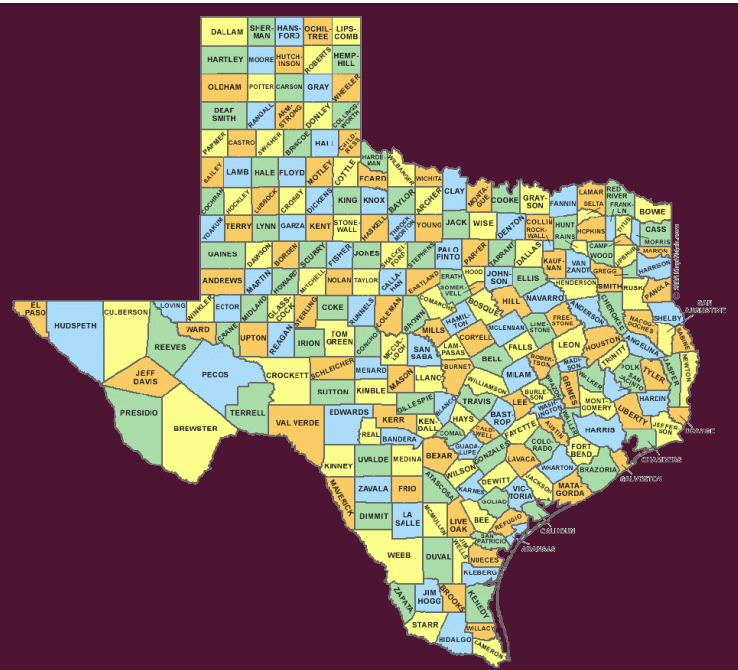
MODULE 1: FUNDING TRANSIT IN TEXAS



LEARNING OBJECTIVES

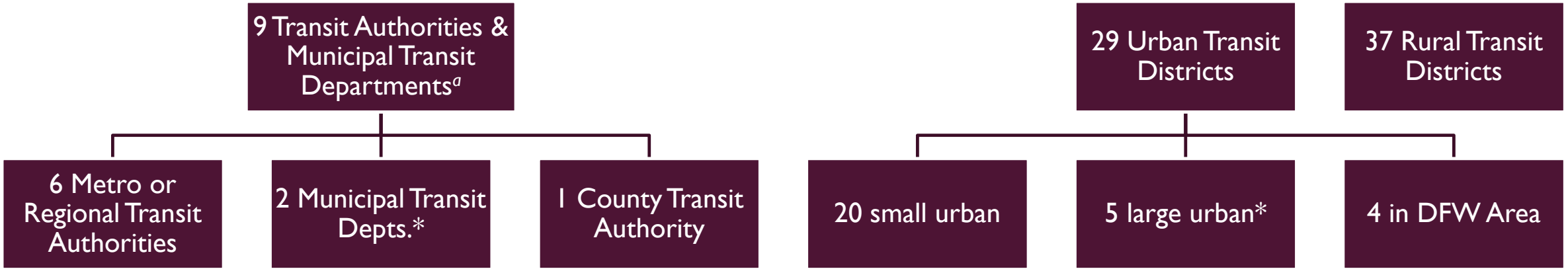
By the end of this module, you should be able to:

- **Explain the categories of public transportation systems in Texas.**
- **Recall the state laws establishing and governing transit in Texas.**
- **Describe some key facts regarding public transportation in Texas.**
- **List the main sources of funding for transit.**

TRANSIT SYSTEMS IN TEXAS

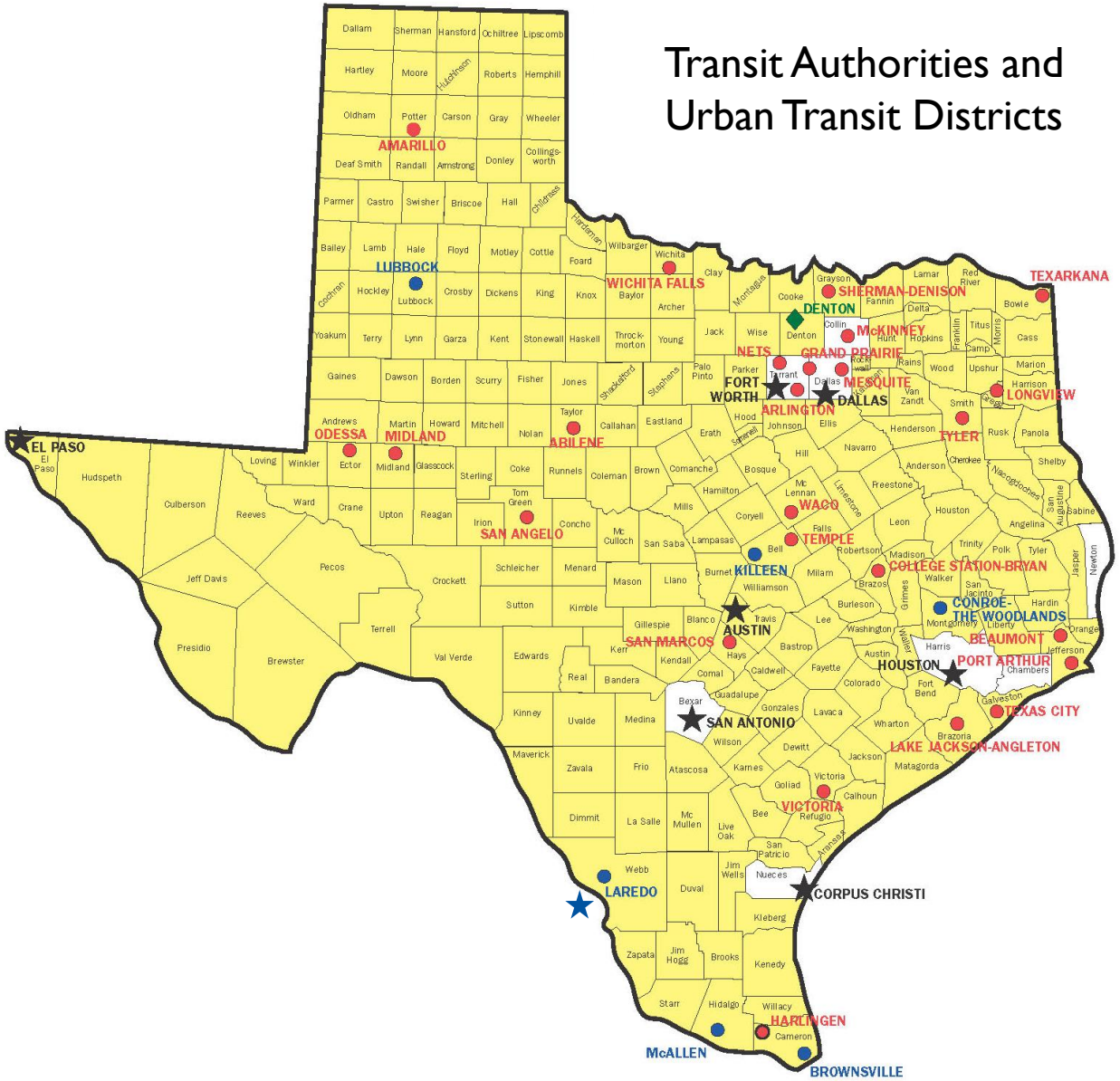
- Transit Authorities and Municipal Transit Departments
- Urban Transit Districts
  - Small urban (urbanized area <200K population)
  - Large urban (urbanized area ≥ 200K population)
- Rural Transit Districts

TRANSIT SYSTEMS IN TEXAS



*Laredo is counted as a municipal transit department in this illustration.

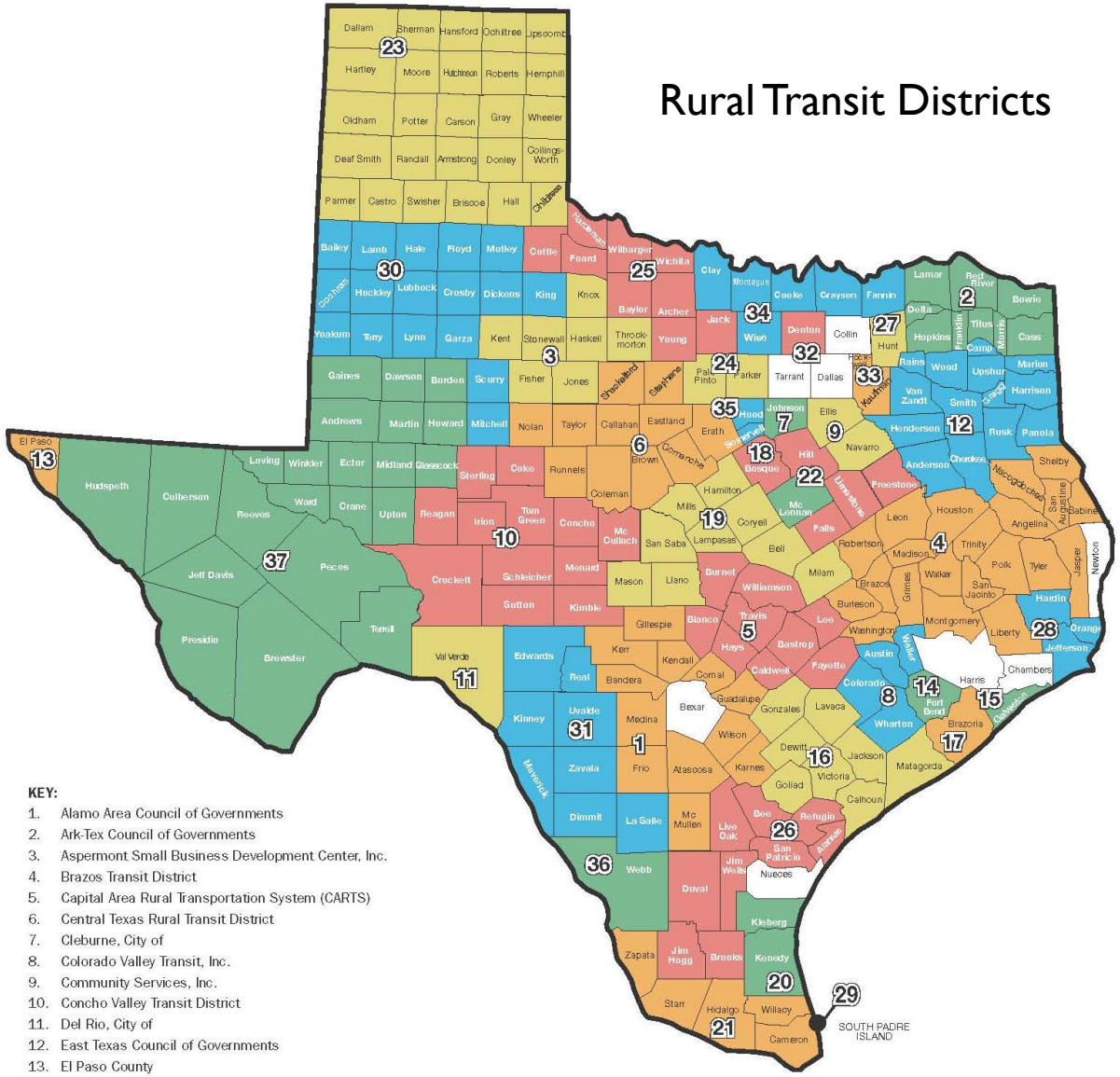
Transit Authorities and Urban Transit Districts



★ Cities by metropolitan transportation authorities
◆ Cities/Counties served by coordinated county transportation authority
● Cities served by large urban area transit districts
● Cities served by small urban area transit districts
□ Counties served by rural transit districts

October 2017

Rural Transit Districts

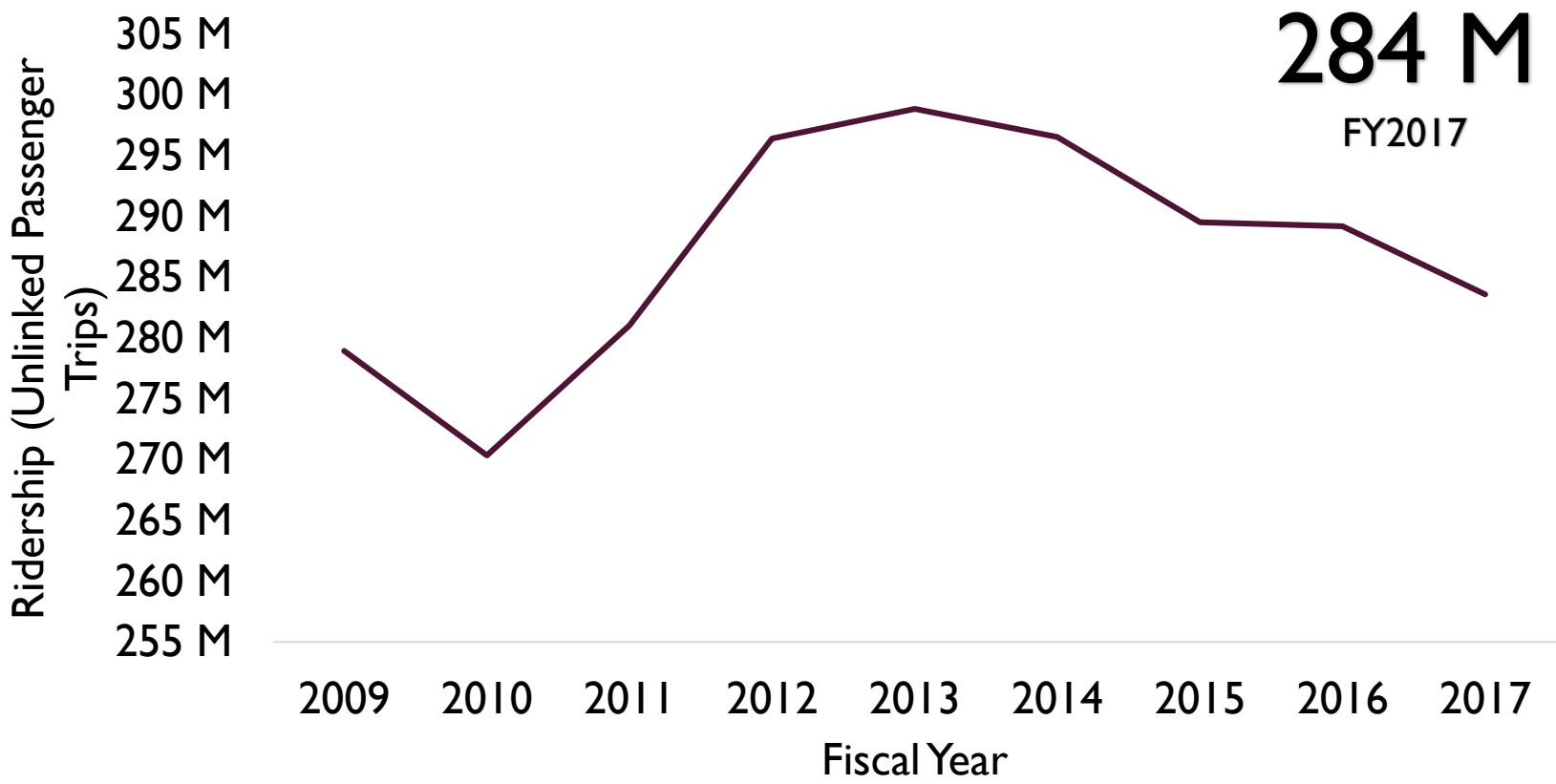


KEY:

1. Alamo Area Council of Governments
2. Ark-Tex Council of Governments
3. Aspermont Small Business Development Center, Inc.
4. Brazos Transit District
5. Capital Area Rural Transportation System (CARTS)
6. Central Texas Rural Transit District
7. Cleburne, City of
8. Colorado Valley Transit, Inc.
9. Community Services, Inc.
10. Concho Valley Transit District
11. Del Rio, City of
12. East Texas Council of Governments
13. El Paso County
14. Fort Bend County
15. Galveston County Transit District
16. Golden Crescent Regional Planning Commission
17. Gulf Coast Center
18. Heart of Texas Council of Governments
19. Hill Country Transit District
20. Kleberg County Human Services
21. Lower Rio Grande Valley Development Council
22. McLennan County Rural Transit District
23. Panhandle Community Services
24. Public Transit Services
25. Rolling Plains Management Corporation
26. Rural Economic Assistance League, Inc.
27. Senior Center Resources & Public Transit, Inc.
28. South East Texas Regional Planning Commission
29. South Padre Island, City of
30. South Plains Community Action Association, Inc.
31. Southwest Area Regional Transit District
32. SPAN, Inc.
33. STAR Transit
34. Texoma Area Paratransit System, Inc.
35. The Transit System, Inc.
36. Webb County Community Action Agency
37. West Texas Opportunities, Inc.

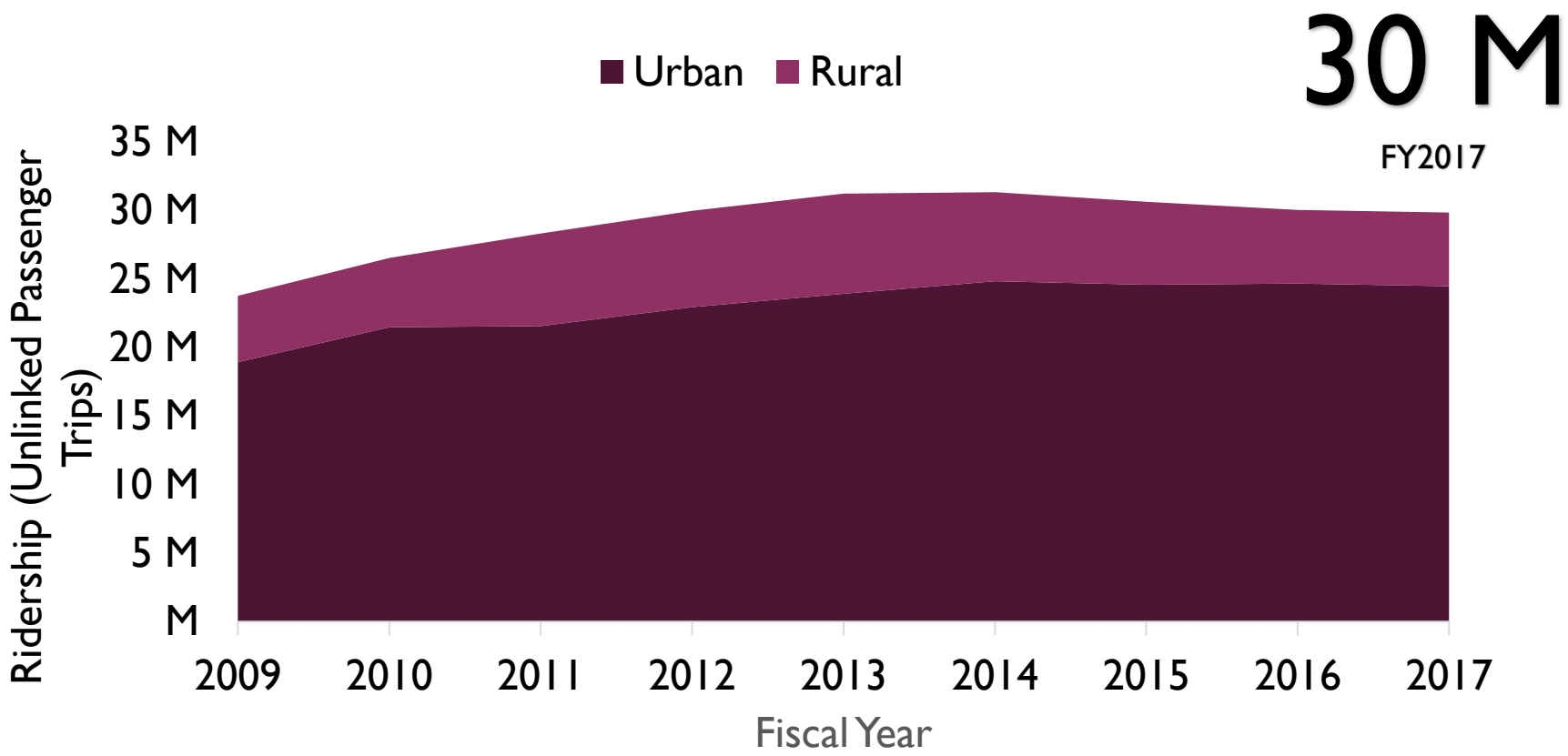
October 1, 2017

TOTAL TEXAS UNLINKED PASSENGER TRIPS



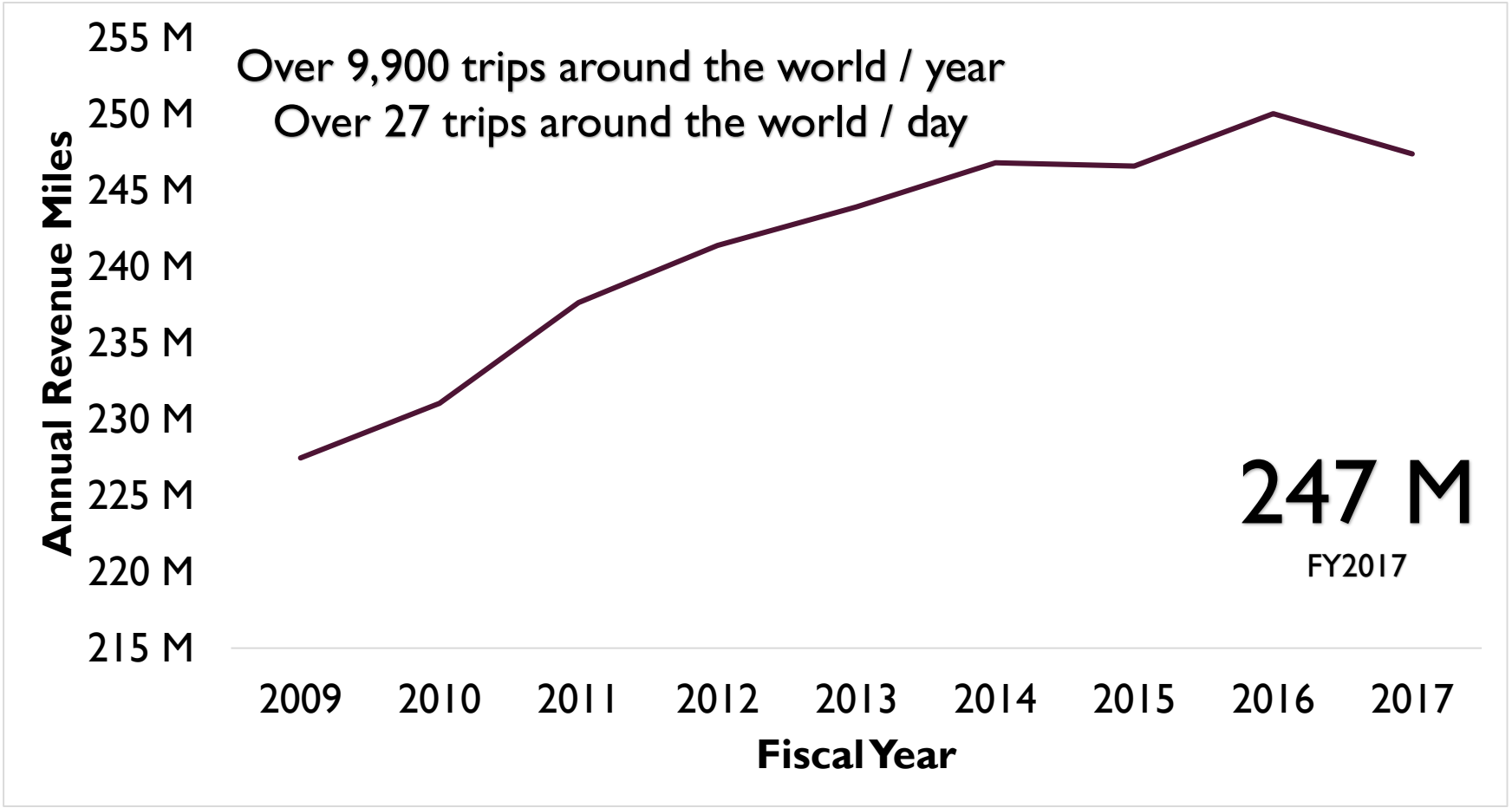
Source: PTN-128.

UNLINKED PASSENGER TRIPS AT STATE-FUNDED TRANSIT DISTRICTS



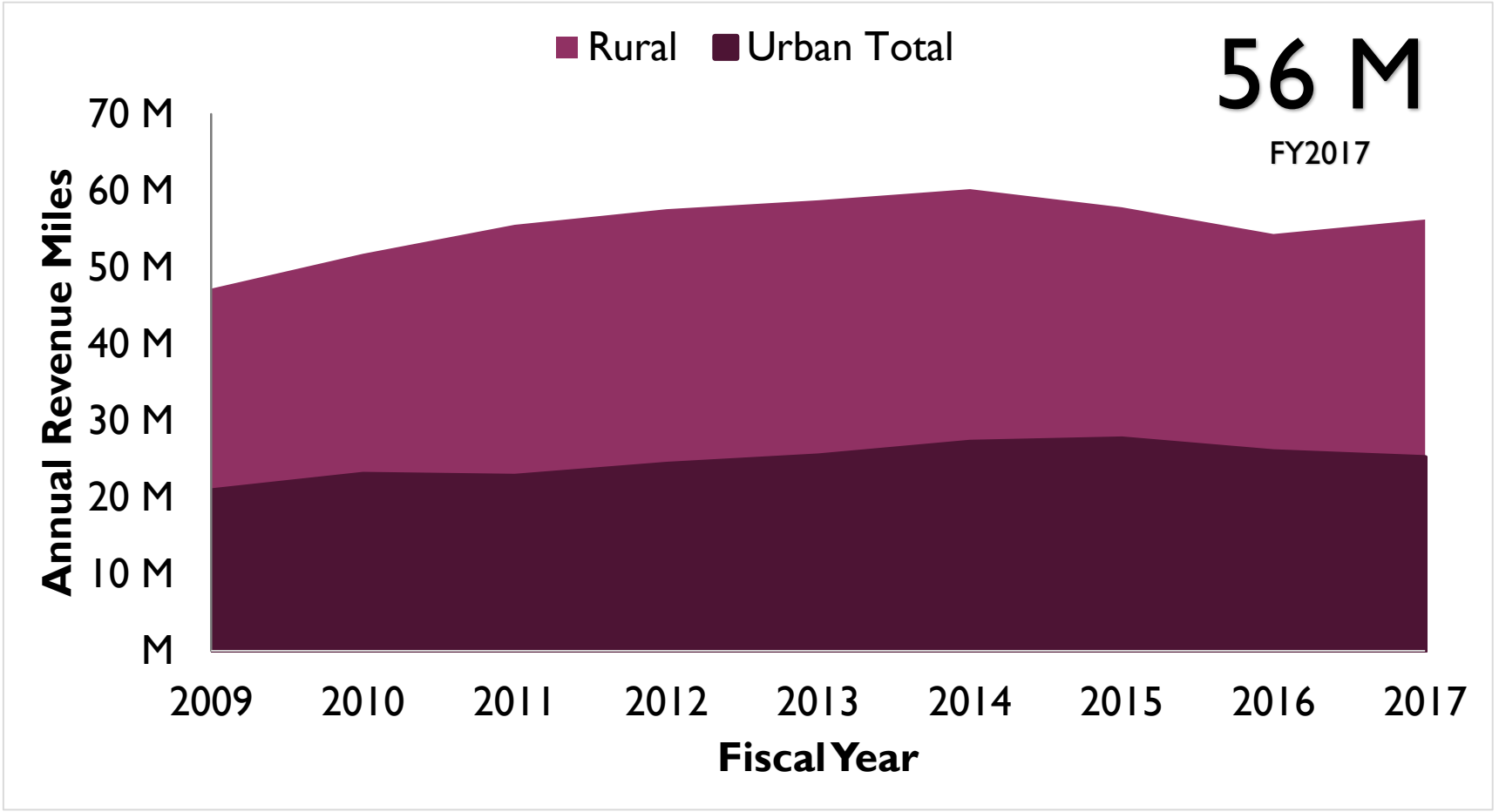
Source: PTN-128.

TOTAL TEXAS VEHICLE REVENUE MILES



Source: PTN-128.

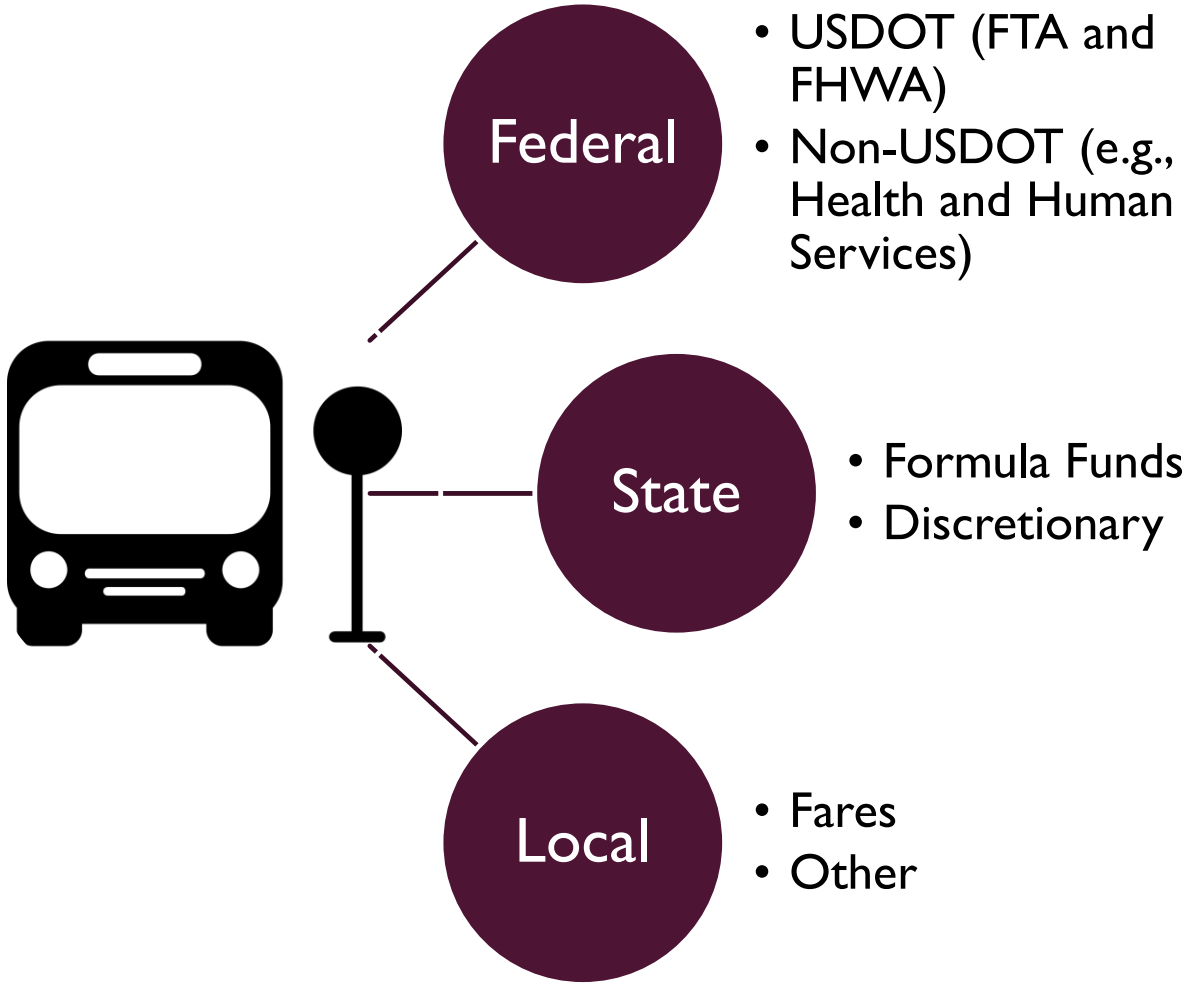
REVENUE MILES AT STATE FUNDED TRANSIT **DISTRICTS**



HOW TRANSIT IS FUNDED

A BRIEF OVERVIEW

SOURCES OF FUNDING FOR TRANSIT



SOURCES OF APPLIED REVENUES IN TEXAS (*IN MILLIONS*)

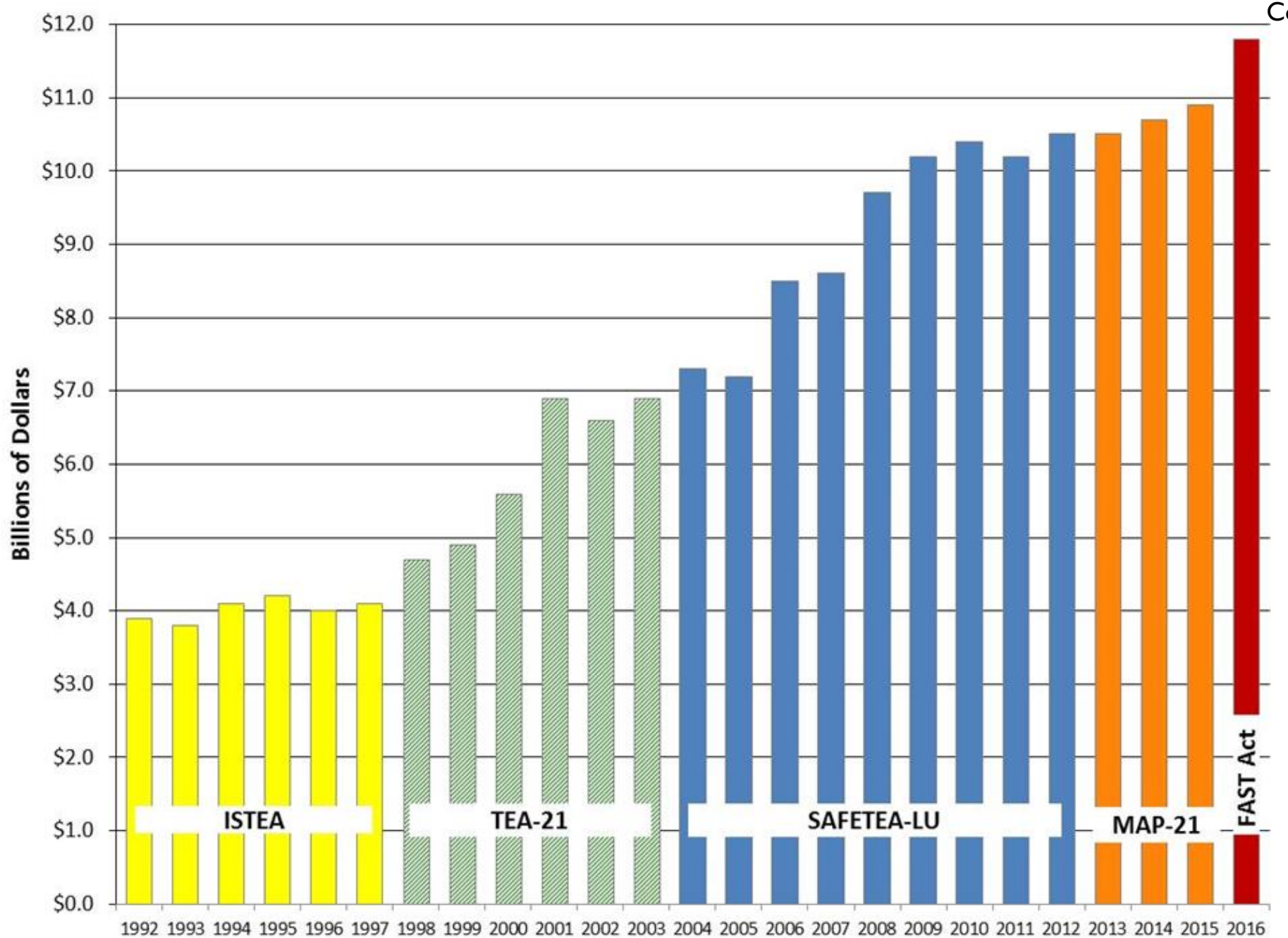
Sources of Applied Revenues	Transit Authorities* (8)		Urban Transit Districts* (30)		Rural Transit Districts (37)	
	Revenues	% Total Revenues	Revenues	% Total Revenues	Revenues	% Total Revenues
Federal FTA	$286.6 M	11%	$69.2 M	47%	$62.8 M	52%
Other Federal	$0	0%	$5.5 M	4%	$10.5 M	9%
State	$43.5 M	2%	$9.9 M	7%	$21.3 M	18%
Local Including Fares	$2,299.8 M	87%	$63.5 M	43%	$26.3 M	22%
Total Revenue	$2,629.9 M	100%	$148.3 M	100%	$120.9 M	100%
% State Total	91%		5%		4%	

*Laredo is as an urban transit district in this table.

ABRIDGED HISTORY OF **FEDERAL** SUPPORT FOR TRANSPORTATION

- Federal support of transportation began in 19th century with the creation of the transcontinental railroad.
- Total federal funding is 14% of revenue for Texas transit and 49% for Texas state-funded transit districts (FY2017)*.
- Can you name the last 5 surface transportation authorization bills, including the FAST Act, and their years in effect?
- More info in **Module 2.**

*Source: PTN-128 FY2017 Data.



Source: Federal Transit Administration

TEXAS **FEDERAL** FUNDING COMPARED TO OTHER STATES

- Texas ranked 20th in Federal funds for transit per capita ($23.13) in FY2015*
- States with highest Federal funds for transit per capita in 2015
  - Hawaii
  - New York
  - New Jersey
  - Connecticut
  - Alaska

*Source: *AASHTO Survey of State Funding for Public Transportation–FY 2015 Data*

TEXAS **STATE** FUNDING FOR TRANSIT

- State funding accounted for 7% of Texas-wide and 18% of rural and urban transit districts (FY2017)*.
- State formula funds are limited to rural and urban transit districts that DO NOT have a local sales tax.
  - *Except Laredo, which has a local sales tax AND receives state funds.*
- State discretionary funds can be allocated to any legally recognized recipient.
- Texas also passes some federal funds (*not the same as state funds*) to subrecipients in the state (e.g., rural transit districts).
- **More info in Module 3**

*Source: PTN-128 FY2017 Data.

TEXAS **STATE** FUNDING FOR TRANSIT

- Legal authority provided:
  - **Texas Transportation Code, Chapter 456**: Texas Transportation Commission to allocate state and federal funds.
  - **Texas Transportation Code, Chapter 458**: Establishes urban and rural transit districts as eligible to receive funds.
  - **Texas Administrative Code, Title 43 Transportation, Part 1, Chapter 31 Public Transportation**: Establishes administrative procedures for allocating funds, including the state funding formula.
- Link to Administrative Code: http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=43&pt=1&ch=31
- Link to Transportation Code: http://www.statutes.legis.state.tx.us/

TEXAS **STATE** FUNDING FOR TRANSIT COMPARED TO OTHER STATES

- Texas ranked 35th in State funding for transit per capita ($1.11) in FY2015*
- States highest per capita
  - Illinois
  - Alaska
  - Massachusetts
  - New York
- Several states do not fund transit at all
  - Alabama
  - Arizona
  - Hawaii
  - Nevada
  - Utah

*Source: *AASHTO Survey of State Funding for Public Transportation–FY 2015 Data*

LOCAL FUNDING FOR TRANSIT

- Accounted for 82% of Texas-wide and 33% of urban and rural transit district revenue (FY2017)*.
- Important!
  - Local match requirements.
  - Needed for operating and capital expenses.
- Examples
  - Transit fares (not eligible as match for federal grants)
  - Revenue from contracts for service
  - Local government funds from general revenues
  - Advertising revenue
  - Donations
- **More info in Module 4**

*Source: *PTN-128 FY2017 Data.*

DISTRIBUTION OF **LOCAL REVENUE** SOURCES

Sources of Local Revenues	Transit Authorities* (8)		Urban Transit Districts* (30)		Rural Transit Districts (37)	
	Revenues	% Local Revenues	Revenues	% Local Revenues	Revenues	% Local Revenues
Fares	$187,035,220	8%	$13,649,919	21%	$4,703,447	18%
Local Contributions (Cash)	$19,577,903	1%	$23,872,060	38%	$9,347,483	36%
Contributed Services (Non-Cash)	$0	0%	$9,256,186	15%	$1,874,323	7%
Sales Tax Dedicated to Transit	$1,983,843,962	86%	$7,287,381	11%	$0	0%
Auxiliary Transit Revenues	$24,278,699	1%	$1,227,419	2%	$95,169	0%
Other Transportation Revenues	$5,149,834	0%	$634,196	1%	$6,902	0%
Non-Transit-Related Revenues	$69,375,385	3%	$1,873,357	3%	$203,509	1%
Other Contracts	$10,531,355	0%	$5,723,865	9%	$10,071,223	38%
Total Revenues	$2,299,792,358	100%	$63,524,383	100%	$26,302,056	100%

**Laredo counted as urban transit district.*
Source: PTN-128 FY2017 Data.

REVIEW

- What are the types of transit agencies in Texas?
- What makes the agencies different from each other?
- How would you describe transit ridership trends?
- What are the three main sources of revenue for transit?

MODULE 2

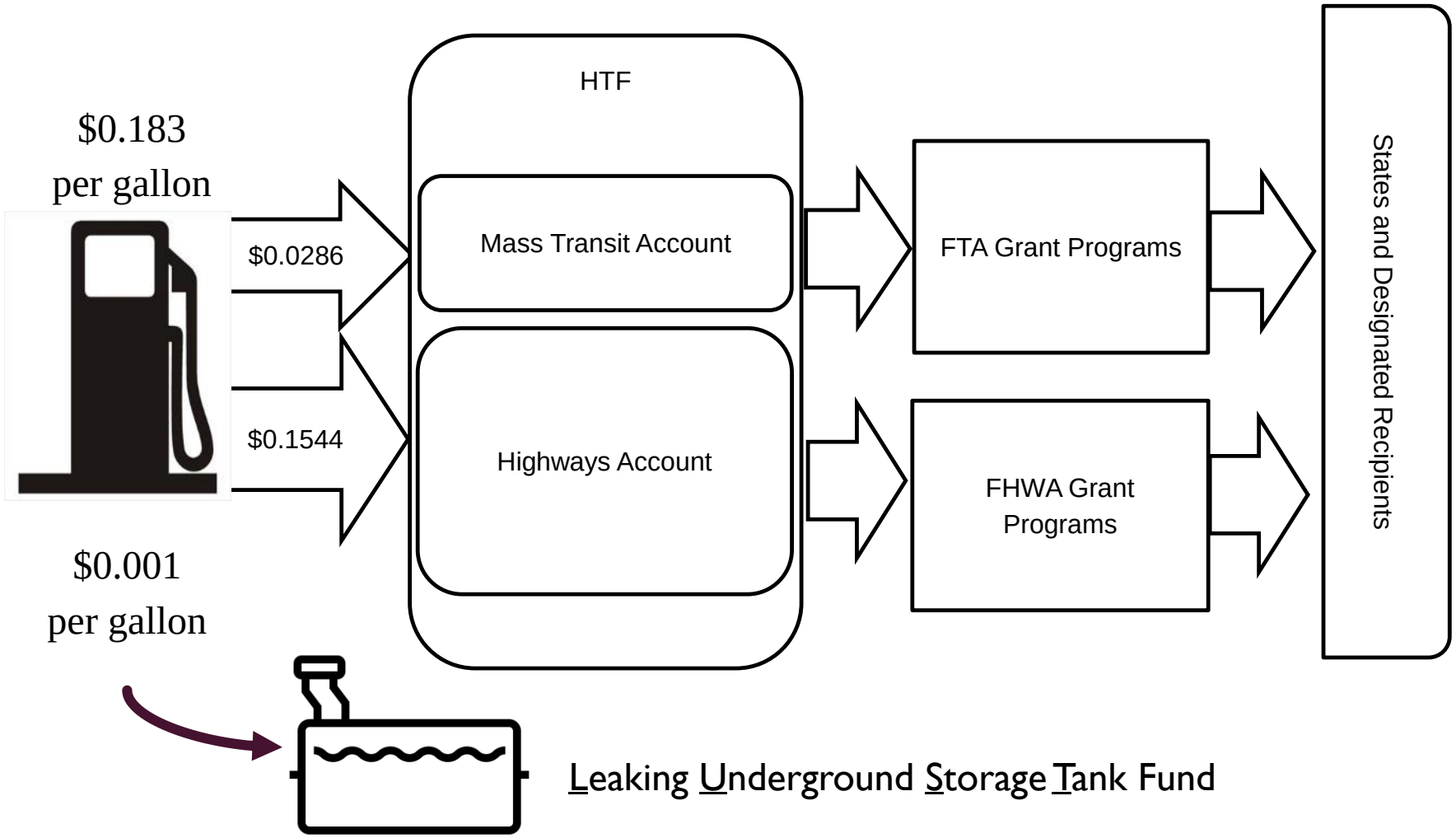
FEDERAL FUNDING PROGRAMS FOR TRANSIT

LEARNING OBJECTIVES

By the end of this module, you should be able to:

- State the responsibilities of a designated recipient for FTA grant programs and describe differences in the responsibilities of a direct recipient and a subrecipient.
- Identify the eight primary FTA federal grant programs that fund transit in Texas and describe the purpose and eligible recipients for each.
- Locate additional information for each FTA federal grant program.
- Identify the sources of USDOT and non-USDOT funds for transit and describe possible eligible projects.
- Understand FTA funding for transit systems in Texas.

MAIN SOURCE OF FEDERAL REVENUE: THE GAS TAX



FEDERAL FUNDING PROCESS

- Authorization
- Revenue Collection
- Annual Appropriation
- FTA Apportionments & Allocations

http://prezi.com/lkpbuewo3au4/?utm_campaign=share&utm_medium=copy&rc=ex0share

FTA FUND RECIPIENT TERMINOLOGY

Terms

- Designated Recipient.
- Direct Recipient.
- Subrecipient.

Types of Entities Recognized by Feds

- STATES
- Urban Areas
  - Large Urban Areas (Population ≥ 200K)
  - Small Urban Areas (50-199K)
- Rural Areas (<50K)

DIRECT RECIPIENTS AND SUBRECIPIENTS

- A designated recipient may authorize another public agency to be a Direct Recipient for §5307
  - One-time basis or at the time of each application submission
- Under the FAST Act, a state or local governmental entity that operates a public transportation service and is eligible to receive direct grants under §5307 or §5311 is eligible to be a direct recipient for §5339 funds
  - TxDOT elects to serve as the §5339 designated recipient for all areas under 200,000 in population
- A Designated Recipient or Direct Recipient may choose to pass its grant funds through to another agency (Subrecipient) to carry out the purposes of the grantee's agreement with FTA.
  - Does not relieve the grantee of its responsibilities to carry out the terms and conditions of the grant agreement

URBANIZED AREAS

Large Urbanized Areas (≥200K)

- FTA grant funds (e.g., §5307) apportioned and flow directly to locally-selected **designated recipient** for the UZA.
- UZA designated recipient must be
  - Public body
  - Have legal authority to receive and dispense federal funds

Small Urbanized Areas (<200K)

- FTA funds are apportioned to **state governor** for distribution.

EXAMPLES OF URBANIZED AREAS IN TEXAS

Large Urbanized Areas (≥200K)

- Dallas-Fort Worth-Arlington UZA has 3 designated recipients
  - Dallas Area Rapid Transit (DART)
  - Fort Worth Transportation Authority (Trinity Metro)
  - North Central Texas Council of Governments
- San Antonio has 1 designated recipient
  - VIA Metropolitan Transit

Small Urbanized Areas (<200K)

- TxDOT is the **designated recipient** of funds (e.g., §5307). *Designated by the governor.*
- TxDOT has designated the small urban transit districts to be **direct recipients** for federal grants (e.g., §5307 and §5339).

Microsoft Excel Worksheet

RURAL AREAS

Basics

- FTA funds (e.g., §5311) apportioned to each state's **designated recipient** to allocate to state's rural areas.

In Texas…

- TxDOT is the **designated recipient** for rural areas.
- TxDOT allocates FTA funds to rural **sub-recipients** (i.e., rural transit districts).
  - $20.1 M of §5311 funds allocated by formula
  - Remaining funds awarded by discretionary and allocation by % of total rural transit district vehicle miles.

Microsoft Excel Worksheet

FAST ACT HIGHLIGHTS

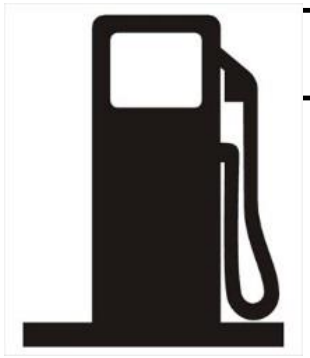
FIXING AMERICA'S SURFACE TRANSPORTATION ACT (FAST ACT)

- Five Year Authorization (FY2016 through FY2020)
  - $11.8 billion in 2016.
  - $12.2 billion in 2017.
  - Increasing to $12.6 billion by 2020.
- Represents $61.1 billion in authorized federal funds for public transportation over five years.

MAJOR FAST ACT FEATURES

- Continues MAP-21 emphasis on Safety and Transit Asset Management
- Funding Increases for State of Good Repair & Buses
- Re-Introduces a Discretionary Bus Program
- Increases Buy America requirements to 70% by 2020

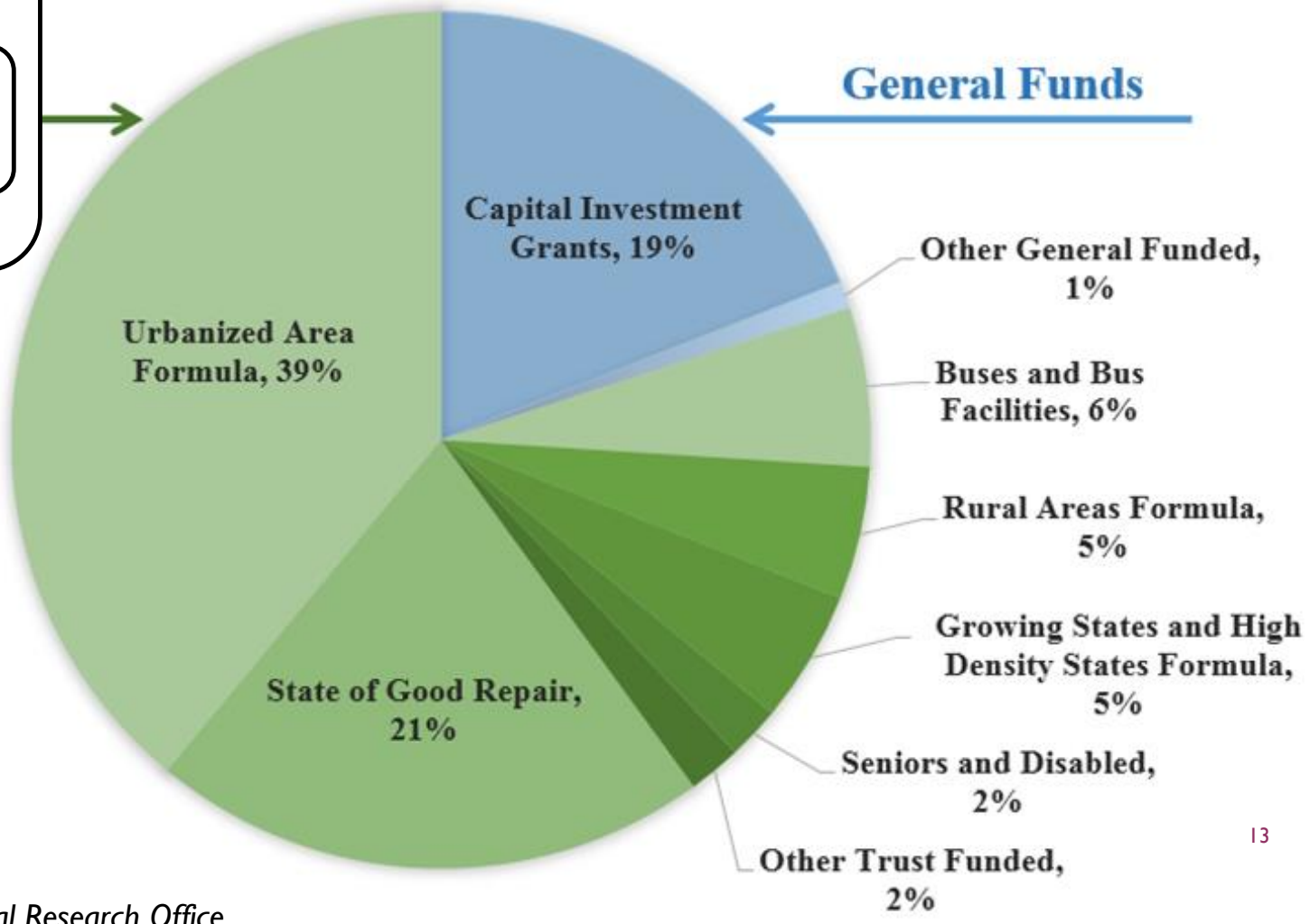
FAST ACT FUNDING DETAILS



$0.0286

HTF

Mass Transit Account

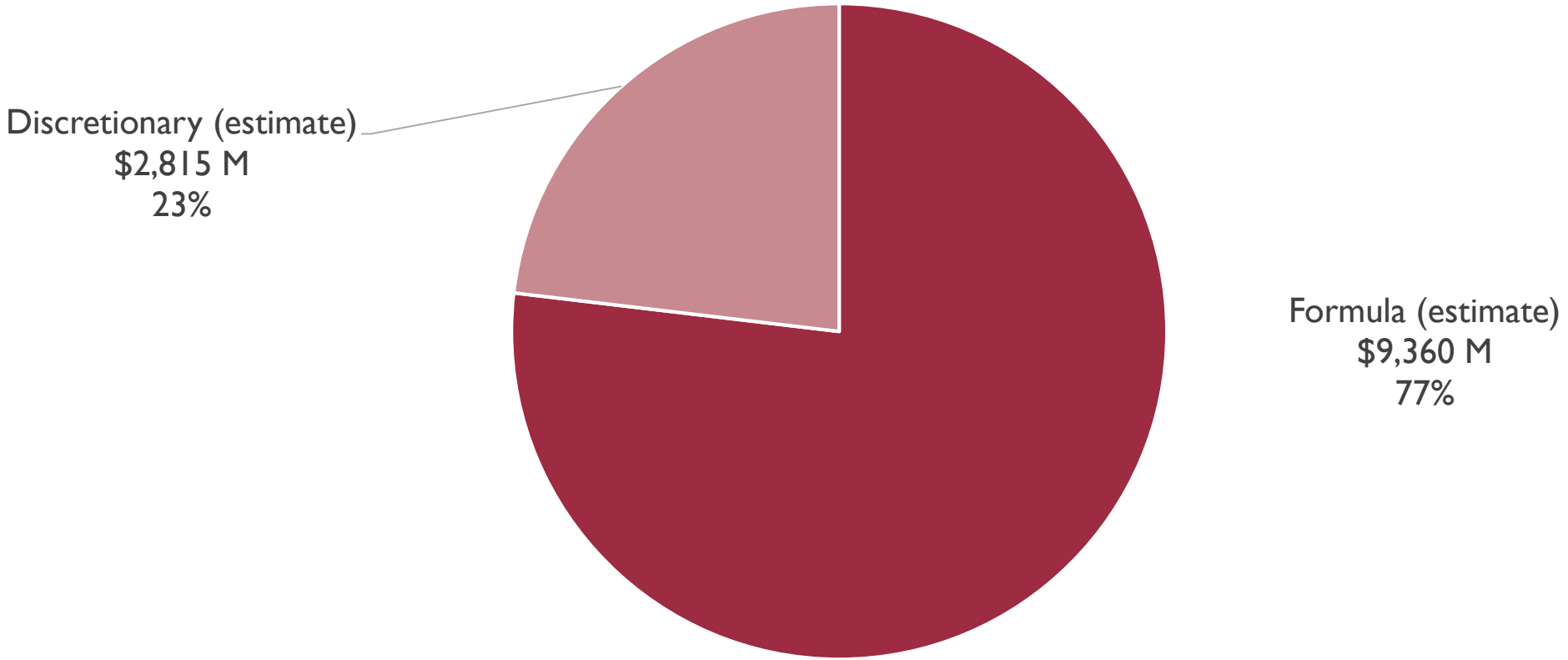


Source: FTA as presented by the Congressional Research Office.

HOW IS THE FAST ACT DIFFERENT FROM MAP-21?

- ***New Programs***
  - Bus and Bus Facilities Discretionary Grants §5339(b) (*reestablished*)
  - Expedited Project Delivery for Capital Investment Grants Pilot Program (subsection of 3005[b] of FAST Act) (*FTA has not recommended any projects for funding*)
  - Pilot Program for Innovative Coordinated Access and Mobility (subsection of 3006[b] of FAST Act)
- ***Consolidated Programs***
  - Public Transportation Innovation (§5312)
  - Technical Assistance and Workforce Development (§5314)

FORMULA VS. DISCRETIONARY



Source: Adapted from FAST Act Estimated Program Totals for FY2017.

CLASS EXERCISE

- Teams
- FTA Grant Program
  - Recipients
  - Eligible activities
  - Federal share
  - Other info (e.g., changes under FAST), special rules, etc.

FTA FUNDING PROGRAMS THAT SUPPORT TRANSIT IN TEXAS

- Sections 5303-5305 Metropolitan, Statewide, or Nonmetropolitan Planning
- Section 5307 Urbanized Area Formula Program
- Section 5309 Capital Investment Grants
- Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities
- Section 5311 Rural Areas Formula Program
- Section 5337 State of Good Repair
- Section 5339 Buses and Bus Facilities
- Section 5340 Growing States and High-Density States Formula Program

5303, 5404, 5305 METROPOLITAN, STATEWIDE, OR NONMETROPOLITAN PLANNING

Recipients

- State DOTs and MPOs

Eligible Activities

- PLANNING ACTIVITIES THAT
- Increase the safety and security of the transportation system
- Increase the accessibility and mobility of people
- Protect and enhance the environment, improve the quality of life
- Enhance the integration, connectivity, and preservation of the transportation system

Federal Share

- Maximum 80%

Changes under FAST

- Requires MPOs and states to establish performance targets that address national performance measures

5307 URBANIZED AREA FORMULA PROGRAM

Recipients

- Transit agencies in urbanized areas

Eligible Activities

- Planning, engineering, design, and evaluation of transit projects
- Capital investments in bus and bus-related activities; fixed-guideway
- JARC projects for welfare recipients and low-income workers
- For urbanized areas with populations less than 200,000, operating assistance

Federal Share

- Maximum 80% for Capital and 50% for Operating; 90% for the vehicle-related equipment attributable to compliance with the ADA, Clean Air Act, projects related to bicycles

Changes under FAST

- Increased spending cap for ADA paratransit service to 20% of apportionment at 80% federal
- Allows up to .5% of funds to be used for workforce development
- See SPECIAL RULE and STIC on following slides

5307 URBANIZED AREA FORMULA PROGRAM

- Special Rule
- Transit systems in large urbanized areas that operate 100 or fewer buses in fixed-route services during peak periods may use Section 5307 funds for operating
- The FAST Act expanded the eligible modes to include fixed-route and demand-responsive transit, excluding ADA complementary paratransit
- Federal operating assistance requires a 50% local match.
  - Between 76 and 100 buses may use up to 50% of the attributable share
  - 75 or fewer buses may use up to 75% of the attributable share
  - Attributable share refers to the share of the urbanized area's apportionment that is attributable to a transit system based on the transit system's share of vehicle revenue hours in the urbanized area.
- Public transportation systems within the urbanized area may agree to allocate funds by a method other than by measuring vehicle revenue hours

5307 URBANIZED AREA FORMULA PROGRAM

- Small Transit Intensive Cities (STIC)
- For Small Urban transit systems that operate at a level of service equal to or above the industry average level of service for all urbanized areas with a population of at least 200,000 but not more than 999,999.
- FTA allocates STIC funds: 1.5% of Section 5307 in FY2016, increasing to 2% in FY2019
- Based on level of service and performance in one or more of six categories:
  - Passenger miles traveled per vehicle revenue mile,
  - Passenger miles traveled per vehicle revenue hour
  - Vehicle revenue miles per capita,
  - Vehicle revenue hours per capita
  - Passenger miles traveled per capita
  - Passengers per capita

5307 – HOW DOES THE FORMULA WORK?

- **Small UZAs** (50,000 to 199,999 population) formula is based on:
  - Population and population density.
- **Large** UZAs (populations of 200,000 and more) formula is based on:
  - Population and population density.
  - Bus revenue vehicle miles.
  - Bus passenger miles.
  - Bus operating cost.
  - Fixed-guideway revenue vehicle miles, and fixed-guideway route miles
- FTA apportions 3.07 percent of the §5307 funds to urbanized areas based on the ratio of the number of low-income individuals in each urbanized area to the total number of low-income individuals in all urbanized areas of that state.

Formula flowchart: https://www.transit.dot.gov/funding/apportionments/section-5307-urbanized-area-formula-program

5309 CAPITAL INVESTMENT GRANTS

Recipients

- State and local governments, including transit

Eligible Activities

- **New Starts:** Total estimated capital cost more than $300 million or requesting more than $100 million in 5309 funds
- **Small Starts:** Total estimated capital cost less than $300 million or requesting less funds at $100 million in 5309 funds
- **Core Capacity**: projects that expand capacity of existing fixed guideway corridors
- Any combination of two

Federal Share

- Maximum 60% for New Starts; 80% for Small Starts

Changes under FAST

- HOV/HOT lanes no longer qualify as fixed-guideway
- BRT corridor project must have separated right-of-way to qualify as New Starts

5310 ENHANCED MOBILITY OF SENIORS AND INDIVIDUALS WITH DISABILITIES

Recipients

- Large UZAs
- States
- Direct recipients

Eligible Activities

- At least 55% funds must be used on capital or "traditional" projects
  - Buses and vans, wheelchair lifts, technology systems, etc.
- Remaining is for additional "traditional" or other "nontraditional" projects
- Projects selected for funding must be included in a locally developed, coordinated public transit–human services transportation plan

Federal Share

- Maximum 80% for Capital and 50% for Operating.
- Purchase of service is eligible for 80%.

Changes under FAST

- Includes activities under the former 5317 New Freedom Program
- New discretionary pilot program for innovative coordinated access and mobility.

5311 NON-URBANIZED AREA (RURAL) FORMULA PROGRAM

Recipients

- States
- Federally recognized tribes

Eligible Activities

- Planning, capital, and operating projects
- JARC projects for welfare recipients and low-income workers
- Each state must spend no less than 15% of its annual apportionment for intercity bus transportation – remaining funds are apportioned

Federal Share

- Maximum 80% for Capital and 50% for Operating
- 80% for ADA paratransit service (up to 20% of apportionment).

Changes under FAST

- Includes activities under former 5316 JARC
- Revenue from sale of advertising and concessions may now be used as local match
- Costs of private intercity bus service connecting feeder service can be used in-kind local match for intercity bus projects

5311 – HOW DOES THE FORMULA WORK?

- Apportionments to States
  - Each state must spend no less than 15 percent of its annual apportionment for the development and support of intercity bus transportation, unless it can certify, after consultation with affected intercity bus service providers, that the intercity bus service needs of the state are being met adequately (§5311[f]).
  - FTA apportions the remaining §5311 funds by a statutory formula in two tiers:
    - Tier 1: 83.15 percent of rural formula funds are apportioned based on land area and population.
    - Tier 2: 16.85 percent of remaining rural formula funds are apportioned based on land area, vehicle revenue miles, and low-income individuals.
  - Texas apportioned $42,258,251 in FY2017.
- Texas Allocation to Subrecipients
  - $20,104,352 of apportionment allocated to rural transit districts by state formula (same formula as state funds).
  - Left over either discretionary or by vehicle miles.
    - For example, a transit district that operates 10% of the total vehicle miles operated by rural transit districts will get 10% of the vehicle miles allocation funds.

Formula flowchart: https://www.transit.dot.gov/funding/apportionments/section-5311-rural-formula-program

5337 STATE OF GOOD REPAIR (SGR) PROGRAM

Recipients

- States and local govts. with fixed-guideway

Eligible Activities

- Capital projects that maintain a fixed guideway or a high-intensity motorbus system in a state of good repair
- Rolling stock, track, line equipment, signals, power equipment, stations and terminals
- Security, maintenance, operational support, computer hardware/software, TAM plans

Federal Share

- Maximum 80% for SGR Projects

Changes under FAST

- High-intensity motorbus funds are to be used only for vehicle state-of-good-repair costs, and may not be used for roadway state-of-good-repair costs

5339 BUSES AND BUS FACILITIES PROGRAM

Recipients

- State or local governmental entities and direct recipients that operate fixed-route bus service

Eligible Activities

- Projects that maintain, rehabilitate, and replace capital assets
- Projects that implement transit asset management plans

Federal Share

- Maximum 80%
- Can exceed 80% for certain ADA, Clean Air Act, and bicycle projects

Changes under FAST

- Includes two discretionary programs:
  - For buses and bus facilities
  - Low- or no-emissions vehicle and related facilities

5340 GROWING STATES AND HIGH-DENSITY STATES FORMULA PROGRAM

- Continued from SAFETEA-LU
- Growing States funds are apportioned based on state population forecasts for 15 years beyond the most recent decennial census (2025)
  - Each state receives a share of Growing States funds based on the ratio of projected 2025 population to the nationwide projected 2025 population
  - Amounts apportioned for each state are then allocated to urbanized and rural areas based on the state's urban/rural population ratio
- High-Density States factors distribute funds to states with population densities equal to or greater than 370 people per square mile
- Texas is eligible for the Growing States factors. As required by statute, FTA apportions §5340 funds with Section 5307 and Section 5311 funds

REVIEW

- Name one of the 8 main federal funding programs for transit in Texas.
- Provide either
  - Eligible recipient.
  - Eligible activities.
  - Federal share limitations.
  - Changes under the FAST Act.

NON-FTA SOURCES OF FUNDING FOR TRANSIT

USDOT FLEXIBLE FUNDS

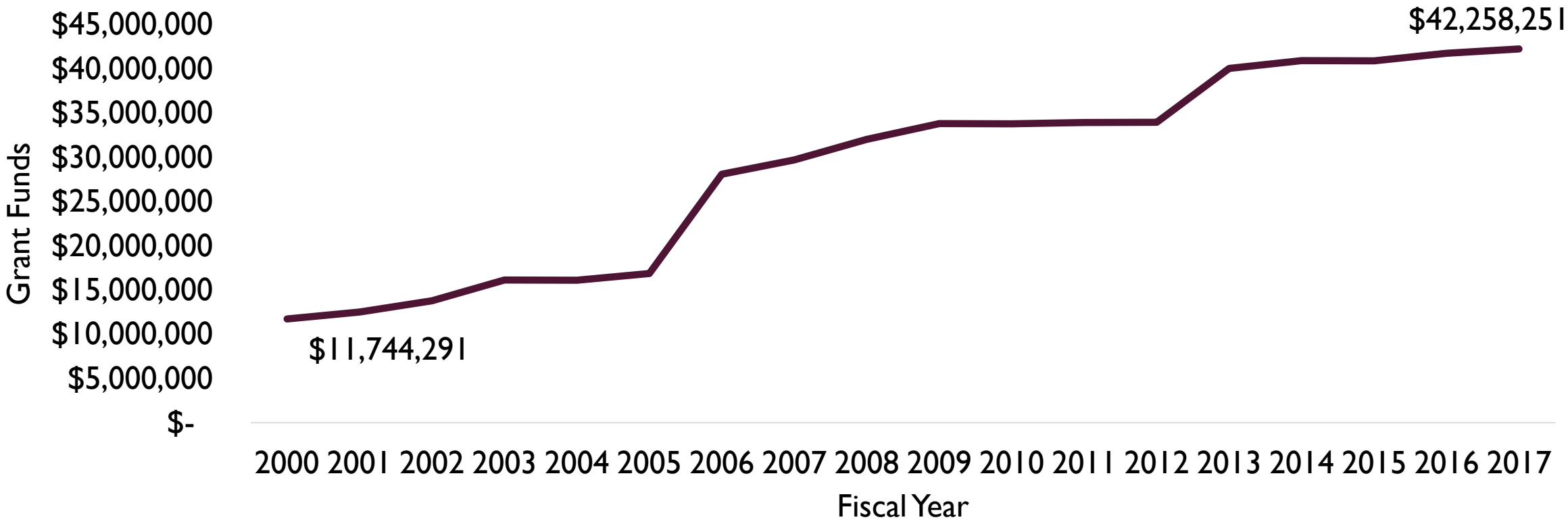
- Transportation Investment Generating Economic Recovery (TIGER) Program
- National Highway Performance Program (23 USC 119)
- Surface Transportation Program (23 USC 133)
- Congestion Mitigation and Air Quality Improvement (CMAQ) Program (23 USC 149)

NON-USDOT FEDERAL FUNDS

- Examples:
  - Food Stamp Employment and Training Program, Food and Nutrition Service, U.S. Department of Agriculture.
  - Vocational Rehabilitation Grants, Rehabilitation Services Administration, U.S. Department of Education.
  - Medical Transportation Program (Medicaid) for Non-Emergency Medical Transportation, Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services.
  - Others…
- Most of these funds flow from the federal department to a Texas state agency for allocation to programs to fund public transportation services.
- Under the FAST Act, federal funds from non-USDOT agencies are eligible as local match for §5307, §5311, and §5310 funds.

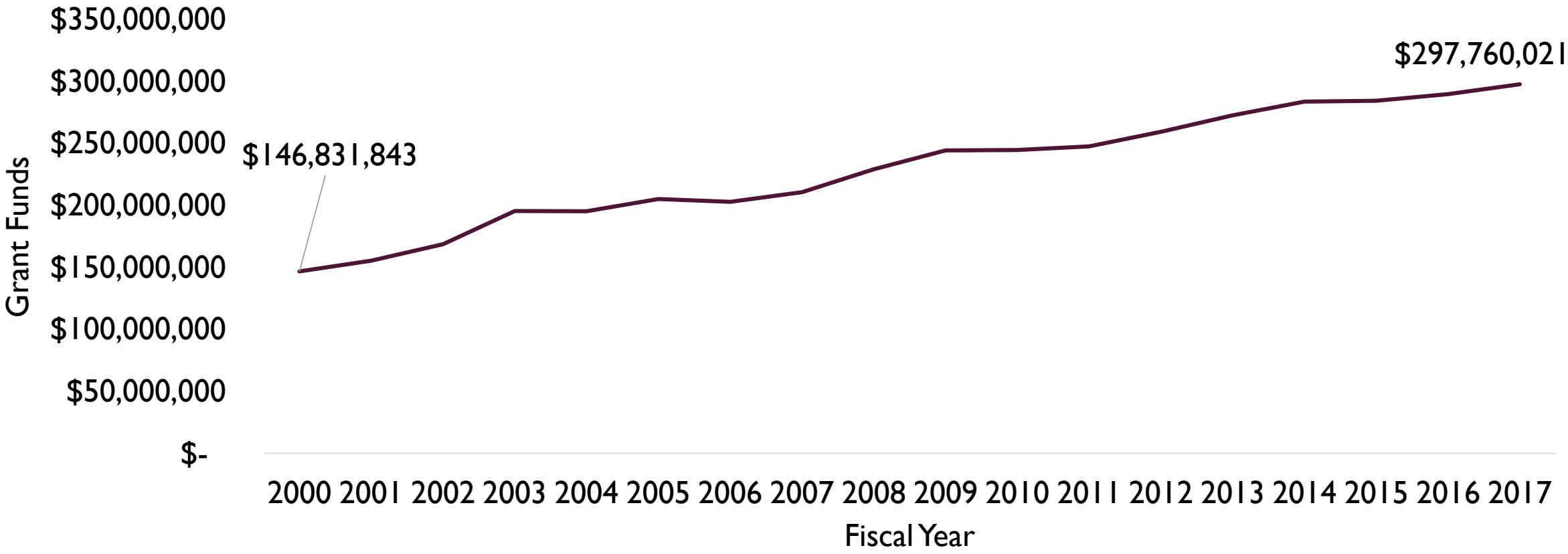
FEDERAL FUNDING TRENDS FOR TEXAS

5311 ANNUAL FUNDING FOR TEXAS



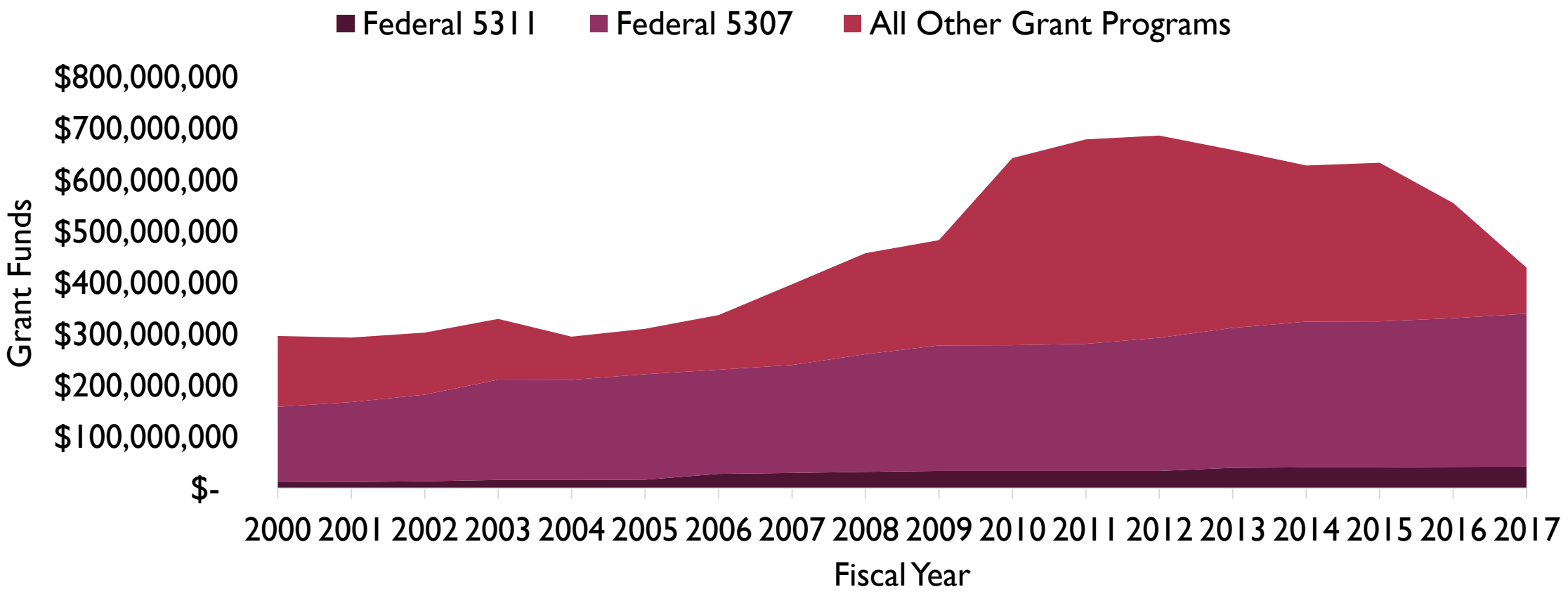
Source: FTA Allocations for Formula and Discretionary Programs by State 1998–2017.

5307 ANNUAL FUNDING FOR TEXAS



Source: FTA Allocations for Formula and Discretionary Programs by State 1998–2017.

TOTAL FTA GRANT FUNDS APPORTIONED TO TEXAS



Source: FTA Allocations for Formula and Discretionary Programs by State 1998–2017.

HELPFUL RESOURCES

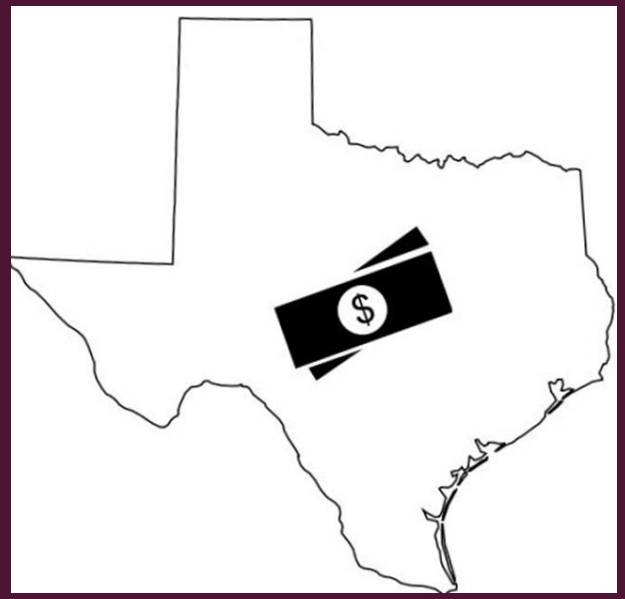
- The State Management Plan: http://ftp.dot.state.tx.us/pub/txdot-info/ptn/programs/grant-smp.pdf
- FTA Grant Program Fact Sheets: http://www.transit.dot.gov/grants
- FTA Circulars: http://www.transit.dot.gov/regulations-and-guidance/fta-circulars/final-circulars
- FTA's FAST Act Website: http://www.transit.dot.gov/FAST
- Listing of FTA Grant Programs: http://www.transit.dot.gov/grants
- FTA Presentation on FAST Act Changes: http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/2015_FAST_Act_Presentation.pdf
- CCAM Website: http://www.transit.dot.gov/ccam
- APTA FAST Act Guide: http://www.apta.com/gap/legissues/authorization/Pages/default.aspx
- FTA Funding Formula Flow Charts: https://www.transit.dot.gov/funding/apportionments/fast-act-formula-flowcharts

REVIEW

- What are the responsibilities of a designated recipient?
- Describe the differences in the responsibilities of a direct recipient and a subrecipient.
- What are the primary sources of FTA revenue in Texas?
- Identify a source of USDOT flexible funds for transit and what types of projects might be eligible.
- Identify a source of non-USDOT federal funds for transit.

MODULE 3

STATE FUNDING FOR TRANSIT



LEARNING OBJECTIVES

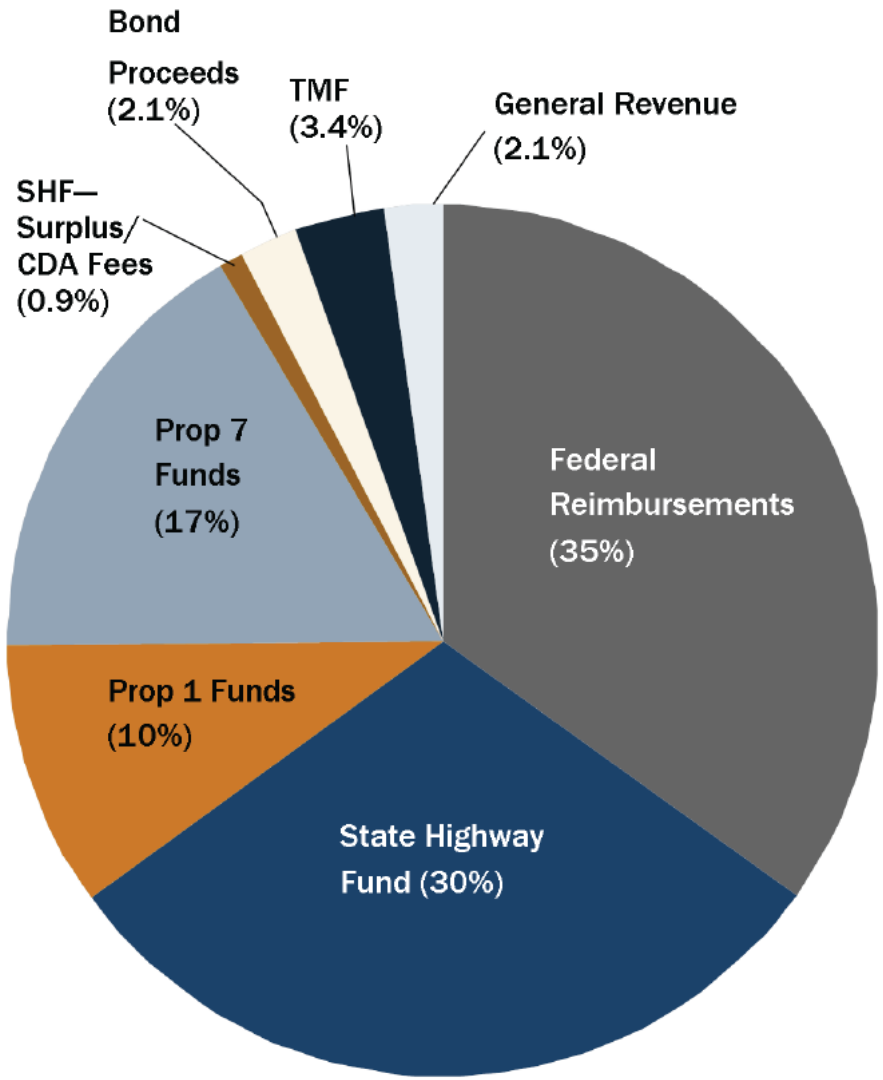
By the end of this module, you should be able to:

- Know and understand sources of state funds for transportation and transit.
- Describe the steps in the state funding process.
- Discuss the Texas transit funding formula for urban and rural transit districts.

IMPORTANCE OF STATE FUNDS FOR TRANSIT

- In FY2017, State funds accounted for
  - 7% revenue for urban transit districts
  - 18% revenue for rural transit districts
- Helps support operating and capital needs
- Can be used as local match for federal grants

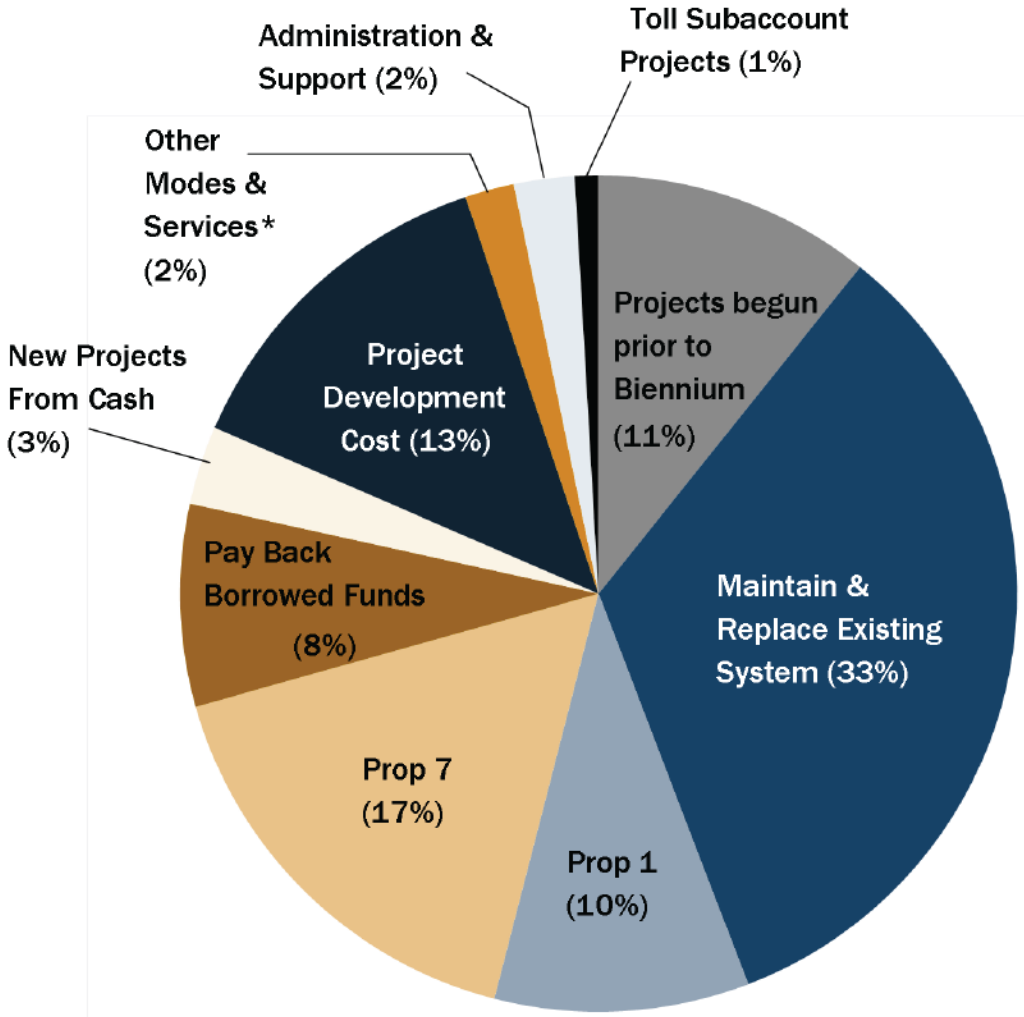
TEXAS REVENUE FOR TRANSPORTATION



Federal Reimbursements	$10.5 B
State Highway Fund	$9.0 B
Proposition 1 Funds	$3.0 B
Proposition 7 Funds	$5.0 B
SHF—Surplus/CDA Fees	$0.3 B
Bond Proceeds	$0.6 B
Texas Mobility Fund (TMF)	$1.0 B
General Revenue	$0.6 B
Total	$30.1B

Totals and percentages may not sum due to rounding.

TEXAS USES OF TRANSPORTATION REVENUES



Projects begun prior to Biennium	$3.2 B
Maintain & Replace Existing System	$10.1 B
Proposition 1	$3.0 B
Proposition 7	$5.0 B
Pay Back Borrowed Funds	$2.3 B
New Projects from Cash	$0.9 B
Project Development Cost	$4.0 B
Other Modes & Services*	$0.6 B
Administration & Support	$0.7 B
Toll Subaccount Projects	$0.3 B
Total	$30.1B

**Other Modes & Services includes Aviation, Public Transportation, Traffic Safety, Travel Information, and Rail.*

Totals and percentages may not sum due to rounding.

SOURCES OF STATE FUNDS FOR TRANSIT

The main sources of state revenue for the State Highway Fund are:

- Motor vehicle registration fees
- Sales tax on motor lubricants
- Motor fuel tax ($0.20 per gallon of gasoline and diesel)

However, most sources are constitutionally guaranteed to fund highway projects or to pay down the debt from highway construction financing.

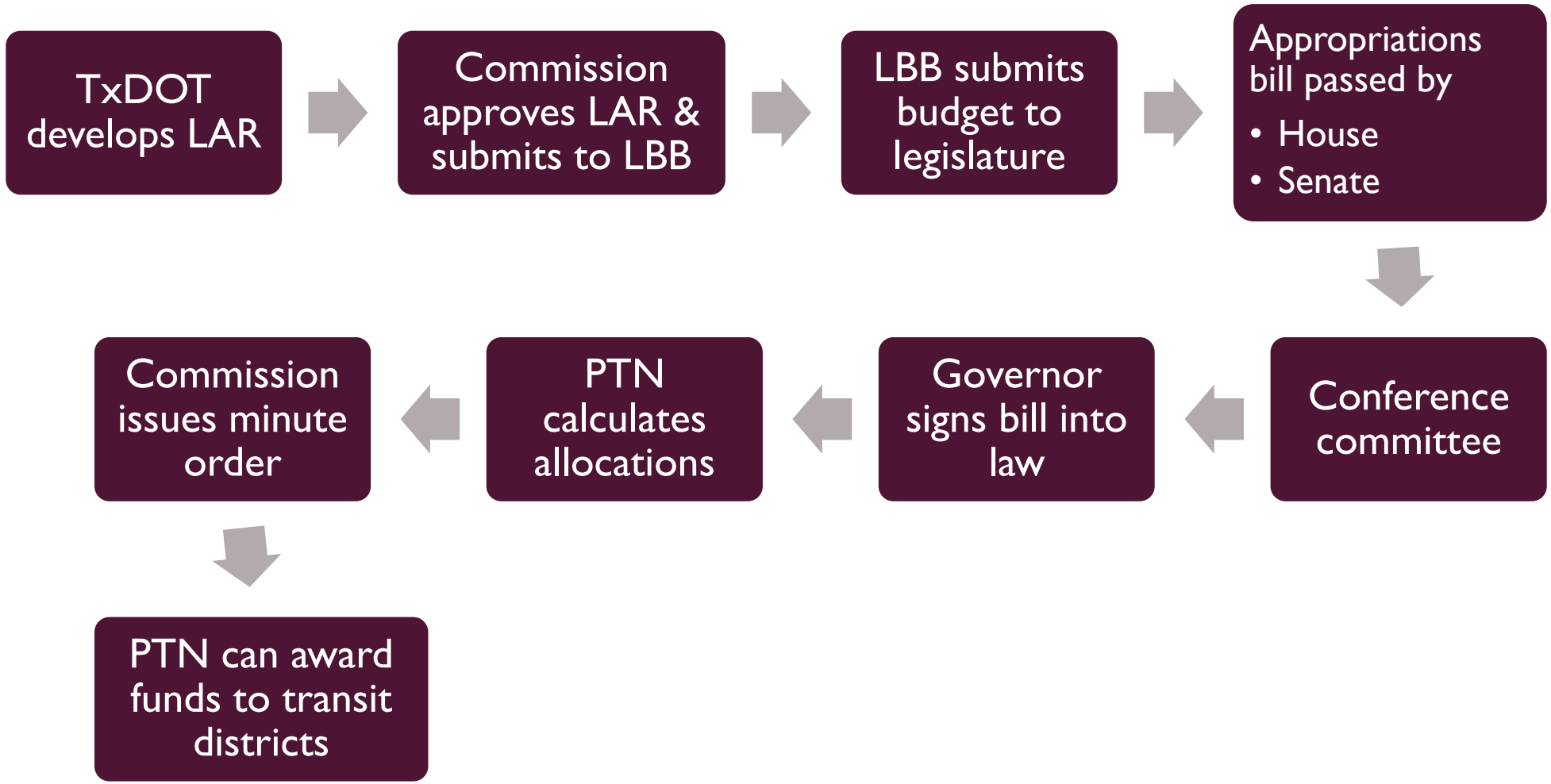
State funds that can be used for public transportation come from the parts of the State Highway Fund that are not-constitutionally dedicated, such as fees for various purposes,

TEXAS STATE TRANSIT FUNDING

Category	Number	Eligible for State Transit Funds?	Dedicated Local Sales Tax for Transit?	Texas Statute Authorizing State Funds
Transit Authority or Municipal Transit Department	9, w/ Laredo	No (8) Yes—Laredo	Yes	Chapter 451, 452, and 453, and 460
Urban Transit District - Large	5, w/o Laredo	Yes	No	458
Urban Transit District – Small	24*	Yes	No	458
Rural Transit District	37	Yes	No	458

**Includes the 4 DFW-Area transit districts w/ statutorily-limited funding levels.*

STATE OF TEXAS APPROPRIATIONS PROCESS
See Module 3 in your Coursebook



TEXAS PUBLIC TRANSPORTATION FUND

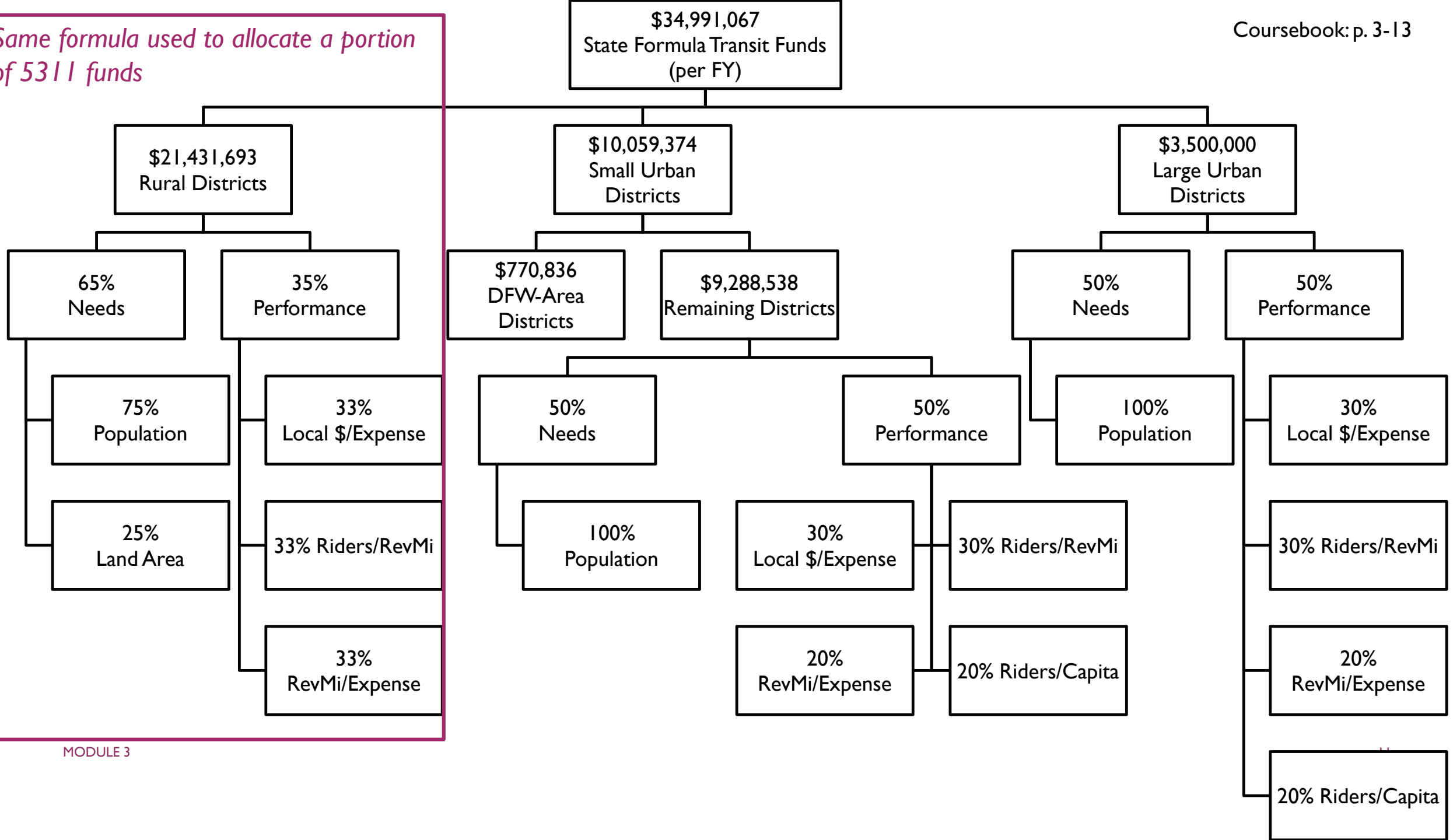
- The Texas Legislature appropriates state funding levels each biennium
- TxDOT allocates state funds according to the Texas Transit Funding Formula
- Funding formula applies to $69,982,134 per biennium or less as appropriated by the Legislature
  - Funding formula applies to $34,991,067 per fiscal year
  - Any funds >$ 69,982,134 per biennium can be allocated on a discretionary basis.
- State funding is split between Rural and Urban transit districts

TEXAS STATE FORMULA FUNDING CATEGORIES

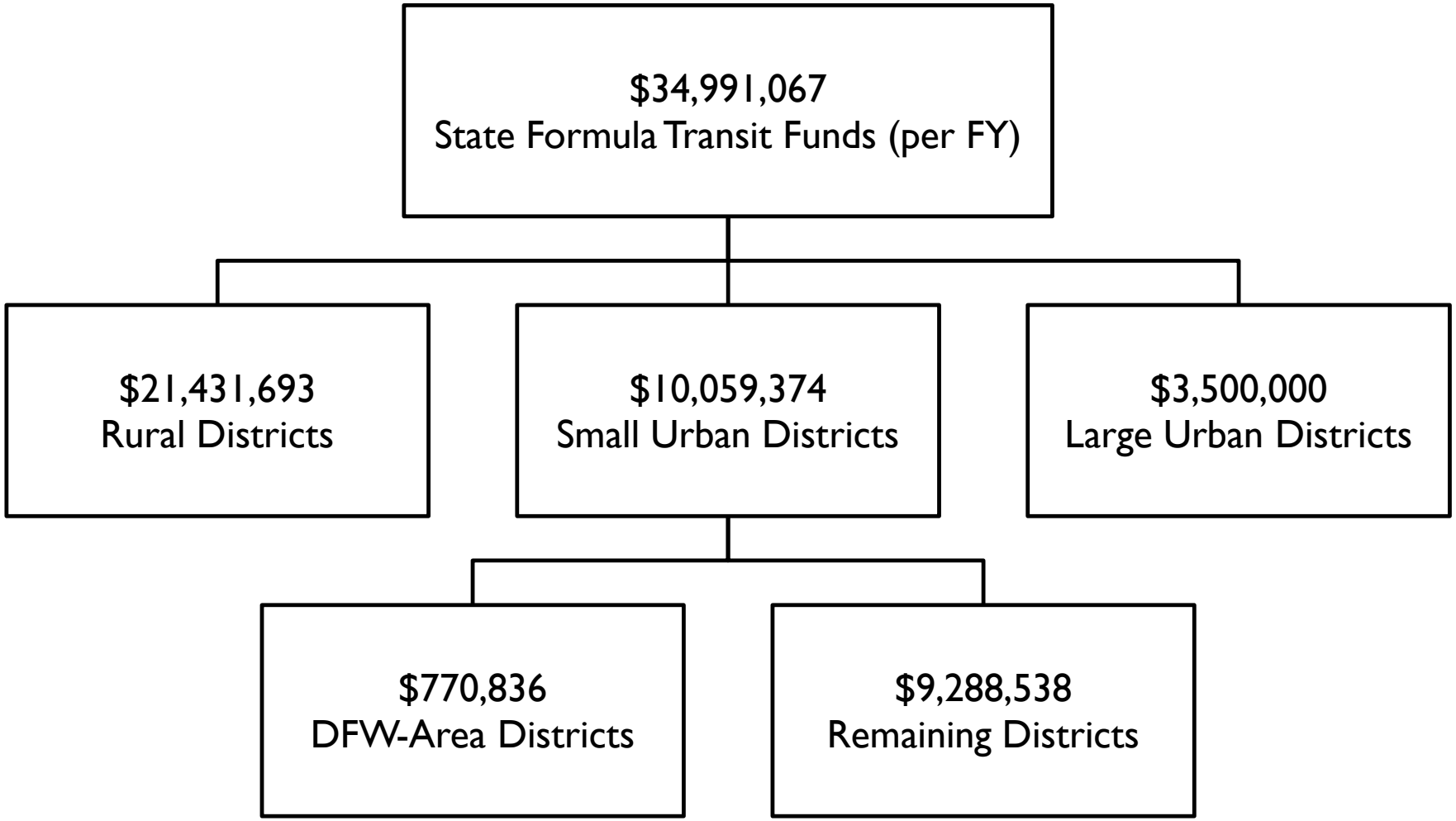
Transit District Category	Per Biennium	Per Fiscal Year
Rural	$42,863,386	$21,431,693
Small Urban	$20,118,748	$10,059,374
DFW	$1,541,672	$770,836
Arlington	$683,326	$341,663
Grand	$341,168	$170,584
Mesquite	$284,910	$142,455
NETS	$232,268	$116,134
Remaining Small Urban	$18,577,076	$9,288,538
Large Urban	$7,000,000	$3,500,000
Total	**$69,982,134**	**$34,991,067**

Same formula used to allocate a portion of 5311 funds

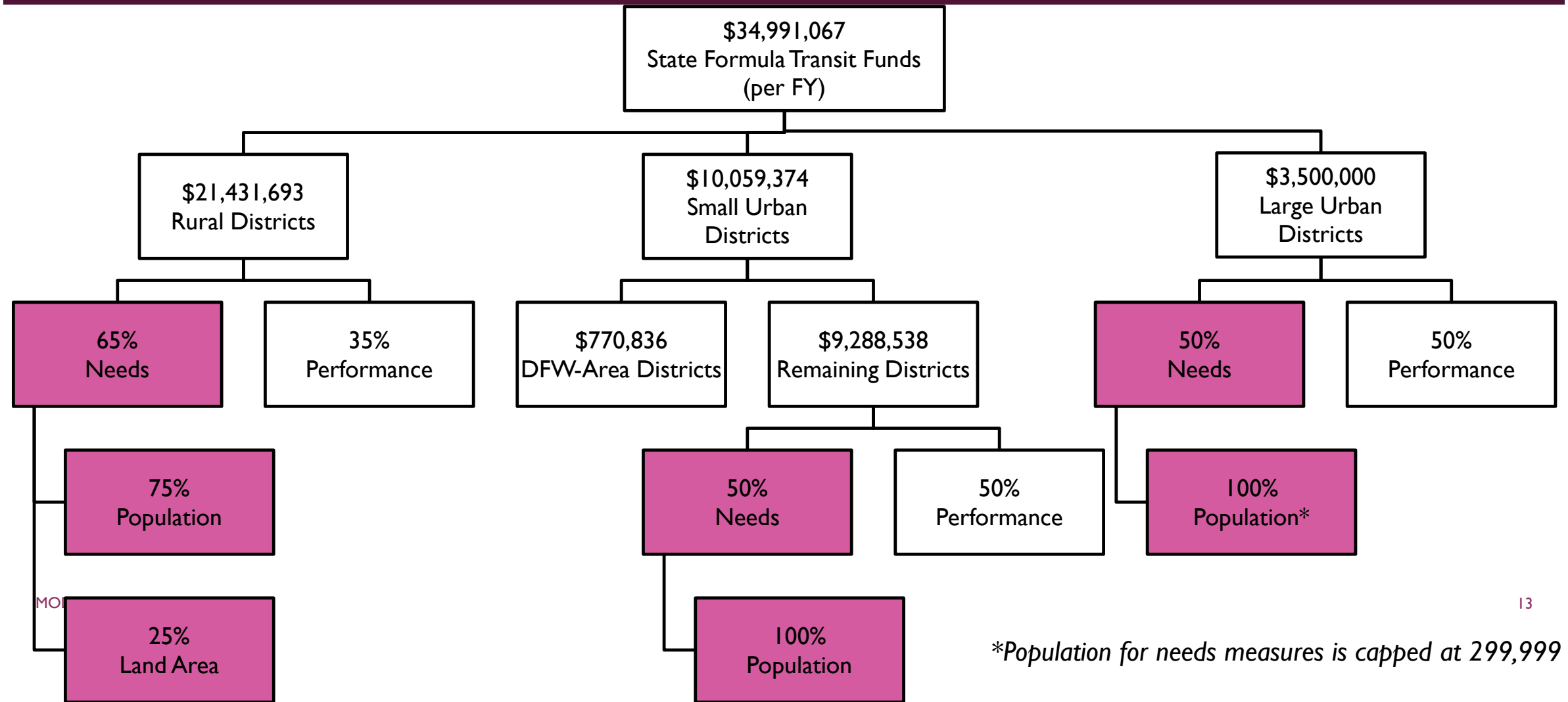
Coursebook: p. 3-13



STATE FUNDING FORMULA: 1ST LEVEL

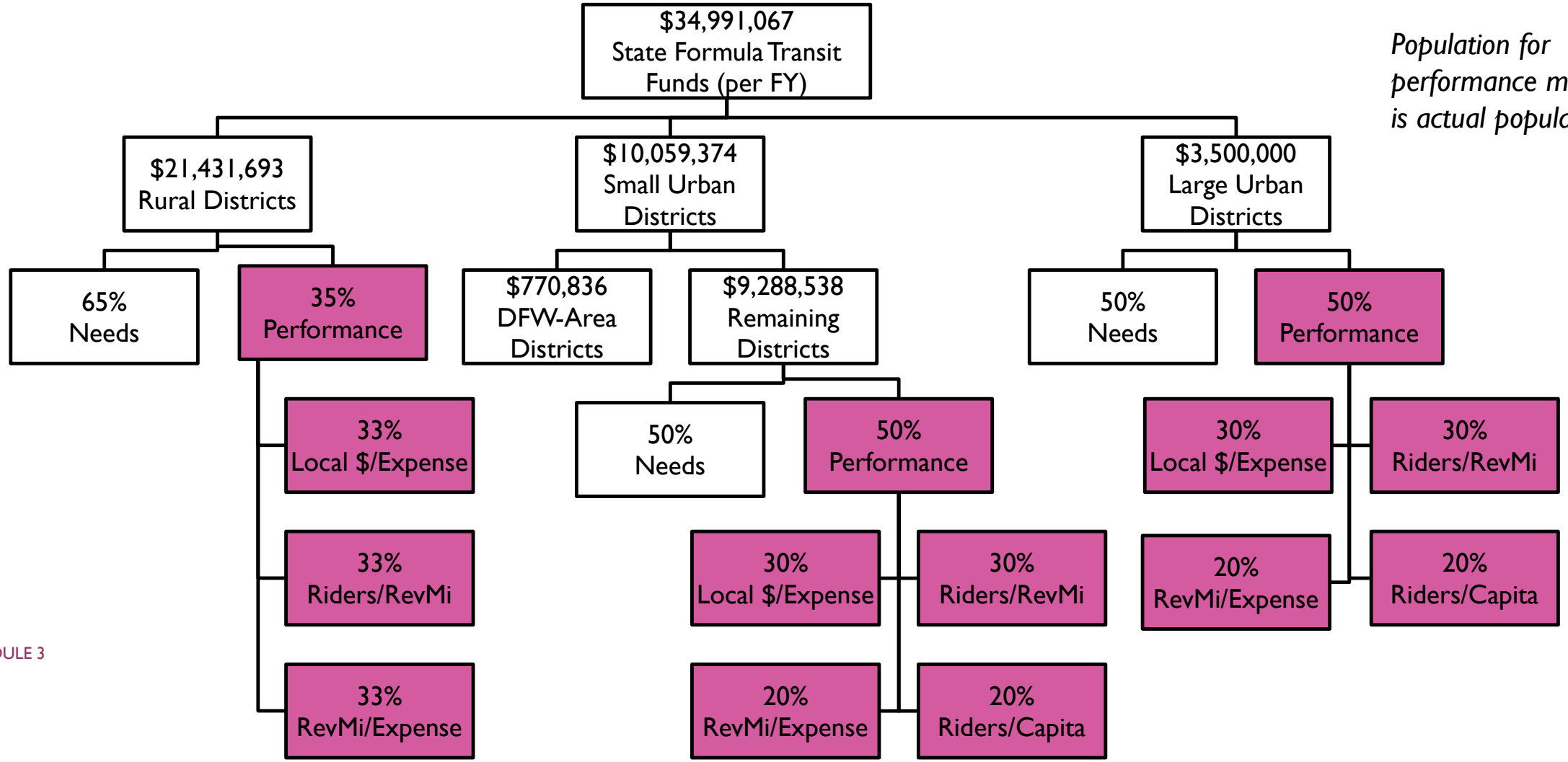


STATE FUNDING FORMULA: NEEDS MEASURES



**Population for needs measures is capped at 299,999*

STATE FUNDING FORMULA: PERFORMANCE MEASURES



Population for performance measures is actual population.

An Increased Value for Any Measure is an Improvement in Performance

PERFORMANCE MEASURES

Urban Performance

- 30% Local investment*/ Operating expense
- 30% Passengers/ Revenue mile
- 20% Revenue miles/ Operating expense
- 20% Passengers/Population for urbanized area

Rural Performance

- 33% Local investment*/ Operating expense
- 33% Passengers/ Revenue mile
- 33% Revenue miles/ Operating expense

* *Local investment includes Federal programs <u>other than</u> Section 5307, Section 5311 Formula grants and Section 5339 and 5303 grants*

Includes local funds operating and capital

IT'S ALL RELATIVE

- Improvements in performance DO NOT GUARANTEE increased formula funding
- Funding is a function of *relative performance* (when compared to other transit districts)
- Stability Guarantee:
  - Transit districts guaranteed at least 90% of last fiscal year's state formula funding

PERFORMANCE DATA REPORTED: PTN-128

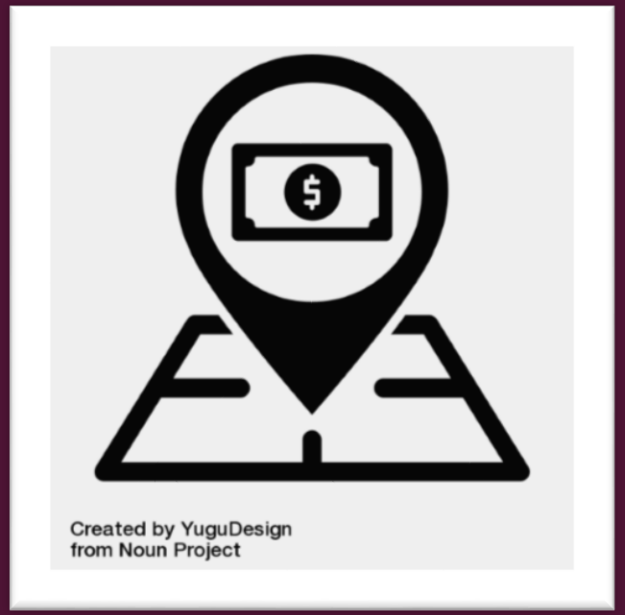
- Financial and performance data are reported for all public transportation services in one database
- Operating data are collected and reported according to common definitions and instructions
- Financial data are reported for operating and capital expenses
- Revenues and expenses are reported in proper category, including contributed services
- Reviews are conducted with each transit district

REVIEW

- What are the steps in the state Legislative funding process?
- What is the first allocation in the Texas transit funding formula? [Think: types of transit districts]
- What is the second allocation in the Texas transit funding formula? [Think: balance of population/service area and efficiency/effectiveness]
- What is the total state formula funding available per fiscal year or biennium?
- *Discussion:* What do you think the impacts of the next census will be?

MODULE 4

LOCAL REVENUE SOURCES AND LOCAL MATCH



LEARNING OBJECTIVES

- List and define the main categories of local funding for transit.
- Discuss the use of local revenue as local match for FTA grants.
- Locate additional resources concerning sources of local revenue for transit.

IMPORTANCE OF LOCAL FUNDS

- Fill gaps in operating and capital needs not met by federal or state.
- Can be used as match for federal grants.
- Have more flexibility and less "strings" as federal and state funds.
- Significant source of revenue in Texas; between
  - 22% of revenue for rural transit districts
  - 87% of revenue for transit authorities

VARIETY OF LOCAL REVENUE SOURCES

Sources of Local Revenues	Transit Authorities* (8)		Urban Transit Districts* (30)		Rural Transit Districts (37)	
	Revenues	% Local Revenues	Revenues	% Local Revenues	Revenues	% Local Revenues
Fares	$187,035,220	8%	$13,649,919	21%	$4,703,447	18%
Local Contributions (Cash)	$19,577,903	1%	$23,872,060	38%	$9,347,483	36%
Contributed Services (Non-Cash)	$0	0%	$9,256,186	15%	$1,874,323	7%
Sales Tax Dedicated to Transit	$1,983,843,962	86%	$7,287,381	11%	$0	0%
Auxiliary Transit Revenues	$24,278,699	1%	$1,227,419	2%	$95,169	0%
Other Transportation Revenues	$5,149,834	0%	$634,196	1%	$6,902	0%
Non-Transit-Related Revenues	$69,375,385	3%	$1,873,357	3%	$203,509	1%
Other Contracts	$10,531,355	0%	$5,723,865	9%	$10,071,223	38%
Total Revenues	$2,299,792,358	100%	$63,524,383	100%	$26,302,056	100%

Laredo is included in the urban transit district values.

LOCAL MATCH

- Local match is a "key" for unlocking allocated federal funds.
- FTA Guidance Provided
  - FTA C 5010.1E *Award Management Requirements*
  - Program-specific circulars

CREATIVE SOURCES OF LOCAL REVENUE

- Sponsorships and partnerships
- SMRT
- Paris Metro (Paris, TX)
  - United Way
  - Texas Oncology
  - Etc.

DISCUSSION

- What are your main sources of local revenue?
- What *would you like to do* to increase local revenue?

LOCAL REVENUE CATEGORIES

DETAILS FOR EACH OF THE EIGHT CATEGORIES

FARES

- Definition: revenue earned from carrying passengers, including
  - Payments from passengers
  - Special Transit Fares: Payments from entities in exchange for free or reduced transit for a targeted population (Example?)
  - Contracts for Fares: Agreement for an entity to pay the transit agency for trips provided to specific passengers or groups of passengers (Example?)
- Local Match? NO
  - Fares can only used to reduce operating cost.
- See the Matching Funds Resource Guide from PTN for more information on the treatment of fares: : http://ftp.dot.state.tx.us/pub/txdot-info/ptn/matching-funds-resource-guide.pdf.

EXAMPLE OF APPLYING FARES TO REDUCE OPERATING COST

1	**Operating Costs**	**$100,000**
	Income to Reduce Operating Cost	
2	Fare Revenue	($25,000)
3	Net Operating Cost	$75,000
	Sources of Revenue	
4	Maximum FTA Operating Assistance (50%)	($37,500)
5	**Required Local Match**	$37,500

LOCAL CONTRIBUTIONS (CASH)

- Definition: funds allocated to transit out of general revenues of another entity. These funds are often part of the government's annual budgeting process from general revenues rather than dedicated funds for transit.
- Local Match: YES

CONTRIBUTED SERVICES (NON-CASH)

- Definition: Contributed services are receipt of non-cash assets or services from another entity that benefits the transit operator. (Example?)
  - Only contributed services if there is *no obligation to pay* for the services or assets.
- Centralized services (e.g., municipal transit department using centralized city IT resources) should be reported as contributed services (if no expectation of payment)
- Documenting value: fair market value
- Reporting: must be reported both as *cost* and *revenue*
- Local Match: YES But…
  - OMB and FTA policy determines what contributions are eligible as match
  - Recipient must formally document value
  - Contribution must be for an cost or activity necessary to accomplish the project
  - Contribution cannot be counted toward other local match

SALES TAX DEDICATED TO TRANSIT

- Definition: a local tax imposed by an independent political entity with legal authority to do so. The tax is dedicated to funding transit.
- 9 transit areas in Texas that are supported by local sales tax
- State sales and use tax = 6.25%; local taxing is capped at 2% for a Total 8.25% maximum
- Local Match: YES

Type of Authority or Governmental Entity	Principal City or County	Agency	Sales Tax Rate (Percent)
Metropolitan Rapid Transit Authorities (Texas Transportation Code, Chapter 451)	Houston	Metropolitan Transit Authority of Harris County	1.00%
	San Antonio	VIA Metropolitan Transit San Antonio Advanced Transportation District*	0.50% 0.25%
	Austin	Capital Metropolitan Transportation Authority	1.00%
	Corpus Christi	Regional Transportation Authority	0.50%
Regional Transportation Authorities (Texas Transportation Code, Chapter 452)	Dallas	Dallas Area Rapid Transit	1.00%
	Fort Worth**	Fort Worth Transportation Authority	0.50%
Municipal Transit Departments (Texas Transportation Code, Chapter 453)	El Paso	El Paso Mass Transit Department	0.50%
	Laredo	Laredo Transit Management, Inc.	0.25%
Coordinated County Transportation Authority (Texas Transportation Code, Chapter 460)	Denton County–Denton, Lewisville	Denton County Transportation Authority	0.50%

** Revenues generated from the 0.25 percent sales tax in the city of San Antonio dedicated to advanced transportation projects.*
*** The City of Grapevine dedicates a part of the municipal sales tax (0.375 percent) to fund the TEX Rail commuter rail service in Grapevine. The City of North Richland Hills provides funding from available sources equal to 0.375 percent municipal sales tax to fund TEX Rail commuter rail service in that city.*

AUXILIARY TRANSIT REVENUES

- Definition: revenue from the byproducts of transit service. (Examples)
  - Ads
  - Concessions
  - Fees for ID cards, Fines
- Local Match: YES

OTHER TRANSPORTATION REVENUES

- Definition: revenues from transportation services that are not open to the general public, for example:
  - Charter service
  - Exclusive school bus service
  - *Note:* FTA prohibits these activities unless waiver is granted by FTA
- Local Match: NO (unless waiver granted by FTA)
- See also:
  - PTN charter compliance document http://ftp.dot.state.tx.us/pub/txdot-info/ptn/charter_compliance.pdf
  - Bus Garage Questions

NON-TRANSIT-RELATED REVENUES

- Definition: funds earned from activities not associated with the provision of transit service
  - Investment earnings
  - Sales of maintenance services
  - Renting revenue vehicles, buildings, and property, parking fees (park-and-ride fees are fare revenue)
- Local Match: YES

OTHER CONTRACTS

- Definition: funds earned from non-federal or state contracts for public transportation service. (Usually with city, county, or another transit agency.)
- *Note:* report funds from contracts for service as *contract revenue* to NTD ONLY IF
  - There is a written agreement between the buyer and the seller of transportation
  - The buyer pays the *fully allocated costs* of operating the service that fares do not cover
- Otherwise, report revenue according to state or local government or other source type.

CONTRACTS FOR PUBLIC TRANSPORTATION-HUMAN SERVICES COORDINATION

- Transit agencies may obtain revenue from contracts for coordinated transportation, e.g.:
  - Medicaid NEMT
  - Human Services / Social Services agency
- §5310 and §5311 (sub)recipients have a choice:
  - Apply contract revenue to reduce operating costs (treat like farebox revenue)
  - Apply contract revenue as local match

Coursebook: p. 4-13

		Option 1: Apply Contract Revenue as Local Match	Option 2: Use Contract Revenue to Decrease Project Costs	Comments
1	Operating Costs	$100,000	$100,000	
	Income to Reduce Operating Cost			
2	Fare Revenue	($25,000)	($25,000)	
3	Coordinated Service Contract (used to reduce project costs)	—	($30,000)	Only applied under Option #2
4	Net Operating Cost	$75,000	$45,000	Line 1 + 2 + 3
	Sources of Revenue			
5	Maximum FTA Operating Assistance (50%)	($37,500)	($22,500)	50% of net operating cost
6	Required Local Match	$37,500	$22,500	Equal to FTA operating assistance
7	Coordinated Service Contract (used as local match)	$30,000	—	Only applied under Option #1
8	Additional Local Match Needed	$7,500	$22,500	

See Module 4, p. 4-14+

EXAMPLES OF APPLIED REVENUES

TEXAS TRANSIT DISTRICT LOCAL REVENUES

REVIEW

- Which category of local revenue CANNOT be used as local match?
- What are the risks of not having enough local match?
- Are there any local match sources you haven't used but are interested to try?
- You want to use contributed services as local revenue and match for your FTA grant. What are some things you need to remember?

MODULE 5

ACCOUNTING, BUDGETING AND FINANCIAL MANAGEMENT

LEARNING OBJECTIVES

By the end of this module, you should be able to:

- Compare cash-based and accrual-based accounting
- Explain the use and value of a good chart of accounts.
- Explain variable and fixed costs.
- Explain the importance of matching revenues to expenses.
- Explain the difference between a cost allocation plan and an indirect cost rate proposal.

And other exciting lessons about Accounting, Budgeting, and Financial Management.

PART 1: ACCOUNTING AND BUDGETING

HOW DO ACCOUNTING AND BUDGETING DIFFER IN PERSPECTIVE?

Accounting	Budgeting
Deals with financial transactions that have already happened.	Aims to predict what will happen financially in the future.
	
Looks backwards in time	**Looks forward in time**

GENERAL ACCEPTED ACCOUNTING PRINCIPLES (GAAP)

Basic Principles

- Cost Principle – "Cost" refers to the amount spent (cash or cash equivalent) when an item was originally obtained. All values are listed as the cost to obtain or acquire an asset, not adjusted to any type of increase in value.
- Revenue Recognition Principle – The revenue recognition principle states that all revenue must be reported when it is realized and earned, not necessarily when the cash is received.
- Matching Principle – This accounting principle requires transit agencies to use the accrual basis of accounting. The matching principle requires that expenses be matched with revenues.
- Full Disclosure Principle – information important to financial statements must be disclosed.

GENERAL ACCEPTED ACCOUNTING PRINCIPLES (GAAP)

Constraints

- Objectivity – Accounting information should be reliable, verifiable, and objective.
- Materiality – Significance of a financial item should be considered. Financial statements can use rounding.
- Consistency – Accounting practices should be consistent when applying accounting principles, procedures, practices.
- Prudence – Accounting practices should be reduce the likelihood of overstating assets and income.

IMPORTANT ACCOUNTING CONCEPTS
THE ACCOUNTING EQUATION

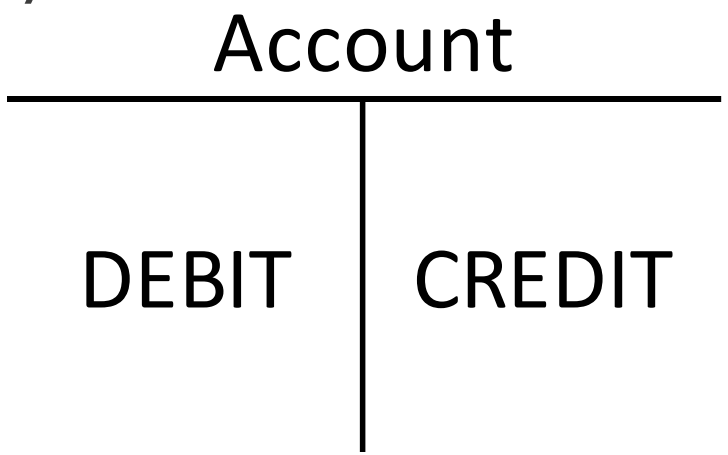
The accounting equation is the basis of all accounting practice:

Assets = Liabilities + Capital

- Assets – Resources that provide potential future benefit
- Liabilities – Obligations that will result in probably future outlay of an asset
- Capital – Represent the ownership accounts of the organization, includes accumulated earnings (reserves) or losses and the current year's revenue and expense accounts

IMPORTANT ACCOUNTING CONCEPTS
DOUBLE ENTRY BOOKKEEPING

The "T-ledger entry"



Debits are on the Left side of the 'T' ledger.
Credits are displayed on the Right side.
Think of the letter R for right.
Credit has an R in it. Credits go on the Right.

IMPORTANT ACCOUNTING CONCEPTS
DOUBLE ENTRY BOOKKEEPING

DEBIT

- Increases in:
  - Asset accounts
  - Expense accounts
- Decreases in:
  - Liability accounts
  - Capital accounts
  - Revenue accounts

CREDIT

- Increases in:
  - Liability accounts
  - Capital accounts
  - Revenue accounts
- Decreases in:
  - Asset accounts
  - Expense accounts

IMPORTANT ACCOUNTING CONCEPTS
DOUBLE ENTRY BOOKKEEPING

Every financial transaction is recorded in accounting records using the double entry bookkeeping system

- At least one account is debited and at least one account is credited in every transaction

  Double bookkeeping entry: Debit and Credit

- Regardless of the number of accounts involved in any transaction, the total dollar amount of the debits must equal the total dollar amount of credits

  Debit $ = Credit $

IMPORTANT ACCOUNTING CONCEPT
BASIS OF ACCOUNTING

Cash Basis

- Revenues and expenses recorded when cash is received or paid out

Accrual Basis

- Expenditures are recorded as soon as they result in liabilities for benefits received, whether or not the payment is made
- Revenues are recorded when earned, whether or not the receipt of revenues takes place in the same reporting period

IMPORTANT ACCOUNTING CONCEPT
DIFFERENCES IN CASH OR ACCRUAL

Cash Basis

- Simpler
- Appropriate when time between transaction and cash flow is short

Accrual Basis

- Requires more accounting transactions, time-consuming tasks reduced with financial accounting software
- More accurate and complete picture of financial condition
- Required for financial reporting to the National Transit Database

Translation Cash Basis to Accrual Basis

FINANCIAL STATEMENTS

Financial Statements for Transit Agencies, prepared at least annually

Balance Sheet

- Assets
- Liabilities and Capital

Statement of Income and Accumulated Reserves

- Revenues
- Operating Expenses
- Capital Expenses
- Net Income (Loss)
- Accumulated Reserves (Losses)

FINANCIAL STATEMENTS

Net Income (Loss) and Accumulated Reserves

- NTD and PTN-128: Annual Revenues = Annual Expenses
- If Net Income, adjust Revenues to increase (credit) Accumulated Reserves in Capital Accounts
- If Net Loss, must balance from another source of Revenues to cover Loss or draw from (debit) Accumulated Reserves in Capital Accounts

THEMES: BALANCE, BALANCE AND BALANCE

- Transit agencies follow good business practices, generally accepted accounting principles
- Matching principle, revenues = expenses
- Accounting equation, assets = liabilities + capital
- Double entry bookkeeping, debits = credits
- Accrual accounting, expenditures recognized when obligated (incurred), revenues recognized when earned, always balance
- Financial statements
  - Balance Sheet, assets = liabilities + capital including reserves
  - Income Statement, revenues = expenses

UNIFORM SYSTEM OF ACCOUNTS (USOA)

- USOA is the accounting structure required by Federal Transit laws
- Should be used to report to the NTD – Refer NTD Policy Manual

https://www.transit.dot.gov/ntd/uniform-system-accounts-usoa

(See Handout 5-A)

- Transit agency should establish its chart of accounts to suit the needs of management, governing board, sources of funding
- Chart of accounts can be flexible and adaptable, can be truncated or expanded but not materially changed

See example chart of accounts in the Coursebook, pages 5-17/18

OPERATING EXPENSES

- Salaries and Wages
- Fringe Benefits
- Employee Compensation
- Services
- Materials and Supplies
- Utilities
- Casualty and Liabilities Cost
- Leases and Rentals
- Purchased Transportation
- Other Operating Expenses

OPERATING EXPENSES BY FUNCTION - HANDOUT 5-B

- Vehicle Operations
- Vehicle Maintenance
- Non-Vehicle Maintenance
- General Administration

If applicable

- Planning
- Purchased Transportation

Let's test your knowledge

- Close Coursebook
- Try Handout 5-B
- Assign operating expense line items in chart of accounts to by Function
- Check or mark, do not assign $

- See Coursebook, pages 5-22/23 for answers

OPERATING EXPENSES BY VARIABLE/FIXED COST - HANDOUT 5-C

Variable Costs

- Change with services provided
- Hours-driven costs involve operating expenses (Operator wages and benefits, for example)
- Miles-driven involve costs for vehicle maintenance and also fuel expenditures

Fixed Costs

- Do not change with level of services provided (hours, miles)
- Include Administration, other fixed costs

Let's test your knowledge

- Close Coursebook
- Try Handout 5-C
- Assign operating expense line items in chart of accounts by Variable or Fixed
  - Note Variable by Hours-Driven or Miles-Driven
- Check or mark, do not assign $

- See Coursebook, pages 5-24/25 for answers

CAPITAL EXPENSES

- Facilities
- Guideway (Fixed)
- Passenger Stations
- Administration Buildings
- Operations & Maintenance O&M Facilities
- Rolling Stock
  - Revenue Vehicles
  - Service Vehicles
- Fare Revenue Collection Equipt
- Communications & Info Systems
- Other Capital Expenses

STATE OF GOOD REPAIR FOR CAPITAL ASSETS

State of Good Repair (SGR) according to FTA

- The condition at which a capital asset is able to operate at a full level of performance for these three criteria:
  1. Is able to perform its designed function.
  2. Does not pose a known unacceptable safety risk.
  3. Its life-cycle investments have been met or recovered.

TRANSIT ASSET MANAGEMENT

Transit Asset Management (TAM) required by FTA

- Final Rule for Transit Asset Management (TAM) (49 Code of Federal Regulations Part 625) in July 2016
- TAM requirements vary depending on whether a transit agency is classified as a Tier I or Tier II provider
- Requires reports to NTD's Assent Inventory Module on SGR

BUDGETING

Preparing for the Budget Process

- Define transit agency goals and objectives
- Establish a timeframe for the budget document (i.e. 1-year, 3-years, or 5-years)
- Seek feedback from stakeholders

BUDGETING – OPERATING PLAN

Budget Process

- Analyze goals and objectives
- Explicitly list major assumptions used to prepare the budget
- Estimate revenues and expenses for the budget timeframe
  - Use chart of account line items
  - Identify revenue to balance with estimates of expenses
- Balance estimated expenses to identified sources of revenue
- Compile findings into a complete budget document

BUDGETING – CAPITAL PLAN

Capital Budget Process

This discussion focuses on the revenue vehicle fleet

- Replace existing vehicles consistent with SGR
- Plan for regular vehicle replacement schedule
- Provide for fleet expansion consistent with growth in ridership and new services
- Plan for predictable capital budget
- Develop at least 5-year Capital Plan to reflect revenue planning to support SGR and TAM (contributes to Financial Plan)

BUDGETING – BUSINESS PLAN

Benefits of Preparing a Business Plan

- Budget complements the short range plan of the agency
- Ties short range plans supported by the budget summaries
- Communicates goals and objectives
- Defines performance measures to evaluate outcomes

PART 2: FINANCIAL MANAGEMENT

FTA'S EXPECTATION OF FINANCIAL MANAGEMENT

- Why does the FTA care about your financial management?
  - FTA has a vested interest in ensuring that grant recipients are financially capable and have appropriate financial management practices in place
- Good financial management at transit agencies benefits EVERY TAXPAYER and EVERY RIDER
- FTA Financial Management Guidance in FTA C 5010.1E *Award Management Requirements*
- FTA Financial Management expectations consist of
  - Internal Controls
  - Local Match
  - Financial Plans
  - Allowable Costs
  - Indirect Costs
  - Program Income
  - Annual Audit
  - Payment Procedures

INTERNAL CONTROLS

- Definition: a process to ensure
  - Effectiveness and efficiency of operations.
  - Reliability of reporting for internal and external use.
  - Compliance with applicable laws and regulations.
- Why have internal controls?
  - Efficient operations, keeping costs within limits and legal requirements
  - Safeguard against waste, loss, and misuse
  - Timely collection and accounting for revenues
  - Accurate and reliable financial and statistical reports
- Elements of Internal Controls
  - Integral part of management systems
  - Supportive attitude among managers and employees
  - Experienced, competent employees performing work
  - Specific needs identified and valid controls put in place
  - Adoption of polices, plans, and procedures (e.g., separation of duties)
  - Regular program of testing
- Self Assessment: https://ecihstp.org/wp-content/uploads/sites/8/2016/05/16.-Internal-Control-Self-Assessment-Tool.pdf
- Must have robust financial management systems

NON-FEDERAL SHARE (LOCAL MATCH)

- Must certify to FTA that they have OR WILL HAVE available local match
- Match may not be used for more than one federal award
- Examples of local share are covered in Modules 4
- Consult applicable *program circular*

FINANCIAL PLAN

- Recipients must have financial plan available to the FTA upon request. The plan:
  - Be a multi-year plan (3-5 years) for operating and capital revenues and expenses.
  - Demonstrate the source(s) of local match, the amounts of match from each source, and the time frame for acquiring local match funds.
  - Indicate adequate revenues to maintain and operate the existing system and to complete the annual program of projects.

ALLOWABLE COSTS

- Not all costs of all activities are eligible for federal financial support.
- *See program-specific circular and 2 CFR 200*
- Criteria for allowable costs
  - Necessary, reasonable
  - Authorized and not prohibited under state or local laws and regulations
  - Consistent with policies, regulations, and procedures
  - Treated consistently (e.g., same cost should be treated the same way)
  - Adequately documented
  - Not included as a cost of any other federally-assisted program
  - Not incurred before its award is made

DISALLOWED COSTS

- FTA will exclude:
  - Any cost incurred before the date of the award
  - Any contract cost that should have been approved by FTA but wasn't
- Note:
  - Just because FTA pays for it, doesn't mean the cost was allowed
  - Just because the project is closed doesn't mean the FTA might not ask for its money back if it was used incorrectly

INDIRECT COSTS

- Indirect costs are:
  - Incurred for a common or joint purpose benefiting more than one cost objective.
  - Not readily assignable to the cost objectives specifically benefited, without effort disproportionate to the results achieved.
  - Originating in the recipient department as well as those incurred by other departments in supplying goods, services, and facilities to the recipient department.

FTA REQUIREMENTS FOR INDIRECT COSTS

- *If you intend to seek payment for indirect costs you must have (or be using) an approved:*
  - Cost Allocation Plan OR
  - Indirect Cost Rate (from an Indirect Cost Rate Proposal)
- Indirect costs must be a separate line item in a project budget to be eligible for reimbursement
- CAPS and ICRPs must be approved by the recipient's assigned cognizant federal agency.
- CAPS and ICRPs and their use are reviewed by FTA comprehensive reviews
- See Table 5-9 in Module 5 in your Course book

Type of Organization	Cost Allocation Question	Recommended Approach
Municipal Gov't or County Gov't	A city or county government asks the appropriate methodology to recover its costs for various central service departments (purchasing, audit, human resources/personnel, legal, etc.) under its various Federal awards.	Central Services Cost Allocation Plan
Municipal Gov't or County Gov't	A city or county government operates transit services as a function of a larger department, for example the Department of Public Services and Transit. The city or county government asks the appropriate methodology to claim the costs of departmental overhead and shared costs under its Federal transit grants.	Indirect Cost Allocation Plan
Non-profit Organization (e.g., COG / RPC)	A non-profit organization operates several major programs or activities, including transit services. The agency asks the most appropriate methodology to claim the costs of agency overhead costs under its various Federal awards.	Indirect Cost Rate Approved by Cognizant Agency
Transit Provider	A transit provider asks the most appropriate methodology to include certain transit administrative direct costs in its cost analysis of individual services. These costs include salary and personnel costs, facility related costs, and other expenses that cannot by directly accounted for as variable costs.	Transit Service Cost Allocation Plan
Transit Provider	A transit provider receives funding under both Section 5307 Urban and Section 5311 Rural grant programs. FTA requires a methodology to allocate costs between the two programs.	Urban/Rural Cost Allocation Plan
Transit Provider	A transit provider receives local funding from multiple local jurisdictions (for example, city/county governments). The transit provider asks the appropriate methodology to allocate costs by jurisdiction.	Jurisdictional or Service Area Cost Allocation Plan
Transit Provider approved to operate Charter	An FTA grantee asks the most appropriate methodology to document eligible charter service pursuant to 49 CFR Part 604.	Charter Services Cost Allocation Plan

Coursebook: p. 5-47

PROGRAM INCOME

- Definition: "gross income earned that is directly generated by a supported activity, or earned only as a result of the federal award during the period of performance"
- FTA encourages recipients to earn income to defray program costs. Examples
  - Fees for services performed.
  - Use or rental of real or personal property acquired under an award.
  - License fees and royalties on patents/copyrights.
- Uses of Program Income
  - For capital or operating public transportation expenses
  - As local match for *future public transportation projects*

ANNUAL AUDIT

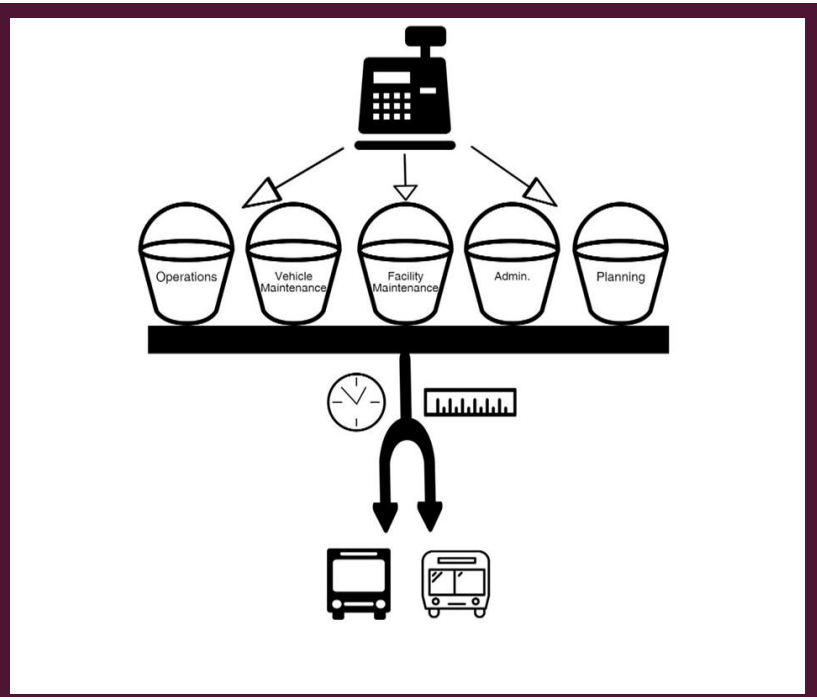
- All recipients that expend $750,000 or more in a year in federal assistance from all sources must have a single audit conducted.
- The audit must be conducted by an independent, outside auditor.
- The purpose of the single audit is to protect the federal interest and investment and ensure:
  - Financial statements fairly present the recipient's financial position in accordance with generally-accepted accounting principles.
  - The recipient has internal accounting and control systems to provide assurance of management of grants in compliance with applicable federal, state, and local laws and regulations.
  - The recipient has complied with laws and regulations related to financial transactions and to FTA grant programs.

REVIEW

- Compare cash-based and accrual-based accounting
- Why does your transit district need a good chart of accounts?
- Provide an example of a variable cost. How do you know the cost is variable?
- Explain the importance of matching revenues to expenses.
- Can you decide to request reimbursement for indirect costs if they were not included in your original project budget?

MODULE 6

ALLOCATING COSTS TO TRANSIT SERVICES



LEARNING OBJECTIVES

By the end of this module, you should be able to:

- Discuss the purpose of allocating costs to services, modes, and jurisdictions
- List and describe the four steps in the cost allocation methodology
- Define important cost allocation terms
- Complete your own basic cost allocation example

DO YOU STRUGGLE WITH NTD AND PTN-128 REPORTING COMPLEXITY?

NTD and PTN-128 reporting requires that transit agencies report:

- By mode—fixed-route bus, commuter bus, demand response...
- By jurisdiction—urbanized, non-urbanized

NTD "Full Reporter" requires that transit agencies identify expenses:

- By service type—directly operated or purchased
- By sponsored service—e.g.. Medicaid NEMT, university

Your transit agency needs a good model to allocate costs by service

WHY DEVELOP A COST ALLOCATION MODEL?

- When operate multiple services (routes, jurisdictions, programs), operating expenses not easily tracked for each service.
- For example, what is *true cost* of a service provided in County A, County B, etc.? TOO COMPLEX to track exactly.
- Discussion: Who has / uses a cost allocation model? Describe it.

KEY TERMS

- Cost Allocation
- Fully Allocated Cost
- Variable Cost
- Fixed Cost
- Direct Cost
- Indirect Cost

FTA AND OMB REFERENCES

- National Transit Database Policy Manual (2017)
- 2 CFR 200 (2013)
- FTA Circular 9030.1E Urbanized Area Formula Program (2014)
- FTA Circular 9040.1G Formula Grants for Rural Areas (2014)
- FTA Circular 9070.1G Enhanced Mobility of Seniors and Individuals with Disabilities (2014)
- FTA Circular 5010.1E Grants Management Requirements (2017)

ACCOUNTING METHODOLOGY—TWO VARIABLE

Consider using a model based on Two Variables.

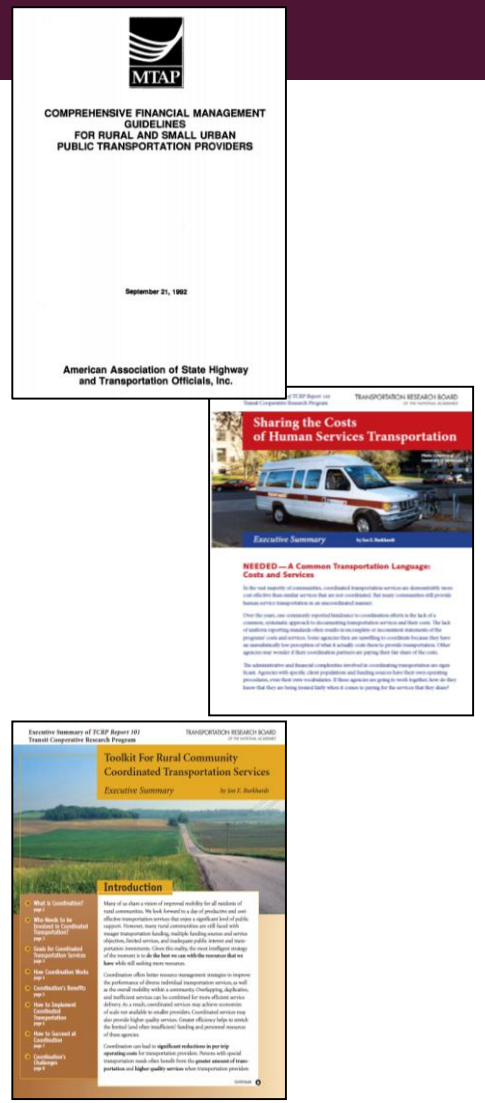
Two Variable Cost Allocation:

- Vehicle Hours
- Vehicle Miles

BASIS OF THIS ACCOUNTING METHODOLOGY

Based on methodologies described in:

- AASHTO MTAP Comprehensive Financial Management Guidelines for Rural and Small Urban Public Transportation Providers
- TCRP Report 144 Sharing the Costs of Human Services Transportation
- TCRP Report 101 Toolkit for Rural Community Coordinated Transportation Services.



COST ALLOCATION STEPS

1. Assemble Operations Data (vehicle hours, miles, passenger trips)
2. Assemble Operating Expenses into a Chart of Accounts
3. Assign line item expenses to transit functions
4. Allocate variable and fixed-cost expenses, to service modes, types, sponsored service and jurisdictions using two variables: vehicle miles and vehicle hours

ACCOUNTING METHODOLOGY—FOUR-STEP PROCESS

Update Annually or with Major Service Change

Need Three Pieces of Information— ***Hours, Miles, Passengers*** *by mode, service, funding source, jurisdiction (urban/rural)*

Route	Funding Source	Mode	Total Vehicle Hours	Total Vehicle Miles	Total Passenger Trips
FIXED ROUTE					
Route 1	Section 5307 Small Urban	MB	3,591	57,276	29,488
Route 6	Sectin 5311 Rural	MB	1,258	22,575	1,257
Route 14	Section 5307 Large Urban	MB	2,473	53,965	8,163
Yellow	Section 5307 Small Urban	CB	3,010	62,565	6,076
Purple	Section 5307 Small Urban	CB	2,580	50,740	6,076
DEMAND RESPONSE					
General Public	Section 5311 Rural	DR	2,300	22,200	3,021
Sponsored Services:					
Veterans	Section 5311 Rural	DR	675	12,180	501
Adult Day Care	Section 5311 Rural	DR	1,989	41,280	5,237

2. Assemble Operating Expenses

Need ***Year-End Total Operating Expenses by Line-Item***

Chart-of-Account Format

Account Description	Annual Total Operating Expense
Total Operating Costs	**$3,799,051**
Salaries	**$1,329,261**
Drivers	$837,984
Dispatch	$90,565
Maintenance	$179,144
Office Staff	$221,567
Fringe	**$699,920**
Drivers	$441,239
Dispatch	$47,687
Maintenance	$94,328
Office Staff	$116,666
Utilities	**$23,515**
Fuel/ Oil	**$456,130**
Tires	**$39,518**
Training	**$1,123**

3. Assign Operating Expenses to Functions and Variable/Fixed

Assign Line-Item Expense to Functions

Why? NTD & PTN-128 Reporting

Assign Line-Item Expense by

Variable Costs & Fixed Costs

		Variable Cost			Fixed Cost		
Account Description	Annual Total Operating Expense	Operations	Operations-Fuel	Vehicle Maintenance	Facility Maintenance	Administration	Planning
Total Operating	**$3,799,051**	**$1,730,086**	**$456,130**	**$570,679**	**$18,662**	**$1,013,494**	**$10,000**
Salaries	**$1,329,261**	**$928,549**		**$179,144**		**$221,567**	
Drivers	$837,984	$837,984					
Dispatch	$90,565	$90,565					
Maintenance	$179,144			$179,144			
Office Staff	$221,567					$221,567	
Fringe	**$699,920**	**$488,926**		**$94,328**		**$116,666**	
Drivers	$441,239	$441,239					
Dispatch	$47,687	$47,687					
Maintenance	$94,328			$94,328			
Office Staff	$116,666					$116,666	
Utilities	**$23,515**	**$16,461**		**$3,057**		**$3,998**	
Fuel/ Oil	**$456,130**		**$456,130**				

4. Allocate Costs to Routes and Services, Modes, Funding Sources, Jurisdictions

Allocate Costs by Category

- Routes and Services
- Modes
- Funding Sources and/or Jurisdictions

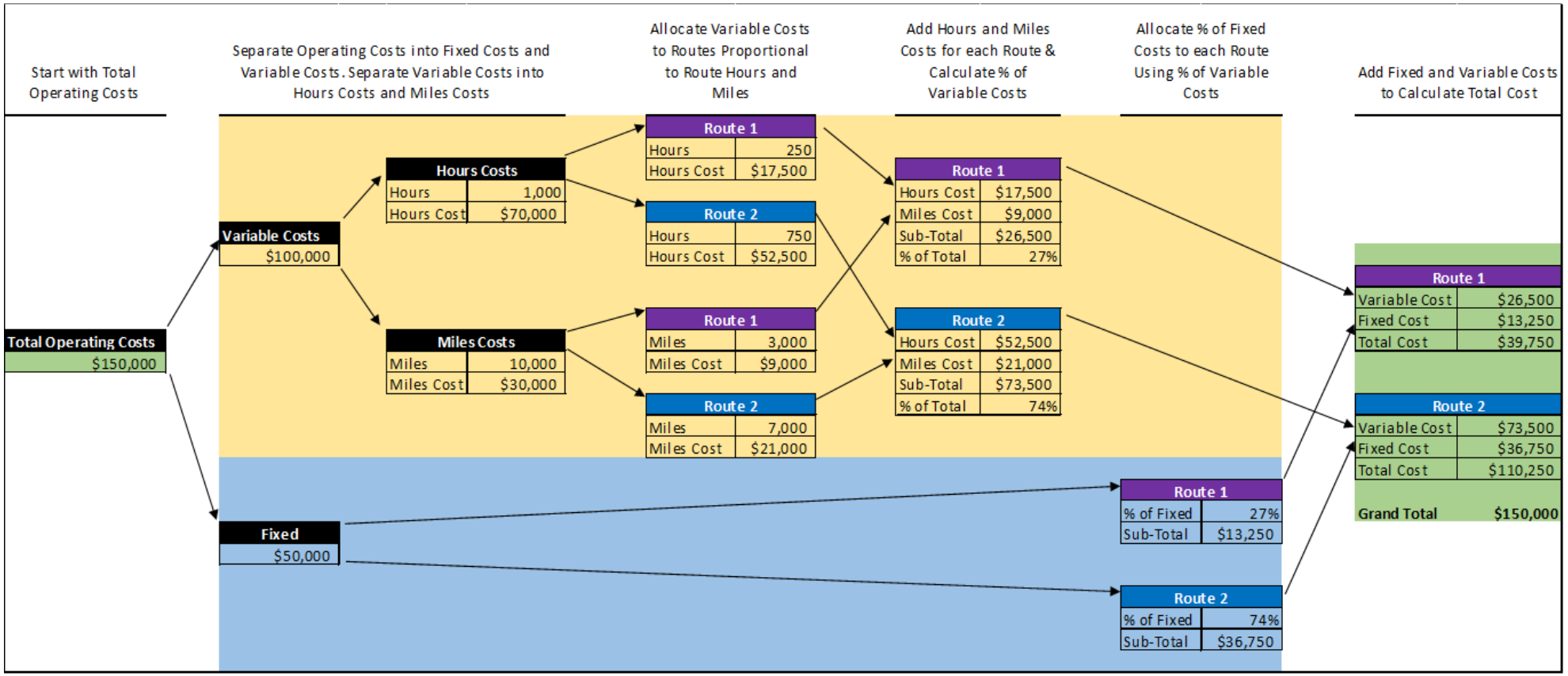
Allocate Variable Costs

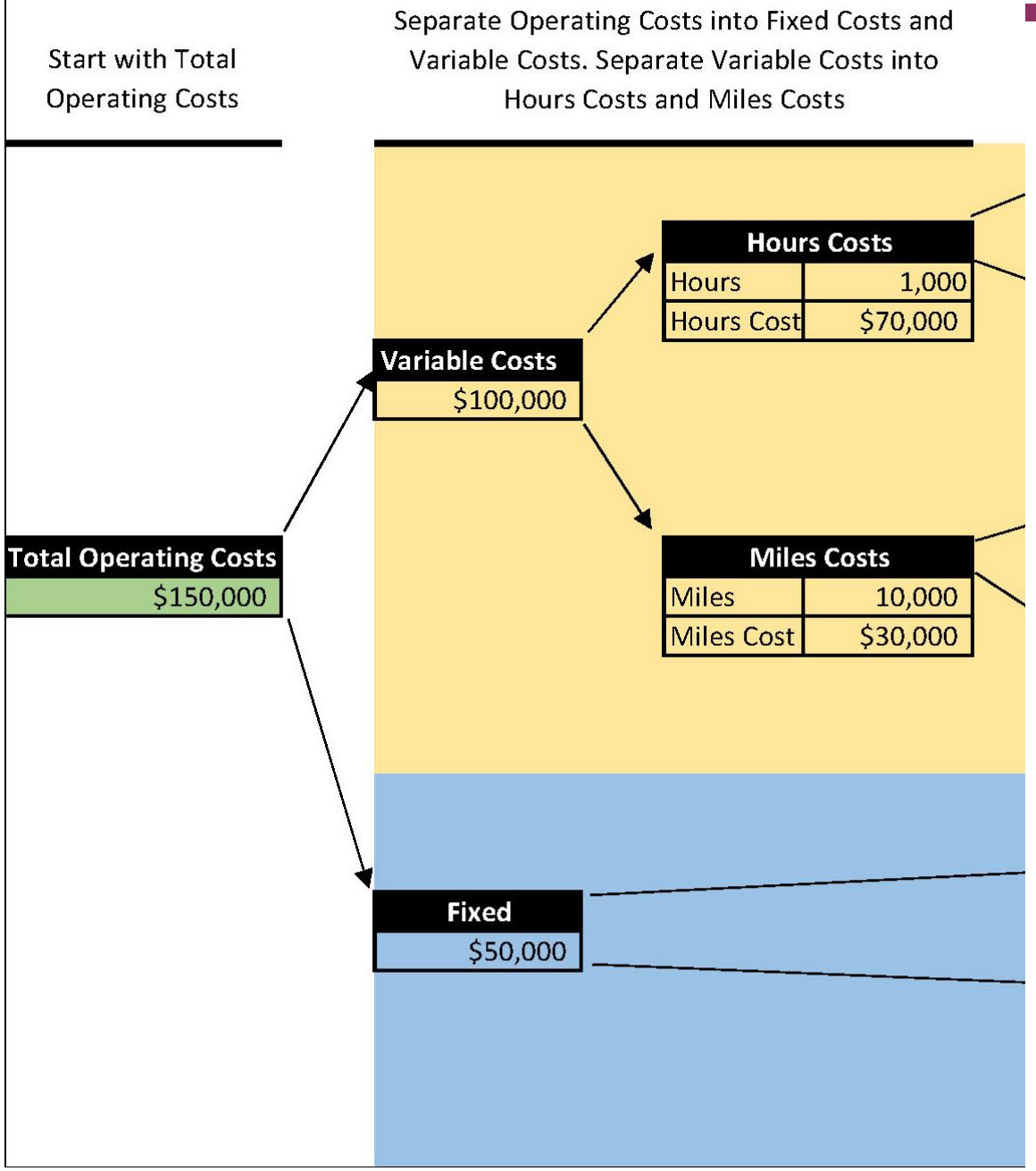
- Operations (excluding Fuel) by % hours
- Vehicle Maintenance and Fuel by % miles

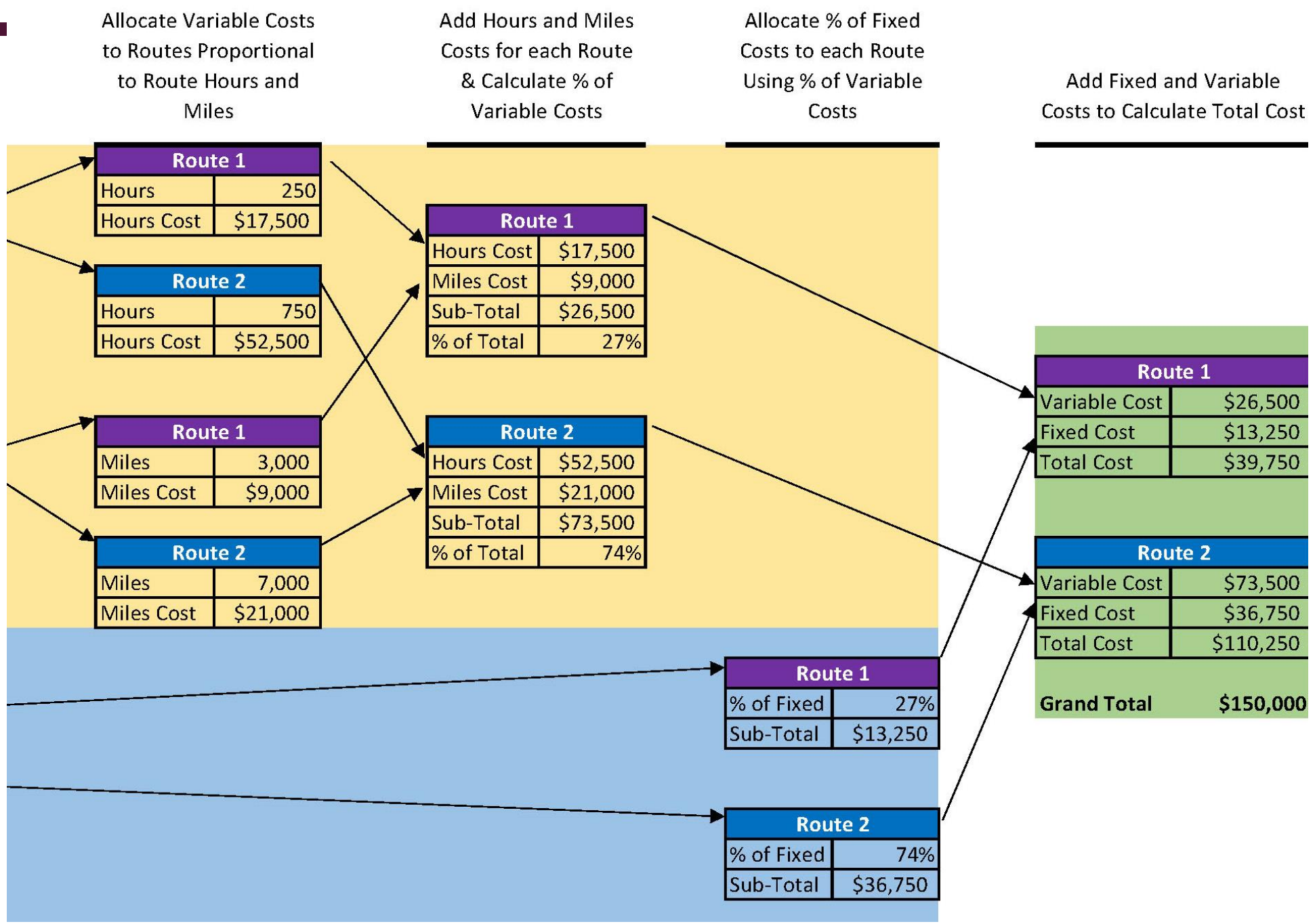
Fixed Costs

- Allocate Fixed Costs as % variable costs
- Typically Facility Maintenance and Administration, fixed cost may include other maintenance expenses
- Assign Planning directly to route/program planned if the detail is available

ASSIGNING OPERATING COSTS – HANDOUT 6




Start with Total Operating Costs
Separate Operating Costs into Fixed Costs and Variable Costs. Separate Variable Costs into Hours Costs and Miles Costs
Total Operating Costs
$150,000
Variable Costs
$100,000
Fixed
$50,000
Hours Costs
Hours
1,000
Hours Cost
$70,000
Miles Costs
Miles
10,000
Miles Cost
$30,000


Allocate Variable Costs to Routes Proportional to Route Hours and Miles
Add Hours and Miles Costs for each Route & Calculate % of Variable Costs
Allocate % of Fixed Costs to each Route Using % of Variable Costs
Add Fixed and Variable Costs to Calculate Total Cost
Route 1
Hours 250
Hours Cost $17,500
Route 2
Hours 750
Hours Cost $52,500
Route 1
Miles 3,000
Miles Cost $9,000
Route 2
Miles 7,000
Miles Cost $21,000
Route 1
Hours Cost $17,500
Miles Cost $9,000
Sub-Total $26,500
% of Total 27%
Route 2
Hours Cost $52,500
Miles Cost $21,000
Sub-Total $73,500
% of Total 74%
Route 1
% of Fixed 27%
Sub-Total $13,250
Route 2
% of Fixed 74%
Sub-Total $36,750
Route 1
Variable Cost $26,500
Fixed Cost $13,250
Total Cost $39,750
Route 2
Variable Cost $73,500
Fixed Cost $36,750
Total Cost $110,250
Grand Total $150,000

SHARED RIDE DEMAND RESPONSE

- If demand response (DR) services are shared ride, and there is a need to allocate costs by service type or funding source, then an additional four-step methodology may be required
- An additional four-step methodology can be used to allocate costs by service type or by funding source, etc.
- This methodology is only required if passenger trips by service type or funding source are significantly different in distance (passenger miles) or time (passenger hours) than the average

SHARED RIDE DEMAND RESPONSE

Four steps in methodology for shared ride demand response

1. Use driver manifests to determine average trip length in passenger miles and passenger hours by service type
2. Estimate total passenger miles and hours by service type
3. Determine percent of passenger miles and passenger hours by service type
4. Allocate variable costs according to hours-based costs, miles-based costs; and allocate fixed costs using percent of variable costs

SHARED RIDE DEMAND RESPONSE: EXAMPLE STEP 1
ESTIMATE AVERAGE PASSENGER TRIP LENGTH

Service Type	Avg. Trip Length (Hours)	Avg. Trip Length (Miles)
General Public	1.32	21.52
Sponsored Service		
Veterans	1.00	17.96
Adult Day Care	0.57	7.88
Grand Total (Weighted Average)	0.85	13.16

SHARED RIDE DEMAND RESPONSE: EXAMPLE STEP 2
ESTIMATE PASSENGER HOURS AND MILES PER PROGRAM

Trip Type	Passenger Trips	Avg. Trip Length (Hours)	Avg. Trip Length (Miles)	Total Passenger Hours	Total Passenger Miles
General Public	3,021	1.32	21.52	4,000	65,000
Sponsored Service					
Veterans	501	1.00	17.96	500	9,000
Adult Day Care	5,237	0.57	7.88	2,984	41,280
Grand Total	8,759	0.85	13.16	7,484	115,280

SHARED RIDE DEMAND RESPONSE: EXAMPLE STEP 3
CALCULATE PERCENTAGE OF PASSENGER HOURS AND MILES PER PROGRAM

Percent by Trip Type	Passenger Trips	Passenger Hours	Passenger Miles
General Public	34.5%	53.5%	56.4%
Sponsored Service			
Veterans	5.7%	6.7%	7.8%
Adult Day Care	59.8%	39.9%	35.8%

SHARED RIDE DEMAND RESPONSE: EXAMPLE STEP 4

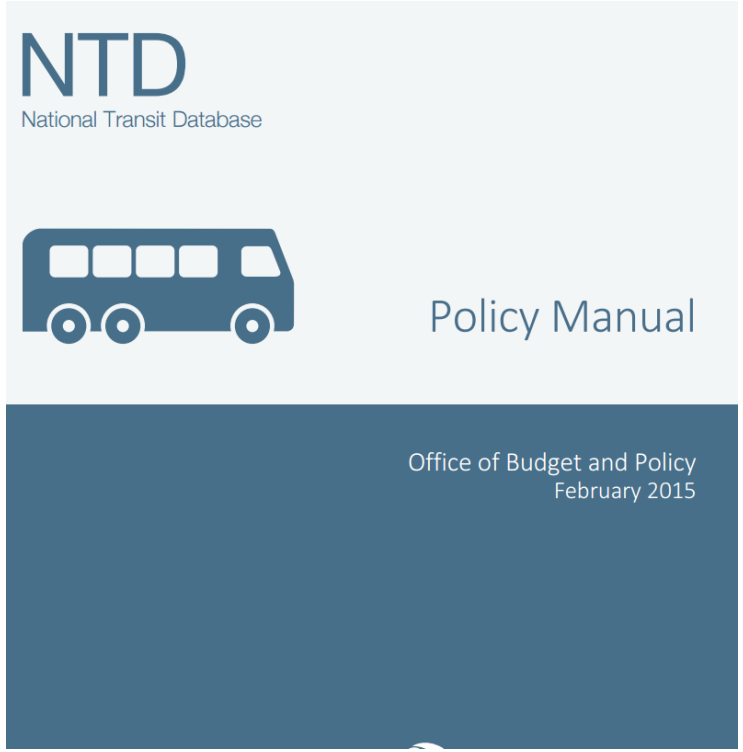
ALLOCATE OPERATING EXPENSES BY THE PERCENTAGE OF PASSENGER HOURS AND MILES PER PROGRAM

Route	DR Passenger Hours	% DR Passenger Hours	DR Passenger Miles	% DR Passenger Miles	Operations	Fuel	Maint.	Sub-Total Variable	% DR Variable Cost	Facility Maint.	Admin.	Planning	Total Cost
DEMAND RESPONSE	7,484		115,280		$118,353	$21,473	$26,865	$166,691		$1,128	$61,279	$0	$229,099
General Public	4,000	53.5%	65,000	56.4%	$63,261	$12,107	$15,148	$90,516	54.3%	$613	$33,276		$124,404
Sponsored Services													
Veterans	500	6.7%	9,000	7.8%	$7,908	$1,676	$2,097	$11,681	7.0%	$79	$4,294		$16,055
Adult Day Care	2,984	39.9%	41,280	35.8%	$47,185	$7,689	$9,620	$64,494	38.7%	$437	$23,709		$88,640

METHODOLOGY OUTCOMES **HOW CAN YOU USE?**

NTD Reporting

- By Mode
- By Section 5307 and Section 5311
- By Chart-of-Account Line Item (Object Class)
- By Function
- By Service Type (Directly Operated/Purchased)



PTN-128 Reporting

- By Mode
- By Section 5307 Urban and Section 5311 Rural
- By Function

Know Cost and Make Decisions

Route	Funding Source	Mode	Total Cost	Passenger Trips per Vehicle Hour	Cost per Passenger Trip
FIXED ROUTE					
Route 1	Section 5307 Small Urban	MB	$177,954	8.21	$6.03
Route 6	Sectin 5311 Rural	MB	$61,039	1.00	$48.55
Route 7	Section 5307 Small Urban	MB	$178,375	4.07	$12.19
Route 14	Section 5307 Large Urban	MB	$128,410	3.30	$15.73
Yellow	Section 5307 Small Urban	CB	$153,575	2.02	$25.28
Purple	Section 5307 Small Urban	CB	$129,101	2.36	$21.25
DEMAND RESPONSE					
General Public	Section 5311 Rural	DR	$94,865	1.31	$31.40
Sponsored Services:					
Veterans	Section 5311 Rural	DR	$32,815	0.74	$65.50
Adult Day Care	Section 5311 Rural	DR	$101,419	2.63	$19.37

Measure Performance

Route	Passenger Trips per Vehicle Hour	Cost per Total Vehicle Hour	Cost per Total Vehicle Mile	Cost per Passenger Trip
FIXED ROUTE	5.68	$52.81	$2.33	$9.31
DEMAND RESPONSE	1.76	$46.15	$3.03	$26.16
GRAND TOTAL	5.41	$52.36	$2.36	$9.68
Summary by Funding Source				
Section 5307 Small Urban	5.63	$54.79	$2.21	$9.74
Section 5307 Large Urban	5.63	$48.00	$2.77	$8.52
Section 5311 Rural	4.55	$50.43	$2.51	$11.07
Summary by Mode				
MB	6.14	$50.15	$2.56	$8.17
CB	4.64	$58.80	$1.98	$12.68
DR	1.76	$46.15	$3.03	$26.16

Price Services

Route	Cost per Total Vehicle Hour	Cost per Total Vehicle Mile	Cost per Passenger Trip
FIXED ROUTE	$52.81	$2.33	$9.31
DEMAND RESPONSE	$46.15	$3.03	$26.16
General Public	$41.25	$4.27	$31.40
Sponsored Services:			
Veterans	$48.61	$2.69	$65.50
Adult Day Care	$51.00	$2.46	$19.37
GRAND TOTAL	**$52.36**	**$2.36**	**$9.68**
Summary by Funding Source			
Section 5307 Small Urban	$54.79	$2.21	$9.74
Section 5307 Large Urban	$48.00	$2.77	$8.52
Section 5311 Rural	$50.43	$2.51	$11.07
Summary by Mode			
MB	$50.15	$2.56	$8.17
CB	$58.80	$1.98	$12.68
DR	$46.15	$3.03	$26.16

Understand Costs by Funding Source

Funding Source	Operations	Fuel	Maint.	Facility Maint.	Admin.	Planning	Total Cost
Section 5307 Small Urban	$982,644	$290,117	$362,975	$10,914	$592,749	$10,000	**$2,249,400**
Section 5307 Large Urban	$391,995	$80,947	$101,275	$4,001	$217,287	$0	**$795,505**
Section 5311 Rural	$355,447	$85,066	$106,429	$3,746	$203,458	$0	**$754,146**
GRAND TOTAL	**$1,730,086**	**$456,130**	**$570,679**	**$18,662**	**$1,013,494**	**$10,000**	**$3,799,051**

Could also include funding source by contract to provide human services transportation

Backup for Monthly Request for Reimbursements
(Expenses Incurred)

		Section 5307 Small Urban (Month Expense Incurred * Line-Item %)						
Account Description	**Month Expense**	Operations	Fuel	Vehicle Maintenance	Facility Maintenance	Administration	Planning	Total
Total Operating	**$316,588**	**$81,774**	**$24,176**	**$30,248**	**$923**	**$50,230**	**$833**	**$188,183**
Salaries	**$110,772**	**$43,949**	**$0**	**$9,495**	**$0**	**$10,955**	**$0**	**$64,400**
Fringe	**$58,327**	**$23,141**	**$0**	**$5,000**	**$0**	**$5,768**	**$0**	**$33,910**
Utilities	**$1,960**	**$779**	**$0**	**$162**	**$0**	**$198**	**$0**	**$1,139**
Fuel/ Oil	**$38,011**	**$0**	**$24,176**	**$0**	**$0**	**$0**	**$0**	**$24,176**
Tires	**$3,293**	**$0**	**$0**	**$2,095**	**$0**	**$0**	**$0**	**$2,095**
Training	**$94**	**$0**	**$0**	**$60**	**$0**	**$0**	**$0**	**$60**

FOR THE ACCOUNTANT— WHY IT MATTERS

Accounting Methodology for cost allocation to services Provides:

- A **consistent and equitable operating cost distribution** across routes, programs, modes, jurisdictions
- Transparent documentation for **federal grant reimbursement**
- **NTD and PTN-128** reporting
- Basis for accounting system to **automate financial reporting**
- Basis for **budgeting** operating expenses and funding need

I'M NOT AN ACCOUNTANT— WHY IT MATTERS TO ME

As a Manager You Can Answer the Questions:

How much does Route 6 cost per passenger, per mile, per hour and why?

Why is the fixed route cost per passenger different than demand response cost per passenger?

What is the ranking of fixed routes by cost effectiveness (cost per passenger)?

What line item of expense is driving my costs?

How should I price commuter bus service for an employer?

REVIEW

- Discuss the purpose of allocating costs to services, modes, and jurisdictions
- List the four steps in the cost allocation methodology
- Define an important cost allocation term that you learned today

Texas A&M Transportation Institute

MODULE 7

REPORTING FINANCIAL DATA TO PTN-128 & NTD

LEARNING OBJECTIVES

By the end of this module, you should be able to:

- Describe collecting and reporting financial data for PTN-128 and NTD
- Identify the correct classification of revenue sources and types of expenses
- Describe how to report purchased transportation
- Use travel modes in PTN-128 worksheets and check for data reasonableness

WHAT IS PTN-128?

TxDOT Public Transportation Division (PTN) automated web-based mechanisms for:

- Reporting uniform transit data to the state and FTA
- Submitting consistent data
- Performing quality control
- Providing queries and reports
- Managing performance

HOW IS THE DATA USED?

- To communicate funding need to legislature and stakeholders
- To fulfill state and federal grant recipient reporting requirements as a measure of performance accountability
- To calculate Texas Public Transit Funding Formula for allocation of funds to state-funded urban and rural transit districts
- To submit Section 5311, Other than Urbanized Area (Rural) Formula Program reporting to NTD
- To manage and communicate transit performance

RELATIONSHIP TO NTD

The National Transit Database (NTD)

- FTA's primary national database for transit industry statistics
- Section 5307 and 5311 recipients are required by statute to submit data to NTD
- PTN-128 data element definitions and reporting requirements are consistent with NTD
- TxDOT reports NTD for Section 5311 subrecipients who do not also provide Section 5307 service

WHO REPORTS DATA?

- Transit districts report data quarterly to PTN-128, annually to NTD
- All services are reported
  - Both directly operated and purchased service
  - Include all transit services regardless of funding source

Goal – to report all services to provide the true magnitude of transit

PURCHASED TRANSPORTATION WITH ANOTHER DISTRICT

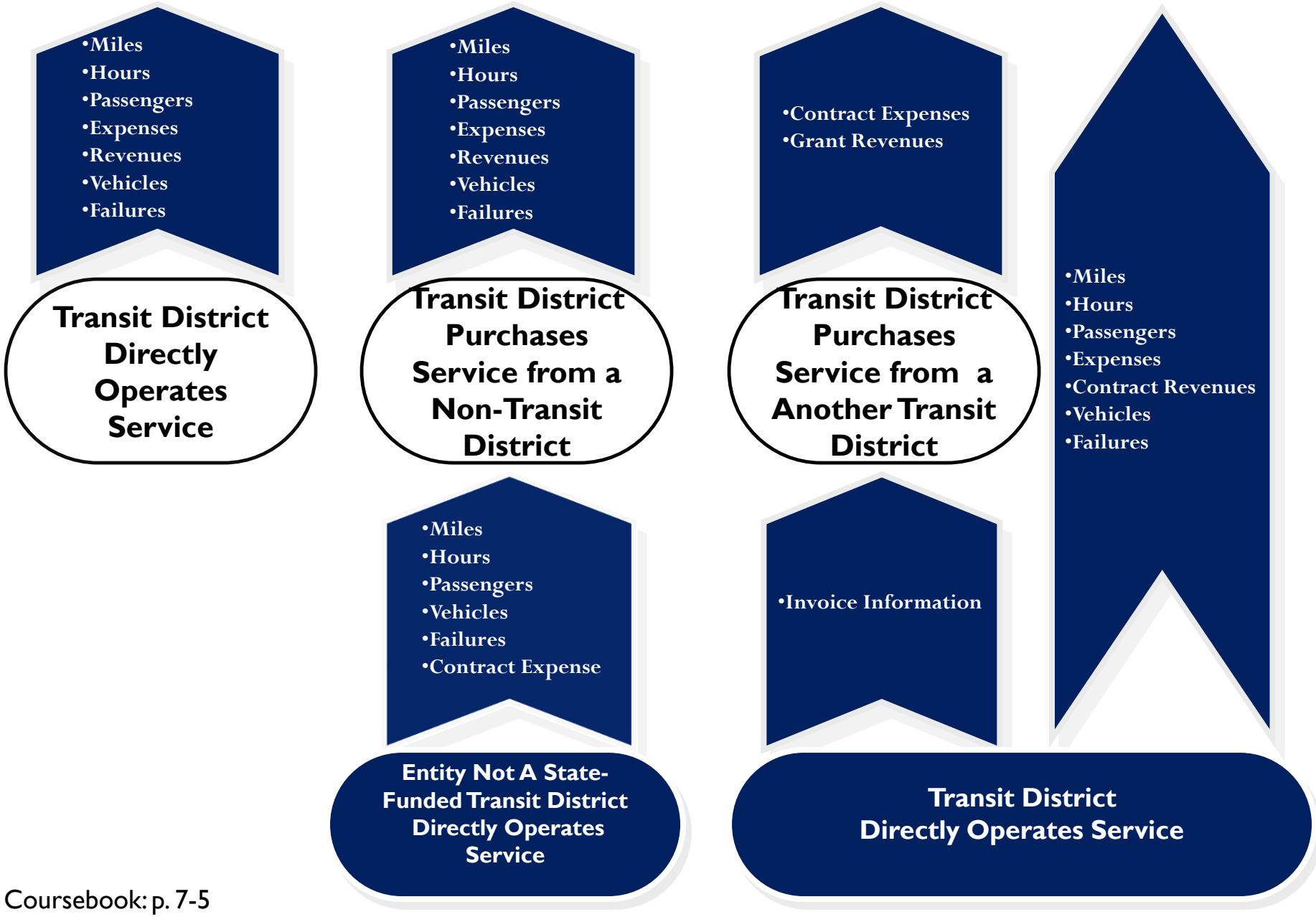
One Exception!

If a transit district purchases from another *transit district*, then:

- The purchaser reports financial data only (grant revenues and offsetting PT expenses) and
- The provider of service reports both financial (contract revenues and operating expenses) and operating data (passengers, miles, hours, vehicles).

Purpose – To avoid double-counting of operating data at the state-level

PTN



Coursebook: p. 7-5

EXAMPLE: PURCHASE FROM TRANSIT DISTRICT

Data Reported	Purchaser Transit District	Provider Transit District
REVENUES		
Section 5307 or Section 5311 Funds	$10,000	
Transit District Revenues		$10,000
EXPENSES		
Purchased Transportation Expense	$10,000	
Operating Expense		$7,000
Maintenance Expense		$1,000
Administration Expense		$2,000
OPERATING DATA		
Passengers		500
Miles		6,000
Hours		250
Vehicles		1
Failures		1

REVENUES

REVENUE REPORTING CONCEPTS

- Report revenues by funding source
- Include *all* funds for both operating and capital expenditures
- **Report only those funds that are (or will be) *applied* to expenses during the reporting period (accrued accounting)**

TYPES OF REVENUES

- **Federal Grant Programs**
  - 5307, 5311, 5303, 5304, 5305, 5309/5339
- **State Formula Revenues**
- **Local Investments**
  - Local Revenues (Fares)
  - Direct Transit Funding
  - Indirect Transit Funding
- **Contract Revenues**
  - Medical Transportation, DADS, DARS
  - 5310, Head Start, 5316 JARC, CMAQ, 5317 New Freedom
  - Other local contracts

FEDERAL & STATE GRANT PROGRAMS

- **Federal & State** formula funds
  - Annually allocated for urban and rural agencies
  - 5307 & Urban State – urban transit districts
  - 5311 & Rural State – rural transit districts
  - Based on performance measures and local need

- Section **5307 & 5311 Contract** Revenues
  - If your transit district contracts to provide general public transit services for another urban or rural transit district
  - These dollars are not eligible to be counted as local investment for funding formula

FEDERAL & STATE GRANT PROGRAMS

- **Planning** Revenues
  - Awarded for specific projects or planning efforts
  - 5303, 5304, 5305 are planning-related programs - Metropolitan & Statewide Planning and Non-Metropolitan Transportation Planning

- **Capital Investment** (5309) and **Bus & Bus Facilities** (5339) Grants
  - Revenue program capital asset purchases or bus rehabilitation projects
  - Always reported with corresponding capital expenses

LOCAL INVESTMENTS

- Passenger Fares
- Direct Transit Funding
  - Local Contributions (gov't & non-gov't)
  - Contribution Services (non-cash)
  - Sales Tax
- Indirect Transit Funding
  - Auxiliary Transit Revenue
  - Other Transportation Revenues
  - Non-Transit Related Revenues

PASSENGER FARES

- Passenger fares are the revenues earned from carrying passengers. Passenger fares may be collected in several ways, including:
  - Before service is provided (e.g., through the sale of media such as passes, tickets, tokens sold to passengers)
  - Directly at the point of service (e.g., farebox, turnstile)
  - After the service is provided, (e.g., through weekly or monthly billing)

SPECIAL TRANSIT FARES

- The USOA defines **special transit fares** as fare revenues earned for *rides* given in regular transit service, but paid for by some organization other than by the rider.
- Special transit fare contracts are *not* a contract for service but a contract for fares based on the *rides* provided.

CONTRACT FOR SERVICE VS. CONTRACT FOR FARES

- A contract for service is a contractual arrangement to pay the transit provider for transit *service* and is not based on the *rides* provided.

- A contract for fares (special transit fares) is a contractual arrangement to pay the transit provider for the number of *rides* provided.

FARE SUBSIDY … IS NOT A PASSENGER FARE

- Local government financial support to subsidize the difference between full adult fares and special reduced fares is considered fare subsidy and is reported in the appropriate state and local fund category

- Fare subsidy is not considered passenger fare revenue

- Local fare subsidy may include funding to cover the difference in the full adult fare and reduced fares for individuals with disabilities, elderly individuals, students and/or other groups specified.

LOCAL CONTRIBUTIONS

- **General funds** – transfers from the general fund of local governments to cover the local share portion of the transit system operating and capital budget
- **Specified contributions** – contributions from city, county, or other municipal government towards the local share portion of the transit system operating and capital budget
- **Reserve capital funds** – transfers from a capital reserve fund of local governments expressly established to be used to cover the local share portion of transit system capital costs

CONTRIBUTED SERVICES

- "Services" can be a misleading term
- Revenues for **Contributed Services** are receipt of *non-cash* assets or services from another entity that benefits the transit provider.
- Contributed services include **physical assets and services**.
  - In-kind services are a type of contributed services where the transit provider derives a benefit from another entity but is under no obligation to pay for that benefit.
  - Central services should be reported as revenues for Contributed Services if the parent agency has no expectation of reimbursement.

CONTRIBUTED SERVICES

- Examples of contributed services include:
  - Utility services provided without-charge
  - Marketing provided without-charge
  - Maintenance services provided without-charge
  - Office space provided without-charge
- The transit provider should keep a record of the financial value of any and all Contributed Services including in-kind services.
- A cost allocation plan may be required for Centralized Services
- Contributed Services are reported as both expenses and revenues
- If contributed services are not reported, the cost of providing the service is not accurate.

CONTRIBUTED SERVICES

When documenting the value of contributed services, report:

- Physical assets as the fair market value of the physical asset at the date received (may be operating or capital expense)
- Services if the service meets the following test:
  - The service is significant and essential.
  - The transit provider has reasonably good control over the services.
  - There is an objective basis to value services.
  - The service benefits people outside the contributor's organization.

AUXILIARY TRANSIT REVENUES

- Auxiliary transit revenues are generated from the by-products of the transit service
- Includes:
  - Advertisements on-board vehicles
  - Concessions stands in station areas
  - Fees paid for transit ID cards
  - Fines paid for fare evasion
- Not dedicated to the provision of transit service.

OTHER TRANSPORTATION REVENUES

Other Transportation Revenues include charter service, exclusive school bus service and freight tariff revenues associated with the operating and capital cost of these services

- **Charter service** is a vehicle hired for exclusive use that does not operate over a regular route or on a regular schedule and is not available to the general public.
- **Exclusive school bus service** is the use of buses to carry children and school personnel to and from their schools or school-related activities.
- **Freight tariffs** are revenues earned from carrying freight on runs whose primary purpose is passenger operations.

NON-TRANSIT RELATED REVENUES

- **Non-transit related revenues** are the revenues earned from activities not associated with the provision of transit service. Non-transit related funds include, but are not limited to:
  - Sale of maintenance services
  - Rental of revenue vehicles
  - Rental of buildings and other property
  - Investment income
  - Parking facility revenue
- **Donations** – donations from individuals or organizations to help cover the costs of providing transit service but which are not related to specific passengers or trips, and to help cover capital costs.

CONTRACT REVENUES

- Generated from contracts to provide transit services for a designated group or purpose.
- May be Federal, State, local, or privately funded
- Pre-filled Federal and State contracts listed in the PTN-128 web system:
  - Medical Transportation Program (MTP)
  - Head Start
  - Department of Aging and Disabilities (DADS)
  - Department of Assistive & Rehabilitative Services (DARS)
  - FTA Special Needs of Elderly Individuals and Individuals with Disabilities (Section 5310)
  - FTA Job Access and Reverse Commute (JARC)(Section 5316)
  - FTA New Freedom Program (Section 5317)
  - FHA Congestion Mitigation Air Quality (CMAQ)

HOW TO REPORT BONDS AND LOANS

- Report the proceeds from government agency bonds or loans issued during the period as revenues in the appropriate state or local fund category
- Report the interest as an operating expenditure under administrative expense
- The bond or loan revenues are reported in the period when applied
- Use of funds from bonds and loans are listed as a capital expense (bonds and some loans) or operating expense (loans) for the period when the expense is applied

EXPENSES

TOTAL COST

- Report the total operating cost
  - Direct and indirect costs
  - Allowable and unallowable costs
  - Contributed services – in-kind/non-cash
- Report both operating and capital cost

Report total costs for accuracy of performance measures in PTN-128 and NTD

	Total Cost	Not Total Cost (Excluding In-Kind, indirect or other costs)
Operating Cost	$100,000	$90,000
Miles	40,000	40,000
Cost per Mile	$2.50	$2.25

EXPENSES TOPICS

- A Common Chart of Accounts
- Allowable and Unallowable Expenses
- Direct and Indirect Costs
- Operating vs. Capital Expenses
- Operating Expenses by Function:
  - Operating, Maintenance, Administrative, Planning, Purchased Transportation
- Accrual Accounting Method of Recording Expenses

CHART OF ACCOUNTS

- The agency's chart of accounts is the basic tool used to ensure that all transportation costs are reflected in the agency's accounting system
- Public transportation industry standard for NTD uses the Uniform System of Accounts (USOA).

	Ledger Expenses
Salaries - Driver	$100,000
Salaries - Mechanic	$30,000
Salaries - Administration	$20,000
Payroll Benefits (30% salary)	$45,000
Purchased Transportation	$10,000
Building Rent	$5,000
Building Maintenance and Repair	$10,000
Utilities	$5,000
Insurance - Vehicles	$20,000
Insurance - General Liability	$10,000
Fuel	$40,000
Vehicle Parts & Supplies	$30,000
Professional Services	$10,000
Travel	$1,000
Total Operating Expenses	$336,000

ALLOWABLE AND UNALLOWABLE EXPENSES

- Report all expenses incurred, both allowable and unallowable
- The total cost of providing transit service should be captured in data
- Difference in reporting allowable costs for grant reimbursement and reporting total cost for NTD and other stakeholder reporting requirements

DIRECT AND INDIRECT COSTS

- **Total Costs** = Direct Costs + Indirect Costs

- **Direct Costs**
  - Associated on a one-to-one basis with a given service, typically change with level of service
  - Ex. driver wages, fuel, vehicle maintenance

- **Indirect Costs** –
  - Associated with a common/joint purpose benefiting more than one cost objective
  - Not readily assignable to the cost objectives specifically benefited, without effort disproportionate to the results achieved
  - Ex. legal services, human resources, purchasing

OPERATIONAL AND CAPITAL COSTS

- **Operational costs -** typically expenses consumed in a one-year (include labor, fringe benefits, materials and supplies (e.g. fuel), maintenance, office space, equipment and administrative costs).
- **Capital costs** - expenses associated with long-term acquisitions and leases of physical assets, such as buses, garages, and maintenance facilities. NTD: capital expenses are the costs incurred that exceed $5,000 or the capitalization value established by the local government unit if lower.

OPERATIONAL EXPENSES BY FUNCTION

- Functional areas represent a set of line item expenses
- Supervisors are often held accountable for costs by functional area
- PTN-128 reports costs by function:
  - Operating
  - Maintenance
  - Administrative
  - Planning
  - Purchased Transportation

ASSIGN COSTS BY FUNCTION

	Ledger Expenses	Operating	Preventive Maintenance	Admin.	Purchase of Service
Salaries - Driver	$100,000	**$100,000**			
Salaries - Mechanic	$30,000		**$30,000**		
Salaries - Administration	$20,000			**$20,000**	
Payroll Benefits	$45,000	**$30,000**	**$9,000**	**$6,000**	
Purchased Transportation	$10,000				**$10,000**
Building Rent	$5,000			**$5,000**	
Building Maint./Repair	$10,000		**$10,000**		
Utilities	$5,000			**$5,000**	
Insurance - Vehicles	$20,000		**$20,000**		
Insurance – Gen Liability	$10,000			**$10,000**	
Fuel	$40,000	**$40,000**			
Vehicle Parts & Supplies	$30,000		**$30,000**		
Professional Services	$10,000			**$10,000**	
Travel	$1,000			**$1,000**	
Total Expenses	$336,000	$170,000	$99,000	$57,000	$10,000

OPERATING

- Includes all expenditures associated with activities to dispatch and operate vehicles in revenue service to carry passengers, including direct supervision and clerical support
- Operations expenses are the typically the largest expense function (driver labor, fuel costs are key cost drivers)

MAINTENANCE

- All expenditures associated with *vehicle* maintenance (includes preventative) and *non-vehicle* maintenance.
- Although preventive maintenance is eligible for *reimbursement* as a capital expense, preventive maintenance is an operational expense by definition.
- Basically ALL maintenance expenses (vehicle maintenance and non-vehicle maintenance) are eligible for federal reimbursement at the rate 80% from capital funds

MAINTENANCE OR OPERATING? – INSURANCE EXPENSE

Note about insurance according to FTA:

- "Property insurance (which would be the premiums paid to protect a grantee's own vehicles/property in the even of a collision or theft/damage) is eligible for federal reimbursement under Maintenance
- Casualty or liability insurance, which is the liability a grantee might have to third parties as a result of negligent actions, is an operating expense and thus <u>not eligible</u> under Maintenance"

Distinguishes between if the associated costs caused by you or caused by outside source

ADMINISTRATION

- Expenditures associated with activities (other than operating, maintenance, planning and purchased transportation expenses) supporting the provision of transit service
- If a transit provider is part of a larger organization, many of these supporting services may provided by the larger organization.

PLANNING

- Costs associated with preparing long-range, regional and coordinated transportation plans and financially feasible transit improvement projects
- Activities include:
  - Planning
  - Service development
  - Market research

PURCHASED TRANSPORTATION

- Costs incurred and billed by purchased transportation providers (sellers) in the operation of the contracted transit services
- Does not include costs that are not a part of the purchased transportation agreement - for example, if the service costs the seller more than his contract covers.
- Excludes costs in support of PT service – i.e. administration, fuel and tires if provided to the seller, vehicle maintenance, marketing, advertising, legal services, and ticket sales (if provided by the buyer). Reported in appropriate expense category.

PURCHASED TRANSPORTATION AND FARES

If PT provider:

- Collects and retain fare revenues
- Deducts fares from the invoice

Contract Rate per Passenger	$15.00
Number of Passengers	1,000
Purchased Transportation Expense	$15,000
Less Fares Retained ($2/passenger)	($2,000)
Invoiced Amount	$13,000

Report:

- PT Cost = $15,000
- Fare Revenue - $2,000

If PT provider has a negotiated contract with an agreement to retain a set amount for passenger fares -
Charges an adjusted rate for the retained fare

ADJUST FOR CAPITAL PORTION OF PURCHASED TRANSPORTATION

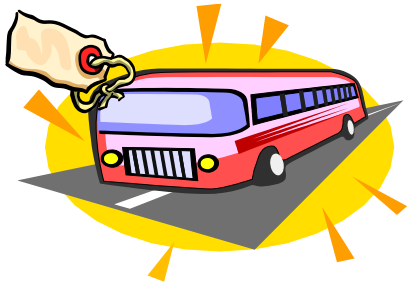
Table 7: Maximum Allowable Capital Expense in Purchased Transportation Deduction (unless specified by contract)

				The Part of Capital Cost of Contracting that is Operating	The Part of Capital Cost of Contracting that is Capital
Type of Contract		What the Contractor Does	Capital Cost of Contracting (Grant Purposes)	Operating	Capital
1	Vehicle Lease Contract	Vehicles only	100%	0%	100%
2	Vehicle Maintenance Contract	Maintenance only	100%	100%	0%
3	Maintenance/Lease Contract	Vehicles and Maintenance	100%	80%	20%
4	Turnkey Contract	Transit Service, Maintenance, Vehicles	50%	40%	10%
5	Service Contract	Transit Service and Maintenance	40%	40%	0%
6	Vehicle/Service Contract	Transit Service and Vehicles	10%	0%	10%

Note: Preventive maintenance is an operating expense even though it is eligible for capital reimbursement.

CAPITAL EXPENSES

- **Capital expenses** include expenses related to the purchase of facilities, vehicles and equipment
- Capital items are an article of non-expendable tangible personal property having a useful life of more than one year and an acquisition cost threshold consistent with federal and local requirements
- The cost threshold by FTA requirements is at least $5,000 ***OR*** the capitalization value used by the transit provider if lower



OPERATING EXPENSES ELIGIBLE FOR CAPITAL REIMBURSEMENT

- An operating expense that is eligible for reimbursement as a capital expense is still reported as an operating expense
- For example, portion of ADA paratransit cost is an operating expense that is eligible for the capital rate of reimbursement
- See FTA circulars provide further guidance

REMEMBER: ACCRUAL ACCOUNTING

- Expenses are recorded when incurred regardless of whether or not the expenditure is paid during the reporting period.
- Uses the matching principle – requires that efforts (expenses) be matched with accomplishments (revenues)

IMPORTANCE OF DATA BY TRAVEL MODE

- For FY16 onward, data in PTN-128 web system should be reported by Travel Mode
- Travel modes come from NTD glossary
- For rural districts, TxDOT PTN submits data by travel mode to NTD for reduced reporting forms
- Revenue and expenses data must also be submitted by travel mode, using either:
  - Agency's own cost allocation plan
  - Total vehicle miles per mode

NTD TRAVEL MODES

Motor Bus - MB

- (called "Bus" in NTD)
- Rubber-tired passenger vehicles operating on fixed routes and schedules over roadways.
- Vehicles may be powered by diesel, gasoline, battery, or alternative fuel engines contained within the vehicle
- Includes fixed-route, flexible-fixed route, and route-deviated service
- Basically, if the service has part of the route with bus stops and a set schedule, the data usually belongs in the Motor Bus mode

NTD TRAVEL MODES

Commuter Bus - CB

- Defined as fixed-route service primarily connecting outlying areas with a central city
- Typically has the following service characteristics:
  - Operates with at least 5 miles of continuous closed-door service
  - Service uses motorcoaches or over-the-road buses
  - Peak scheduling in the morning and afternoon periods
  - Multiple-trip tickets
  - Limited stops in the central city
- Decide with PTN whether service is more characteristic of Commuter Bus or Motor Bus travel mode

NTD TRAVEL MODES

Demand Response - DR

- Comprised of passenger cars, vans, or small buses operating in response to calls from passengers/agents to the transit operator
- Vehicle is dispatched to pick up the passengers and transport them to their destinations
- Vehicle may be pick up several passengers at different pick-up points before taking them to their respective destinations and can be interrupted en route to these destinations to pick up other passengers

Demand Response Taxi - DT

- Distinct travel mode for taxi service by private for-profit company using passenger vehicles for hire by the riding public; functions similarly to regular demand response
- Does not include taxi voucher programs

REASONABLENESS OF DATA

- Are measures of the data reasonable for the travel mode and consistent with previous years?
  - Speed calculations, deadhead, cost measures

Travel Mode	Average Speed in Revenue Services (MPH)
Bus	12.5
Bus Rapid Transit	10.5
Commuter Bus	26.0
Demand Response	14.8
Transit Vanpool	40.5
Trolleybus	7.1

Source: APTA 2015

CHECKING SPEED & DEADHEAD

- Speeds should be consistent from month to month
- Vehicle speeds should be realistic

#		Sep	Oct	Nov	Dec
ACTUAL VEHICLE HOURS					
TOTAL VEHICLE MUST BE GREATER THAN OR EQUAL TO REVENUE					
1	Revenue	4744	5062	4428	4459
2	Total Vehicle	4981	5135	4650	4682
3	**Deadhead Hours**	**237**	**73**	**222**	**223**
4	**Deadhead Ratio**	**4.8%**	**1.4%**	**4.8%**	**4.8%**
ACTUAL VEHICLE MILES					
TOTAL VEHICLE MUST BE GREATER THAN OR EQUAL TO REVENUE					
5	Revenue	66046	55161	29632	31055
6	Total Vehicle	77954	63985	33385	34872
7	**Deadhead Miles**	**11,908**	**8,824**	**3,753**	**3,817**
8	**Deadhead Ratio**	**15.3%**	**13.8%**	**11.2%**	**10.9%**
SYSTEM SPEED					
9	**Revenue**	**13.9**	**10.9**	**6.7**	**7.0**
10	**Total**	**15.7**	**12.5**	**7.2**	**7.4**
11	**Deadhead**	**50.2**	**120.9**	**16.9**	**17.1**

CHECKING COST MEASURES

- While some cost functions will vary slightly month to month, there should not be major fluctuations between months and years
- What could cause changes in cost measures?

	Travel Mode					
Operating Costs	**Commuter Rail**	**Heavy Rail**	**Light Rail**	**Bus**	**Vanpool**	**Demand Responsive**
Per Passenger Mile	$ 0.45	$ 0.30	$ 1.88	$ 0.82	$ 0.89	$ 2.84
Per Passenger Trip	$ 21.19	$ 1.97	$ 2.51	$ 3.70	$ 11.60	$ 27.83
Per Vehicle Mile	$ 18.86	$ 6.24	$ 16.12	$ 5.43	$ 1.58	$ 3.55
Per Vehicle Hour	$ 694.52	$ 164.09	$ 185.71	$ 76.33	$ 57.54	$ 53.27

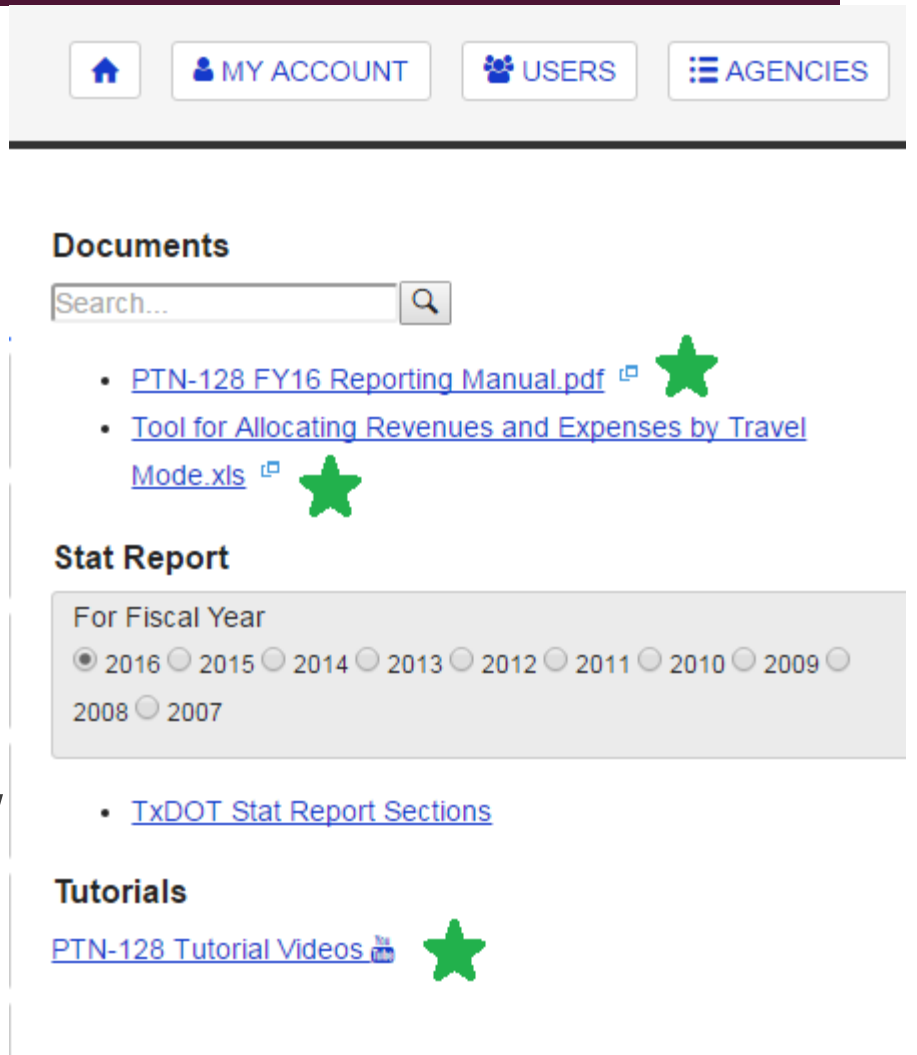
Table 8-4. Operating Costs by Travel Mode for Medium-Sized Cities (2005 Dollars)

AVAILABLE RESOURCES

- On PTN-128 Main Page:
  - Reporting Manual
  - Financial Allocation Tool
  - Tutorial Videos

  http://ptn128.tti.tamu.edu
- On NTD Site:
  - Urban and Rural Reporting Manuals

  http://www.transit.dot.gov/ntd/manuals



REVIEW

- Who reports service data (miles, hours, trips) if one transit agency purchases service from another transit district?
- How does a chart of accounts relate to data reporting?
- How are services classified by travel mode? How are travel modes defined?
- What are some examples of cost and performance measures calculated by PTN-128?

MODULE 8
MANAGING OPERATING COSTS

OBJECTIVES

At the end of this module you will be able to:

- Understand why vehicle useful life guidelines are important
- Understand employee turnover and managing staff schedules
- Manage costs through different means such as reducing fuel consumption and utilizing existing technology

YOUR EXPERIENCES

- What recent (last 5 years) efforts has your transit agency enacted to work to control operating costs?

VEHICLE REPLACEMENT PLANS AND SGR

The key to managing maintenance costs involves:

- Gathering data about your agency's maintenance expenses.
- Using that data to set acceptable performance measures to optimize maintenance expenditures.
- Creating flexible policies and procedures that are easily adaptable when the unexpected happens.

GATHER AND USE INFORMATION TO MANAGE MAINTENANCE COSTS

Data Captured	Description
Vehicle Unit Number	Give all vehicles (revenue and non-revenue) an agency unit number. This makes the vehicle easily identifiable without having to use the vehicle identification number (VIN).
Year Model	Record the vehicle's year model. This allows you to keep track of the vehicle's age.
Vehicle Make/Model	Record the vehicle's manufacturer make and model. This information helps in quickly identifying vehicles when assessing fleet mix and performance.
License Plate	Include the state vehicle license plate number.
VIN	The VIN is the official identification number that stays with the vehicle throughout its life. Maintain full VIN numbers (all 17 digits) in the database.
Number of Seats	Transit vehicles can everything from 4-passenger minivans to 60-passenger articulated buses. To assess fleet mix and capacity, include the number of seats in the database for each vehicle.
Vehicle Length	Capture the vehicle length; useful in assessing fleet mix.
Vehicle In-Service Date	Knowing when the vehicle was put into service helps determine when the vehicle's useful life will end.
Vehicle Condition	Assess periodically (at least once every 6 months) the condition of each vehicle based on criteria defined by your agency.
Revenue/Non-Revenue	Label each vehicle as revenue or non-revenue to separate out support vehicles from revenue-service vehicles.
In-Service/Out-of-Service	Label each vehicle as to whether it is still in-service or if the vehicle has been retired (out-of-service). Retaining these records in the database—even once the vehicle has been retired—helps to create an evolving context in which to judge your existing fleet.

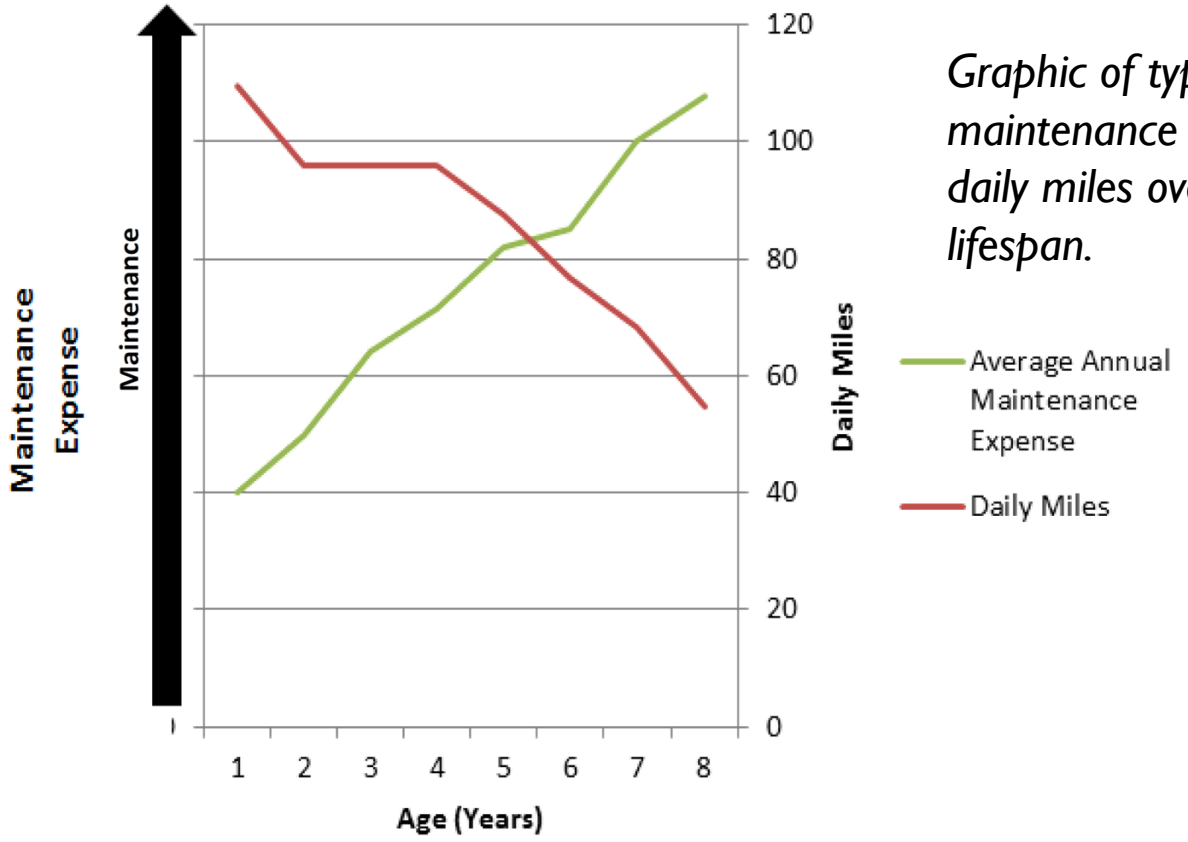
Update data at least weekly

EXAMPLE MAINTENANCE PERFORMANCE MEASURES

- Maintenance cost per revenue mile (or hour)
- Road calls (major mechanical failures) per revenue mile
- Fleet availability

FTA STATE OF GOOD REPAIR

- The FTA establishes a minimum service life for vehicles (by vehicle category) in Useful Life of Transit Buses and Vans. The minimum service life is the expected miles or years an agency must use a vehicle before the vehicle is retired without financial penalty



Graphic of typical maintenance expense and daily miles over a bus's lifespan.

MAINTENANCE PRACTICE RESOURCES

- TCRP Report 54 *Management Toolkit for Rural and Small Urban Transportation Systems* (http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_54-a.pdf)
- *Guidebook: Managing Operating Costs for Rural and Small Urban Public Transit Systems* (https://tti.tamu.edu/group/transit-mobility/files/2014/05/GUIDEBOOK-REVISED-0415-Final.pdf)
- TCRP Synthesis 81 *Preventative Maintenance Intervals for Transit Buses*
- Discuss maintenance operations – how many directly maintain, contract maintenance, or use local shared resources?

DEMAND RESPONSE COST MANAGEMENT

NO-SHOWS AND LATE CANCELLATIONS

NO-SHOWS AND LATE CANCELLATIONS

Suggestion	Description
1	Record and monitor (monthly) no-shows and late cancellations to resolve problems before they become excessive.
2	Categorize no-shows to help determine responsibility for the no-show (consumer or agency). Use the following categories: 1. consumer no-show and a. driver is on-time b. driver is late 2. consumer cancellation on driver arrival due to a. unpreventable cause (e.g., illness/emergency) b. preventable cause (e.g., consumer forgot to cancel) c. undetermined cause (consumer cannot give a reason) d. address error by • consumer • reservationist • dispatcher • unknown
3	Record cancellations by trip purpose or location (helpful in addressing chronic cancellations). **Example:** workshops for persons with disabilities might be closed on certain holidays, but consumers with subscription trips might forget to cancel trips.
4	Track workshop locations and work with host facilities to provide holiday schedules to consumers. Be proactive in contacting consumers to cancel trips in advance.

NO-SHOW POLICY RECOMMENDATIONS

- Define no-shows and late cancellations.
- Determine a value for "the number of excessive events," such as five in a month, as a trigger to identify consumers who may have "a pattern or practice of missed trips."
- Set a percentage of the consumer's trips taken that are no-shows, such as 10%, as a threshold before a sanction is imposed.
- Establish progressive sanctions for consumers with a pattern or practice of no-shows and late cancellations.
- *TCRP Synthesis 60* contains recommendations for no-show programs.

What is your no-show rate? Do you have a no-show policy?

CONTRACTING FOR SERVICE

CONTRACTING FOR SERVICE

- Transit agencies contract for service for a variety of reasons including to:
  - Start new service or expand services quickly.
  - Secure the specialized expertise needed to deliver particular kinds of service.
  - Enhance customer service.
  - Avoid upfront capital costs by contracting for service and vehicles, especially for new service.

IS CONTRACTING RIGHT FOR YOUR TRANSIT AGENCY?

Result	Circumstances
More Cost-Efficient to Contract	• There exists a strong need for flexibility (e.g., to implement new services). • The level of service is easy to quantify as the basis for calculating costs. • Your agency has relatively high wages, generous benefit plans, or restrictive work rules; therefore, a contractor can likely reduce costs. • The contractor can provide more expertise than your agency.
Less Cost-Efficient to Contract	• Potential cost savings are not easy to calculate. • Estimated cost savings are minimal after considering transaction costs and contractor oversight. • Lower cost may sacrifice effectiveness. • There is a lack of competition in the procurement of services. • Procurement arrangements are not transparent. • Your agency yields too much policy control to the contractor.

TYPES OF SERVICE CONTRACTS

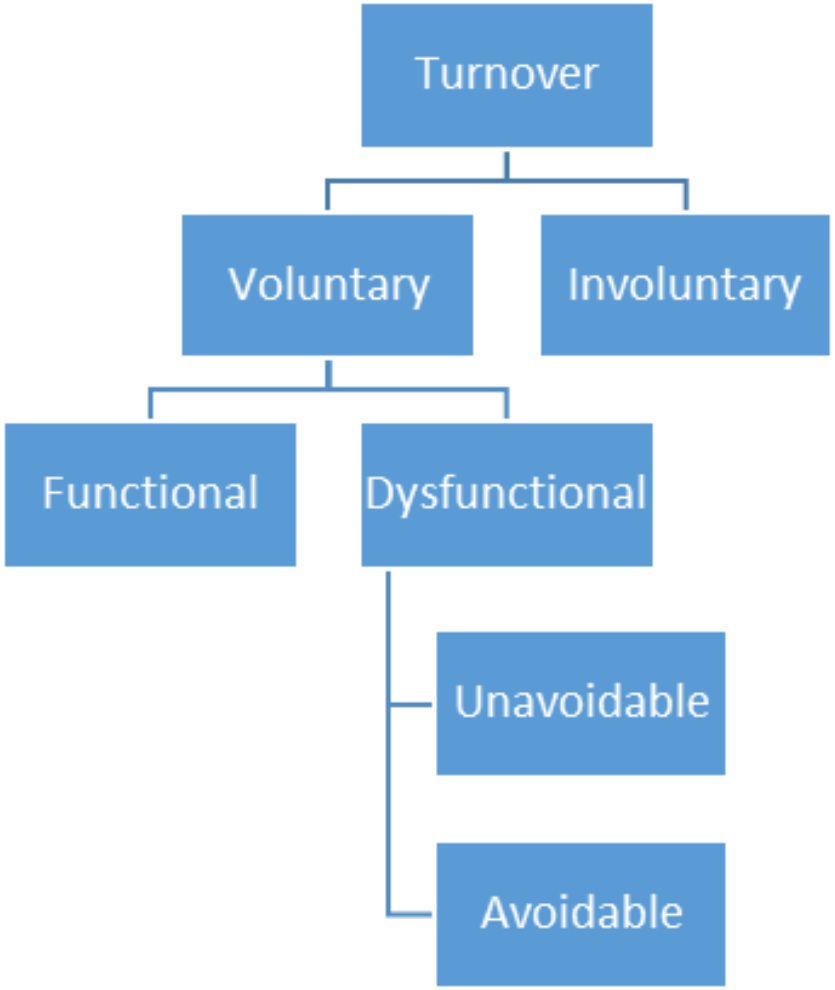
- **Management contract** — Several Texas urban transit districts contract with a private company to serve as the general manager for transit services. The private company provides an experienced general manager, and in some cases additional key staff, to oversee the public transit system. The transit district retains ownership of the vehicles, and public employees operate the transit system.
- **Transit services contract**— A transit agency might contract for services with another public entity, a non-profit organization, or a private company. The contractor is responsible for managing, supervising, and operating transit services with the company's employees.
- **Turnkey contract**— Turnkey means the contractor is responsible for managing, supervising, and operating the transit services, and also provides the vehicles and the operations and maintenance facility.

MANAGING STAFF TURNOVER

STAFF TURNOVER

- "[Great organizations] start by getting the right people on the bus, the wrong people off the bus, and the right people in the right seats." – Jim Collins (From Good to Great)

TYPES OF TURNOVER



BUS OPERATOR TURNOVER

- Varies in transit from 10 to 27% or more.
- BLS transportation, warehousing, and utilities industry at 39.5% as of 2015

IMPROVING TURNOVER RATES

- Striving for fairness and equity.
- Maintaining a good working environment and working conditions.
- Supporting operator autonomy.
- Keeping operators safe.
- Providing opportunities for recognition, training, and job progression.

And don't forget pay and benefits!

What is your agency's experience with turnover?

MANAGING STAFF AND SHIFTS

What is the impact of productivity?

- **Decrease resources needed to provide service** – Increasing the number of passengers carried per service hour means fewer service hours are needed to serve the same number of passengers. Thus, fewer vehicle and driver resources are used to serve the same number of consumers.
- **Increase the level of service using the same resources** – The efficient use of resources can free up capacity for serving additional consumers during existing service hours, thus generating increased revenue without the need for applying additional resources.

FACTORS AFFECTING STAFF SHIFTS

- Size and geography of the service area.
- Population size and demographics.
- Population density.
- Roadway and sidewalk networks.
- Major generators of service demand (e.g., proximal cities, hospitals, educational institutions).
- The economy.

KEY FACTORS TO CONSIDER FOR STAFF POLICIES AND SCHEDULING

- Attendance and on-time arrival to work standards.
- Dispatcher backup and driver backup, commonly referred to as "extra-board."
- Responsibilities and skills of the dispatcher/scheduler.
- Dispatch calls processed by time of day, average call time, and average hold times.
- Setup of the dispatch office and equipment.
- Staffing according to demand (dispatch call volume, trip requests, and distribution).
- Individual driver productivity.
- The amount of "slack" (or downtime that can be potentially productive) in the schedule.

MANAGING OPERATIONS STAFF

- Staffing dispatch by call volume
- Operator shifts: staff shifts based on service demand
- Monitoring trend patterns
- Bus operator familiarity with routes and vehicles

FUEL CONSUMPTION

FUEL AND FUEL CONSUMPTION

Factors impacting fuel consumption

- Providing service over large service areas.
- Serving areas of low-population density.
- Traveling to destinations outside the service area.
- Scheduling practices (e.g., ridesharing) to minimize individualized trip-making.
- Implementing policies to control no-show and late cancellations resulting in unnecessary trips.

WAYS TO REDUCE FUEL CONSUMPTION

Driver behaviors

- Reducing excess idling (over 3 to 5 minutes).
- Maintaining consistent vehicle speed (keeping engine RPMs at optimum levels).
- Accelerating and decelerating smoothly.
- Using vehicle momentum to maintain cruise speed.
- Avoiding filling the gas tank to the very top (especially in summer months).
- Avoiding pumping the accelerator pedal.
- Avoiding riding the brakes.
- Avoiding hard turning.

WAYS TO REDUCE FUEL CONSUMPTION (CONT.)

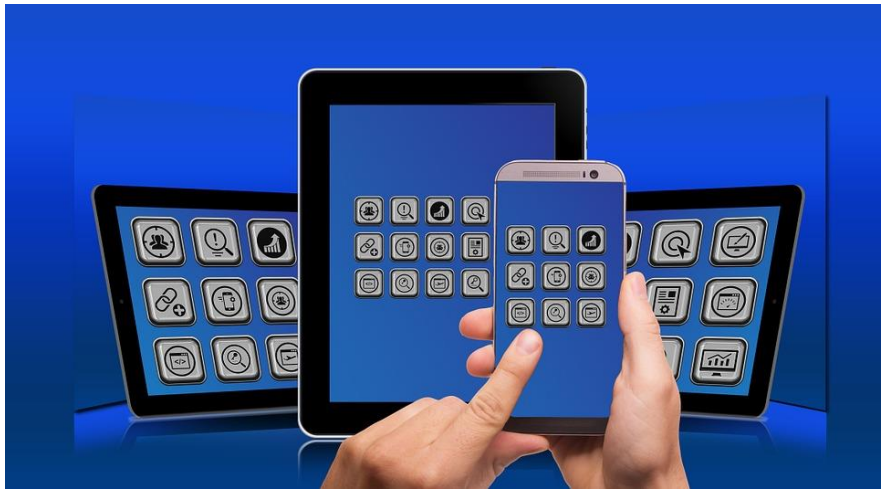
Improving vehicle maintenance

- **Management commitment and ownership**. Management must oversee and implement the fuel oversight program to ensure implementation occurs in a coordinated manner.
- **Data collection and analysis**. Conduct fuel-consumption data collection and analysis consistently. Implement benchmarks, targets, and measurement of fuel economy indicators to take action where improvement is needed.
- **Maintenance directed at low fuel-economy buses**. Focus technical-support interventions on the 10 percent of the fleet showing the lowest fuel economy. Underperforming buses should undergo proper operations and maintenance practices and quality assurance of repairs processes.

TECHNOLOGY

USE OF TECHNOLOGY AND AUTOMATION

- Leveraging available technology can increase efficiency and production, which saves operating costs.



TYPES OF TECHNOLOGY

- Tablets
- GTFS
- Innovative Partnerships

Also, look for free tools:

- Google maps
- Google forms (for mobile data collection)
- Zoho Reports (for online database and dashboards)
- AirTable (online database)

RESOURCES

- See coursebook for references and resources cited in the module's text.
- Also, see TTI's *Guidebook: Managing Costs for Rural and Small Urban Public Transit Systems* (https://tti.tamu.edu/group/transit-mobility/files/2014/05/GUIDEBOOK-REVISED-0415-Final.pdf)

REVIEW

- What affects turnover?
- Why is routine maintenance important?
- What are the types of service contracts?
- What does GTFS stand for?

What's one area that you think your transit agency could work on to better control operating expenses?