

Chapter 3: Proposed Passenger Rail Improvements and Investments

3.1 Introduction

This chapter summarizes ongoing or proposed passenger rail initiatives, as well as new passenger rail service initiatives, that have the potential to enhance mobility and expand transportation options for Oklahoma. Passenger rail service is broadly categorized as conventional intercity passenger rail service, high-speed intercity passenger rail service, and commuter rail service. Some of the primary characteristics of each service are:

- **Conventional intercity rail service:** Conventional intercity services operate over lines owned by the freight railroads. The service consists of regional and long-distance trains that operate between towns and cities across the country, in most cases with maximum train speeds of 79 miles per hour. Regional intercity rail passenger services generally serve routes at least 100 miles or more in length up to a maximum of 749 miles, operate with limited frequencies seven days a week, and require state funding and support. Long-distance trains serve routes of 750 miles or more in length, and are funded by Amtrak as part of its national network (see Figure 3-1).
- **High-speed intercity rail service:** Although prevalent in Europe and Asia where some trains operate in excess of 220 miles per hour, currently the only high-speed rail service in the U.S. is on the Northeast Corridor (NEC) between Washington and Boston. Much of the NEC is rated at 125 miles per hour, although Acela Express trainsets have a maximum authorized speed of 150 miles per hour over selected segments between New Haven, Connecticut and Boston, Massachusetts. High-speed rail services generally require tracks that are separate from the slower freight operations to prevent interference.
- **Commuter rail:** Commuter rail service is a mass transit option that links relatively high-density employment centers with outlying residential areas, operates service concentrated on weekdays during the morning and evening commute periods when travel is the highest, and can be managed by local or state agencies with funding from local, state, and federal sources.

Figure 3-1: Amtrak Route System



Source: Passenger Rail Oklahoma

3.2 Improvements to Existing Service

3.2.1 Increase the Efficiency of the Heartland Flyer Route and Expand Service

As discussed in Chapter 2, ODOT funds the operation of the state's sole existing intercity passenger service, the *Heartland Flyer*. The *Heartland Flyer* makes a single daily round trip, departing Oklahoma City in the morning southward to Fort Worth, Texas, and returning northbound from Fort Worth to Oklahoma City in the evening. The train makes intermediate station stops in Norman, Purcell, Pauls Valley, and Ardmore, Oklahoma, as well as Gainesville, Texas. Connections can be made in Fort Worth to Amtrak's *Texas Eagle*, which operates between Chicago and Los Angeles via San Antonio, Texas. Connections via Thruway Bus from Oklahoma City can be made at Newton, Kansas, to Amtrak's *Southwest Chief*, which operates between Chicago and Los Angeles. The combined population of cities served by the *Heartland Flyer* route totaled nearly 7.8 million in 2010.¹

The *Heartland Flyer* service is operated by Amtrak under contract to Oklahoma and Texas, with funding providing by the both states under a cost allocation formula for capital and operating expenses paid for the provision of passenger rail service as mandated in the Passenger Rail Investment and Improvement Act of 2008 (PRIIA). Although Oklahoma had been funding the service since the *Heartland Flyer's* inception in 1999, the annual payments made by Oklahoma and Texas to Amtrak to support the operation of the *Heartland Flyer* jumped 40 percent between 2013 and 2014, when the PRIIA-mandated revised cost allocation formula was applied to state charges.

¹ https://ftp.dot.state.tx.us/pub/txdot-info/rail/high_speed/system-summaries/texas-south-central.pdf

As a result, Oklahoma and Texas took some initial steps to explore other possible ways of providing passenger rail service, and potentially improving the service, at a lower cost. This culminated in the issuance by ODOT on June 1, 2016, of a Request for Qualifications (RFQ) for “Heartland Flyer Intercity Passenger Rail Service Opportunities”². Texas Department of Transportation (TXDOT) issued a concurrent Request for Information for Intercity Passenger Transit Service Opportunities. The purpose of the RFQ was to gather qualifications from providers of passenger rail services about service delivery options to provide for more convenient, rapid, and reliable intercity passenger rail service in the *Heartland Flyer* corridor between Oklahoma City and Fort Worth. The RFQ noted that both states were seeking opportunities for cost reduction and developing priorities based on creating the best value relative to the resources required in a manner that would:

- Provide an efficient, safe, and cost-effective alternative to highway, bus, and air travel
- Support future growth of intercity passenger rail service on the *Heartland Flyer*
- Enhance the rail corridor between Oklahoma City and Fort Worth/Dallas by increasing the frequency of service from two to a minimum of four trains per day
- Operate an efficient, high-quality intercity passenger rail service that helps minimize the need for state subsidies
- Provide flexibility for ODOT and TXDOT to manage service amenities and business costs
- Be sensitive to community and environmental impacts
- Integrate with local roadway, transit, bicycle, and pedestrian transportation networks

ODOT received seven responses to the RFQ from interested operators. Since then, ODOT has not formally taken additional steps that advance discussions with potential rail operators.

Meanwhile, ODOT has continued to work with Amtrak on ways to improve the cost-efficiency of the *Heartland Flyer* service, as well as ways to enhance the service offering. Some of the initiatives identified by Amtrak as part of this effort include:

1. **Implementing a Second Round Trip at Minimal Cost:** Amtrak is studying the feasibility of providing a second round trip between Fort Worth and Oklahoma City by creating a section of the long-distance *Texas Eagle* train linking Chicago and San Antonio that could be combined and separated at Fort Worth. The *Heartland Flyer* train would then be rescheduled to provide an opposite-direction morning and evening trip with the new *Texas Eagle* section, thus allowing for daily morning and evening departures from each end of the corridor.
2. **Lower Cost Equipment Options:** Among the options being studied is the possibility of furnishing lower-cost equipment for the *Heartland Flyer* service than the current bilevel Superliner equipment in use. Other possibilities include the elimination of the cab-baggage car at the opposite end of the trainset from the locomotive, although this would require that the trainset be turned around between trips at both Fort Worth and Oklahoma City.
3. **Wi-Fi installation:** The installation of wireless internet access onboard passenger rail cars has proven to be a popular and widely used customer service feature on Amtrak’s routes in the northeast United States. Wi-Fi provides many passengers, not just business passengers, with the ability to be productive or just to be “connected.” Installing Wi-Fi on board the *Heartland Flyer* could help enhance onboard amenities and improve the customer experience for travelers.

3.2.2 Passenger Rail Investment and Improvement Act Considerations

² https://ok.gov/odot/Programs_and_Projects/Rail_Programs/index.html

The passage of PRIIA in 2008 has had multiple effects on the expansion of Oklahoma’s passenger rail system. Section 209 mandated changes to Amtrak’s cost accounting and how costs are shared with the states for their state-sponsored trains. States have raised concerns since state costs have increased under Section 209. While direct expenses assessed to a state-sponsored service are, to a degree, controllable by the state, the allocation of shared expenses is not. Shared expenses are those which are averaged over all Amtrak passenger operations and cannot be assigned to any specific train or route. For example, if a state adds a second train daily, its allocation of the shared expenses will almost double although the second train will have little effect in increasing the total shared costs across the system. If states start dropping services because of the cost, the shared costs will then be spread over a fewer number of trains and costs will further increase.

PRIIA, which was enacted into law on October 16, 2008, required that the new cost sharing agreement be finalized by October 16, 2010, and to take effect 5 years following enactment.³ Amtrak and the various states, through a state working group, came to an agreement on the allocation of costs with the lone dissent from the State of Indiana. Since unanimous consent was required, the methodology was placed before the STB for final decision. On March 13, 2012, the STB ruled that the allocation methodology formulated by Amtrak and the state working group was reasonable. As discussed above, payments made by ODOT and TXDOT to Amtrak to support the operation of the *Heartland Flyer* jumped 40 percent between 2013 and 2014, when the PRIIA-mandated revised cost allocation formula was applied to state charges.

Under Section 305 of the Act, Amtrak was directed to establish a committee to define requirements for the next generation of train equipment, the Next Generation Corridor Equipment Pool Committee. The committee is charged with the design of the next generation equipment; the development of technical specifications; preparation of procurement and contracting plans; preparation of funding and financing plans; and development of contract and service specifications. The committee was formed on January 13, 2010. Membership is made up of representatives of Amtrak, FRA, host railroads, equipment manufacturers, interested states, and other passenger train operators.

Initial specifications issued have been for (1) double-deck passenger cars, (2) single-level passenger cars, (3) diesel-electric locomotives, (4) trainsets, and (5) self-propelled Diesel Multiple Unit vehicles. The issued specifications are for equipment capable of up to 125 mph operations. Future procurement of passenger train equipment using federal funds will be required to comply with the Section 305 specifications and process.

In general, the specifications leave adequate flexibility for adaptation to a particular use. For Oklahoma, where serious consideration will be given to passenger trains powered by compressed natural gas (CNG), the locomotive specification explicitly provides for associated technologies, indicating CNG would be potentially acceptable as a substitute for diesel fuel.

3.2.3 Oklahoma Passenger Rail Station Improvements

In addition to cost-efficiency and service upgrades, some stations along the *Heartland Flyer* route are also being upgraded as part of state and community initiatives. Major station initiatives are discussed below. Initiatives involving Oklahoma City’s Santa Fe Depot are discussed in Section 3.3.

³ <https://www.congress.gov/bill/110th-congress/house-bill/6003/text>

Ardmore. The City of Ardmore, the Main Street Authority, and the Ardmore Chamber of Commerce are advancing plans to restore the city's historic (built in 1916) Santa Fe Depot. Santa Fe assembled the Mercy Train in 1915 to rush medical personnel and supplies from North Texas to Ardmore after a downtown explosion. The restoration work is being carried out in conjunction with an initiative to develop Depot Park, a planned downtown greenspace to be used for recreation and city events on land adjacent to the train station. In addition to the restored train station, other features of this \$2.7 million City plan, funded by grants and donations, include expanded sidewalks and improved pedestrian access, landscaping, the introduction of sidewalk dining and off-street parking, and a renovation and relocation of the historic Mercy Train steam locomotive from the city coliseum to the depot area.⁴

Thackerville. ODOT has approved a new station stop for the *Heartland Flyer* at Thackerville, Oklahoma, just north of the Oklahoma/Texas state line. Thackerville is home to the WinStar World Casino and Resort, the largest casino in Oklahoma. The resort is owned and operated by the Chickasaw Nation, which is expected to construct the station platform and an adjacent parking lot. Amtrak is currently working with ODOT, BNSF Railway, and the Chickasaw Nation to evaluate the addition of a station at Thackerville. Early projections from the Chickasaw Nation indicated that the stop could potentially increase *Heartland Flyer* ridership by 12 percent, however, no specific date has been set for the establishment of the station stop.

3.2.4 Amtrak Long-Distance Train Performance Improvement Plans

PRIIA Section 210 required Amtrak to develop performance improvement plans for each long-distance service. The plans identified potential concepts and ideas for improving financial performance, reliability, service, and customer satisfaction. The plans discussing Amtrak long-distance services that connect with the *Heartland Flyer* are discussed below.

Texas Eagle

Amtrak's September 2010 report, "PRIIA Section 210 FY10 Performance Improvements Plan, *Sunset Limited/Texas Eagle*"⁵ identified several possible improvements for the *Texas Eagle* operating daily between Chicago and San Antonio, and its connecting train at San Antonio, the *Sunset Limited*, operating three days per week in each direction between New Orleans and Los Angeles.

The potential improvements that could improve connectivity and service for *Heartland Flyer* passenger included:

- New daily service between Los Angeles and Chicago
- New daily service between San Antonio and New Orleans
- Reduction of layover time in San Antonio
- Daylight schedule in major cities
- Connection to Coast Starlight (Los Angeles-Seattle)
- Reduced equipment requirements: Released sleeping cars would ease capacity constraints on other trains

The two major changes underpinning Amtrak's proposal for service changes were:

⁴ <http://www.kxii.com/content/news/Historic-train-restoration-nears-completion-402798326.html>

⁵ <https://www.amtrak.com/ccurl/970/304/PRIIA-210-SunsetLtd-TexasEagle-PIP,0.pdf>

1. Establishing a new daily Los Angeles – Fort Worth – Chicago service, which would combine the Los Angeles - San Antonio portion of the *Sunset Limited* with the San Antonio - Chicago *Texas Eagle*.
2. Establishing a new daily San Antonio - New Orleans service with cross-platform transfer of passengers at San Antonio.

The combined *Sunset Limited/Texas Eagle* would provide daily service over the entire route of the *Sunset Limited* by extending the *Texas Eagle* west from San Antonio to Los Angeles and providing daytime service between New Orleans and San Antonio with a new connecting train that had a guaranteed connection to the *Sunset Limited/Texas Eagle* in San Antonio.

Amtrak's Market Research & Analysis Group and Finance Department estimated that the new service would add 124,100 additional riders annually and generate more than \$10 million in additional revenue across the Amtrak system. Nearly 80% of the revenue and ridership increases would be generated on the new combined *Sunset/Eagle* route. Connecting trains at Los Angeles (the *Coast Starlight* to Seattle) and Chicago (the *Capitol Limited* to Washington, D.C.) would also benefit from this change.

The new service also would vastly improve San Antonio layovers for through-passengers. The most significant reduction would be for passengers traveling between Los Angeles and Chicago, with trip times falling by 9 and 5 hours for eastbound and westbound travelers, respectively.

Although Amtrak received approval from its Board of Directors to proceed with this plan, no funding source has been identified to pay for the projected capital costs of infrastructure upgrades required to support a daily passenger train between Los Angeles and New Orleans.

Southwest Chief

Amtrak's September 2012 report, *PRIIA Section 210 FY12 Performance Improvements Plan, Auto Train, City of New Orleans, Coast Starlight, Empire Builder, Southwest Chief*⁶, identified the following possible improvements for the *Southwest Chief*:

- **Oklahoma City-Wichita-Newton Thruway Bus:** This concept would provide a link between the *Southwest Chief* in Newton, Kansas, and the *Heartland Flyer* in Oklahoma City, Oklahoma.
- **Premium Express Contracted Pallet Service between Chicago and Los Angeles:** This concept would provide for a small-scale shipment of six pallets per trip loaded into the train's existing baggage car between Los Angeles and Chicago. No incremental labor or capital costs were anticipated. Incremental revenue would amount to an estimated \$284,000 per year.
- **Southwest Chief Food Service Adjustments:** Given that trains often arrive in Los Angeles an hour earlier than scheduled (8:15 a.m.), passengers' time for breakfast is compressed, as it is for dining car crews preparing, serving, and clearing meals. The concept of the adjustments was to switch from a conventional sit-down breakfast to a continental breakfast, which would minimize food preparation as well as free up seating, as passengers would not have to wait for their meals to be cooked and brought to them and thus remain in their table seats for longer periods.
- **Schedule Improvements:** Minor schedule adjustments were contemplated to help improve on-time performance.

⁶ <https://www.amtrak.com/ccurl/676/676/PRIIA-section-210-FY-12-performance-improvement-plan-amtrak,0.pdf>

Other initiatives, common to all of the long-distance services reviewed, were:

- **Modify the Seat Pitch on Superliner Coaches:** The concept would reduce seat pitch from 50-52 inches to 46-48 inches, allowing for 4 or 6 additional seats, and thus generating more revenue.
- **Modify the Current Superliner Transition Sleeping Car:** This concept would add 11 additional sleeping rooms for sale. Most would be on the lower level where a largely unused lounge space could be converted into four roomettes, one Family Room, and one ADA Accessible room. Also five rooms for sale would be added on the upper level: four from the Business Travel group and one from the conversion of the Conductor Room. The Conductor's Room would be relocated to the former Chief's Room, thereby maintaining an Amtrak crew work area.
- **Customer Service Performance Metrics Integrator Program:** This program is a business intelligence system that tracks information on an individual crew and train level, with monthly reports that compare a route's performance by crew and crew member. The goal would be to encourage positive competition between crew couplets, build teamwork, and identify crew couplets needing additional management coaching. The ultimate goal would be to improve personnel-related CSI scores.

Following the release of this report, Amtrak did implement one of the suggestions in this plan, which was the establishment of an Oklahoma City-Wichita-Newton Thruway Bus connecting the *Heartland Flyer* and *Southwest Chief*. That service was launched in April 2016.

3.2.5 Improving Connectivity with Other Modes at Passenger Rail Stations

For numerous reasons, passenger rail services have not been blended into the overall fabric of the transportation system in the United States except in the older, densely populated Northeast United States. The newer urbanized areas grew in the two-mode era of commercial aviation and private automobiles. While the speed of the airplane and the convenience of the private automobile have significant mobility benefits, neither of these modes are energy efficient, and have rendered land use patterns that further exaggerate energy demand and consume vast tracts of land.

A stand-alone intercity passenger rail system does not make for convenient transportation. Its ability to attract patronage from the competing modes is greatly diminished without convenient connections. Consequently, the presence of "last mile" alternatives is critical to the success of intercity passenger rail services (just as they are to commercial air service). Intercity passenger trains themselves can assume the role of a feeder service for extended journeys. Newark Liberty International Airport in Newark, New Jersey and Baltimore-Washington International Airport are prime examples of where Amtrak trains and local commuter trains feed passengers from an entire region to the airport.

Amtrak has had success with its Thruway Bus services as a means of linking to a broader market, including the Oklahoma City-Wichita-Newton bus service inaugurated in 2016. Thruway buses are used at many locations on Amtrak's system to connect passengers to popular destinations.

ODOT conducted a "Transit Gap" analysis, surveying where there is a lack of mobility in the state. This investigation found "information obtained during public outreach efforts associated with the update of the Oklahoma's Statewide Intermodal Plan found that, in general, adequate urban and regional transit is available for users. However, a need exists to improve statewide mobility and provide modal connections that will permit transit users to travel beyond urban and regional boundaries." While the analysis found that transit can be used for general mobility, it did not particularly address the

convenience issues that make public transportation options attractive to the segment of the public that have other travel options. Capturing those riders is key to growing ridership and further expanding available transportation options.

Fort Worth Amtrak and Commuter Rail Connections

Amtrak: The *Heartland Flyer's* current schedule, which provides southbound morning service from Oklahoma City to Fort Worth and a northbound evening return trip to Oklahoma City, requires the train to stay in Fort Worth for 5 hours during the middle of the day. It also permits travelers from Oklahoma City make connections at Fort Worth with Amtrak's long-distance *Texas Eagle*. The *Texas Eagle* makes an early afternoon stop in Fort Worth in each direction on its journey between Chicago and San Antonio.

While the approximate 90-minute connection with the southbound *Heartland Flyer* is reasonable, the return to Oklahoma requires a wait of several hours throughout the afternoon. An earlier northbound *Heartland Flyer* departure from Fort Worth to Oklahoma could reduce this wait but would hamper the trip purposes of other types of travelers, who need time in Fort Worth. Fort Worth is home to world-class art museums and historical sites. The *Texas Eagle* connection accounts for less than 10 percent of the *Heartland Flyer* passengers. Leisure passengers account for a much higher percentage and an earlier departure from Fort Worth might discourage day-trippers.

Trinity Railway Express: Trinity Railway Express (TRE) is a regional commuter train service that operates between the Fort Worth ITC and Dallas Union Station. Current wait times between the southbound *Heartland Flyer* and the next available TRE departure to Dallas range from 58 minutes on weekdays to 28 minutes on Saturday. (There is no Sunday TRE service.) Minimum wait times at Fort Worth from TRE trains arriving from Dallas with the northbound *Heartland Flyer* range from 29 minutes on weekdays to 59 minutes on Saturday. Midday and afternoon TRE trains between Fort Worth and Dallas operate once an hour in each direction Monday through Saturday.

Tightened connections between the *Heartland Flyer* and TRE might encourage more connecting trips to Dallas as well as the TRE station stop serving Dallas-Fort Worth International Airport. However, if the connection is too tight, any minor operating delay might cause passengers to miss their connecting train at Fort Worth. Further improvement would be to time the airport shuttle buses to the TRE trains. Under the current operation, shuttles run every 15 minutes, regardless of arrivals or departures of TRE trains.

Other Passenger Rail Multimodal Improvement Considerations

Additional opportunities exist to enhance the multimodal role of the *Heartland Flyer* with agencies at both the Oklahoma City and Fort Worth terminals. Discussion with rural transit districts to coordinate at intermediate stops in Oklahoma may also be worthwhile. Ridership improvements could be anticipated if multimodal connections were improved and publicized. Most of these connections would require extraordinary cooperation between companies or agencies with diverse goals and objectives.

In Texas, the *Heartland Flyer* serves the Fort Worth Intermodal Transportation Center, where rail passenger, commuter rail, local transit, and intercity bus services come together, although the services are not coordinated.

In Oklahoma City, recent emphasis on integrating various modes of public transportation into the city's overall transportation matrix has led to several studies and initiatives, further described below in Section 3.3. The Association of Central Oklahoma Governments completed the "Intermodal Transportation Hub Master Plan,"⁷ which created a foundation for the current expansion and development of the existing Santa Fe Depot discussed further in Section 3.3, while the Central Oklahoma Transit and Parking Authority completed "The Greater Downtown Circulator AA,"⁸ which formed the first step in the region's process for implementing enhanced rail transportation options such as commuter and light rail. Subsequent efforts included conducting a commuter/rail transit feasibility study for the region, which is discussed in Section 3.5. Oklahoma City is also constructing a modern streetcar line that will serve the central business district (CBD). All of these efforts work in conjunction to point toward a greatly enhanced transportation network in the coming years.

Tulsa, Oklahoma, is making a similar effort to prepare the way for expanded public transportation needs. Prior studies carried out by the City of Tulsa and the Indian Nations Council of governments (INCOG) are preparing the way for the introduction of an enhanced transportation network.

Multimodal plans previously completed within the State that address multimodal transportation options include:

- The "2030 Fixed Guideway Plan" identifies transit improvements for Oklahoma City by the Central Oklahoma Transit and Parking Authority (COTPA). This 2005 plan includes the modern streetcar downtown circulator, bus rapid transit, and commuter rail:
<http://www.gometro.org/fgp>
- In coordination with the COTPA studies on fixed guideway transit in the Oklahoma City region, the Association of Central Oklahoma Governments (ACOG) in 2011 published a comprehensive study for creating a multimodal hub to connect the wide variety of planned transportation options in Oklahoma City.
- ACOG also developed a framework for creating a Regional Transit Authority (RTA) and regional transit district. Subsequent legislation, HB 2480 signed in law in 2014, authorized creation of a regional transportation authority under a framework presented in the legislation. Following passage of the law, cities in the Oklahoma City metropolitan area authorized the formation of a Regional Transit Authority Task Force to develop an implementation plan for establishing an RTA.
- In the Tulsa region, the City of Tulsa and the Indian Nations Council of Governments released its comprehensive transit development plan in October 2011, entitled "FastForward".

3.3 Support for Oklahoma City as a Multimodal Hub

Both ODOT and the City of Oklahoma City have been advancing initiatives and institutional arrangements that would facilitate Oklahoma City to become a multi-modal passenger rail hub, serving the existing *Heartland Flyer* service, additional proposed intercity rail services, new proposed commuter rail services, proposed high-speed rail, intercity bus service, as well as local transit services serving the Oklahoma City metropolitan area.

⁷ <http://www.acogok.org/wp-content/uploads/2015/09/hubreport.pdf>

⁸ <http://embarkok.com/about/planning>

Locating a multimodal transportation hub at the Santa Fe Depot in Oklahoma City will help improve the market reach for all modes. ACOG completed the “Intermodal Transportation Hub Master Plan,”⁹ which created a foundation for expanding and redeveloping the existing Santa Fe Depot (discussed further below) as a transportation center and gateway for Oklahoma City. The hub study also laid the groundwork for merging pedestrian, bicycle, bus, light rail, commuter rail, and intercity passenger rail at the preferred location of the Santa Fe Depot. The hub plan includes the capacity necessary to accommodate an expansion of service on the *Heartland Flyer* route, as well as the introduction of passenger rail service between Oklahoma City and Tulsa, and also space for the introduction of commuter rail service on lines serving central Oklahoma. Expanded taxi service and parking will also be located at the planned hub to assure this location is capable of meeting transportation needs for decades to come. Specific initiatives currently underway are discussed below.

3.3.1 Santa Fe Depot Restoration and Multimodal Improvement Project

The U.S. Department of Transportation awarded Oklahoma City a \$13.6 million Transportation Investments Generating Economic Recovery (TIGER) grant in 2013 to help fund a \$28.4 million restoration and reconstruction project that will convert the historic Santa Fe Depot (built in 1934) into an intermodal transportation hub, improving passenger waiting facilities, adding space for Amtrak ticketing and checked baggage services, expanding accessibility and neighborhood connectivity for bicycles and pedestrians, and providing a multimodal transit connection to the Oklahoma City streetcar, currently under construction.¹⁰ The improved connectivity includes construction of a new tunnel beneath the BNSF Railway tracks that will connect the Santa Fe Depot to the west end of the city’s Bricktown neighborhood. Other funding sources for the station restoration project include ODOT, ACOG, and a City capital program called MAPS 3 (discussed further below). The station renovations are expected to be completed in 2017.

In an unrelated project, in 2017, FRA approved the establishment of a quiet zone on the BNSF tracks through downtown Oklahoma City also used by the *Heartland Flyer*. Within the quiet zone, which extends nearly three miles through the city center, trains do not have to sound their horns at grade crossings as part of routine operation. (Emergency situations will require sounding the horn.) As part of the quiet zone establishment process, eleven grade crossings were improved to maintain safe operation for motorists and trains in the absence of the train horn.

3.3.2 Oklahoma City Streetcar

Heartland Flyer passengers at Oklahoma City will benefit from the improved transit connectivity that will occur with the opening of the Oklahoma City Streetcar¹¹, projected to begin operations in December 2018. The streetcar will operate on two separate loops within city streets, linking commercial and residential districts in and around downtown Oklahoma City. The \$131 million streetcar line is one of eight projects that are part of MAPS 3 (Metropolitan Area Projects), a seven-year, \$777 million capital program funded with a 1-cent municipal sales tax that voters approved in 2009.

Service will be provided with seven streetcars built by the Brookville Equipment Corporation that will be capable of drawing power from overhead wires or onboard lithium-ion batteries in areas where

⁹ <http://www.acogok.org/wp-content/uploads/2015/09/hubreport.pdf>

¹⁰ <https://www.okc.gov/Home/Components/News/News/1382/18?arch=1&npage=13>

¹¹ <http://embarkok.com/learn/services/okcstreetcar>

overhead wires will not exist.¹² Oklahoma City's Santa Fe Depot is one of the 22 planned stops on the streetcar line, and will be served by both the 2-mile east-west loop serving Bricktown, the convention center, and the botanical gardens, and the 4.9-mile north-south loop connecting Bricktown with Midtown.

3.4 Proposed New Intercity Services

3.4.1 New Intercity Service Development Under FRA's High Speed Rail Program

The U.S. Department of Transportation, through the Federal Railroad Administration (FRA), has been working with states to plan, fund, and develop high-speed rail services, which includes new or enhanced conventional intercity passenger rail services that use existing freight lines and travel at existing passenger rail speeds. Since 1991, the FRA has identified 11 high-speed rail corridors (see Figures 3-2), positioning them for future Federal passenger rail funding. The Tulsa-Oklahoma City-Dallas/Fort Worth-San Antonio corridor was officially designated as a high-speed rail corridor in 2000¹³, as shown in Figure 3-3. It is known as the South Central High Speed Corridor.

Figure 3-2: Designated U.S. High-Speed Rail Corridors



Source: US DOT

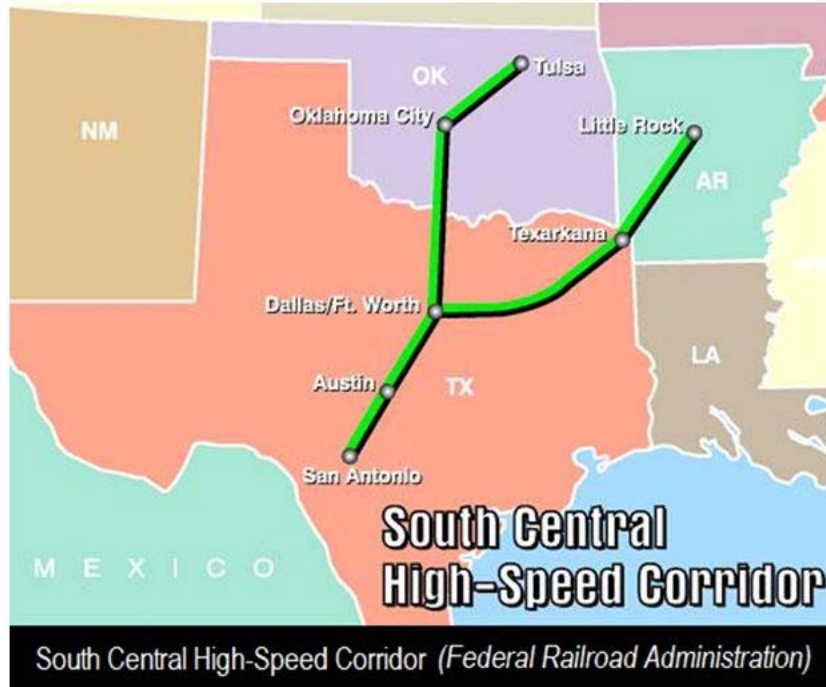
ODOT began studying the development of high speed rail in 1999, and subsequently released a "High Speed Passenger Rail Feasibility Study" in 2001, followed by the "Oklahoma High Speed Rail Initiative" in 2002. This South Central High Speed Rail Corridor has three segments, centered on Dallas-Fort

¹² <http://www.brookvillecorp.com/OKC-Selects-Brookville-Liberty-Streetcars.asp?news=news-streetcar.asp>

¹³ Federal Railroad Administration, "High Speed Rail Timeline", <https://www.fra.dot.gov/Page/PO140>, retrieved April 29, 2017

Worth: a southern segment that extends 288 miles to Austin and San Antonio, a northeast segment that extends 388 miles to Texarkana and Little Rock, and a northern segment that extends 311 miles to Oklahoma City and Tulsa.

Figure 3-3: South Central High Speed Rail Corridor



Source: Passenger Rail Oklahoma

The Oklahoma City to Tulsa segment of the South Central High-Speed Corridor has been identified as an extremely important component for establishing sustainable high-speed passenger rail service in this region of the United States because of the potential for extensions to provide through service to Kansas City and St. Louis, and make connections there with the Midwest Regional Rail System.

In 2009, ODOT completed a Service Development Plan (SDP) for the Oklahoma portion of the South Central High Speed Rail Corridor.¹⁴ This plan recommended a phased approach that would:

- Upgrade the BNSF-owned *Heartland Flyer* route between Oklahoma City and Fort Worth to improve existing service and subsequently accommodate a second passenger train roundtrip
- Upgrade track infrastructure at and around the Oklahoma City train station to improve rail access to the station platforms, eliminate delays caused by passenger-freight train congestion, and accommodate additional passenger trains at the station facility
- Acquire land and construct a high-speed (90 mph) passenger rail line between Oklahoma City and Tulsa following the Turner Turnpike (I-44) corridor

The SDP estimated that a high-speed rail service between Oklahoma City and Tulsa with auto-competitive trip times could generate a ridership of 6,000 daily commutes between the two cities, which the study considered necessary to support the service. Many of the infrastructure improvements

¹⁴ http://www.okladot.state.ok.us/recovery/hs_rail/fra-final-app/support/service.pdf

to the *Heartland Flyer* route identified and recommended by the SDP were subsequently completed, with partial funding provided by federal high-speed rail and TIGER grants.

As a result of PRIIA, the federal government established a mechanism for creating federal-state funding partnerships dedicated to developing passenger rail corridors, using federal grants as well as three new federal intercity rail capital assistance programs. Examples of these new funding sources include the Federal high-speed rail grant program, discussed below, and the establishment of funds such as the Intercity Passenger Rail Service Corridor Capital Assistance Program, which provides funding to states, groups of states, public agencies, and interstate compacts. To allocate this funding, FRA established the “High Speed Intercity Passenger Rail Program” (HSIPR) in 2009. The program was designed to make strategic investments that would create or enhance an efficient network of passenger rail corridors to connect communities across the country. FRA established three objectives for the program¹⁵:

1. Build new high-speed rail corridors that expand and fundamentally improve passenger transportation in the geographic regions they serve
2. Upgrade existing intercity passenger rail corridors to improve reliability, speed, and frequency of existing services
3. Lay the groundwork for future high-speed rail services through corridor and state planning efforts

Also in 2009, the Obama Administration announced plans to develop high-speed intercity passenger rail, with the goal of serving 80 percent of the American population within 25 years. An initial funding package of \$8 billion was made available through the American Recovery and Reinvestment Act (ARRA), plus an additional \$2.5 billion through transportation appropriations.

With new funding sources available, ODOT renewed its efforts to examine the expansion of passenger rail in the state. It submitted a series of funding applications for every one of the HSIPR Program’s funding notices beginning in 2009. Through the HSIPR Program, ODOT secured three separate grants to aid Oklahoma’s passenger rail efforts. Grants were awarded to:

- Help the state complete its long-term rail plan, published in 2012
- Prepare a Service Development Plan and the Environmental Impact Statement for the rail corridor from Oklahoma City to Tulsa (discussed below)
- Fund track, signal, and switch improvements at the Oklahoma City Santa Fe Depot for safer and more efficient operation of the *Heartland Flyer*, completed in 2012

ODOT also received a “Rail-Highway Crossing Hazard Elimination Grant” in 2011 to upgrade three at-grade rail crossings in Ardmore, Oklahoma, to improve safety and operations for the existing *Heartland Flyer* passenger rail service.

Largely resulting from budgetary restraints following the 2008 recession, further high-speed rail funding has not been forthcoming. However, various states, including Oklahoma, have continued to plan commuter, intercity, and high-speed rail improvements assuming that funding will resume as the economy improves.

FRA’s HSIPR is being developed under a three-tiered passenger rail strategy, defined as follows¹⁶:

¹⁵ <https://www.fra.dot.gov/Page/P0060>

¹⁶ <https://www.fra.dot.gov/Page/P0134>

1. **Core Express services:** These trains connect major population centers, typically 200 to 600 miles apart, in the nation's densest and most populous regions. Top speeds are between 125 and 250+ mph, primarily on completely grade-separated and dedicated rights-of-way. Some exception to grade-separated and dedicated track requirements may be acceptable in terminal areas.
2. **Regional services:** These trains provide relatively frequent service between large and mid-sized cities, 100 to 500 miles apart, with some intermediate stops. Top speeds range between 90 and 125 mph, with some dedicated and some freight-shared tracks. Tracks are grade-separated with terminal area exceptions.
3. **Feeder services:** These trains connect communities to the passenger rail network in corridors 100 to 500 miles long, and provide a foundation for future higher-speed corridor development. Top speeds range from 79 to 90 mph, generally on shared track with advanced grade-crossing protection or grade separations. This stage is intended to provide travel options and develop a market for rail service. The Oklahoma City-Fort Worth corridor is currently identified as a Feeder Service by FRA.

FRA has established that, to be eligible for federal implementation or construction funding of new intercity passenger rail services, the sponsoring entity must complete a Passenger Rail Corridor Investment Plan (PRCIP). This plan provides the foundation for the project's development and consists of two main components, an environmental impact statement (EIS) or some other type of environmental review document, and a service development plan (SDP). The SDP analyzes the transportation needs and the purposes to be met by the proposed service. The plan also presents the results from testing various alternatives for performance, ability to attract riders, and generate revenue. Financing of the system as well as the benefits accrued to both users and non-users are also examined. The requirements for preparing the SDP are defined by FRA. An EIS examines the impact of the proposed system development on the natural, built, and cultural environments. The EIS is also required to examine the resulting effects if the system is not built. Requirements for preparing an EIS are defined under the National Environmental Policy Act (NEPA).

Three passenger rail corridors in Oklahoma are currently under evaluation as candidates for new or expanded service:

- Oklahoma City to Fort Worth, previously discussed in Section 3.2
- Oklahoma City to Tulsa
- Oklahoma City to Kansas City

3.4.2 Oklahoma City to Tulsa

Travel between Oklahoma's two largest metropolitan areas, Oklahoma City and Tulsa, provide an attractive market for intercity rail transport. The 110-mile distance separating Oklahoma City and Tulsa, and population of 2.2 million within the corridor as of 2010, forms a corridor where the economics of rail technology are very favorable.¹⁷ Both cities also have plans to develop commuter or rail transit services that would provide connectivity to surrounding population centers. Regularly scheduled passenger rail service between the two cities ended in 1967. A provision in the Oklahoma Tourism and Passenger Rail Act of 1996 jumpstarted the current effort to restore passenger service

¹⁷ https://ftp.dot.state.tx.us/pub/txdot-info/rail/high_speed/system-summaries/texas-south-central.pdf

between Oklahoma City and Tulsa¹⁸. The state law enabled Oklahoma to secure \$23 million of funding from the federal Taxpayer Relief Act of 1997, which was used to establish the *Heartland Flyer* service between Oklahoma City and Fort Worth and develop service to Tulsa.¹⁹

Sooner Subdivision Ownership and Passenger Service Obligations

In 1998, ODOT purchased 97.5-mile former St. Louis-San Francisco Railway main line between Midwest City (in suburban Oklahoma City) and Sapulpa (suburban Tulsa) from successor BNSF Railway, to preserve the corridor for future passenger service. That same year, ODOT leased the line to the Stillwater Central Railroad, a shortline freight railroad owned by Watco Companies, to maintain freight service to rail shippers on the line and initiate a program of track upgrade and renewal.²⁰ With the lease planned to expire in 2017, ODOT in 2014 announced its intent to sell the line through a bidding process. Stillwater Central Railroad was the successful bidder and purchased the 97.5-mile line, known as the Sooner Subdivision, on August 4, 2014, for \$75 million.²¹

The sale agreement obligates the buyer to permit passenger rail operations on the line. Specific provisions in the sale agreement relating to passenger include:

- Within seven years of the purchase date, the buyer must upgrade and improve the mainline track to FRA Class 3 conditions, which would support 60-mph passenger train operations and 40-mph freight train operation.
- Within five years of the purchase date, the buyer must arrange for a pilot demonstration program of regular passenger service to be provided between Oklahoma City and Tulsa, or between Del City and Sapulpa, if direct passenger rail access to Oklahoma City and Tulsa is not available. The demonstration service must operate at least two trips per day, seven days per week, for a period of at least six months.
- Depending on the results of the program, the buyer must either provide, or arrange for a designated operator or agency to provide, continuous daily passenger service within ten years of the purchase date, if the demand, capacity of the line, and costs will support profitable passenger operations.
- Within ten years of the purchase date, the buyer must make \$2.185 million in capital improvements to support passenger rail service on the line.
- The buyer will not be obligated to operate or host passenger services on the line beyond the pilot program, if the results of the demonstration service indicate that the passenger service will not provide a profitable return to the buyer (and the third party passenger operator) equal to or greater than the buyer's existing cost of capital, or that providing the passenger service will have a negative effect on the buyer's freight operations and/or profitability.

In the first quarter of 2016, Stillwater Central indicated to ODOT that it had made good progress on the Class 3 track upgrade, and would be ready to have track inspectors certify the line for Class 3 track

¹⁸ Oklahoma Statutes, [§66-Railroads](#): §66-321, Oklahoma Tourism and Passenger Rail Act, Added by Laws 1996, c. 255, § 1, eff. July 1, 1996

¹⁹ [Taxpayer Relief Act of 1997](#), Section 977 Elective Carryback of Existing Carryovers of National Railroad Passenger Corporation, [26 USC 172 note](#)

²⁰ [Track Lease and Operating Agreement Oklahoma City – Sapulpa Rail Line June 19, 1998, Stillwater Central Railroad, Inc.](#)

²¹ [http://www.odot.org/SoonerSub/16-FINAL%20Sale%20Agreement%20\(2014\).pdf](http://www.odot.org/SoonerSub/16-FINAL%20Sale%20Agreement%20(2014).pdf)

operation in the first half of 2016.²² Stillwater Central said that it was continuing to work toward launching a demonstration passenger rail service before the August 2019 deadline.

Iowa Pacific Trial Service

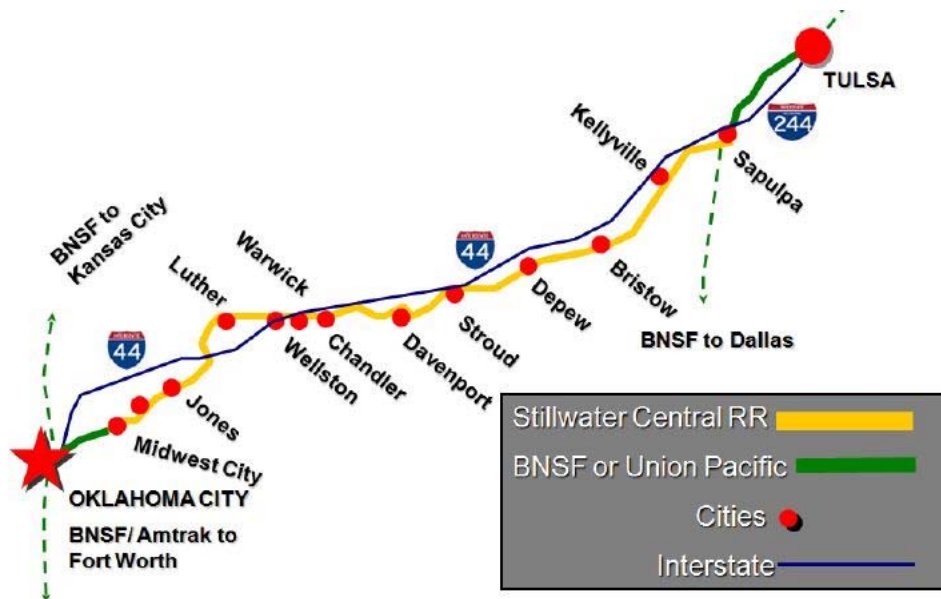
During the bid evaluation period for the Sooner Subdivision sale, Stillwater Central Railroad arranged for the passenger rail service provider Iowa Pacific Holdings to operate a trial demonstration passenger rail service between Midwest City and Sapulpa. On three consecutive weekends in February 2014, Iowa Pacific’s “Eastern Flyer” made a daily round trip, departing Sapulpa at 8 a.m. and returning to Sapulpa at 6:30 p.m. The one-way trip between Sapulpa and Midwest City took approximately 3 hours. Bus connections at Midwest City were available to and from Oklahoma City. The train consisted of two coaches, a dining car, a dome car, and a club car. The trips were popular, and most departures were completely sold out.

After the pilot service concluded, Iowa Pacific maintained a presence in Oklahoma, operating seasonal Polar Express trains, first from Bristow on the Sooner Subdivision, then in 2016 from Stillwater. Yet as of this time, neither Stillwater Central nor ODOT have named Iowa Pacific or any other company to be the designated operator of the pilot demonstration service required under the Sooner Subdivision sale agreement.

Rail Access Considerations in Tulsa and Oklahoma City

Although Stillwater Central owns the rail corridor between Midwest City and Sapulpa, passenger rail access to downtown Oklahoma City and downtown Tulsa would have to be provided using tracks owned by two Class I freight railroads serving the state, Union Pacific and BNSF Railway (see Figure 3-4).

Figure 3-4: Track Ownership of the Oklahoma City-Tulsa Corridor



²² <http://passengerrailok.org/memberfiles/2016-04-13-124844290-Wato-ODOT.pdf>

Source: Passenger Rail Oklahoma

The western 4.3 miles of the corridor, between Midwest City and Oklahoma City, are owned by Union Pacific Railroad. The Oklahoma City Council in September 2015 passed a resolution approving the expenditure of up to \$50,000 on an evaluation study with UP to determine the infrastructure requirements needed to upgrade this 20-mph freight branch line for regular passenger rail service.

The eastern 17 miles of the corridor, between Tulsa and Sapulpa, are owned by BNSF Railway. The purchase agreement governing ODOT's acquisition of the Sooner Subdivision from BNSF Railway in 1998 included a 99-Year "Buyer's Passenger Service Rights Agreement," which contractually obligates BNSF to provide access for a passenger carrier to be named by the State of Oklahoma to use its tracks for 16.9 miles between the Stillwater Central connection in Sapulpa and a location in downtown Tulsa near the former Union Depot.²³ The agreement set a fee per train-mile to be paid to BNSF for use of the trackage, and allows for up to four passenger train trips per day to use this segment of track without investments in track capacity to support additional frequencies. To date, neither ODOT nor Stillwater Central have named or identified a passenger operator for this segment of trackage.

Passenger rail access to Tulsa will also benefit from the I-244 Downtown Tulsa Double-Decker Bridge that opened in 2012. The bridge's unique design provided a way to replace an aging Interstate highway bridge across the Arkansas River west of downtown with a multimodal, double-deck structure that carries westbound Interstate automobile and truck traffic on its upper level, and one railroad track for future intercity and commuter rail service on its lower level along with a dedicated pathway for pedestrians and bicyclists. ODOT was awarded a \$49.5 million TIGER grant in 2010 to help fund the \$78 million structure.²⁴ This project was one of the first granted in round one of U.S. DOT's innovative "Transportation Infrastructure Generating Economic Recovery" grant program.

The structure is key to establishing frequent, reliable passenger rail service connecting Oklahoma's two largest cities, because it provides a rail link to downtown Tulsa that does not require passenger trains to use BNSF's freight rail bridge across the Arkansas River or occupy freight tracks at the entrance to BNSF's Cherokee Yard west of downtown, the largest freight rail yard in Oklahoma.

In addition to state planning efforts to develop the Tulsa-Oklahoma City passenger rail corridor, the Indian Nations Council of Government has provided assistance with the planning and identification of the proposed passenger rail route into downtown Tulsa. The plan calls for the use of existing railroad infrastructure, which will require significant upgrades for passenger service and also likely require property acquisition to accommodate additional track capacity in certain locations. The proposed route is considered to be a reasonable alternative for reinstating passenger rail service to downtown Tulsa while minimizing interruption to existing freight rail capacity. The proposed route also identifies the location for a downtown Tulsa passenger rail station, using the former Tulsa depot building, which is owned by Tulsa County. (The county currently leases the building.)

A new connection in Sapulpa would also be required between the existing shortline railroad that operates the rail line from Oklahoma City and the connecting Class I railroad that owns the route

²³ [Purchase of Oklahoma City – Sapulpa and Pawnee Junction – Stillwater Rail Lines, February 26, 1998, Closing Documents](#)

²⁴ http://www.odot.org/recovery/tiger/tulsa_i244/index.htm

leading to downtown Tulsa. Additional property would likely be purchased to construct the connection in Sapulpa. Property acquisitions are also anticipated at certain locations adjacent to the Class I rail line between Sapulpa and Tulsa to provide additional track capacity to accommodate any passenger service. New connections would also be required to link the future passenger railroad right-of-way built into the new I-244 Arkansas River bridge in Tulsa with existing Class I infrastructure on either side of the river.

State Planning Efforts to Establish Regularly Scheduled Service

In 2001-2002, ODOT identified a preferred high-speed rail alignment for the 100-mile segment of the South Central High Speed Rail Corridor between Oklahoma City and Tulsa. The alignment selected followed the Turner Turnpike (I-44). Earlier feasibility studies conducted by Amtrak in the 1990s for establishing passenger rail service on the Sooner Subdivision between Oklahoma City and Tulsa determined that a significant capital investment would be needed in order to upgrade the rail line to support auto-competitive trip times. Since then, efforts to establish regularly scheduled passenger rail service have progressed incrementally, as funding has allowed, including an incomplete Tier 1 Environmental Assessment in 2009. Almost all of ODOT's previous work will materially contribute to current and future efforts.

In 2011, the Oklahoma Legislature enacted HB 1686, later signed into law by Governor Mary Fallin, which formed the Eastern Flyer Passenger Rail Development Task Force. The task force, comprised of 17 members, was charged with examining the development of conventional and high-speed passenger rail transportation between Tulsa and Oklahoma via the use of public-private partnership (P3) formulas. The task force issued a final report in 2012 that discussed policy issues and identified potential alternatives. Currently, the use of P3s is not legally authorized in Oklahoma. If a P3 is to finance a Tulsa-Oklahoma City system, further legislative action would be required.

With funding received from an FY 2010 FRA HSIPR planning grant, ODOT began developing a federally mandated Passenger Rail Corridor Investment Plan for new service between Tulsa and Oklahoma City. The corridor investment plan was to include an updated service development plan and environmental documentation required to comply with NEPA requirements, leading to a conclusion that would enable the project to enter the design phase. However, the study was ended in late 2014, because there was no future funding source identified.

As part of this effort, ODOT released a Preliminary Alternatives Analysis in July 2014. This alternatives analysis screened ten possible alignments for high-speed rail between Oklahoma City and Tulsa. The study identified two feasible routes, one following Turner Turnpike and one following Stillwater Central's Sooner Subdivision. The study assessed the feasibility of providing service with conventional passenger rail equipment, European/Asian-style high-speed rail equipment, or Emerging Technology equipment (Diesel Multiple Unit vehicles), but did not recommend a preferred train technology.

3.4.3 Recent Efforts to Develop Interstate Passenger Corridors

Regionally since 2009, ODOT, TXDOT, and Kansas Department of Transportation (KDOT) have been working together on HSIPR efforts related to the expansion of passenger rail service. ODOT and KDOT

mutually funded and completed the “Passenger Rail Service Development Plan”²⁵ in 2011 that examined options for adding passenger rail lines between Kansas and Oklahoma. TXDOT, with input from KDOT and ODOT, has begun a similar study for the corridor from Oklahoma City to South Texas. This study will also perform an environmental analysis of the corridor. While HSIPR has served as a vital tool to boost the State’s passenger rail efforts, other federal programs have led to beneficial rail projects as well for both existing and proposed services.

In terms of additional intercity and high speed passenger rail planning efforts, the Oklahoma City Intermodal Hub, discussed earlier and later in this chapter, included significant research to assure that the hub was capable of supporting added passenger rail capacity should any of the projects being examined by ODOT, KDOT and TXDOT move forward into construction. Additionally, ODOT and the Oklahoma Turnpike Authority have been examining upcoming large-scale highway projects to ensure they include necessary right-of-way to allow for the inclusion of passenger rail structures should they be needed in the future.

3.4.4 Oklahoma to Kansas City

As mentioned above, ODOT and KDOT completed a Service Development Plan in 2011 that looked at extending the *Heartland Flyer* from Oklahoma City to Newton, Kansas, as well as introducing a new standalone daytime service between Kansas City and Fort Worth via Oklahoma City, either in place of, or in conjunction with, the *Heartland Flyer* extension. This SDP built off of a previous feasibility study conducted by Amtrak in 2010,²⁶ and was jointly paid for by ODOT and KDOT, using a \$250,000 Federal FY2009 high-speed rail grant that provided half the funding for the study.

The SDP studied three alternatives:

- **Extending the *Heartland Flyer* from Oklahoma City to Newton, Kansas:** The study projected the service, which would operate overnight north of Oklahoma City to connect with Amtrak’s *Southwest Chief* in Newton, would generate an incremental ridership increase on the *Heartland Flyer* of 111,300 annual passengers, and require approximately \$136.5 million in capital startup costs
- **Introducing a new daytime Kansas City-Oklahoma City-Fort Worth passenger train:** The study projected this service would generate an annual ridership of 256,700, and require approximately \$436.2 million in capital startup costs
- **Extending the *Heartland Flyer* to Newton, and introducing a new daytime Kansas City-Fort Worth passenger train:** The study projected this combination of services would generate a combined annual ridership of 368,000, and require approximately \$475.0 million in capital startup costs

The study estimated that extending passenger service to Newton (*Heartland Flyer* extension) could be projected to require six years to implement, including environmental reviews, preliminary engineering, construction and commissioning. Developing a new daytime Kansas City-Oklahoma City-Fort Worth, either separately or in conjunction with a *Heartland Flyer* extension to Newton is estimated to require seven years from the start of the environmental studies.

²⁵ http://www.ksdot.org/PDF_Files/PDF-Passenger-Rail-SDP.pdf

²⁶ [Feasibility Report of Proposed Amtrak Service, Kansas City, Missouri – Oklahoma City, Oklahoma to Fort Worth, Texas](#), March 9, 2010

To further these efforts, Amtrak operated an inspection train from Oklahoma City to Kansas City on Friday June 9, 2017, during which officials discussed the feasibility of reinstating regularly scheduled passenger rail service between the two cities. (Amtrak had provided passenger rail service between Kansas City, Oklahoma City, and Fort Worth until 1979.) The inspection train operated on tracks owned by BNSF Railway, and made brief stops along the route at Guthrie, Perry, and Ponca City, Oklahoma, as well as Arkansas City, Wichita, Newton, Emporia, Topeka, and Lawrence, Kansas. The inspection train was a preliminary step in a feasibility assessment process to evaluate service options and costs for reinstating passenger rail service. Potential service options could include extending the *Heartland Flyer* north from Oklahoma City to Newton, Kansas, where passengers would make a cross-platform connection to Amtrak's Chicago-Kansas City-Newton-Los Angeles *Southwest Chief* train, or establishing a through-car operation at Newton, where passenger cars are uncoupled from the *Southwest Chief* and onto an extension of the *Heartland Flyer*.

3.4.5 Oklahoma to Texas

Texas Department of Transportation, in coordination with ODOT, completed a study of the South Central High Speed Rail Corridor between Oklahoma City to southern Texas that included an examination of expanding the *Heartland Flyer* with a second frequency as well as performance improvements. In October 2010, TXDOT was awarded a \$5.6 million high-speed rail planning grant to help fund an Oklahoma City-South Texas Corridor Investment Plan. This \$14 million project, called the "Texas-Oklahoma Passenger Rail Study" and completed in 2016, included preparation of a service-level (Tier 1) EIS and SDP for an 850-mile segment of the South Central High Speed Rail Corridor between Edmond, Oklahoma, and a southern terminus of either Corpus Christi, Brownsville, or Laredo, serving Oklahoma City, Dallas-Fort Worth, San Antonio, and Austin.²⁷

Based on projected ridership and capital costs, the study recommended carrying forward a conventional rail alternative for the corridor segment between Oklahoma City and Fort Worth. This alternative would use conventional diesel-powered trainsets operating on shared-use passenger and freight tracks at top speeds of 79 or 90 mph. The study recommended increasing the number of daily round trips along the route, and extending the route north to Edmond on BNSF trackage and east from Fort Worth to Dallas using the Trinity Railway Express commuter line (see Figure 3-5), in order to provide travelers in Oklahoma with a one-seat ride to both Fort Worth and Dallas.

Figure 3-5: Northern Segment of Texas-Oklahoma Passenger Rail Study EIS

²⁷ <http://www.txdot.gov/inside-txdot/projects/studies/statewide/texas-oklahoma-rail.html>



Source: TXDOT

In addition, the study recommended improvements to existing station facilities, and new train equipment with more onboard amenities, including business class available for a premium price. The study proposed that service be provided by diesel-locomotive hauled equipment with frequencies of up to six daily round trips. Two or three of the round trips would operate on an accelerated schedule, making roughly seven stops, with the remaining "local" trains making as many as 12 stops. The study projected a substantial increase in rail ridership of more than 700,000 passengers per year by 2035, which would be a 500 percent increase in mode share over the 2035 "No Build" alternative.

3.5 Proposed Commuter Rail Service to Enhance Passenger Rail Options in the Oklahoma City Region

As part of the long-range plans to develop a multimodal hub in Oklahoma City (discussed in Section 3.3), ACOG released a "Central Oklahoma Commuter Corridors Study" in 2015. The study proposes to develop a network of commuter rail and streetcar routes serving Oklahoma City, in order to provide new and expanded transportation options in a metropolitan region where the population and employment demand is projected to grow nearly 40 percent between 2010 and 2040.²⁸ The study's proposed transit recommendations were branded as CentralOK!go, and were developed by ACOG in conjunction with input from local communities and stakeholders. The study analyzed the feasibility of

²⁸ http://www.acogok.org/wp-content/uploads/2015/09/ACOG_CentralOKgo_FinalReport_12-03-2015.pdf

developing rail transit on three corridors that were first identified in ACOG's 2005 Regional Fixed Guideway Study as those having the most potential for high-capacity regional transit (see Figure 3-6).

Figure 3-6: Proposed Oklahoma City Commuter Rail Corridors



Source: ACOG

The results of the feasibility study produced a Locally Preferred Alternative (LPA) for each route. The LPAs were approved by the ACOG Intermodal Transportation Policy Committee in October 2014. All three routes would hub at the downtown Oklahoma City Santa Fe Depot. Specific recommendations for each route are summarized below.

North Corridor LPA. The study recommended developing commuter rail service on the North Corridor, a 14-mile route between Oklahoma City and West 2nd Street in Edmond, using the existing BNSF right-of-way wherever possible. The service would provide an alternative to highway travel on I-35 between Edmond and Oklahoma City. Five intermediate stations were proposed between the Oklahoma City Santa Fe Depot and Edmond, one of which is a proposed station near the Chesapeake Energy campus. The study also recommended establishing a connection with the Oklahoma City Streetcar at the Chesapeake Energy station near Nichols Hills, which would entail constructing a 5-mile extension of the streetcar line along Classen Boulevard to reach the proposed station site. Capital cost estimates for construction of the North Corridor commuter rail line ranged from \$260 million to \$360 million. The study estimated the streetcar line extension to cost between \$270 million and \$370 million. Operating and maintenance costs were estimated to be \$5 million per year for the commuter rail service, and \$2.5 million per year for the streetcar extension.

South Corridor LPA. The study also recommended developing commuter rail service on the South Corridor, a 17-mile route from Oklahoma City through Moore and Norman terminating at State Highway 9 south of downtown Norman, using the existing BNSF right-of-way wherever possible. The service would provide an alternative to highway travel on I-35 between Norman and Oklahoma City. Seven intermediate stations are proposed between Norman and the Oklahoma City Santa Fe Depot. Capital cost estimates for construction of the South Corridor commuter rail line ranged from \$310 million to \$410 million. Operating and maintenance costs were estimated to be \$4.5 million per year.

The study recommended that commuter trains operate through Oklahoma City, making one-way trips that serve both the North and South corridors, which would provide travelers with opportunities for a one-seat ride on a 31-mile corridor between Edmond and Norman. The study projected a service with trains operating on 15-minute headways during peak commuting periods and 30-minute headways during midday.

East Corridor LPA. The study recommended developing a streetcar service on the East Corridor, a 9-mile route between Oklahoma City, Midwest City, and Tinker Air Force Base. The service would provide an alternative to highway travel on I-40 between Midwest City and Oklahoma City. The alignment would use an abandoned railroad line between Midwest City and Reno Avenue in Del City. Capital cost estimates for construction of the East Corridor streetcar rail line ranged from \$320 million to \$440 million. Operating and maintenance costs were estimated to be \$2.5 million per year. Ridership was projected to be 2,300 per day.

No funding sources have been established or developed for the system, and the study recommends establishing a regional transit district to pursue funding and a Regional Transit Authority to provide ongoing management and funding.

3.6 Proposed Commuter Rail Service to Enhance Passenger Rail Options in the Tulsa Region

In 2011, the Indian Nations Council of Governments (INCOG) published "Fast Forward," the 2035 INCOG Regional Transit System Plan for the Tulsa Transportation Management Area. The plan developed a prioritized list of transportation improvements and new services to meet anticipated travel demand in the region based on future population and employment projections through the year 2035. Among the improvements identified in the plan were commuter rail and rail transit corridors, which were divided into two tiers, "Foundation Network Corridors," where high travel demand already exists and rail transit could provide a high-capacity transportation solution, and "Enhanced Corridors," serving smaller communities where significant population increases and residential development were expected to occur. Foundation Network Corridors are considered to be those with the highest probability of success. To lower implementation costs, the plan suggests the use of existing freight rail infrastructure wherever possible for the proposed rail transit services.

As part of the planning process to develop and deploy a regional commuter system, the Regional Transit System recommended establishment of a regional transportation authority to ensure that proper discussions and negotiations would be carried out with railroad operators and/or owners to address system needs without the unnecessary interruption of freight rail service. All of the commuter rail routes proposed in the plan would hub at a location in downtown Tulsa. The plan encourages community leaders to work with Tulsa County to develop alternatives that consider a commuter hub at

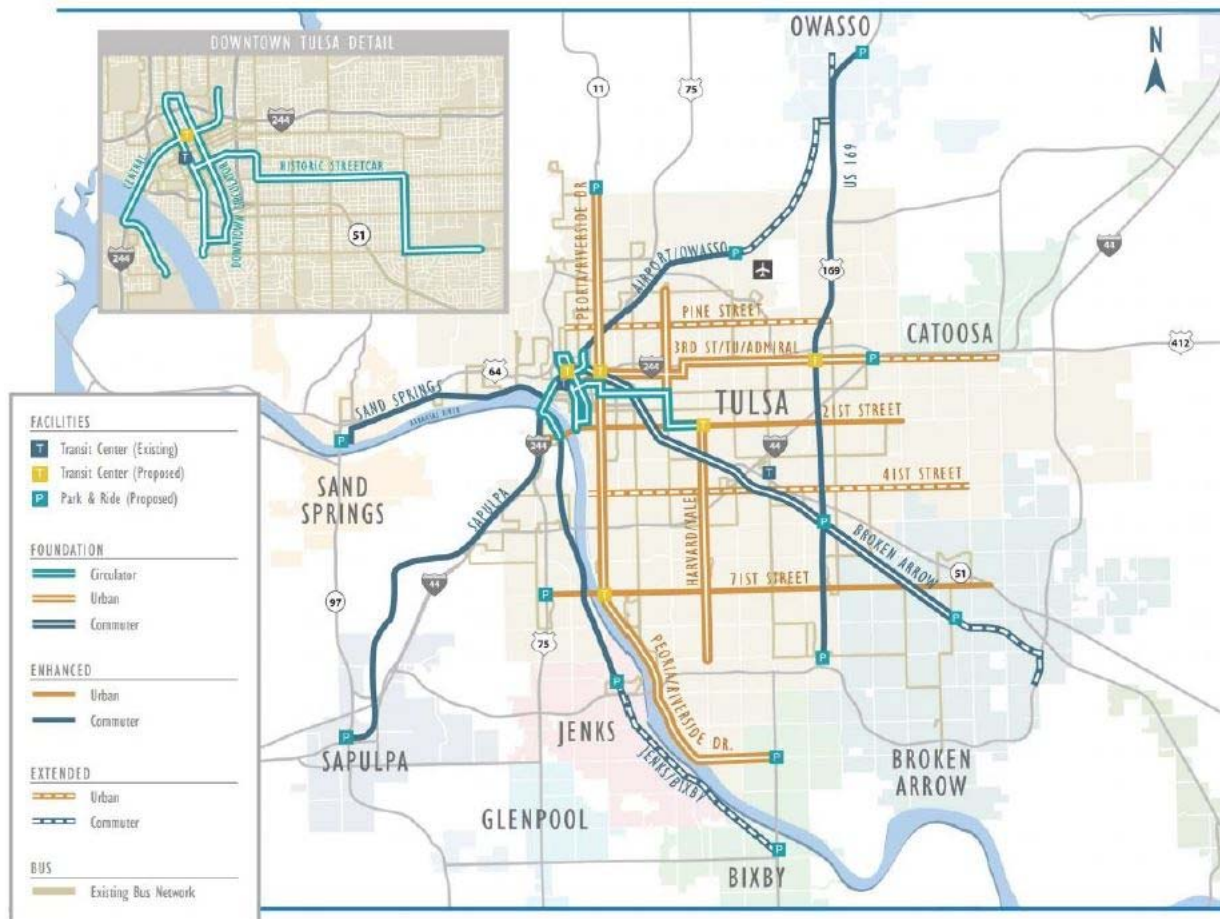
the former Tulsa train station, now home to the Jazz Hall of Fame, by way of joint use agreement. Planning efforts are underway to better understand the estimated costs for upgrading existing rail assets to initiate a commuter rail system along the prioritized routes in the Regional Transit System Plan. Once estimates are understood, funding sources will be identified and/or established to help support and operate these systems.

As shown in Figure 3-7 below, the corridors proposed for commuter rail or rail transit include:

- Tulsa-Broken Arrow (Foundation), with a subsequent extension to Northeastern State University's Broken Arrow campus
- Tulsa-Jenks (Enhanced), with a potential extension to Bixby
- Tulsa-Sand Springs (Enhanced)
- Tulsa-Owasso via Tulsa Airport (Enhanced)

These corridors are the prioritized corridors for the Tulsa metropolitan region where the demand for alternative transit systems, such as commuter rail, is supported by projected increases in population and employment, and where resulting roadway congestion is expected to be high. Commuter train frequencies would be agreed upon during negotiations with the Class I and shortline railroad owners of the rail lines.

Figure 3-7: Proposed Tulsa Commuter Rail Corridors



Source: INCOG

The potential commuter rail routes identified in the Regional Transit System Plan are discussed in detail below.

Broken Arrow – Tulsa. This proposed Tulsa commuter rail line would transport passengers 15 miles westbound into downtown Tulsa, with station stops between Broken Arrow and Sheridan. The line would use existing railroad infrastructure to the greatest extent possible. Infrastructure constraints prohibit station stops between Sheridan and downtown Tulsa, because the railroad track is located inside the median of the Broken Arrow Expressway between Sheridan and Lewis Avenue near 11th Street in Tulsa. Alternatives planning for this proposed commuter rail route would focus on terminal construction at a location on Main Street in downtown Broken Arrow, rail track and safety improvements, and strategic right-of-way acquisition. This route parallels US64/SH51 (Broken Arrow Expressway), which has a significant amount of inbound and outbound traffic during most hours of the day. There are numerous business districts along this corridor where employees could benefit from stations located within walking distance to their place of employment. Projected capital costs for infrastructure upgrades have not yet been determined, but track and safety upgrades to the line could range from \$100,000 to \$150,000 per mile of railroad. Operating costs will be based on the number of commuter rail frequencies and the final number of station stops along the proposed route. The plan contemplates the addition of a subsequent corridor extension from the Broken Arrow terminal eastward to a location near the Northeastern State University–Broken Arrow campus.

Jenks – Tulsa. This proposed commuter rail line would transport passengers an estimated 12 miles north from Jenks into downtown Tulsa, utilizing existing railroad infrastructure to the greatest extent possible. The route parallels U.S. 75, which has heavy inbound and outbound commuter traffic during peak hours. Alternatives planning for the proposed service would focus on terminal construction at a location in Jenks that is in the vicinity of Main Street and the Creek Turnpike, in an economic development area along a Class I owned railroad, along with rail track and safety improvements, and strategic right-of-way acquisition. Potential stops along this route include the location where a new pedestrian bridge is being constructed across the Arkansas River to the newly developed “A Gathering Place” park on the east side of the river. The proposed route through the city of Jenks requires the construction of railroad track from a point at Southwest Boulevard in Tulsa to and across the lower deck of the I-244 Arkansas River Multimodal Bridge, and within Class I Railroad right-of-way on the east side of the bridge to connect to a one-mile segment of mainline Class I Railroad track to bring commuters into downtown Tulsa. Expected capital costs to install trackage, upgrade railroad infrastructure, and perform safety improvements to the existing railroad track are estimated at \$20 million, or \$100,000 to \$150,000 per mile of railroad. Operating costs will be based on the number of commuter rail frequencies and constructed costs along the proposed route.

Sand Springs – Tulsa. This proposed commuter rail line would transport passengers an estimated 10 miles from Sand Springs, eastbound, into downtown Tulsa, using existing shortline and Class I railroad infrastructure to the greatest extent possible. The proposed route follows a corridor lined with residential neighborhoods, business districts, and technical trade educational centers in Sand Springs and west Tulsa. The route parallels U.S. 64/U.S. 412, which has heavy amounts of inbound and outbound traffic during peak hours. Alternatives planning would focus on terminal construction in Sand Springs at a location to the southeast of the U.S. 64/U.S. 412 and Adams Road intersection along a rail line owned by a shortline railroad company, rail track and safety improvements, and strategic right-of-way acquisition. Capital costs to implement the service have not yet been determined, but track and

safety upgrades to the line could range from \$100,000 to \$150,000 per mile of railroad. Operating costs will be based on the number of commuter rail frequencies and constructed stops along the proposed route.

Owasso – Tulsa. This proposed commuter rail line would transport passengers an estimated 13 miles into Tulsa along a shortline railroad route that bypasses U.S. 169 and SH11, both of which have heavy amounts of inbound and outbound traffic during peak hours. The proposed commuter rail line passes adjacent to the Tulsa International Airport, and planning efforts could include the development of an airport rail station. Alternatives planning for this proposed commuter rail route would focus on terminal construction (an endpoint terminal location has yet to be determined), along with rail track and safety improvements, and strategic right-of-way acquisition. Capital costs for upgrades have not yet been determined, but track and safety upgrades to the line could range from \$100,000 to \$150,000 per mile or railroad. Operating costs will be based on the number of commuter rail frequencies and constructed stops along the proposed route.

3.7 Concepts from Stakeholder Outreach

Various passenger rail improvement and expansion concepts were suggested by participants during public and stakeholder outreach opportunities conducted for the Oklahoma State Rail Plan. The first of these opportunities consisted of a High Leverage Stakeholder Committee meeting held in Oklahoma City on March 22, 2017. Other methods used to solicit public feedback and participation in the State Rail Plan development process included arranging interviews and coordination opportunities with representatives from passenger rail service providers and passenger rail special interest groups, and encouraging public comment via an online survey posted to the Oklahoma State Rail Plan webpage on ODOT's website. Outreach efforts conducted as part of the State Rail Plan development process will be described in detail in Chapter 6. Specific passenger rail projects and initiatives identified during public outreach are summarized below.

Ideas related to improving and expanding service on the *Heartland Flyer* route included:

- Continue efforts to establish a station at Thackerville to capture leisure travelers to the WinStar Casino
- Establish funding metrics for the Chickasaw Nation to operate and maintain a new station stop in Thackerville
- Invest in track capacity improvements on the *Heartland Flyer* route to reduce passenger train delays caused by freight rail traffic
- Continue the exploration of lower-cost service solutions for Oklahoma's state-supported passenger trains
- Explore the feasibility of acquiring passenger rail equipment for use on state-supported passenger trains to manage service delivery costs and service quality
- Extend the *Heartland Flyer* north of Oklahoma City to Newton, Kansas, to connect with Amtrak's Chicago-Los Angeles *Southwest Chief*
- Add a second roundtrip passenger train between Oklahoma City and Fort Worth
- Continue to fund studies examining the economic impact of the *Heartland Flyer* service to Oklahoma

Ideas related to establishing passenger rail service on other corridors included:

- Establish passenger rail service between Oklahoma City and Tulsa, including completion of any necessary track and signal upgrades and contracting with a passenger rail service operator
- Complete Class I railroad track improvements and access agreements to ensure Oklahoma City-Tulsa passenger trains have access to downtown multimodal centers
- Establish commuter rail and/or rail transit service in Oklahoma City and Tulsa
- Establish a Regional Economic Transportation Authority to generate and pursue national, state, and local funding streams and manage state-supported passenger rail services on behalf of Oklahoma
- Create a baseline study in conjunction with KDOT and TxDOT that can be easily modified as grant requirements, capital requirements, and other projections change
- Develop partnerships between ODOT and local regions, along with neighboring states, that will encourage the implementation of new passenger rail passenger corridors, in particular:
 - Fort Worth-Oklahoma City-Wichita-Kansas City
 - Oklahoma City-Tulsa-Kansas City
 - Oklahoma City-Tulsa-St. Louis
 - Oklahoma City-Altus
 - Oklahoma City-McAlester

Chapter 5 of this plan (The Rail Service and Investment Program) includes specific projects identified through the survey and stakeholder outreach process.