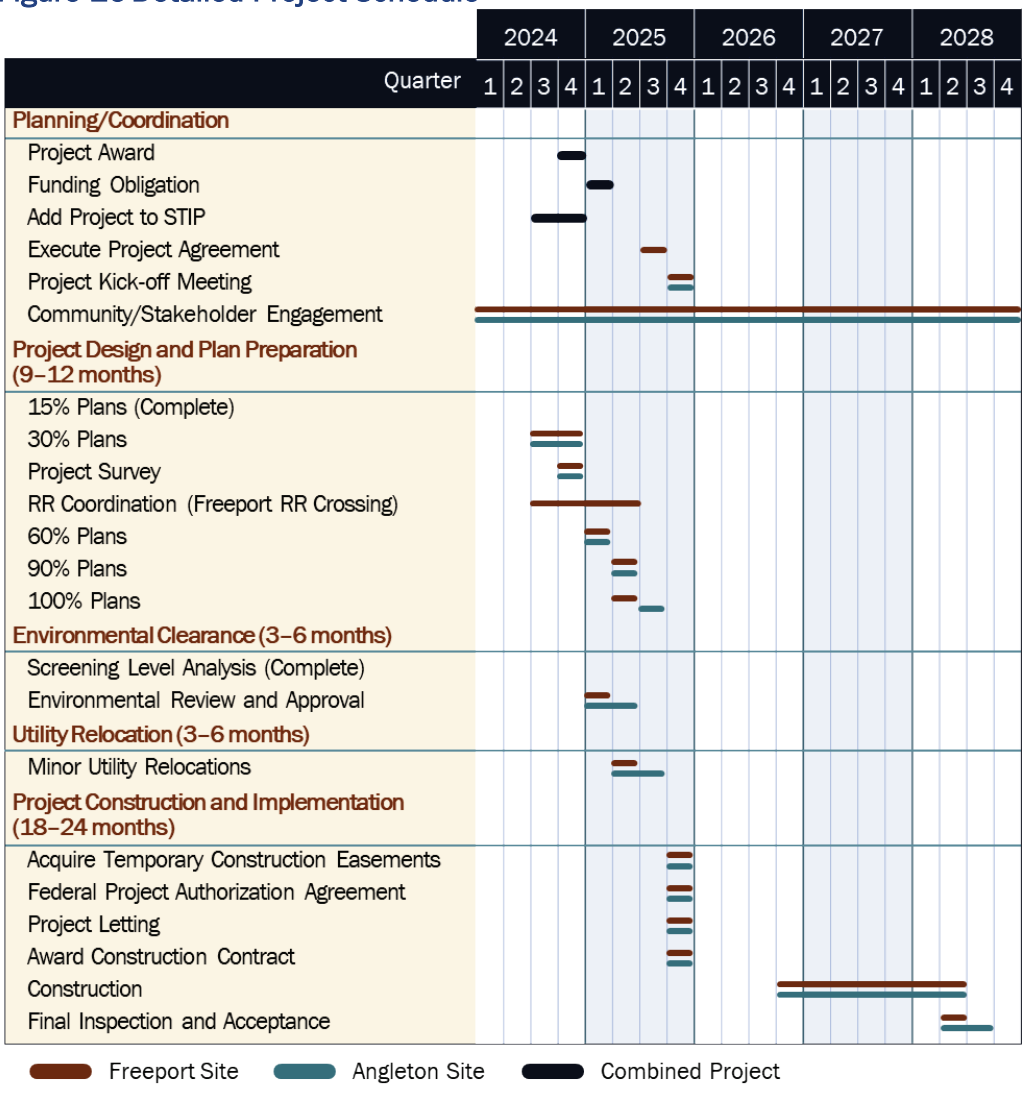
Workshop	Date (2024)
Port Freeport Meeting	Jan. 11, Jan. 26, Jan. 30, Feb. 2, Feb. 8
Port Freeport Commission	Feb. 8
METRO STAR Vanpool	Jan. 16, Jan. 24, Feb. 6
City of Angleton Meeting	Jan. 18
Connect Transit	Jan. 24
Angleton City Council	Jan. 27
Brazoria County Meeting	Feb. 2
Angleton Rotary Club	Feb. 4
Houston-Galveston Area Council (HGAC)	Feb. 6, Feb. 13
BAYTRAN	Apr. 17
HGAC Greater Freight Committee	Apr. 18
Public Agency and Industry Partners	Apr. 23, Apr. 24
South East Texas Regional Planning Commission – Jasper, Jefferson, Orange, Hardin Regional Transportation Study	May 23

5. Project Readiness

Environmental Risk

The schedule presented in **Figure 16** demonstrates that this project can be completed from start of construction to completion within two years. TxDOT anticipates no issues with obligating these projects by September 30, 2028, and completing construction within three years of obligation. Further, the projects will begin construction no later than 18 months after the date of obligation of funds for the project.

Figure 16 Detailed Project Schedule



TxDOT has identified appropriate development schedules for the submitted project and commits to meet the project development timelines identified in the application. The design of the Freeport and Angleton Sites could be moved to accommodate the award of Rural grant funding. TxDOT has ample experience designing, building, and managing rest areas statewide that include freight parking. An example of delivering a context-sensitive project is the award-winning Brooks County Safety Rest Area that won a state and national AIA Honor

Award.[7] TxDOT anticipates no delays that would put the funds at risk of expiring before they are obligated. All ROW is committed by TxDOT, the City of Angleton, and Port Freeport.

Required Approvals

NEPA Status of the Project

TxDOT has determined that this project qualifies for a Categorical Exclusion (CE) because the project will not have significant individual or cumulative impacts to the interests protected by the National Environmental Policy Act (NEPA). The work included in this project aligns with CE-eligible activities under 23 CFR § 771.117 (c). Locating the Freeport Site adjacent to Port Freeport and south of the railroad tracks will have minimal to no impacts on adjacent parcels. Locating the truck parking facility for owner-operator and overnight parking near the railroad tracks, on the north side of the Angleton Site, as well as including several thick rows of trees will build a noise abatement measure to protect residential areas south of Orange St. There are no known controversies in the area and the local jurisdictions, and community groups are strongly advocating for the proposed improvements. TxDOT does not expect proposed improvements to negatively impact social, economic, or sensitive environmental resources such as floodplains, wetlands, endangered species, wildlife habitat, historic and archaeological sites, parklands, air quality, noise, right-of-way, historically and/or economically disadvantaged populations, or travel patterns.

Reviews, Approvals, and Permits by other Federal and State Agencies

The proposed improvements do not add capacity and would be exempt from a conformity determination. TxDOT **does not** anticipate needing any of the following for the Freeport and Angleton Sites:

- Navigational permits (Sections 9 and 10)
- Section 404 (Waters of U.S.)
- Section 106 clearance (archaeological and historical)
- Protected species

The State is coordinating with local jurisdictions and the Houston-Galveston Area Council (MPO) to add this project to the RTP and STIP. The project will require railroad coordination with UPRR, and TxDOT is prepared to begin that process to ensure the project can be obligated on schedule. Finally, TxDOT will review the project and follow the NEPA process.

Environmental Studies or Other Documents

While formal environmental studies have not begun for the project, TxDOT's consultants used preliminary environmental data in the development of each intermodal facility. This included considering adjacent land uses and drainage. As a result, TxDOT anticipates no adverse impacts to historic areas, flood zones, wetlands, or critical habitat, as shown in **Table 11**.

[7] Source: TxDOT Brooks County Safety Rest Area Receives 2023 Texas Society of Architects 25-Year Award—Texas Architect Magazine (texasarchitects.org).

Table 11 Preliminary Environmental Screening

Environmental Screening	Angleton Site	Freeport Site
Historic Areas	No Impacts	No Impacts
Surrounding Historic (within 0.25 miles)	No Impacts	No Impacts
Flood Zone	No Impacts	No Impacts
Soil Type	Entisols	Vertisols
Wetlands	No Impacts	No Impacts
Critical Habitat	No Impacts	No Impacts

Discussions with Appropriate DOT Operating Administration Field or Headquarters Office

TxDOT has NEPA Assignment authority, which limits the need for ongoing coordination meetings with FHWA-TX. However, TxDOT will provide all necessary project updates, notifications, and approval requests to FHWA as required throughout construction.

ROW Acquisition Plans

TxDOT owns the ROW needed to construct the Angleton Site. The Freeport Site will be constructed on Port Freeport property through an MOU whereby TxDOT constructs the capital infrastructure improvements and Port Freeport agrees to operate and maintain them in perpetuity, while also contributing to a local match. Sidewalk improvements on FM 1495 will be constructed within TxDOT ROW. Sidewalk improvements on W. 8th St. will be constructed within the City of Freeport's ROW with their full support. This project does not require ROW acquisition. Commitments are documented in attached letters of support.

Description of Public Engagement

TxDOT plans to conduct additional public involvement for each of the intermodal facilities in advance of final design. To do this, TxDOT will develop a Public Involvement Plan consistent with USDOT's Promising Practices for Meaningful Public Involvement in Transportation Decision-Making. This will consist of a public meeting for each location and a Notice Affording an Opportunity for a Public Hearing. Should a public hearing be requested, TxDOT commits to conduct one for each intermodal facility.

Receipt of State and Local Approvals

Archaeological and historical coordination with the agencies listed in the **Error! Reference source not found.** section will be conducted as part of the NEPA Process. TxDOT has initiated outreach to all coordinating agencies and expects to secure all state and local approvals and NEPA clearance by July 1, 2025.

Federal Transportation Requirements Affecting State and Local Planning

TxDOT has been coordinating extensively with the Houston Galveston Area Council (HGAC) which serves as the local Metropolitan Planning Organization for Southeast Texas. These projects will be submitted for incorporation into the Transportation Improvement Program and the Regional Transportation Plan. Given that these projects do not affect Transportation Conformity, and in fact help to improve air quality in this non-attainment area, TxDOT expects them to be added without issue.

Technical Capacity

Experience Implementing Federally Funded Transportation Projects

TxDOT, the lead applicant, is the Texas state agency responsible for construction and maintenance of all roads and associated infrastructure that constitute the state highway system and is an experienced and effective manager of federal funding. Per the most recent (2022) Stewardship and Oversight Annual Report on this partnership, TxDOT:

- Let 701 federally funded projects totaling $7.904 billion in FY 2022.
- Processed 810 construction project preliminary engineering plan sets.
- Managed approximately 1,722 active construction projects.

TxDOT's Civil Rights Division oversees the goal setting, implementation, and enforcement of the Department's Civil Rights protections and considerations, including its Disadvantaged Business Enterprise programs. TxDOT also maintains Historically Underutilized Business (HUB) Programs, setting goals to be implemented statewide. Any contracts or purchases with businesses actively certified as a HUB will count towards the appropriate goal.

Federal Regulations

TxDOT has NEPA Assignment Authority to reduce approval delays for TxDOT projects. TxDOT has issued several policy guidance documents to account for federal program requirements, including Standard Operating Procedures (SOPs) on Cost Estimation, Plan Review, and Early Plans Posting for Contractor Review.

Project Planning

TxDOT maintains a robust Strategic Plan, prepared biannually at the direction of the Texas Transportation Commission, to set vision, mission, and strategic goals for the agency. TxDOT also provides a suite of Project Planning Tools for use in project development.

Project Delivery

In 2022, 84% of TxDOT projects were completed on-budget, and in 2023, TxDOT released an Educational Series Report on Project Development, Selection and Delivery.

Financial Completeness

Table 12 includes all required information to demonstrate that TxDOT has presented a complete funding package based on reasonable cost estimates.

Table 12 Financial Completeness Assessment Summary

Criteria	Details
All Funding Sources for Project Budget Identified	▪ The **Project Budget** narrative summarizes the allocation of all funding sources intended to support the project. ▪ Additional funding details are also provided in the **Plan for Project Fund Usage** subsection.
Funding Availability and Commitments Documented	▪ TxDOT is seeking 80% federal share in MPDG grant funding and has letters of support from Port Freeport outlining their participation in providing ROW and ongoing maintenance.

Criteria	Details
Contingency Amounts Included in Project Budget	▪ The project budget includes $4,428,900 (2024 dollars) in contingency funds (approximately 16% of the total construction budget), derived from 15% design cost estimates.
Plan to Address Cost Overruns Described	▪ This application includes a three-phase plan to address potential cost overruns, shown in **Plan to Address Potential Cost Overruns**.
Cost Estimates No More Than a Year Old	▪ Cost estimates were produced to support 15% designs and finalized in January 2024.

Additional Considerations

Geographic Diversity

The Angleton Site is in **Census Tract 6624** designated as a Rural Area and immediately adjacent to, but not within, an Area of Persistent Poverty. The Freeport Site is located in **Census Tract 6644** which is a Rural Area, Area of Persistent Poverty, and Historically Disadvantaged Community.

Previous Awards

This project has not previously received an award from any USDOT discretionary grant programs. TxDOT did apply to the FY 2024 RAISE program earlier this year.

Assessment of Project Risks and Mitigation Strategies

Pursuant to the Risk Management Strategies described in TxDOT's 2022 TAMP, **Table 13** summarizes the principal risks to this project and strategies to mitigate them.

Table 13 Project Risks and Mitigation Strategies

Risk	Mitigation
Change in Cities and Port Staff	▪ TxDOT will request City and Port Resolutions to ensure continuity throughout staff changes
Railroad Coordination	▪ TxDOT has a long history of working with UPRR and will begin coordination early on the pedestrian crossing of their tracks
Material Cost Escalation	▪ Monitor incoming bids over the next two years to refine cost estimates ▪ Deploy **Plan to Address Potential Cost Overruns** as required; TxDOT will cover overruns
Unexpected Finding During the NEPA Process	▪ An initial environmental screening was conducted for both sites. ▪ TxDOT will continue to coordinate with State and Federal agencies to secure final approvals.

TxDOT does not expect to pursue any waivers for any domestic preference laws on this project. TxDOT has remained up to date with all Build America, Buy America requirements and maintains a public webpage providing guidance to all TxDOT contractors.

6. Statutory Project Requirements

This project is being submitted as a Rural project under 23 U.S.C. 173. The table below summarizes how this project meets the applicable statutory requirements.

Table 14 Statutory Selection Requirements

23 U.S.C. 173 Rural	Meeting Requirements
1. The project will generate regional economic, mobility, or safety benefits	The two intermodal facilities are in rural Texas, where freight plays a vital role in the local economy and job creation. Once constructed they will facilitate the movement of freight in rural and coastal areas and will promote economic growth. The two intermodal facilities will have a significant impact on truck driver safety by providing additional truck parking spaces and amenities which will address safety risks and reduce truck-related injuries caused by fatigue and unsafe parking. Further, the project will directly improve Port Freeport's gate management logistics to address increasing truck demand, which will reduce unsafe queuing and parking on FM 1495 an intermodal connector and H-GAC designated Critical Freight Corridor.
2. The project will be cost effective	**Results of BCA:** The project has an overall discounted Net Present Value (including residual value of assets) of $40.2 million and a Benefit Cost Ratio (BCR) of **2.9:1**.
3. The project will contribute to 1 or more of the national goals described under 23 U.S.C. § 150	**Safety**: The project is expected to reduce traffic fatalities and injuries from reduced truck VMT. The project safety benefits total $3.6 million undiscounted and $2 million discounted to 2022 dollars over the 25-year operating period. **Infrastructure Condition**: This project will improve the condition of infrastructure by restoring and modernizing an abandoned TxDOT area office into a regional intermodal facility that will serve freight, truck drivers, car/vanpoolers, transit riders and other uses by local communities including promoting tourism opportunities in the Visitor Center. The updated and new facilities will address vehicle dependence, connectivity, and maintain the condition and safety of infrastructure in the existing footprint. **Congestion Reduction**: The addition of these facilities is expected to result in a savings of 299,643 vehicle hours traveled (VHT) from 2028 to 2052, valued at a total of $5,579,508 in discounted 2022 dollars. This reduction results in decreased congestion and improved mobility for all transportation users.

23 U.S.C. 173 Rural	Meeting Requirements
	System Reliability: The freight network in Texas and beyond will benefit tremendously as these additional facilities will provide truck parking and staging, deploy truck parking availability system (TPAS) to manage truck parking demand, and promote transit connectivity. **Freight Movement and Economic Vitality**: Truck parking is a fundamental requirement for freight and logistics operations. Building additional truck parking and staging will improve supply chain efficiency in the region, reducing costs and increasing economic competitiveness. Both intermodal facilities will impact regional businesses relying on trucking as well as Texas Coastal Ports and rail intermodal facilities served by trucks. **Environmental Sustainability**: The proposed project is expected to have significant emission reductions through the year 2052 as a result of reduced VMT. This translates to a 14.1-ton reduction in NOX and a 0.6-ton reduction in VOC which are required for the creation of ground-level 03. Further, the project will reduce 0.1 tons each of PM10 and PM2.5. While PM10 can get deep into people's lungs, PM2.5 is more toxic as it can get into the bloodstream, posing the greatest risk to public health.
4. The project is based on the results of preliminary engineering	The Angleton Site was based on preliminary design concepts that included a high-level desktop screening of environmental constraints as shown in the Project Readiness section. Based on these, general estimates of the types of quantities and materials were prepared, and contingency funds included in the budget to cover any cost overruns. A 15% schematic design was performed for the Port Freeport truck parking facility that included a detailed review of the existing site conditions and terrain that included the development of existing contours and vertical and horizontal geometry of roadway connections. Once the existing conditions were developed, OpenRoads Designer was used to design the proposed intermodal facility concept including street tie-in locations, and pedestrian realm; discuss drainage plans; design grading; develop proposed surface model; evaluate proposed typical sections; and calculate proposed earthwork. Schematic production included the development of a schematic checklist, typical sections, pavement details, driveway tie-ins, and proposed earthwork. TxDOT is committed to continue advancing the design of both intermodal facilities in order to meet the project schedule outlined in the Project Readiness schedule.