



Transit Mobility Program  
Texas A&M Transportation Institute  
701 N. Post Oak Rd.  
Houston, TX 77024

713-613-9240  
[tti.tamu.edu/group/transit-mobility](http://tti.tamu.edu/group/transit-mobility)

## TECHNICAL MEMORANDUM

**TO:** Kelly Kirkland, TxDOT PTN Planning and Support Section Director

**FROM:** Shuman Tan, TTI Assistant Transportation Researcher  
Jinuk Hwang, TTI Graduate Student Researcher  
Jonathan Brooks, TTI Assistant Research Scientist

**DATE:** February 19, 2016

**SUBJECT: Fiscal Year 2016 Subtask 3B: Part 1. Transit District Profiles**

The Texas Transportation Code Chapter 458 authorizes 26 urban transit districts (UTDs) and 37 rural transit districts (RTDs) to provide and/or coordinate transit services for people in Texas. UTDs and RTDs receive public transportation money through the Texas Department of Transportation (TxDOT). The TxDOT Public Transportation Division (PTN) requested that Texas A&M Transportation Institute (TTI) form a consistent set of profiles for each transit district, providing a quick and easy way for interested parties to comprehensively understand each transit district.

Nine transit districts serve as both a UTD and an RTD. These nine agencies are referred to as urban and rural transit districts (URTDs). As a result, there are three categories of transit districts profiled: UTDs (17 districts), URTDs (9 districts), and RTDs (28 districts).

This memorandum accompanies the district profiles and functions as a user's guide, explaining each page of a sample profile.

Appendix A contains a list of transit districts for the three categories. Appendix B contains the profiles of 54 transit districts. Each transit district's name in Appendix A has a hyperlink. You can click a transit district's name to navigate to its profile in Appendix B. Whenever you would like to go back to the Appendix A pages, just click the transit district's name at the very top of the first page of each profile.

A specific profile can be downloaded from:

<http://tti.tamu.edu/group/transit-mobility/resources/profiles/>

## PROFILE AT A GLANCE

---

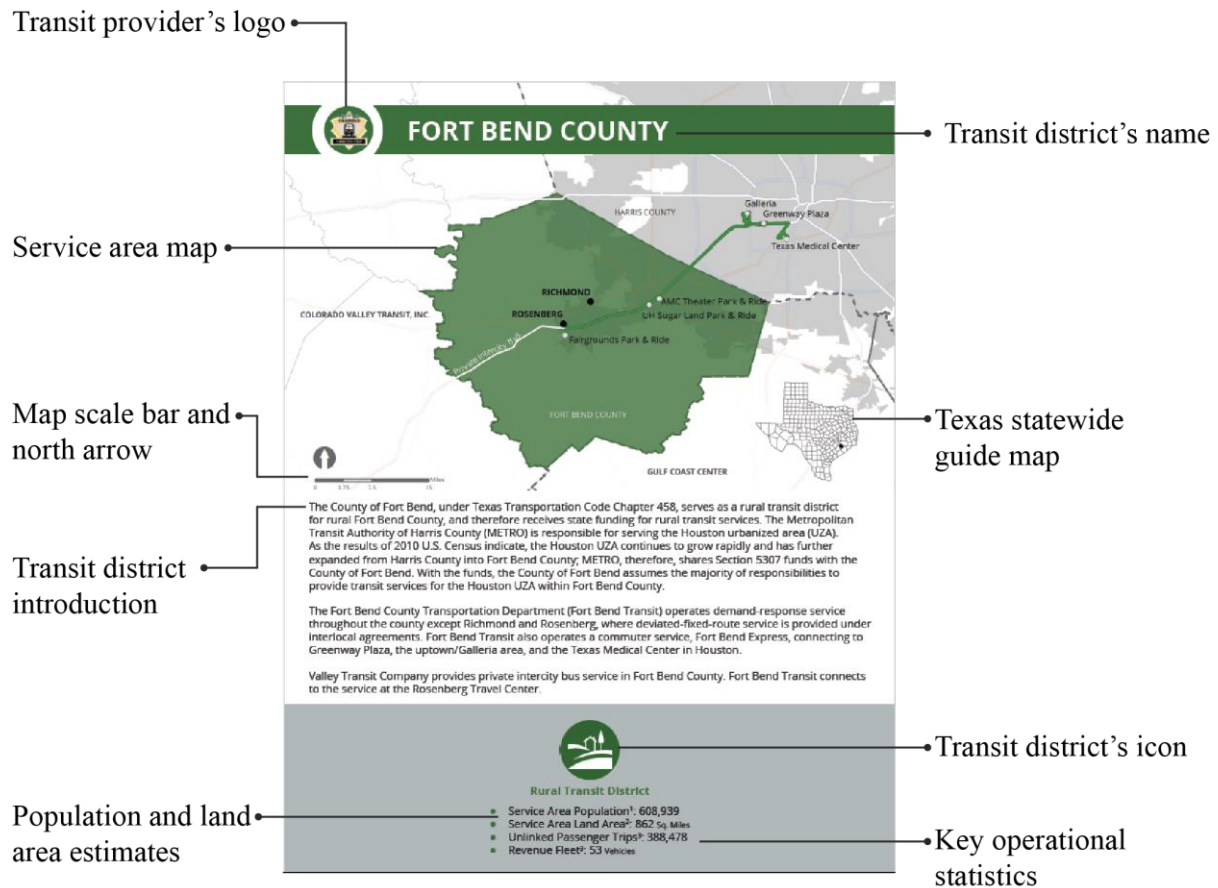
Each profile includes the following information about the respective district, in order of occurrence:

- Transit provider(s) for the transit district.
- Governance.
- Service area population and land area.
- Transit service information by mode.
- Fare structure and fare media by mode.
- Operating days and hours (excluding holidays) by mode.
- Financial status, based on TxDOT PTN-128 data.
- Performance statistics from TxDOT PTN-128 data.
- Planned projects in the coming years.

The profile format may vary depending on the category that the profile belongs to. UTD and RTD profiles are four-page documents. URTD profiles have a similar structure but with separated RTD and UTD information. If there is more than one transit provider for either RTD (such as the Galveston County Transit District) or UTD (such as the Brazos Transit District and Lower Rio Grande Valley Development Council), the URTD profile has separate information for each transit provider as well.

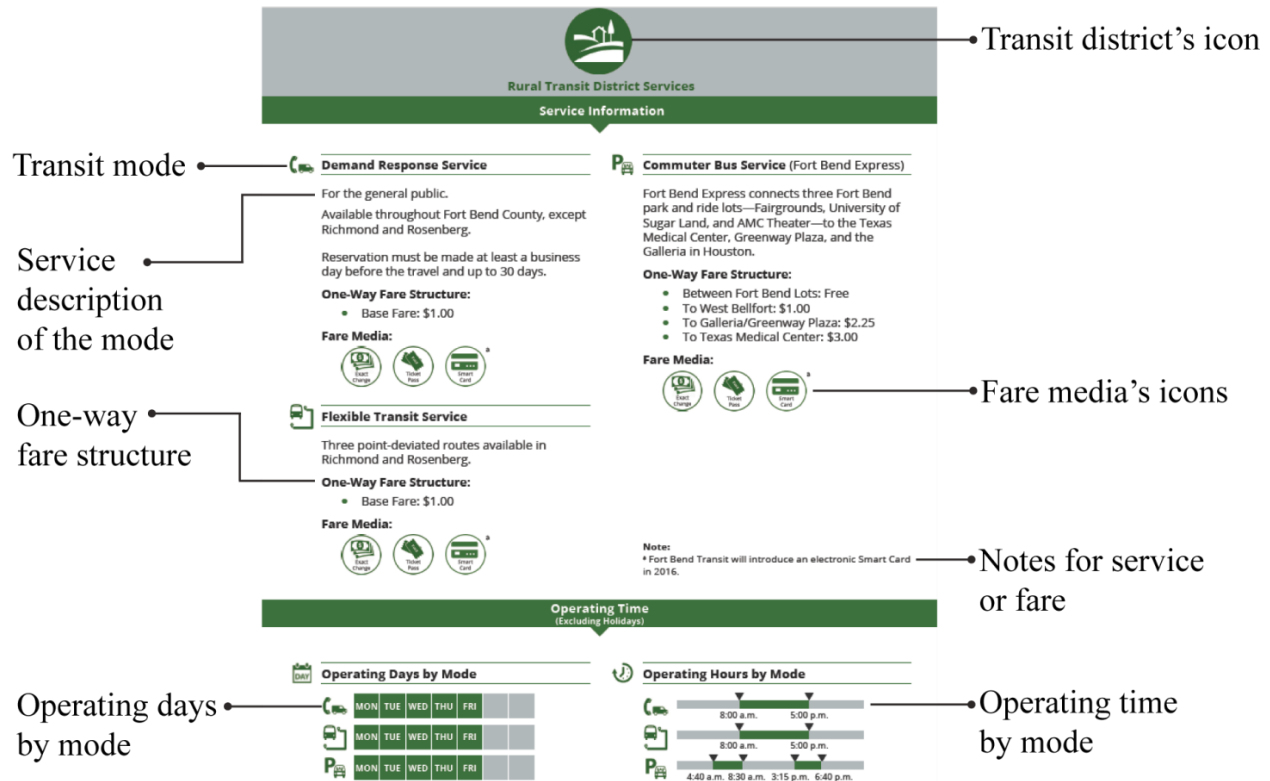
Profile content may also vary depending on the year the transit district was established and the availability of information. For example, the McLennan County Rural Transit District began service on July 1, 2015. Therefore, its financial status is based on TxDOT PTN-128 fiscal year (FY) 2015 data, while other transit districts' financial statuses are based on FY 2014 data, which was the latest data when the task began. Another example is the Senior Center Resources and Public Transit Service. The agency provides a list of project with priorities. Therefore, on page four, instead of presenting projects in the proposed 2015–2018 Statewide Transportation Improvement Plan, the profile uses the list that the agency provides.

In the following sections, TTI researchers use the Fort Bend County profile as an example to provide some tips for using the profiles and ancillary information about categorizing transit modes and submodes used in the profiles.



Page one includes a map, an introduction, and four key statistics for the transit district. The following are some tips for reading the map:

- Tips applicable to the image above and other profiles:
  - Grey areas are the U.S. Census–designated urbanized areas.
  - Color shows demand-response service.
  - A black dot means a flexible transit service is available at that location.
- Tips not applicable to the image above but applicable to other profiles:
  - A colored-line-bordered transit district does not provide demand-response service.
  - A thin black line boundary means the area is served under an interlocal agreement.
  - A black dot with a buffer means a local fixed-route service is available at that location.




Page two provides detailed service information and operating time by mode.

## TRANSIT MODE

Based on *TCRP Report 165: Transit Capacity and Quality of Service Manual, Third Edition*, TTI researchers categorized available transit services in Texas into four main modes: fixed-route transit, demand-response transit, vanpool, and water cruiser. Fixed-route transit and demand-response transit have four and five submodes, respectively. The submodes are defined in the following sections.






### Fixed-Route Transit

- **Trolley-replica bus service** ( )—rubber-tired vehicles that have an exterior designed to look like a streetcar from the early 1900s and not powered by electric current from overhead wires.
- **Local bus service** ( )—rubber-tired passenger vehicles that operate over roadways with fixed routes and schedules, typically within the city limits.
- **Regional bus service** ( )—rubber-tired passenger vehicles that operate over roadways with fixed routes and schedules, connecting two urbanized areas (UZAs) or rural areas with a UZA. The term is used to avoid confusion between this kind of service and the private intercity bus service.


- **Commuter bus service** (  )—fixed-route bus service that provides at least 5 miles of closed-door service, typically connecting outlying areas to a limited number of central city stops and typically featuring peak scheduling.

### Demand-Response Transit


Demand-response transit is a form of public transportation characterized by flexible routing and scheduling of small to medium-size vehicles operating in a shared-ride mode between pickup and drop-off locations according to passengers' needs.

- **General-public demand-response service** (  )—the demand-response service that responds to requests from the general public.
- **Limited-eligibility demand-response service** (  )— the demand-response service that responds to requests only from defined rider groups, often older adults and people with disabilities.
- **ADA paratransit service** (  )—the Americans with Disabilities Act of 1990 (ADA) requires transit agencies to provide paratransit service to eligible people with disabilities within 3/4 mile on either side of fixed-route services. Transit agencies can operate a separate ADA paratransit service and can also use the demand-response service for the general public to meet ADA paratransit requirements.
- **Flexible transit service** (  )—the service combines attributes of fixed-route, fixed-schedule service and demand-response service, including route-deviation service (also called flex route) and point-deviation service.
- **Human transportation service** (  )—human service transportation is shared-ride, advance-scheduled transportation for users and clients of human service programs, typically mixed with the demand-response service for the general public.

### Vanpool/Carpool

Vanpools/Carpools (  ) provide shared rides in vans, buses, or sedans between homes or a central location (such as a park-and-ride lot) to a regular destination. The same group of riders uses the vehicle each day; driving duties may be assigned to one of the riders (possibly in exchange for a reduced or eliminated fare or limited after-hours use of the vehicle) or rotated among the riders.

### Waterway Cruiser

Waterway cruiser (  ) provides a water connection among population destinations. Only The Woodlands Township, a transit provider of the Brazos Transit District, operates a waterway cruiser.

## FARE MEDIA

*Fare media* refers to how the trip is paid for. In addition to paying cash for each trip, the majority of transit districts offer other fare payment options. TTI researchers summarized the options and created icons for each option, which are listed as follows.



Fare is paid for each trip when boarding by the exact amount of money.



Fare is paid for each trip when boarding by a personal check.



Fare is paid for each trip when boarding by a piece paper issued by the transit agency.



Fare is paid for each trip when boarding by a piece resembling a coin issued by the transit agency.



Fare is prepaid and loaded onto the card issued by the transit agency. The card is refillable and has a chip inside that stores information.



Fare is prepaid for more than one trip without a discount.



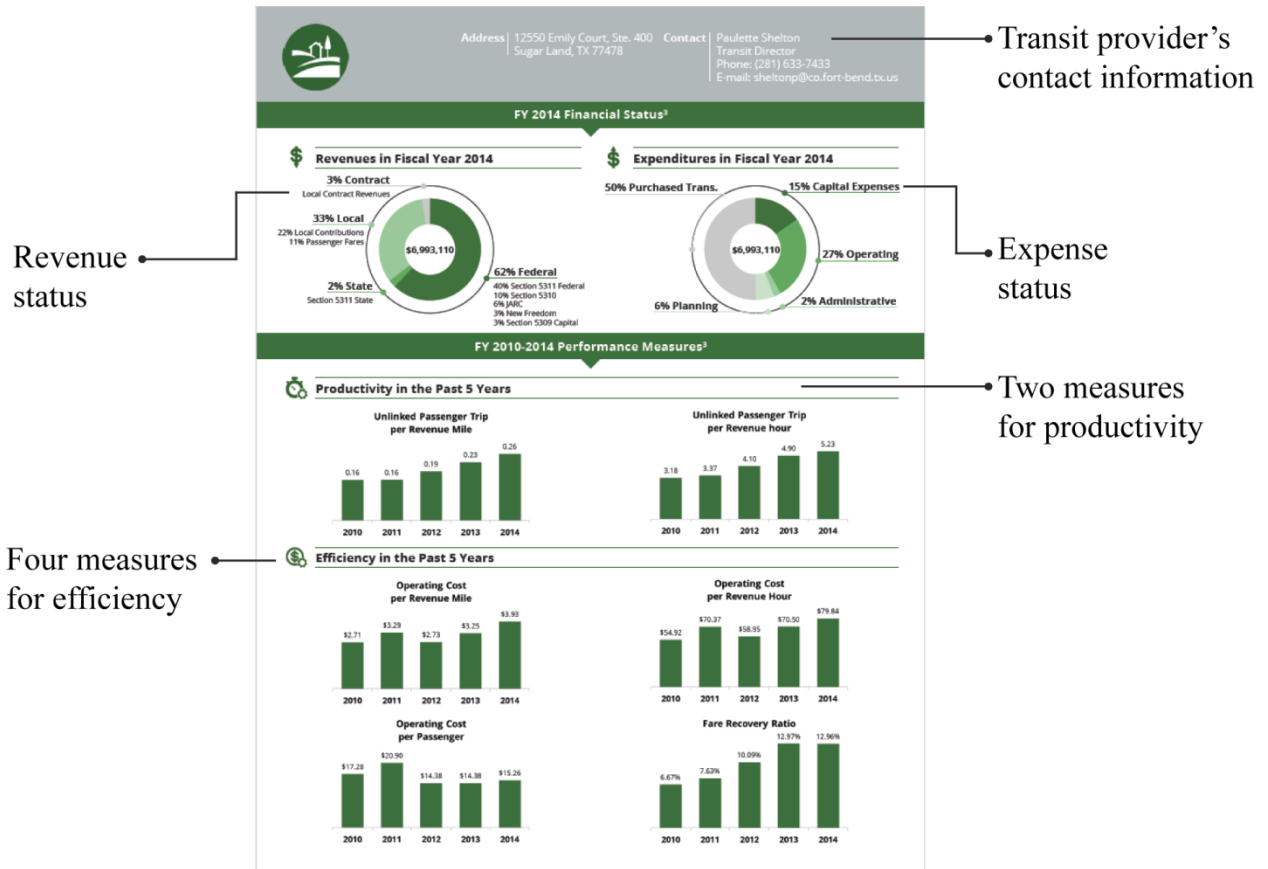
Fare is prepaid for more than one trip with a discount. The discount can be offered according to the number of trips, time period (such as daily, weekly, and monthly), and rider groups (such as seniors and people with disabilities).



Fare is prepaid for a type of transit service over a certain period.



Fare is deducted from payroll for a type of transit service over a certain period.



Page three presents financial status and performance measures.

TTI researchers select two performance measures for productivity and four performance measures for efficiency. These measures are comparable among different transit districts.

- Productivity measures:
  - Unlinked passenger trips per revenue mile = total unlinked passenger trips ÷ total revenue miles.
  - Unlinked passenger trips per revenue hour = total unlinked passenger trips ÷ total revenue hours.
- Efficiency measures:
  - Operating cost per revenue mile = total operating cost ÷ total revenue miles.
  - Operating cost per revenue hour = total operating cost ÷ total revenue hours.
  - Operating cost per passenger = total operating cost ÷ total passenger trips.
  - Fare recovery ratio = total fare revenues ÷ total operating cost.

Prioritized  
projects  
in recent years

### Projects in the 2015-2018 STIP<sup>4</sup>

| Implementation Year | Project Name   | Cost        |
|---------------------|--|-------------|
| 2015                | Acquire 6 additional large transit vehicles (Phase 1) for express services from Westpark (P & R)   | \$549,566   |
| 2015                | Construct Transit O&M Facility Adjacent To The Ft Bend County Fairgrounds P&R To Support Express Bus, Vanpool, Circulator, Connector & Social Services Vehicles Operations | \$7,600,000 |
| 2016                | Acquire 12 Small To Medium Size Transit Vehicles For County-Wide Demand Response Services  | \$1,115,262 |

Data sources

Information  
validity

TTI's logo

#### Data Sources:

1.U.S. Census Bureau, American Community Survey 2009-2013 5-Year Estimates.  
2.U.S. Census Bureau, 2013 TIGER/Line Shapefiles: Places.  
3.Texas Department of Transportation, Public Transportation Division PTN-128 Fiscal Year 2014 data.  
4.Texas Department of Transportation, Proposed 2015-18 District Statewide Transportation Improvement Programs.

Last Updated Date:  
December 18, 2015



TxDOT's logo

Page four provides information about prioritized projects, data sources, and the date the profile was last updated.