

2024 Texas Rail Plan

Executive Summary

February 2025





The Texas freight and passenger rail system is a significant component of the national rail network. Rail transportation provides low-cost, high-capacity, and low environmental impact solutions for the movement of people and goods.



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ECONOMIC BENEFITS OF RAIL TO TEXAS

The Texas rail network is a valuable asset to the citizens of Texas. It is a critical component of a thriving economy that safely connects industries, ports and people while providing an effective alternative to highways.

The benefits of moving freight by rail include less congestion on highways, efficient fuel consumption, lower greenhouse gas emissions, and an

excellent safety record. One freight train can move nearly 500 tons on one gallon of fuel while removing hundreds of trucks from highways. Benefits generated by the rail industry in Texas stem from firms providing freight and passenger transport services, as well as industries using rail freight services to transport goods. Of these activities, freight-users generate more than 99% of the economic impact.

The economic benefits of rail to Texas are estimated using the IMPLAN economic model with input data and assumptions from freight movement data, values of commodity shipments, passenger rail operations, and visitor expenditures. IMPLAN forecasts the effects of a given industry or economic activity on the state economy in its direct form and including multiplier effects with indirect and induced impacts.



Rail supports over 469,000 jobs.



Rail transportation industries supported \$54.2 billion in earnings.



The combined value-added impact of rail-related activity is \$101.5 billion.



Rail-related industries generated \$220.2 billion in output.



More than \$7.1 billion in tax revenue was generated by the rail industry.



On average, railroads are four times more fuel efficient than trucks.



Moving freight by rail instead of truck lowers greenhouse gas emissions by up to 75% on average.



About 409.6 million tons of freight and over 10.1 million carload units were transported over Texas' rail network in 2022.

The Texas freight and passenger rail system is a significant component of the national rail network. In 2023, Texas ranked first in the nation for number of rail miles by state with more than 10,500 miles.

State and local public entities collaborate with the private sector to carry out, administer, or assist in rail operations planning in the state. These entities include TxDOT's Rail Division, TxDOT district offices located throughout the state, local transportation authorities that manage regional commuter rail or rail transit systems, Metropolitan Planning Organizations, Councils of Governments, Rural Rail Transportation Districts (RRTDs), metropolitan planning organizations, and state or local public and private economic development agencies.



EMPLOYMENT



The rail industry supports **13,400 jobs** directly employed in the provision of rail transport services (both passenger and freight).



When expanded to include industries that are reliant on rail, more than **469,000 jobs** are supported.*

EMPLOYMENT INCOME



Nearly **\$4.6 billion** is earned by employees directly employed in the provision of rail transportation.



This impact amounted to **\$54.2 billion**, accounting for **5.7%** of state employment income in 2022.*

OUTPUT



A total impact of **\$220.2 billion** was generated by transport service providers, representing a positive impact on the state economy as of 2023.

VALUE ADDED



The value added generated by rail transportation services amounts to **\$101.5 billion**.*

As of 2022, there is a positive value added impact on the state's Gross State Product generated by rail transportation services.*

TAX REVENUE



\$556.9 million in federal, state, and local tax revenue was generated by rail service providers.

When transportation users are included, the total revenues were estimated to be over **\$7.1 billion**.

Texas RRTDs are formed at the county government level. Counties cited the following three motivations for the formation of RRTDs:

- Rail Preservation/Prevent Abandonment
- Economic Development
- Improved Passenger Rail Service

** When multiplier effects are included.*

RAIL SAFETY AND GRADE CROSSING IMPROVEMENTS

Rail safety is an important issue for railroads and for TxDOT, as it affects the well-being of railroad workers, rail passengers and the public, as well as the efficiency of railroad operations.

Included within the umbrella of safety are grade crossing improvements and grade separations, the safe movement of hazardous materials by rail, and rail security (safeguarding the rail system from potential disruption by bad actors).

Over the past decade, there has been a general downward trend for rail-related incidents and injuries in Texas despite the substantial growth in population, registered vehicles, vehicle miles traveled and rail traffic.

TxDOT continues to strive to further improve by focusing its safety miles program on core essential principles:

- Educate
- Enforce
- Evaluate
- Engineer

Among TxDOT's initiatives in this area are coordination with Operation Lifesaver to educate the public about railroad safety, and partnership with the Texas A&M Transportation Institute (TTI)'s Rail Research Department to conduct railroad and hazardous material safety research and organize industry conferences.

TxDOT has adopted federal safety standards for railroad track, equipment, operating practices, signals and train control. They have also prescribed standards for the horizontal and vertical clearance of structures over and alongside railroad tracks, sight distances at signalized grade crossings, and exemptions for certain rail-related structures.

In addition, TxDOT requires railroads to submit monthly reports of instances where crews exceed the hours-of-service limits in federal law, as well as to provide TxDOT with copies of safety-critical documentation such as operating rules, timetables, and employee instructions. Railroads must report to TxDOT any accident or incident that meets certain criteria. TxDOT conducts safety inspections of railroad infrastructure, facilities, and equipment, as well as participates in FRA's Rail State Safety Participation Program.





At-Grade Highway-Rail Crossing Safety

Safety at at-grade highway-rail crossings is one of TxDOT's primary missions. At FRA's request, TxDOT in 2011 published the Texas Highway-Rail Grade Crossing Safety Action Plan to identify specific solutions for improving crossing safety (including potential crossing closures or grade separations), with a focus on crossings that have experienced multiple accidents or are at a high risk for accidents. About 68% of Texas' 9,191 public at-grade highway-rail grade crossings have active warning devices, while 32% have passive warning devices or no warning systems (many of which have low traffic volume or are rural in nature).

Among the approaches TxDOT has taken to improving grade crossings are resurfacing crossing areas to eliminate humped crossings, constructing highway median barriers at crossings, reviewing traffic patterns to determine where grade crossings can be closed while minimizing impact to local communities, and upgrading warning devices, such as by installing high-intensity reflectorized crossbucks and track signs.



Hazardous Materials

TxDOT's Rail Safety Program collects information on the transport of hazardous materials by rail in the state and uses it to allocate inspection resources. Both state and FRA inspectors regularly conduct on-site investigations to monitor regulatory compliance with respect to hazardous materials (including with new federal regulations on railcars carrying crude oil).

TxDOT's Hazardous Materials Safety Program consists of inspections of railroad facilities, employee training records and quality assurance programs; technical assistance and outreach to railroads, rail shippers, emergency responders and the public; inspection of nuclear materials transported by rail; and planning and preparing for response to hazardous material incidents.



Railroad Security

TxDOT shares responsibility for railroad security with the U.S. Department of Homeland Security (DHS), the Texas Department of Public Safety (which has primary responsibility in this area), and other state and county authorities. Larger Class I railroads in Texas also have their own resources and personnel that respond to security threats or incidents, including railroad police officers.

Railroads work with DHS and other federal, state and local security and law enforcement agencies on all aspects of rail security, including by coordinating with the federal Rail Security Task Force.



FREIGHT RAIL



Texas is served by 53 freight railroads consisting of three Class I and 50 short line railroad rail operators.

The Class I rail operators in Texas include BNSF Railway (BNSF), Canadian Pacific Kansas City Railway (CPKC), and Union Pacific Railroad (UP) as shown on the map.

Texas' Class I railroads make significant capital investments within the state annually.

Short line railroads provide specialized services and connect with the Class I railroads.

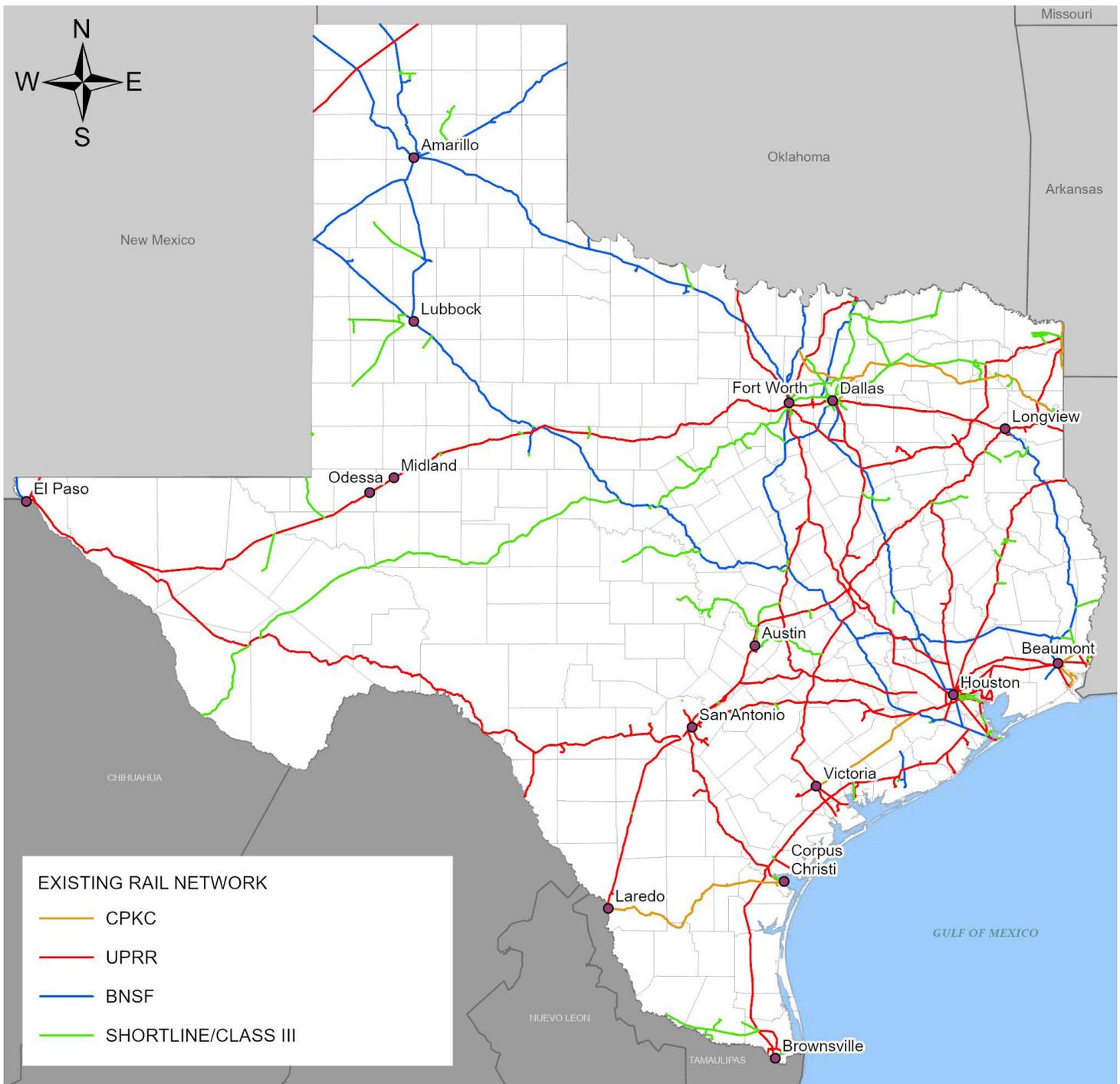
Texas is home to approximately 20 intermodal rail facilities, where shipping containers are transferred between trains and trucks or vessels. These facilities are concentrated mostly in the eastern portion of the state. BNSF and UP operate intermodal facilities at the Port of Houston, which is the No. 1 seaport by volume (tonnage) in the U.S.

Texas rail lines carry more than 10.1 million rail carloads annually. In addition to rail shipments between Texas and other U.S. states, Texas received 1,047,350 rail cars across the Mexican border in 2023 (48% of those being loaded, the rest empty).

In 2022, Texas railroads moved more than 409.6 million tons of freight.

Class I railroads own nearly 80% of the rail network in Texas, totaling 8,374 miles of track in 2023.

Short line railroads own and use 2,031 miles of track, including trackage rights, which comprise about 19% of the state's total trackage in 2023.



PASSENGER RAIL



Intercity passenger rail service in Texas is provided by Amtrak, the National Railroad Passenger Corporation. It operates three routes as shown on the map: the Heartland Flyer, Sunset Limited, and Texas Eagle.

The Heartland Flyer is a daily passenger train that operates between Oklahoma City and Fort Worth, which serves two stations in Texas. Amtrak operates the service under contract to the states of Texas and Oklahoma. The schedule is timed to allow transfers to and from the Texas Eagle in each direction at Fort Worth.

The Sunset Limited provides service three times weekly between New Orleans and Los Angeles. This train serves seven Texas stations.

The Texas Eagle operates daily service between Chicago and San Antonio. At San Antonio, a coach and sleeping car are interchanged with the Sunset Limited for continued service between there and Los Angeles. This train serves twelve stations within Texas.

The Texas Rail Plan also summarizes efforts underway by Amtrak to build and operate a 240-mile-long high-speed passenger rail line between Dallas and Houston, taking over a project previously led by Texas Central Partners. The proposed “Texas Bullet Train” is planned to take approximately 90 minutes, with one intermediate stop in the Brazos Valley.

In addition to three intercity passenger trains, Texas has four commuter rail operations, three in the Dallas/Fort Worth region and one in Austin. Local/regional transit agencies plan, manage and fund these operations.

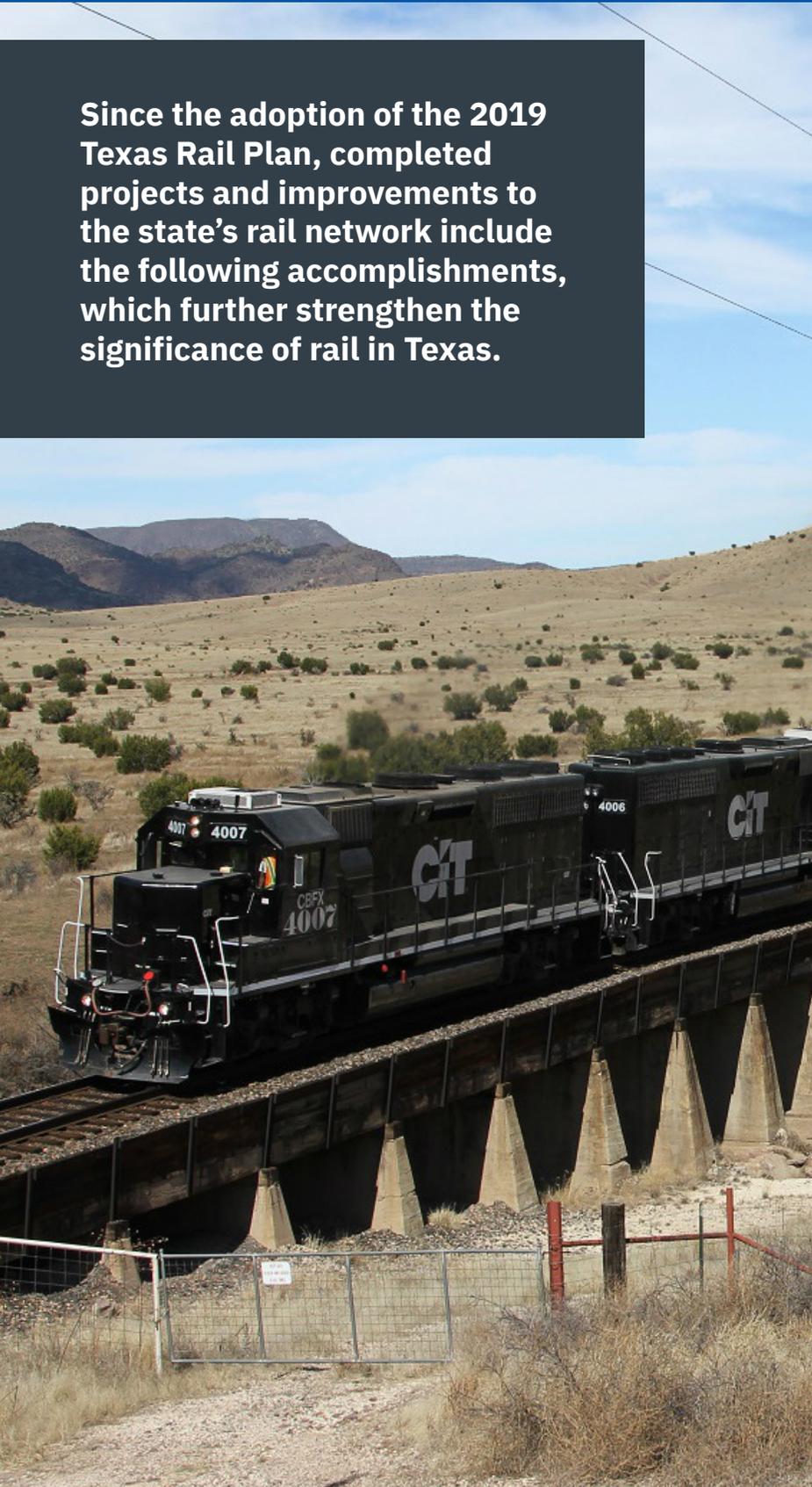
Texas also has six light rail or streetcar transit operations—in Dallas, Houston, Galveston, and El Paso—and five tourist railroads.

AMTRAK ROUTES AND STATIONS, 2023



RECENT ACCOMPLISHMENTS AND NETWORK SIGNIFICANCE

Since the adoption of the 2019 Texas Rail Plan, completed projects and improvements to the state's rail network include the following accomplishments, which further strengthen the significance of rail in Texas.



RAIL NETWORK SIGNIFICANCE



Rail Helps to Alleviate Highway Congestion

The use of rail helps to keep Texans moving as they avoid many of the worst truck bottlenecks in the U.S.

(American Transportation Research Institute, The Nation's Top Truck Bottlenecks 2024)



Texas is #1 in Exports

In 2023, Texas was ranked #1 in the nation in exports, a position the state has held for 22 consecutive years.



Economic Growth

Texas' rail network serves 2 of the 10 U.S. mega-regions where most of the nation's population growth and economic expansion is occurring—the Texas Triangle (Austin, Dallas/Fort Worth, Houston, San Antonio) and the Gulf Coast (from Texas to Florida, including Corpus Christi, Houston, and Beaumont).

(www.America2050.org)



FREIGHT



Second CPKC International Bridge in Laredo

CPKC is set to open a second international bridge over the Rio Grande River from Laredo, Texas to Nuevo Laredo, Tamaulipas, Mexico in early 2025.

The new international bridge is being constructed approximately 35 feet from the existing international bridge and, when finished, would allow trains to operate in both directions concurrently. Also included in the project is a renovation of the existing U.S. Department of Homeland Security/ Customs and Border Protection building in Laredo and a reconstruction of a CPKC Operations Security Building in Nuevo Laredo.



SORR Train Speed Increase and Track Improvements

The South Orient Railroad (SORR) has completed over \$110 million in upgrades since it began operations, including a new international rail bridge at Presidio, Texas.

In 2022, SORR repaired 46 miles of track, renewed 35 grade crossings, rehabilitated 36 bridges, replaced 16,000 crossties, resurfaced 18 miles of track, replaced 9,583 cubic yards of ditches and 4,100 cubic yards of riprap, treated washout issues to maintain 2021 TxDOT upgrades, and implemented a program to address property fence intrusion issues. An additional \$40 million in capital improvements are planned.



PASSENGER



New Commuter Stations in Dallas/Fort Worth and Austin

Trinity Railway Express (TRE) replaced its Richland Hills station in Fort Worth with the new Trinity Lakes station, opened in 2024. A 2.1-mile extension of TEXRail, along with a new station in the Fort Worth Medical District, is under construction and expected to open in 2026. In Austin, a tenth station on the Capital MetroRail Red Line, at McKalla, opened in 2024. In 2025, the Kramer station will be replaced by the under-construction Broadmoor station, which will anchor two new mixed-use developments.



NT Moves – TRE Set of Improvements

TRE is advancing several improvements as part of the NT Moves project, for which the North Central Texas Council of Governments received a \$25 million BUILD grant from the U.S. Department of Transportation and contributed local funds. These include 3.6 miles of new double track, replacing or rehabilitating three bridges, and implementing a new technology that enables users to exchange timely information on train movements to improve corridor fluidity, safety, and on-time performance.



Increasing Demand for Public Transportation

Amtrak ridership grew from 2017 to 2019, then fell sharply in 2020 and 2021 due to the COVID-19 pandemic, but rose again to exceed 2019 levels in 2024. **The three Amtrak trains serving Texas carried more than 483,000 riders in fiscal 2024.**

TEXAS' VISION FOR THE FUTURE



As part of the previous 2019 Texas Rail Plan and this 2024 Texas Rail Plan, TxDOT held a series of workshops and invited rail stakeholders to solicit input into the creation of a vision for Texas freight and passenger rail for the future. These rail visions were consolidated into the most essential needs and opportunities for the state with regard to its rail networks.

The state of Texas does not have a constant and reliable source of funding for rail improvements. The legislature has provided a structure for financing but has not capitalized this funding source. The future condition of passenger rail in Texas is largely dependent on federal funding and various competitive federal grant programs, and, in the case of high-speed rail, private funding sources and investors.

Private investors have been pursuing the development of high-speed rail in Texas, while local and regional agencies have been responsible for the development of commuter rail services with financial contributions from FTA and local sources. The establishment of new corridor services without federal financial assistance would require Texas not only to provide financing for the capital improvements needed to upgrade rail lines to passenger service standards, but also to bear the responsibility for service operating losses in accordance with PRIIA legislation.

Regardless of its limited role, the state can maximize the value of rail through collaboration with private and local stakeholders, and identification and support of important projects.

STATE RAIL PLAN VISION



The State of Texas will work with private rail providers to improve the efficiency and connectivity of the rail network to expand the state's economic competitiveness, improve safety, especially at highway-rail grade crossings, and reduce congestion on our roadways. The state supports a multimodal approach to expanding transportation opportunities that are supportive of all citizens of Texas.

GOALS AND OBJECTIVES



It is essential that the vision and policies advocated in individual modal plans, as well as proposed projects included in those plans, be consistent with those visions and transportation policies in other transportation plans. This Texas Rail Plan is intended to integrate with and expand upon Connecting Texas 2050, the Texas Long-Range Transportation Plan, and Texas Delivers 2050, the Texas Freight Mobility Plan.



SAFETY

which includes the reduction of rail-related fatalities and serious injuries, especially regarding safety at highway-rail grade crossings, and the elimination of conflicts between transportation modes wherever possible.



MOBILITY AND RELIABILITY

which is aimed at reducing rail congestion and improving rail system efficiency, capacity, and performance, including both freight and passenger rail travel time reliability.



ASSET PRESERVATION AND MODERNIZATION

which includes achieving a state of good repair of the rail network, especially those assets owned by TxDOT, and using innovative technologies to ensure safety and efficiency of passenger and freight movement.



MULTIMODAL CONNECTIVITY

which is aimed at providing both freight and passenger choices by improving the rail system and increasing and providing intermodal and multimodal connections.



ECONOMIC VITALITY

which involves selecting projects that strengthen and modernize Texas' position as a trade and logistics hub and support job growth, mobility, and opportunities to expand existing industries and attract new industries.

PLANNED IMPROVEMENTS AND INVESTMENTS

The 2024 Texas Rail Plan includes **more than 200 proposed short- and long-term freight and passenger rail projects** identified and described by Texas railroads, the State of Texas, and other stakeholders as part of the outreach activities conducted during the development of the recently completed Texas Freight Mobility Plan and this Texas Rail Plan. Texas' freight and passenger rail needs are dynamic and are affected by several external factors that drive demand for services.

SHORT TERM (2024-2028)

Passenger rail station improvements.

Program size restricted by funding availability.

LONG TERM (2029-2049)

Funding source(s) not yet identified.

Further evaluation of public and private benefits may be needed.

RAIL INDUSTRY DRIVERS



Growth in Intermodal Traffic



Changes in Energy Production: Oil, Gas, Coal



Congestion



Environmental



Technology



Demographic Changes



Global Trade



Changes in Rail Governance Framework



Aging Infrastructure



PASSENGER RAIL IMPROVEMENTS AND INVESTMENTS

Passenger rail station improvements.

Privately funded ventures to increase intercity passenger rail service.

Commuter and regional passenger rail extension and improvement projects funded by local and regional public agencies.

Continued coordination with neighboring states for state-supported intercity passenger service.

Highway-rail grade separation projects.



FREIGHT RAIL IMPROVEMENTS AND INVESTMENTS

Preservation, protection and enhancement of state-owned assets.

Track upgrades to accommodate heavier, industry standard railcars (286,000 lbs).

Mainline capacity expansion through double tracking.

Improved rail efficiency through the construction of wye tracks.

Safety improvements for at-grade crossings.

Highway-rail grade separation projects.

Improved rail operations at the U.S.-Mexico border.

Track and bridge maintenance and other projects funded internally by Class I railroads.

Freight Rail Projects	Short Term (Number of projects identified in the 2024 Texas Rail Plan)	Long Term (Number of projects identified in the 2024 Texas Rail Plan)
Class I Railroad Improvements (BNSF, CPKC, and UP)	25	13
Rail Intermodal/Terminal Facility Projects	2	8
Shortline Railroad Improvements	10	46
Freight Rail/Port Projects	12	17
Freight Rail/Border Crossing Projects	1	1
Highway-Rail Crossing Projects	19	26
State-Owned Rail Line Projects	-	10
Other Projects	1	-

Passenger Rail Projects	Short Term (Number of projects identified in the 2024 Texas Rail Plan)	Long Term (Number of projects identified in the 2024 Texas Rail Plan)
Privately Funded Passenger Rail Project	1	1
Continued Heartland Flyer Funding	2	1
Intercity Passenger Rail Studies and Projects	11	2
Regional and Commuter Rail Projects	19	45



ABOUT THE TEXAS RAIL PLAN



The 2024 Texas Rail Plan is a federally specified document detailing the state of the rail system in Texas and opportunities for improvement. The Texas Rail Plan sets a direction for rail planning and project development, with the intention to meet federal requirements to qualify the state for any future federal rail funding. In accordance with state law, the plan includes forecasts and potential impacts of proposed passenger rail systems.

The Texas Rail Plan supports the Texas Delivers 2050 Freight Mobility Plan and Connecting Texas 2050, the latest Statewide Long-Range Transportation Plan update.

The development of this Texas Rail Plan was achieved through participation of rail stakeholders and interested agencies. TxDOT expresses its appreciation to those individuals and organizations who participated in this effort. The Texas rail system is very important to the economic vitality of the state.



THEMES

Overarching comment themes include:

- REDUCE BOTTLENECKS
- BLOCKED CROSSINGS
- ENVIRONMENTAL
- SAFETY
- RELIABILITY
- ECONOMIC DEVELOPMENT
- RAIL GOALS / OBJECTIVES
- BRIDGES
- FUNDING
- GRADE SEPARATIONS
- INCREASE SERVICE
- MODERNIZATION/TECHNOLOGY
- PLANNING

CHAPTER INDEX

01

TEXAS RAIL VISION

Outlines the statewide planning context; describes how public-private collaboration can benefit the predominantly private rail network; describes how rail supports established goals and objectives for a multimodal transportation system; and summarizes recent achievements and future plans for the rail system.

02

EXISTING TEXAS RAIL SYSTEM: DESCRIPTION AND INVENTORY

Discusses the existing freight and passenger rail system, trends, and forecasts freight and passenger rail traffic.

03

POTENTIAL PASSENGER RAIL IMPROVEMENTS AND INVESTMENTS

Identifies various passenger rail projects and improvements proposed in Texas.

04

PROPOSED FREIGHT RAIL IMPROVEMENTS AND INVESTMENTS

Identifies possible future improvements and investments to address the freight rail needs of Texas.

05

TEXAS RAIL SERVICE AND INVESTMENT PROGRAM

Outlines potential short-range and long-range freight and passenger rail projects.

06

COORDINATION AND REVIEW

Contains a compendium of outreach activities that were conducted during the preparation of the Texas Rail Plan.



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