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Impacts of Funding and Allocation Changes on Rural Transit in Texas

Final Report

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16. Abstract Funding for Rural Transit Districts (RTDs) in Texas has gone through notable change since 2003. First, the Federal Transit Administration increased funding for non-urbanized (rural) areas under the provisions of the Safe Accountable Flexible and Efficiency Transportation Equity Act – a Legacy for Users (SAFETEA-LU). At the same time, the Texas Department of Transportation (TxDOT) implemented a revised “needs and performance” based method for allocating both federal and state funds among RTDs effective fiscal year 2005. The revised method for allocating funds resulted in some RTDs receiving less federal and state funds, while others received more funds. The 2010 Census will introduce another change in funding due to changes in RTD population and land area, the two “needs” factors in the revised method for allocating funds. New and expanding urbanized areas will have an impact on adjacent RTDs. The population in rural areas near the border or surrounding metropolitan areas will increase faster relative to other parts of Texas. One of the objectives of this research was to document the impact of the change in allocation of federal and state funds on service levels and ridership. A second objective was to assess whether the relative changes in federal and state funding have affected the ability of RTDs to provide local share match for federal funds. This information will help to understand how changes in federal and state funding have affected transit in rural Texas and will contribute to a discussion by stakeholders of possible revisions to the TxDOT funding formula based on the outcomes of Census 2010.					
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IMPACTS OF FUNDING AND ALLOCATION CHANGES ON RURAL TRANSIT IN TEXAS

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Final Report
UTCM 10-19-46

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TABLE OF CONTENTS

	Page
List of Figures	5
List of Tables	6
List of Acronyms	7
Chapter 1. Executive Summary	9
Implications	10
Chapter 2. Introduction	13
Research Approach and Organization of the Report	13
Use of Terms.....	15
Chapter 3. Review of Federal and State Rural Public Transit Funding	17
Federal Funding for Rural Transit	17
Texas Rural Transit Funds	19
Section 5311 and State Funding Allocation for Rural Transit.....	24
Chapter 4. Local match Requirements and Funding Trends	25
Texas Rural Transit Federal Programs and Local Match Needs	25
Rural Transit Program Expenses and Revenue Trends	27
RTD Federal and State Funding Trends	28
Chapter 5. Impact of the Change in Funding Levels on Transit Service and Ridership	33
Change in Section 5311 and State Funding By Transit District	33
Change in Other Funding By RTD	34
Did the Funding Change Impact the Amount of Service RTDs Provided?.....	37
Did the Change in Service Levels Result in a Corresponding Change in Ridership?	38
Difficult to Control Cost Factors	41
Chapter 6. What Transit Districts Said About Use of Increased Funds	45
Results on Use of Increased Funds	45
Chapter 7. Case Studies	51
Case Study Selection Methodology	51
Alamo Area Council of Governments	53
Brazos Transit District	59
Colorado Valley Transit.....	65
Community Services, Inc.....	70
East Texas Council of Governments	76
Webb Community Action Agency	81
Chapter 8. Findings and Implications	87
Research Findings.....	87
Implications	92
Works Cited	95
Appendix A: Local Match Need Estimate	97
Appendix B: Comparison of Funding Change to Service Levels and Ridership	99

LIST OF FIGURES

	Page
Figure 1. Texas Section 5311 and State Funding RTD Allocation.....	9
Figure 2. FTA Non-Urbanized (Rural) Area Formula Appropriations.....	17
Figure 3. Texas State Appropriations for Rural Transit per Biennium.....	20
Figure 4. Texas Rural Transit Funding Formula.	23
Figure 5. Rural Transit Formula Funding.	24
Figure 6. Percent of Program Funds Funding Source.....	27
Figure 7. Texas RTDs.....	32
Figure 8. Comparison of Funding and Service Level Change.....	37
Figure 9. Employer Health Insurance Cost per Employee Hour.	42
Figure 10. Gasoline and No. 2 Diesel Ultra Low Sulfur Prices.....	43
Figure 11. Alamo Area Council of Governments Map.....	53
Figure 12. AACOG Section 5311 and State Allocated Funds.....	54
Figure 13. AACOG Comparative Summary.....	58
Figure 14. Brazos Transit District Map.	59
Figure 15. BTM Section 5311 and State Allocated Funds.	60
Figure 16. BTM Comparative Summary.....	64
Figure 17. Colorado Valley Transit Map.....	65
Figure 18. CVT Section 5311 and State Allocated Funds.....	66
Figure 19. CVT Comparative Summary.....	69
Figure 20. Community Services, Inc. Map.....	70
Figure 21. CSI Section 5311 and State Allocated Funds.....	71
Figure 22. CSI Comparative Summary.....	75
Figure 23. East Texas Council of Governments Map.....	76
Figure 24. ETCOG Section 5311 and State Allocated Funds.....	77
Figure 25. ETCOG Comparative Summary.....	80
Figure 26. Webb County Community Action Agency Map.....	81
Figure 27. Webb Section 5311 Allocated Funds.	82
Figure 28. Webb Comparative Summary.	85
Figure 29. Scatter Diagram of Revenue Mile and Passenger Boarding Change.	89
Figure 30. Scatter Diagram and Equivalency Line.....	90

LIST OF TABLES

	Page
Table 1. Federal Funding and Local Match Requirements.....	26
Table 2. FY10 Rural Transit Expenses and Revenue Sources.....	27
Table 3. Section 5311 and State RTD Funds.....	28
Table 4. Proportion of Allocated State Funds to Section 5311 Federal Funds.....	29
Table 5. Section 5311 Local Match Covered by Allocated State Funds.	30
Table 6. Trend in Other Funding Sources.....	31
Table 7. Section 5311 and State Allocated Fund Change by Transit District.	34
Table 8. Percent Change in Transit District Funding.	36
Table 9. Quartile Analysis – Revenue Mile to Passenger Boardings Change.....	38
Table 10. Percent Change in Revenue Mile and Passenger Boardings.	40
Table 11. Operating Expense by Object Class.....	41
Table 12. Estimated Labor Rate Impact.	42
Table 13. Estimated Fringe Benefit Rate Impact.....	43
Table 14. Estimated Fuel Cost Impact.....	44
Table 15. Reported Uses of Increased Funding.	46
Table 16. Summary of Uses of Funding Increases.	49
Table 17. Percent Change in Section 5311 and State Allocation.	52
Table 18. AACOG Operating Data.....	54
Table 19. AACOG Passenger Boardings by Trip Type.....	55
Table 20. AACOG Operating Expenses.....	55
Table 21. AACOG Capital Expenses.....	55
Table 22. BTD Operating Data.....	60
Table 23. BTD Passenger Boardings by Trip Type.....	61
Table 24. BTD Operating Expenses.	61
Table 25. BTD Capital Expenses.....	61
Table 26. CVT Operating Data.....	66
Table 27. CVT Passenger Boardings by Trip Type.....	67
Table 28. CVT Operating Expenses.	67
Table 29. CVT Capital Expenses.....	67
Table 30. CSI Operating Data.....	71
Table 31. CSI Passenger Boardings by Trip Type.....	72
Table 32. CSI Operating Expenses.....	72
Table 33. CSI Capital Expenses.....	72
Table 34. ETCOG Operating Data.....	77
Table 35. ETCOG Passenger Boardings by Trip Type.....	78
Table 36. ETCOG Operating Expenses.....	78
Table 37. ETCOG Capital Expenses.	78
Table 38. Webb Operating Data.	82
Table 39. Webb Operating Expenses.....	83
Table 40. Webb Capital Expenses.	83
Table 41. Section 5311 and State RTD Funds.....	87
Table 42. Average Change in Funds by Quartile.....	88
Table 43. Average Change in Funds as Compared to Revenue Miles and Ridership.	88
Table 44. Change in Funding Case Study Comparison.	92

LIST OF ACRONYMS

AACOG	Alamo Area Council of Governments
ADMIN	Administration
ARKT	Ark-Tex Council of Governments
ARRA	American Recovery and Reinvestment Act
ART	Alamo Regional Transit
ASBDC	Aspermont Small Business Development Center
AVL	Automated Vehicle Location
BCAA	Bee Community Action Agency
BTD	Brazos Transit District
CACST	Community Action Council of South Texas
CARTS	Capital Area Rural Transportation System
CCART	Collin County Area Regional Transportation
CCSWT	Community Council of Southwest Texas
CLEB	Cleburne
CMAQ	Congestion Mitigation Air Quality
CONVA	Concho Valley Council of Governments
CS	Community Services, Inc.
CTRTD	Central Texas RTD
CVT	Colorado Valley Transit
DR	Del Rio
EPC	El Paso County
ETCOG	East Texas Council of Governments
FBC	Fort Bend County
FTA	Federal Transit Administration
FY	Fiscal Year
GCC	Gulf Coast Center
GCRPC	Golden Crescent Regional Planning Commission
HCTD	Hill Country Transit District
HOTCOG	Heart of Texas Council of Governments
ISTEA	Intermodal Surface Transportation Efficiency Act
JARC	Job Access Reverse Commute
KART	Kaufman Area Rural Transportation
KCHS	Kleberg County Human Services
LRGVDC	Lower Rio Grande Valley Development Council
MDC	Mobile Data Computer
MTP	Medical Transportation Program
PCS	Panhandle Community Services
PM	Preventive Maintenance
POS	Purchase of Service
PTAC	Public Transportation Advisory Committee
PTN	Public Transportation Division (of TxDOT)
PTS	Public Transit Services
REAL	Rural Economic Assistance League

RPMC	Rolling Plains Management Corp.
RTD	Rural Transit District
SAFETEA-LU	Safe Accountable Flexible and Efficiency Transportation Equity Act – A Legacy for Users
SCRPT	Senior Center Resources and Public Transit Inc.
SETRPC	South East Texas Regional Planning Commission
SPAN	Services Program for Aging Needs/Special Programs for Aging Needs
SPCAA	South Plains Community Action Association
SPI	South Padre Island
TAC	Texas Administrative Code
TAPS	Texoma Area Paratransit System
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act of the 21st Century
TTI	Texas Transportation Institute
TTS	The Transit System, Inc.
TxDOT	Texas Department of Transportation
UZA	Urbanized Area
WEBB	Webb County Community Action Agency
WTO	West Texas Opportunities

CHAPTER 1. EXECUTIVE SUMMARY

In August of 2005, Congress approved and the President signed into law the Safe Accountable Flexible and Efficiency Transportation Equity Act – a Legacy for Users (SAFETEA-LU) to fund federal surface transportation programs from 2003 through September 2009. Under SAFETEA-LU, Congress committed to significant increases in authorizations to the Federal Transit Administration (FTA) for Section 5311 non-urbanized (rural) transit funding. FTA apportions federal rural transit funds to states for allocation to local transit districts. In Texas, Section 5311 funds allocated to rural transit districts (RTDs) increased significantly from fiscal year (FY) 04 to FY10, while state funds for rural transit did not change significantly (see Figure 1). The implication is that state funds are losing ground in providing the needed local match to draw down federal funds.

In June 2004, the Texas Transportation Commission (Commission) approved a needs- and performance-based formula for allocating Section 5311 and state funds for public transit. The change to a funding formula resulted in some RTDs receiving less funding as compared to FY04, while others received increased funding.

The purpose of this research was to assess whether changes in federal and state rural transit funding levels have affected the ability of RTDs to match federal funds and if funding changes have resulted in changes in service levels and ridership.

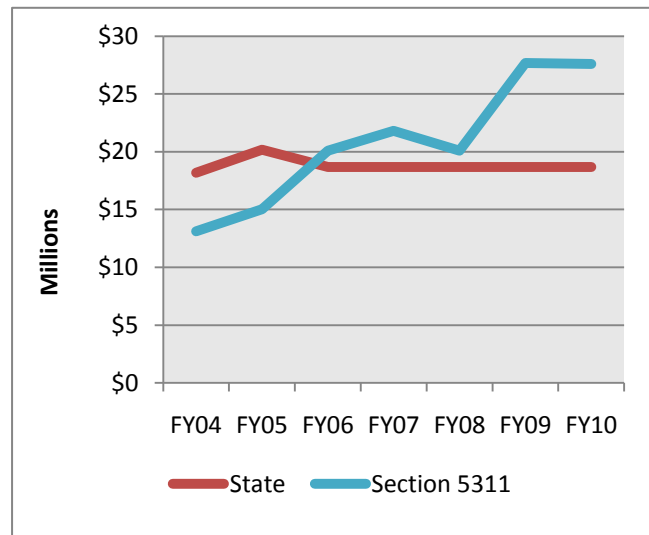


Figure 1. Texas Section 5311 and State Funding RTD Allocation.

One of the significant outcomes of this research was understanding the gap between state funds and federal funds, and the implication in meeting match requirements. Section 5311 federal funds require a local match of 50 percent for operating and 20 percent for capital, administration, and planning projects. Local match can be state funds or locally generated revenues (local government, contract revenues, etc.). Rural transit districts often find it difficult to generate revenues from local governments or contracts for service and so rely on state funds to match federal funds from Section 5311 and other federal programs. In FY08, an estimated 36 of the 38 RTDs in Texas met Section 5311 match requirements with state funds. In FY10, nine of the 38 RTDs met Section 5311 match with state funds. Further, as other FTA program funds in addition to Section 5311 continue to grow, so does the need for RTDs to find additional match for these funds. Researchers estimated the shortfall in state funds required to match all federal programs available to RTDs — including Section 5311 — was \$5.3 million in FY10.

A second research finding was that increases in operational costs offset the ability for RTDs to maintain or enhance service, despite increased federal funding. RTDs reported that increased funds were first used to pay for fuel and insurance, then for labor costs, and then for service enhancements. RTDs that did not have an increase in Section 5311 and state funds from FY04 to

FY10 reported using “reserve” funds to pay for increases in base operating costs in order to maintain service levels. Fuel prices have been volatile, costing RTDs an estimated additional \$2.5 million in FY08; dropping in FY09 for a savings of \$3.1 million and back up in FY10 for an additional \$900,000. Insurance and cost of living wage adjustments have consistently risen annually with an estimated annual increase of \$1.2 million. Researchers estimate that fuel, insurance and cost of living wage adjustments will cost RTDs an additional \$2.0 million in FY11 alone. Some RTDs may find difficulty maintaining current service levels without additional resources.

With state funds declining relative to federal funding programs, RTDs are generating other sources of funding. From FY08 to FY10, local sources of funding (local government funds) increased 28 percent, from \$5.0 million in FY08 to \$6.4 million in FY10; and revenues from negotiated contracts (majority Medicaid non-emergency medical or MTP) increased 30 percent, from \$19.7 in FY08 to \$25.6 million in FY10. Case study research findings indicate those RTDs with a loss in Section 5311 and state funds from FY04 to FY10 used other local funding resources (including reserve funds) to maintain service, while those RTDs that had significant increases in Section 5311 and state funds leveraged other sources of local funds to meet local match requirements.

Last, researchers found RTD service levels (in terms of revenue miles) followed the changes in funding levels – and ridership followed the changes in service levels. The relative changes differed, however. Researchers found that revenue miles grew faster than ridership for RTDs that increased service levels. A possible explanation is that new services introduced have not matured or that new transit service to reach longer distances or more remote areas are less productive for riders per mile. Researchers also found that revenue miles decreased faster than ridership for RTDs that decreased service levels. This may indicate that RTDs reduced less productive service to save costs but sustain ridership or that passengers continue to ride at alternative times when RTDs decrease service levels (reduce span of service, for example).

IMPLICATIONS

Without future increases in state funding, transit districts will face an increasing burden to find local sources of funding for federal local match requirements. This increased burden is during a time of economic constraints when cities and counties (a large source of local match) face budget cuts. Although local sources of funding have grown over the last few years, this growth is likely to slow.

A redistribution of funds is likely to occur across RTDs with the Census 2010 outcomes. Transit districts that realized lower Section 5311 and state funding from FY04 to FY11 have looked to reserves or other sources of funding to sustain service. With the current economic state, these other sources of funding and reserves may not be available in future years. The findings of this research indicate that those RTDs that lost funding also reduced service levels and serve fewer passengers. The implication of a reduction in funding is likely to result in less transit in the communities served.

The total population in rural areas in Texas is growing. An estimated one-fourth of the population in Texas lives in the jurisdictions of rural transit districts, and approximately one-third of the population is age 65 and over or has a disability. A growing and aging rural population will likely increase the demand for public transportation in rural areas. This increased demand may be difficult to serve without increased sources of state and local funding.

RTDs are faced with a widening gap between state and federal funds, a possible redistribution of funds as a result of the outcomes of Census 2010, and increased service demand as an aging population in rural areas increases. The research findings in this report provide insight concerning the impacts of stable state funding levels relative to increased federal funds and the transit funding allocation formula.

CHAPTER 2. INTRODUCTION

The increase in federal funding for rural transit and the change in the state of Texas formula for allocating both federal and state rural transit dollars introduced financial change among the 38 RTDs in Texas. First, with SAFETEA-LU, the FTA increased Section 5311 rural transit funding apportionments to each state. At the same time, the Texas Department of Transportation (TxDOT) implemented a revised “needs- and performance-based” method for distributing both federal and state rural funds among transit districts. This method resulted in some transit districts receiving less funding as compared to FY04 funding levels, while other transit districts received increased funding.

The 2010 U.S. Census will introduce another point of change in funding because population and land area, the two needs factors for rural transit in the current Texas funding allocation formula, will change due to expanding or emerging urbanized areas in previously rural areas. The purpose of this research is to assess whether changes in federal and state rural transit funding levels have affected the ability of RTDs to match federal funds, and if the change in funding formula allocations to RTDs has resulted in changes in service and ridership.

RESEARCH APPROACH AND ORGANIZATION OF THE REPORT

One of the primary sources of research material used for this project was the Transit Cooperative Research Program (TCRP) Web-Only Document 46: *Rural Transit Achievements: Assessing the Outcomes of Increased Funding for Rural Passenger Services under SAFETEA-LU* (TCRP Web-Only Document 46, 2009). This nationwide research focused on federal funding levels to answer: how rural transit federal funding in rural areas has grown since SAFETEA-LU, what the affect was on services and the local communities, and what states and local transit providers identify as major barriers to development of new or expanded rural transit service.

Researchers expanded the aims of TCRP Document 46 in this project, *Impacts of Funding and Allocation Changes on Rural Transit in Texas*. Researchers focused on rural transit in Texas by addressing:

- How both federal *and state* apportioned funds have changed.
- How allocation of these funds to RTDs has changed.
- What other sources of funds were leveraged by transit districts.
- How sources of local match funds changed.
- What change in service levels and ridership has resulted from the funding change.
- How transit districts used funds in providing transit.
- What implications there may be for future changes in funding for rural transit.

Researchers conducted this work in five tasks, as follows:

- In **Task 1**, researchers compiled a database of FY04 to FY10 state and Section 5311 funding allocations; operational and financial data; and service area characteristics for each of the 38 Texas RTDs. TxDOT implemented data collection and report training and a web-based data collection form in FY07, resulting in more detailed and consistent data. Researchers focused on the period from FY08 to FY10 when analyzing changes in service, funding, cost, and performance.
- In **Task 2**, researchers analyzed the sources of local match funds and estimated the federal program local match requirements as compared to funding sources for local match.
- In **Task 3**, researchers categorized changes in terms of service, ridership, funding sources, expenses, and performance changes. Researchers also estimated increases in costs that might have affected transit provider budgets including fuel, insurance, and labor.
- In **Task 4**, researchers collected fact-based information from RTDs to determine if funds were used: for increases in fuel, insurance, wages, benefit costs; to enhance existing or introduce new general public services; for public outreach; for revenue vehicle replacement/rehabilitation and/or vehicle maintenance; for investment in technology; to improve or purchase new facilities.
- In **Task 5**, researchers conducted six case studies of those RTDs with a large percent change in funding levels. Researchers focused on impacts to the operation and service provided as a result of funding changes.

The organization of this report follows the research approach. This report consists of eight chapters. The Executive Summary in Chapter 1 precedes this introduction to the research study, Chapter 2. The body of the report is as follows:

- Chapter 3 provides focus for the research report with a review of federal and state funding for rural transit. A brief overview of the Texas Transit Funding Formula is provided as a point of reference for other chapters of the report.
- Chapter 4 documents rural federal and state funding, estimated local match requirements, and other funding sources.
- Chapter 5 compares the level of funding to service levels and ridership.
- Chapter 6 presents a categorization of how Texas RTDs used additional funds.
- Chapter 7 documents the results of the six case studies.
- Chapter 8 summarizes the research findings.

USE OF TERMS

Texas statute specifically defines public transportation as “mass transportation of passengers and their hand-carried packages or baggage on a regular and continuing basis by means of surface, fixed guideway, or underground transportation or transit, other than aircraft, taxicab, ambulance, or emergency vehicle.”¹ This report uses the terms “public transportation” and “transit” interchangeably. This report specifically focuses on RTDs, as defined below.

The term transit district refers to the urban and rural transit providers that the state funds. Texas statute defines an RTD as “a political subdivision of this state that provides and coordinates rural public transportation in its territory.” Rural public transportation serves non-urbanized areas that provide public transportation to communities with populations of less than 50,000.

¹ Texas Transportation Code, Title 6. Roadways, Subtitle K. Mass Transportation, Chapter 458, Rural and Urban Transit Districts, §458.001 Definitions.

² Section 5340 funds are available to Texas as a Growing State.

CHAPTER 3. REVIEW OF FEDERAL AND STATE RURAL PUBLIC TRANSIT FUNDING

This chapter provides a review of the federal and state legislative and administrative policies for funding rural public transit in Texas. This chapter is organized into three sections. The first section describes the apportionment and allocation of federal formula funds for public transit, focusing on non-urbanized (rural) funding. Texas funding for public transit is the subject of the second section. The third section includes a description of the allocation sequence of Section 5311 federal funds and state fund allocation in rural areas. A detailed description of the Texas Transit Funding formula is provided according to needs and performance.

FEDERAL FUNDING FOR RURAL TRANSIT

The 1998 Transportation Equity Act for the 21st Century (TEA-21) increased the total amount of funds for public rural transportation. At the time of the TEA-21, 94 percent of funds to subsidize public transportation were allotted to 75 percent of U.S. citizens living in urban areas, and only 6 percent to support transportation for the 25 percent of U.S. citizens living in rural areas (RTC University of Montana, 1999). In August of 2005, Congress approved and the President signed into law SAFETEA-LU to fund federal surface transportation programs from 2003 through September 2009. Under SAFETEA-LU, the Congress committed to significant increases in non-urbanized (rural) transit funding. In fact, since SAFETEA-LU's implementation, FTA non-urbanized (rural) area formula funds for transit have approximately doubled (see Figure 2).

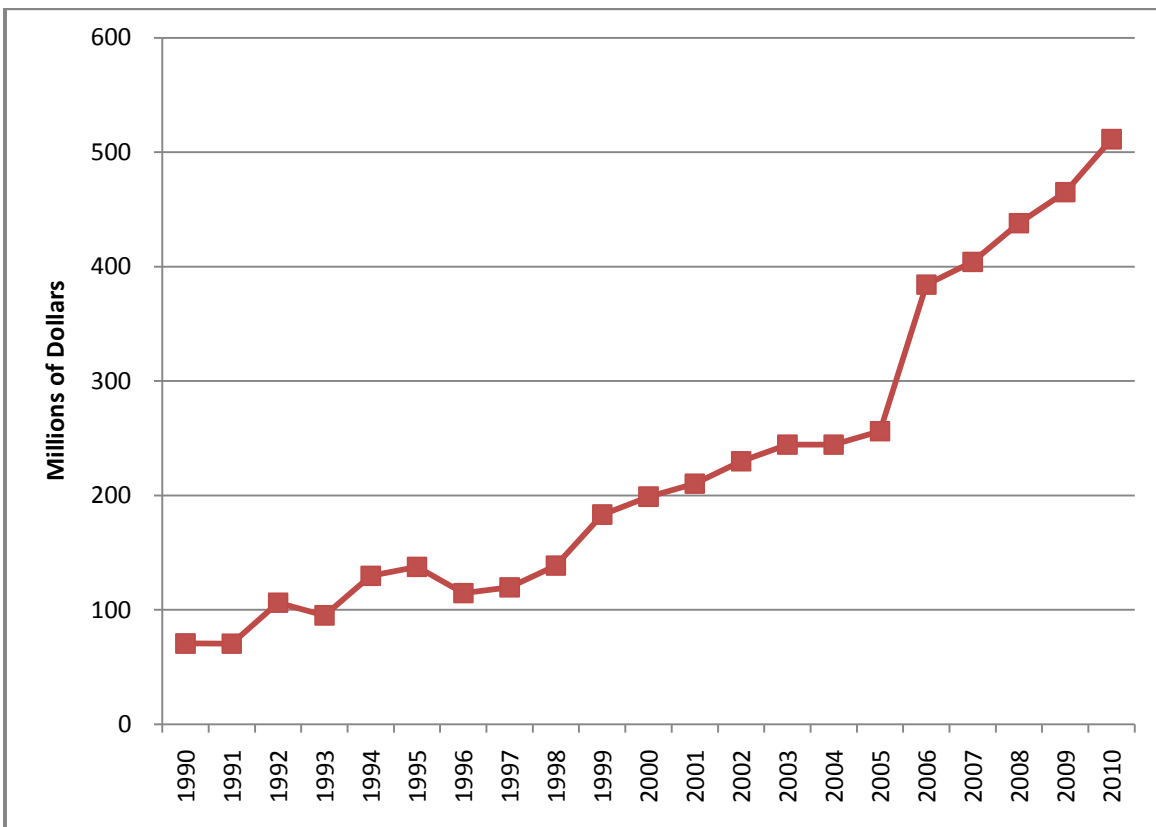


Figure 2. FTA Non-Urbanized (Rural) Area Formula Appropriations.

Federal Apportionment of Rural Transit Funds

FTA's current authorization, SAFETEA-LU, expired September 30, 2009, but is still in effect by authority of continuing resolutions passed by Congress. SAFETEA-LU makes funds available principally from the Mass Transit Account of the Highway Trust Fund to carry out transit programs.

The Section 5311 non-urbanized area (rural) transit program provides formula funding to states and Indian tribes for support of public transportation in rural areas with a population of less than 50,000. Additional funding for non-urbanized area transit is made available through Section 5340 formula for growing states and high-density states.²

The Section 5311 appropriated funds available to states are calculated after allocations to the Tribal Transit Program 0.5 percent for oversight activities, and 2 percent for the Rural Transportation Assistance Program (RTAP). The Section 5340 funds and any prior year carryover funds are added to calculate the amount available to the states for apportionment. For example, the FY08 Section 5311 amount for apportionment was calculated as follows:

Total Appropriation	\$438,000,000
Tribal Transit	- 12,000,000
Oversight	- 2,190,000
RTAP	- 8,760,000
Section 5340 Funds	+ 68,840,835
Prior Year Funds Added	+ 943,489
Total Apportioned	\$ 484,834,324

FTA then apportions Section 5311 funds to the states by a statutory formula using the latest available U.S. decennial census data. FTA apportions the first 20 percent to the states based on land area in non-urbanized areas with no state receiving more than 5 percent of the amount apportioned. FTA apportions the remaining 80 percent based on the non-urbanized population of each state relative to the national non-urbanized population.

Federal Allocation and Use of Funds Requirements for Rural Transit

Once FTA apportions funding to the states, each state is required to prepare an annual program of projects, which must provide for fair and equitable distribution of funds within the state, including Indian reservations, and must provide for maximum feasible coordination with transportation services assisted by other federal sources.

² Section 5340 funds are available to Texas as a Growing State.

Each state must spend no less than 15 percent of its apportionment for the development and support of intercity bus transportation, unless the state certifies, after consultation with affected intercity bus service providers, that the intercity bus service needs of the state are being adequately met. FTA also encourages consultation with other stakeholders, such as communities affected by the loss of intercity service.

The state may use not more than 15 percent of its apportioned Section 5311 funds, including funds apportioned under Section 5340 but not the RTAP allocation, to administer the Section 5311 program and to provide technical assistance to sub-recipients.

The federal share for capital assistance is 80 percent and the federal share for operating assistance is 50 percent of net operating expenses. Net operating expenses are those expenses that remain after a transit provider subtracts operating revenues from eligible operating expenses. States may further define what constitutes operating revenues, but at a minimum, operating revenues must include farebox revenues. Some projects — to meet the requirements of the Americans with Disabilities Act (ADA), the Clean Air Act, or bicycle access projects — may be funded at 90 percent federal contribution. State or local funding sources may provide the local share.

TEXAS RURAL TRANSIT FUNDS

In addition to the federal funds provided to the states for rural transit, the Texas Legislature appropriates additional funding for rural transit and the Commission provides for allocation of both the Section 5311 and state rural transit funds to the RTDs.

Texas Appropriation of Rural Transit Funds

The Texas Legislature makes *appropriations* of state funding in support of state-funded urban and RTDs. There are 30 state-funded urban and 38 RTDs in Texas.³ The Texas Legislature establishes state funding levels each biennium. Figure 3 displays the Texas state biennium funding level appropriation for rural transit since 1990.⁴

³ In addition to small urban areas, Texas transit funds are also allocated to urban transit providers in three large UZAs with a population 200,000 or more. These three areas are Lubbock, McAllen/Hidalgo County urbanized area and Arlington. These transit providers are included in the count of 30 urban systems. Four transit providers in the Dallas-Fort Worth-Arlington urbanized area are funded as “limited eligibility providers” to provide service to only target markets of seniors and people with disabilities – these are in the 30 urban system count and include Arlington, NETS (seven cities in Tarrant County), Mesquite and Grand Prairie.

⁴ The higher funding level in 2000–2001 biennium reflects supplemental revenues from oil overcharge funds.

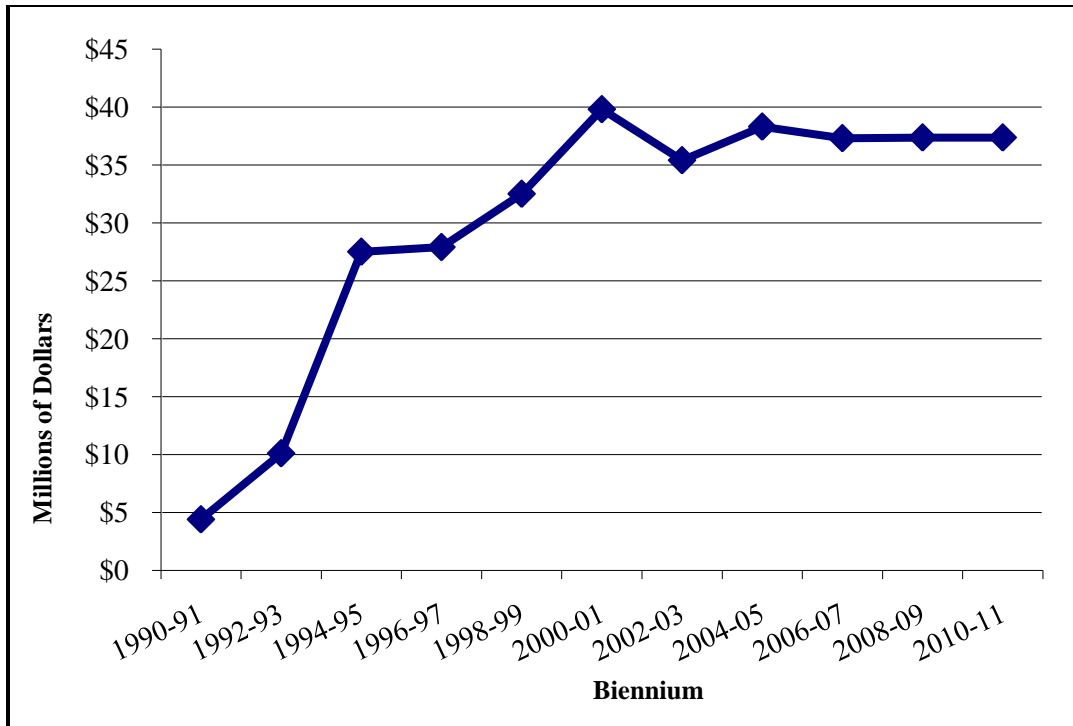


Figure 3. Texas State Appropriations for Rural Transit per Biennium.

Texas Allocation of Section 5311 and State Rural Transit Funds

The Commission sets *allocation* policy for state and federal funds to public transit providers in rural areas and state funds to state-funded urban areas in Texas. Transportation Code, §456.022 requires the Commission to adopt rules to establish a formula allocating state and federal funds among individual eligible public transportation providers. The statute states that the formula may take into account a transportation provider’s performance, the number of its riders, the need of residents in its service area for public transportation, population, population density, land area, and other factors established by the Commission. Transportation Code, §456.008 states that the Commission may establish different performance measures for different sectors of the transit industry and also states that the performance measures shall assess the efficiency, effectiveness, and safety of the public transportation providers.⁵

In June 2004, the Commission approved a formula to allocate funds for public transit based on needs and performance. Prior to this time, allocations for funding were not based on formula but rather on an allocation of the funds available in proportion to what was allocated in previous years. On June 29, 2006, the Commission amended the formula based on the Public Transportation Advisory Committee (PTAC) recommendations to the Commission that the formula required further adjustment to meet the intent as described in statute.⁶ The 2006

⁵ Transportation Code, Title 6. Roadways, Subtitle K. Mass Transportation, Chapter 456. State Financing Of Public Transportation, Sec. 456.022. Formula Allocation.
<http://www.statutes.legis.state.tx.us/Docs/TN/htm/TN.456.htm#456.022>

⁶ Texas Administrative Code, Title 43 Transportation, Part 1 Texas Department of Transportation, Chapter 31 Public Transportation, §31.11 Formula Program and §31.16 Section 5311 Grant Program.

amendment reflects the current needs- and performance-based Texas Transit Funding Formula. State RTD funds are distributed based on the Texas Transit Funding Formula. Section 5311 federal apportionment funds are first subtracted for intercity bus, and TxDOT administration from the federal apportionment. The Texas Administrative Code (TAC), Title 43, Part 1, Chapter 31, Subchapter C, Rule §31.36 states that as part of the administration of the Section 5311 program, TxDOT may use up to 15 percent of the annual federal apportionment to defray its expenses incurred for administration. After subtracting funds for state administrative expenses, the department then allocates a not-to-exceed amount of \$20,104,352 of the Section 5311 funds based on needs and performance. Prior to 2010, if the amount of the Section 5311 federal apportionments exceeded the \$20,104,352 maximum amount, the remaining balance was made available at the discretion of the Commission for award at any time during the fiscal year on a pro rata basis, competitively, or combination of both. Amounts exceeded the \$20,104,352 in FY07 and FY09, which were distributed based on revenue mile share. TxDOT discussed with the RTDs the idea of using revenue mile share to distribute these funds and committed to continuing that practice. The 2010 amendment to the TAC reflects this commitment.

In September 2010, the Commission adopted additional amendments to the TAC Section 5311 Grant Program to clarify the formula for *federal* funds. The amendment maintained the dollar amount \$20,104,352 to be allocated each year using the 2006 needs-and performance-based formula but limited the discretionary portion of federal funds to no more than 10 percent of the annual Section 5311 apportioned funds, less the amounts for intercity bus allocation and up to 15 percent for TxDOT administrative expenses. A new paragraph was added that outlines the procedures for allocating the remaining Section 5311 funds by revenue mile. These remaining funds are allocated using individual system revenue miles as compared to the sum of all systems. The amendments codified the process that TxDOT had used and the Commission approved in 2007 and 2009 to allocate discretionary funds based on revenue miles. This new revenue mile allocation provides the recipients of funds from this program a more predictable distribution of funds in future years. Section 5311 funds are distributed in the following manner and order:

- **Intercity bus allocation** – unless the intercity bus service needs are being adequately met, TxDOT will allocate not less than 15 percent of the annual Section 5311 federal apportionment for the development and support of intercity bus transportation.
- **Administration** – TxDOT may use up to 15 percent of the annual federal apportionment to defray its expenses incurred for administration.
- **Needs and performance formula allocation** (Texas Transit Funding Formula) – an amount not to exceed \$20,104,352 after administration and intercity bus amounts are distributed is allocated based on needs and performance (see Figure 4).
- **Discretionary allocation** – if the amount of the Section 5311 federal apportionments exceeds the \$20,104,352 maximum amount, a part of that excess not to exceed 10 percent will be available to the Commission for award at any time during the fiscal year on a pro rata basis, competitively, or combination of both. Consideration for the award of these additional discretionary funds may include, but is not limited to, coordination and technical support activities, compensation for unforeseen funding anomalies, assistance with eliminating waste and ensuring efficiency, maximum coverage in the provision of

public transportation services, adjustments for reduction in purchasing power, and reductions in air pollution.⁷

- **Vehicle revenue mile formula allocation** – any amount of the annual Section 5311 federal apportionment that is not otherwise allocated will be allocated to non-urbanized areas based on the proportion of vehicle revenue miles for that non-urbanized area to the total vehicle revenue miles for all non-urbanized areas.
- **Adjustments to allocation** – adjustments are determined in the case of a change due to a transit district’s service area or declaration of a previously designated urbanized area as non-urbanized.
- **Application and contract** – new sub-recipients may receive funds by completing and complying with all application requirements, rules, and regulations applicable to the Section 5311 program.

Texas Transit Funding Formula for Needs and Performance

The Texas Transit Funding Formula allocates annually up to \$20,104,352 Section 5311 federal funds and appropriated state funds to each transit provider according to needs and performance. Figure 4 illustrates the Texas transit funding formula for RTDs. State funding for public transportation is first split 35 percent to state-funded urban areas and 65 percent to rural areas. Sixty-five percent of the rural area funds are distributed based on needs and 35 percent are distributed based on performance. The portion of the formula attributed to needs is allocated to rural districts based upon population (weighted 75 percent) and land area (weighted 25 percent). The formula uses several measures to allocate the performance-based funds. The formula weights the three performance measures for rural transit providers equally, as follows:

- Local investment per operating expense – 33 percent.
- Revenue miles per operating expense – 33 percent.
- Passengers per revenue mile – 33 percent.

Prior to FY09, 80 percent of rural area funds were distributed based on needs and 20 percent based on performance. Rural systems transitioned to the 65 percent of funds distributed by needs and 35 percent distributed by performance in order to provide RTDs time to develop better systems for collecting and reporting quality performance data. This distribution is the maximum intended weighting for performance for rural systems. The implementation of the formula program resulted in more funds to some providers and fewer funds to other providers. Built into the formula is an annual adjustment of funds until all providers receive the appropriate funding level according to formula. The annual adjustment for any one provider is limited to a maximum 10 percent decrease from year to year to provide funding stability. This limit on the maximum decrease at 10 percent also limits annual increases because the total funding is the same.

⁷ Texas Administrative Code, Title 43 Transportation, Part 1 Texas Department of Transportation, Chapter 31 Public Transportation, §31.16 Section 5311 Grant Program.

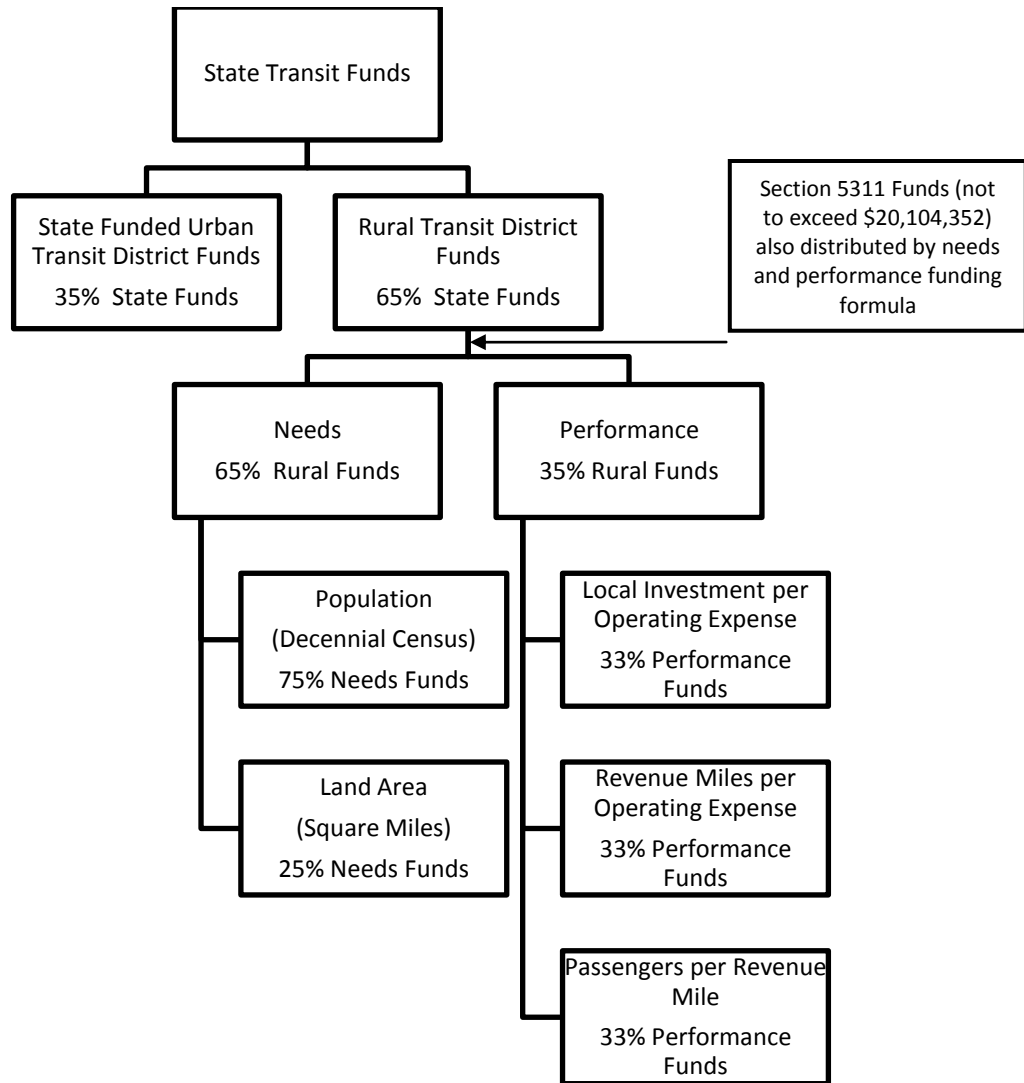


Figure 4. Texas Rural Transit Funding Formula.

SECTION 5311 AND STATE FUNDING ALLOCATION FOR RURAL TRANSIT

Section 5311 funds allocated to Texas RTDs increased \$14.5 million from \$13.1 million in FY04 to \$27.6 million in FY10. Texas RTD funds increased by \$500,000 from \$18.2 million in FY04 to \$18.7 million in FY10. Texas rural transit funds did not increase from 2006 to 2010. Figure 5 highlights the federal and state funding amounts distributed to RTDs for FY04 to 2010.

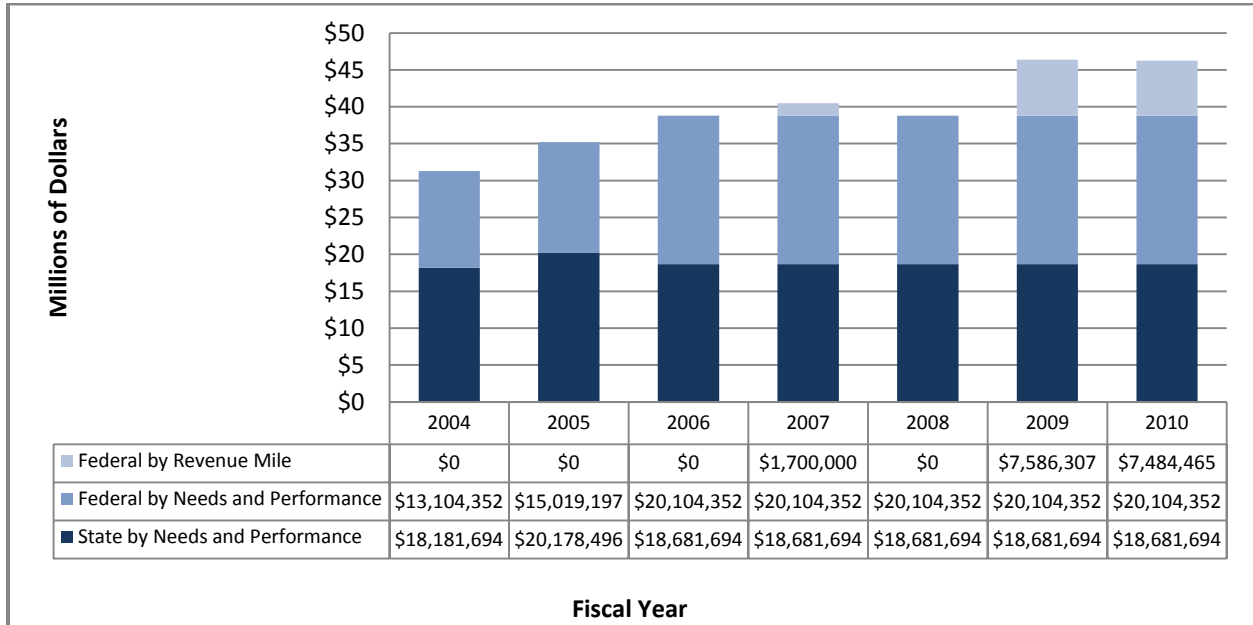


Figure 5. Rural Transit Formula Funding.

CHAPTER 4. LOCAL MATCH REQUIREMENTS AND FUNDING TRENDS

This chapter provides an overview of Section 5311 program and other federal program funds received by RTDs and the estimated local match required to support these federal programs. Researchers conducted two studies. Researchers first estimated the total local match requirements statewide for all federal programs and second estimated local match requirements for the Section 5311 program for each individual RTD. This chapter also provides an overview of the total RTD operating and capital expenses and the sources of funds to support the expenditures.

TEXAS RURAL TRANSIT FEDERAL PROGRAMS AND LOCAL MATCH NEEDS

The Section 5311 federal program requires local share to match federal assistance. The amount of local match required is dependent on the category of expense. Section 5311 funds may be used for eligible operating, preventive maintenance (PM), administrative, planning, purchase of service (POS) and capital expenses. The maximum federal share for operating assistance is 50 percent of the net operating costs, and the maximum federal share for capital, preventive maintenance, administrative, planning and POS is 80 percent. Preventive maintenance is an operating expense eligible for capital reimbursement. Projects to meet the requirements of the ADA, the Clean Air Act, or bicycle access projects may be funded at 90 percent federal contribution. Local share may be provided from state or local funding sources.

In addition to the Section 5311 program to provide funds for rural transit for the general public, Texas RTDs may also seek funds from other federal programs for transit services that benefit specific target markets, including people age 65 and over, people with disabilities, low-income families and individuals, and transit services in areas that are declared nonattainment for air quality. All federal transit-funding programs require a local match. RTDs serve as coordinators of service in rural areas, pooling resources and funding to provide transportation across a variety of programs. Other federal programs that RTDs access to provide service include Section 5310 Elderly Individuals and Individuals with Disabilities, Section 5316 Job Access Reverse Commute (JARC), Section 5317 New Freedom (NF), and Congestion Mitigation and Air Quality (CMAQ) Improvement Program. FTA Section 5309 Capital Bus and Bus Facility funds may be available for capital projects in rural areas; Section 5303 Planning program funds may be available for planning; and some RTDs receive Section 5307 Urban funds to serve portions of urbanized areas that fall within the jurisdiction of the rural transit district. Each of these programs has separate maximum federal share allowances and eligible expense categories. Appendix A provides the maximum federal share provided by expense category for each of these programs.

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act (ARRA). The ARRA created an economic stimulus package that included funds for transit projects. ARRA funds may be used for capital projects, including such activities as vehicle replacements, facilities renovation or construction, preventive maintenance, and mobility management. Researchers documented the amount of ARRA funds received by

RTDs to accurately reflect total federal program funds. However, ARRA funds are excluded from local match analysis, as ARRA requires no local match.

RTDs also provide private/public programs by contract at a negotiated rate requiring no match. These contract services include programs such as Medicaid non-emergency medical transportation, Department of Aging and Disabilities, Head Start, and other public and private programs. By coordinating service, duplication of service is minimized within a rural community.

Appendix A provides an estimate of local match requirements for FY10 by federal grant program. To determine the amount of local match needs for federal transit programs for FY10, researchers first determined the average federal amount of funds *applied* by expense category for each grant [operating, administration, planning, POS, PM, and capital expenses] based on 12 months of grant reimbursement data provided by TxDOT. Applied funds are those funds that RTDs expended as opposed to allocated funds available to RTDs for expenditure. Researchers calculated the percent of funds used by expense category for each federal grant. Researchers then used these percents to distribute the reported FY10 federal grant revenues across expense category. Researchers estimated local match needs based on the maximum federal share allowances by federal program. Table 1 summarizes the results of the analysis of federal funding and estimated local match requirements for FY10.

In FY10, Texas RTDs received a total of \$38.6 million in federal program funds (excluding ARRA funds of \$27.3 million requiring no match) of which \$24.4 million was Section 5311. Estimated local match required for these federal programs was \$23.9 million (see Appendix A for estimate calculation). Local match required for Section 5311 funds alone was estimated to be \$18.4 million or 77 percent of total local match funds required. RTDs reported \$18.6 million in state funds, which represents 78 percent of the total local match required. Therefore, the remaining \$5.3 million or 23 percent in local match required must have been provided by other local funding sources (see Table 1). Funds provided by the state did not cover all of the local match requirements in FY10.

Table 1. Federal Funding and Local Match Requirements.

FY10	Reported Federal Program Revenues	Estimated Local Match Requirements	Reported State Revenues	Local Source Funds Required for Match
Section 5311 Federal Applied	\$24,410,431	\$18,368,849		
ARRA	\$27,345,993	\$0		
Section 5307*	\$2,800,000	\$2,800,000		
5303 Planning	\$312,438	\$78,110		
5309 Capital	\$3,274,627	\$818,657		
5310 Elderly & Disabled	\$3,776,014	\$944,004		
JARC	\$1,969,427	\$492,357		
CMAQ	\$1,757,843	\$302,740		
New Freedom	\$278,448	\$69,612		
Total Federal Revenues	\$65,925,221			
Total w/o ARRA	\$38,579,228	\$23,874,329	\$18,557,721	\$5,316,608

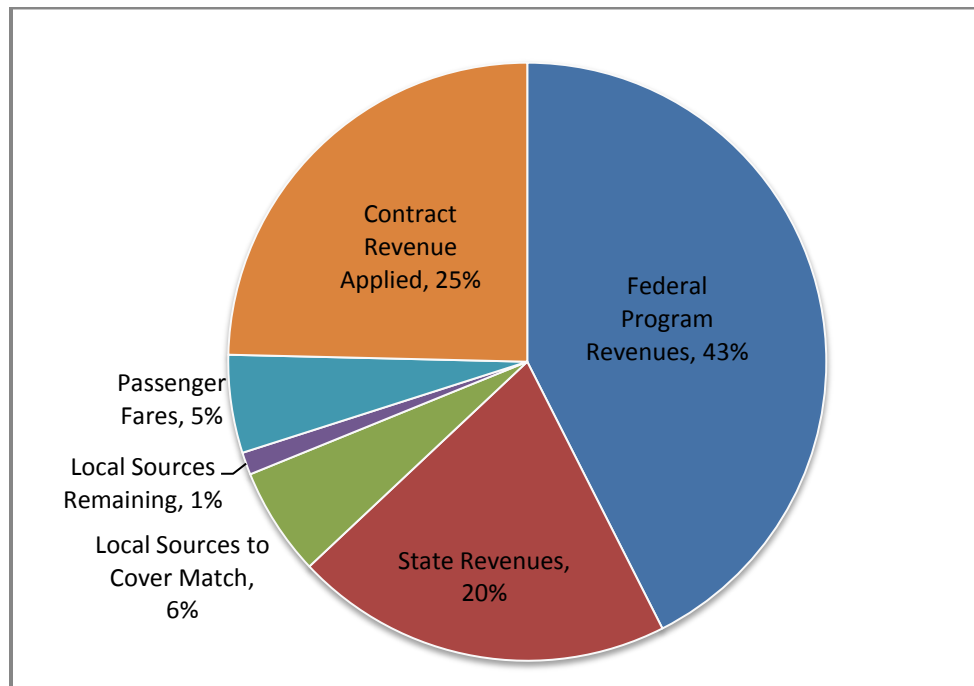
*Section 5307 was estimated as RTDs report these funds within Section 5311 revenues.

RURAL TRANSIT PROGRAM EXPENSES AND REVENUE TRENDS

To better understand sources of funding to cover expenses, researchers analyzed FY10 expenses and sources of revenue. In FY10, operating expenses for rural transit programs totaled \$80.2 million, capital expenses without ARRA totaled \$10.5 million for a total of \$90.7 million operating, and capital expenses (see Table 2). In FY10, RTDs relied on 63 percent of program funds from federal and state revenue sources, 7 percent from local sources, 5 percent from passenger fares and 25 percent from contract services to cover expenses (see Table 2 and Figure 6). Table 2 provides local sources of funding in two parts – local sources to cover match and local sources remaining not needed for match. The local sources to cover match amount assumes that all state funds are first used for match.

Table 2. FY10 Rural Transit Expenses and Revenue Sources.

FY10	Operating	Capital	Total	% of Total
Total Expenses without ARRA	\$80,165,732	\$10,533,375	\$90,699,107	
Federal Program Revenues (without ARRA)	\$30,066,758	\$8,512,470	\$38,579,228	43%
State Revenues	\$17,009,791	\$1,547,930	\$18,557,721	20%
Local Sources to Cover Match	\$4,873,140	\$443,466	\$5,316,606	6%
Local Sources Remaining	\$1,073,911	\$29,509	\$1,103,420	1%
Passenger Fares	\$4,805,825	\$0	\$4,805,825	5%
Contract Revenue Applied	\$22,336,307	\$0	\$22,336,307	25%
FY10 Revenues without ARRA	\$80,165,732	\$10,533,375	\$90,699,107	100%



**Figure 6. Percent of Program Funds Funding Source.
FY10
(Without ARRA)**

RTD FEDERAL AND STATE FUNDING TRENDS

Researchers analyzed in detail federal and state funding trends by transit district from FY08 to FY10. There are 38 RTDs in the state of Texas that provide transit in rural areas (see Figure 7). Total Section 5311 funds for Texas rural transit increased from FY08 to FY10 by \$7.5 million or 37 percent, while state funds remained flat (see Table 3).

**Table 3. Section 5311 and State RTD Funds.
FY08 to FY10**

Federal and State Allocated Funds	2008	2009	2010	FY08 to FY10 Difference
Section 5311	\$20,104,352	\$27,690,659	\$27,588,817	\$7,484,465
State	\$18,681,694	\$18,681,694	\$18,681,694	\$0
Total	\$38,786,046	\$46,372,353	\$46,270,511	\$7,484,465

Researchers wanted to determine if state funding provided the local match required for the Section 5311 program for each transit district. Researchers conducted two analyses. First, researchers calculated the proportion or ratio of state funds to Section 5311 funds allocated by transit district for FY08 and FY10 to determine the change (see **Table 4**). Table 4 reflects that the ratio of state funds to Section 5311 allocated funds decreased for each transit district from FY08 to FY10.

Second, researchers then determined whether state funds provided the match needed for the Section 5311 program. To estimate the Section 5311 local match needed by RTDs, researchers used the outcome of the analysis in Table 1 and Appendix A to estimate the average amount needed as match for Section 5311 allocated funding. In Table 1, researchers estimated the amount of match needed for Section 5311 funds applied in FY10 was \$18,368,849, which is 75 percent of the total Section 5311 applied funds of \$24,410,431 (see Table 1). Researchers estimated each transit district Section 5311 match needs by multiplying the transit district Section 5311 allocated funds by 75 percent. For example, researchers multiplied AACOG Section 5311 allocated funds of \$1,102,036 by 75 percent to estimate local match needs of \$826,602 (see Table 5). Therefore, an estimated \$1,102,036 federal (57 percent) and \$826,602 state (43 percent) are provided to cover AACOG reimbursable Section 5311 expenses. Table 5 provides the results of the RTD Section 5311 match analysis.

Because this analysis uses total *allocated* Section 5311 funds rather than applied Section 5311 funds shown in Table 1, the estimated Section 5311 match differs between Table 1 and Table 5. Table 1 applied FY10 Section 5311 funds is \$24.4 million with an estimated match of \$18.4 million, and Table 5 allocated FY10 Section 5311 funds is \$27.6 million with an estimated match of \$20.7 million.

Researchers then compared the state funds to estimated match. The RTDs that are shaded in Table 5 are those transit districts where the allocated state funds do not fully meet the Section 5311 local match required. In FY08, two RTDs did not receive enough state funds to match the Section 5311 allocations as compared to FY10 when 29 RTDs did not receive enough state funds for local match. In addition, an estimated additional \$3.6 million in state funds was available to match other programs in FY08 where there is a shortfall in FY10.

**Table 4. Proportion of Allocated State Funds to Section 5311 Federal Funds.
FY08 and FY10**

Transit District (see list of acronyms)	FY08			FY10		
	Section 5311 Funds	State Funds	Ratio of State to Section 5311	Section 5311 Funds	State Funds	Ratio of State to Section 5311
AACOG	\$1,102,136	\$960,387	87%	\$1,273,552	\$916,513	72%
ARKT	\$674,214	\$651,203	97%	\$1,052,414	\$635,903	60%
ASBDC	\$283,671	\$258,559	91%	\$394,554	\$264,927	67%
BCAA	\$285,800	\$289,675	101%	\$379,297	\$277,393	73%
BTD	\$2,141,611	\$2,560,761	120%	\$2,442,331	\$2,074,217	85%
CACST	\$371,623	\$349,948	94%	\$432,440	\$371,645	86%
CARTS	\$1,150,265	\$1,057,224	92%	\$1,651,296	\$1,001,942	61%
CCART	\$197,267	\$191,371	97%	\$280,798	\$191,554	68%
CACST	\$497,840	\$496,359	100%	\$849,130	\$489,227	58%
CLEB	\$333,355	\$296,046	89%	\$387,497	\$303,337	78%
CONVA	\$454,148	\$433,999	96%	\$537,862	\$416,693	77%
CS	\$431,085	\$365,400	85%	\$613,969	\$414,146	67%
CTRTD	\$675,134	\$540,683	80%	\$1,089,160	\$650,266	60%
CVT	\$367,278	\$387,030	105%	\$536,726	\$397,383	74%
DR	\$232,149	\$234,887	101%	\$378,295	\$258,835	68%
EPC	\$206,823	\$171,448	83%	\$362,381	\$245,617	68%
ETCOG	\$1,393,357	\$580,773	42%	\$1,517,224	\$889,475	59%
FBC	\$131,244	\$84,911	65%	\$549,279	\$102,804	19%
GCC	\$291,863	\$305,740	105%	\$329,367	\$257,486	78%
GCRPC	\$564,785	\$513,012	91%	\$868,158	\$518,507	60%
HCTD	\$576,851	\$515,573	89%	\$781,501	\$532,108	68%
HOTCOG	\$516,179	\$512,855	99%	\$669,282	\$453,137	68%
KART	\$292,596	\$271,791	93%	\$536,233	\$319,011	59%
KCHS	\$178,659	\$175,873	98%	\$237,599	\$195,125	82%
LRGVDC	\$359,282	\$368,473	103%	\$481,761	\$331,538	69%
PCS	\$978,240	\$928,993	95%	\$1,178,411	\$822,380	70%
PTS	\$387,942	\$367,619	95%	\$647,414	\$390,003	60%
REAL	\$363,261	\$356,357	98%	\$549,724	\$366,650	67%
RPMC	\$387,206	\$355,437	92%	\$559,499	\$381,821	68%
SCRPT	\$280,844	\$269,216	96%	\$419,259	\$281,544	67%
SETRPC	\$392,518	\$354,240	90%	\$502,153	\$381,213	76%
SPAN	\$246,938	\$253,592	103%	\$421,922	\$257,878	61%
SPCAA	\$857,628	\$804,215	94%	\$1,114,182	\$824,905	74%
SPI	\$275,697	\$240,464	87%	\$547,216	\$368,279	67%
TAPS	\$612,444	\$563,511	92%	\$787,952	\$549,595	70%
TTS	\$185,670	\$327,385	176%	\$301,214	\$265,182	88%
WEBB	\$224,837	\$270,391	120%	\$353,809	\$272,859	77%
WTO	\$1,201,912	\$1,016,293	85%	\$1,573,956	\$1,010,596	64%
Total	\$20,104,352	\$18,681,694	93%	\$27,588,817	\$18,681,694	68%

**Table 5. Section 5311 Local Match Covered by Allocated State Funds.
FY08 and FY10**

Transit District	FY08			FY10		
	Estimated Section 5311 Match	State Funds	Difference	Estimated Section 5311 Match	State Funds	Difference
AACOG	\$826,602	\$960,387	\$133,785	\$955,164	\$916,513	-\$38,651
ARKT	\$505,661	\$651,203	\$145,543	\$789,311	\$635,903	-\$153,408
ASBDC	\$212,753	\$258,559	\$45,806	\$295,916	\$264,927	-\$30,989
BCAA	\$214,350	\$289,675	\$75,325	\$284,473	\$277,393	-\$7,080
BTD	\$1,606,208	\$2,560,761	\$954,553	\$1,831,748	\$2,074,217	\$242,469
CACST	\$278,717	\$349,948	\$71,231	\$324,330	\$371,645	\$47,315
CARTS	\$862,699	\$1,057,224	\$194,525	\$1,238,472	\$1,001,942	-\$236,530
CCART	\$147,950	\$191,371	\$43,421	\$210,599	\$191,554	-\$19,045
CCST	\$373,380	\$496,359	\$122,979	\$636,848	\$489,227	-\$147,621
CLEB	\$250,016	\$296,046	\$46,030	\$290,623	\$303,337	\$12,714
CONCHO	\$340,611	\$433,999	\$93,388	\$403,397	\$416,693	\$13,297
CS	\$323,314	\$365,400	\$42,086	\$460,477	\$414,146	-\$46,331
CTRTD	\$506,351	\$540,683	\$34,333	\$816,870	\$650,266	-\$166,604
CVT	\$275,459	\$387,030	\$111,572	\$402,545	\$397,383	-\$5,162
DR	\$174,112	\$234,887	\$60,775	\$283,721	\$258,835	-\$24,886
EPC	\$155,117	\$171,448	\$16,331	\$271,786	\$245,617	-\$26,169
ETCOG	\$1,045,018	\$580,773	-\$464,245	\$1,137,918	\$889,475	-\$248,443
FBC	\$98,433	\$84,911	-\$13,522	\$411,959	\$102,804	-\$309,155
GCC	\$218,897	\$305,740	\$86,843	\$247,025	\$257,486	\$10,461
GCRPC	\$423,589	\$513,012	\$89,423	\$651,119	\$518,507	-\$132,612
HCTD	\$432,638	\$515,573	\$82,935	\$586,126	\$532,108	-\$54,018
HOTCOG	\$387,134	\$512,855	\$125,721	\$501,962	\$453,137	-\$48,825
KART	\$219,447	\$271,791	\$52,344	\$402,175	\$319,011	-\$83,164
KCHS	\$133,994	\$175,873	\$41,879	\$178,199	\$195,125	\$16,926
LRGVDC	\$269,462	\$368,473	\$99,012	\$361,321	\$331,538	-\$29,783
PCS	\$733,680	\$928,993	\$195,313	\$883,808	\$822,380	-\$61,428
PTS	\$290,957	\$367,619	\$76,663	\$485,561	\$390,003	-\$95,558
REAL	\$272,446	\$356,357	\$83,911	\$412,293	\$366,650	-\$45,643
RPMC	\$290,405	\$355,437	\$65,033	\$419,624	\$381,821	-\$37,803
SCRPT	\$210,633	\$269,216	\$58,583	\$314,444	\$281,544	-\$32,900
SETRPC	\$294,389	\$354,240	\$59,852	\$376,615	\$381,213	\$4,598
SPAN	\$185,204	\$253,592	\$68,389	\$316,442	\$257,878	-\$58,564
SPCAA	\$643,221	\$804,215	\$160,994	\$835,637	\$824,905	-\$10,732
SPI	\$206,773	\$240,464	\$33,691	\$410,412	\$368,279	-\$42,133
TAPS	\$459,333	\$563,511	\$104,178	\$590,964	\$549,595	-\$41,369
TTS	\$139,253	\$327,385	\$188,133	\$225,911	\$265,182	\$39,272
WEBB	\$168,628	\$270,391	\$101,763	\$265,357	\$272,859	\$7,502
WTO	\$901,434	\$1,016,293	\$114,859	\$1,180,467	\$1,010,596	-\$169,871
Total	\$15,078,264	\$18,681,694	\$3,603,430	\$20,691,613	\$18,681,694	-\$2,009,919

Trends in Rural Transit Program Funds

In addition to the 37 percent or \$7.5 million increase in Section 5311 federal funding allocation to Texas RTDs from FY08 to FY10, other federal program funds for rural transit also grew. From FY08 to FY10, federal program funds other than Section 5311 grew 20 percent or \$1.8 million (see Table 6). A 20 percent growth in federal programs means an increased need for state or local sources of funding to provide local match requirements. As state funds have remained flat, the burden to provide match falls to local funding sources. Local funding sources have increased 28 percent or \$1.4 million from FY08 to FY10.

RTDs continue to coordinate service, and negotiated service contracts (mainly in MTP service) have grown by 30 percent or \$6.0 million from FY08 to FY10 (see Table 6). Although contract revenues may be used to provide match for federal programs, these contracts are often negotiated at a rate to break even on the operating cost and usually exclude the cost for vehicle depreciation (RMC 0-6205, 2010).

**Table 6. Trend in Other Funding Sources.
FY08 to FY10**

Source	FY08	FY09	FY10	FY08 to FY10 Difference	% Difference
Other Federal Transit Programs:					
Section 5307*	\$2,419,421	\$2,397,388	\$2,800,000	\$380,579	16%
5303 Planning Revenues	\$0	\$25,566	\$78,110	\$78,110	100%
5309 Capital Revenues	\$1,069,781	\$1,154,941	\$818,657	-\$251,124	-23%
Section 5310	\$3,511,386	\$2,991,252	\$3,776,014	\$264,628	8%
Section 5316 (JARC)	\$1,593,612	\$1,172,880	\$1,902,530	\$308,918	19%
Section 5317 (New Freedom)	\$6,834	\$208,664	\$278,448	\$271,614	3974%
CMAQ	\$531,872	\$407,606	\$1,298,558	\$766,686	144%
Total Other Federal	\$9,132,906	\$8,358,297	\$10,952,317	\$1,819,411	20%
Other Local Funds:					
Local Contributions	\$3,908,873	\$3,142,330	\$4,554,959	\$646,086	17%
Contributed Services (non-cash)	\$999,210	\$1,469,378	\$1,626,251	\$627,041	63%
Auxiliary Transit Revenues	\$1,500	\$1,450	\$51,244	\$49,744	3316%
Other Transportation Revenues	\$24,945	\$230,449	\$11,430	(\$13,515)	-54%
Non-Transit Revenues	\$67,439	\$55,824	\$176,142	\$108,703	161%
Total Other Local Funds	\$5,001,967	\$4,899,431	\$6,420,026	\$1,418,059	28%
Passenger Fares	\$4,312,232	\$4,802,787	\$4,805,825	\$493,593	11%
Negotiated Service Contracts:					
Medical Transportation Program	\$16,180,309	\$19,533,730	\$21,578,429	\$5,398,120	33%
Other Private Contracts	\$2,325,143	\$2,900,516	\$2,988,223	\$663,080	29%
Head Start	\$36,686	\$39,368	\$33,711	(\$2,975)	-8%
Dept. of Aging & Disabilities	\$1,087,942	\$1,023,395	\$1,023,384	(\$64,558)	-6%
Dept. of State Health Services	\$43,323	\$35,522	\$15,973	(\$27,350)	-63%
Dept. of Assistive & Rehab. Srv.	\$638	\$440	\$639	\$1	0%
Total Contracts	\$19,674,041	\$23,532,971	\$25,640,359	\$5,966,318	30%

*FTA Section 5307 funds based on estimates as RTDs report these funds within Section 5311 revenues.

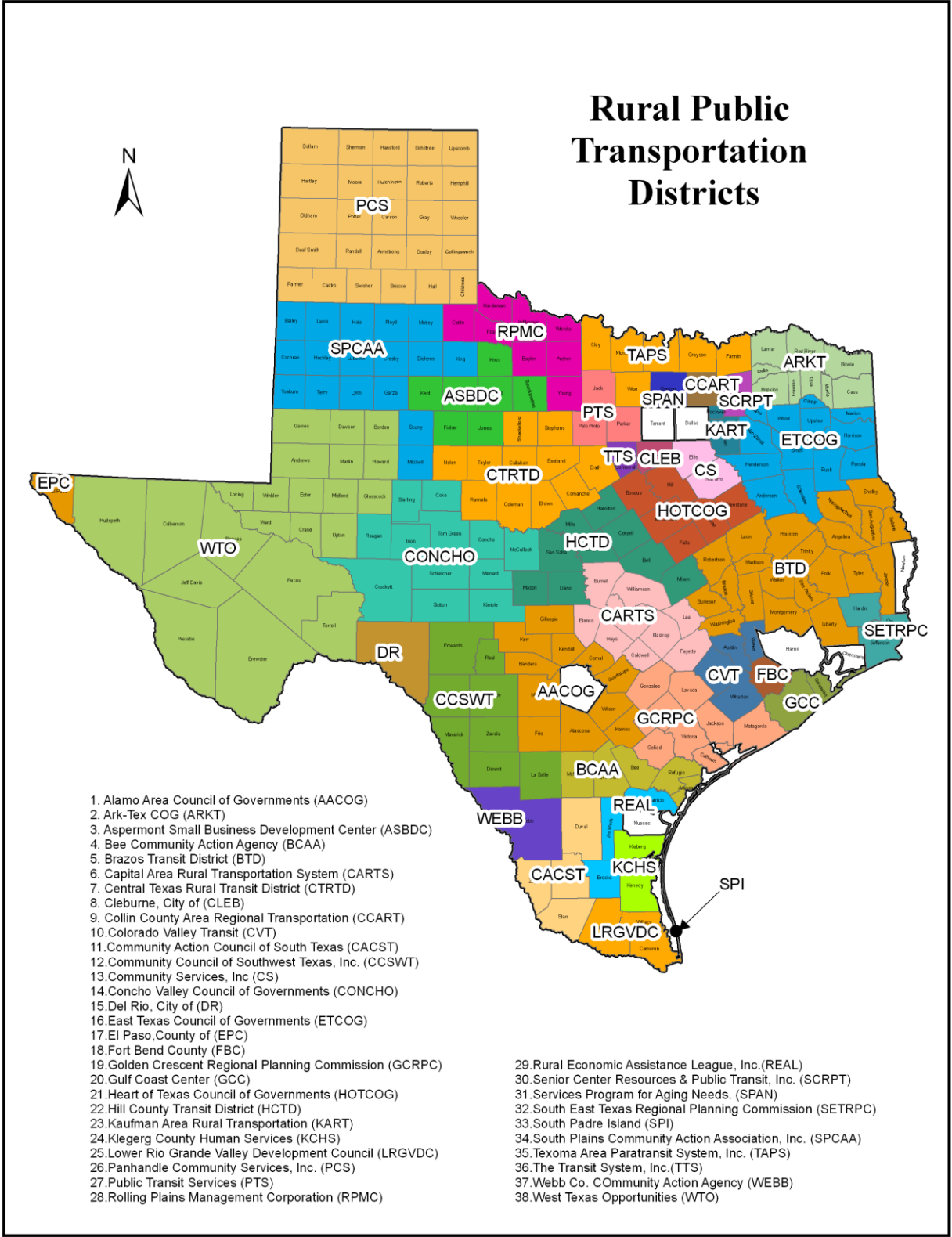


Figure 7. Texas RTDs.

CHAPTER 5. IMPACT OF THE CHANGE IN FUNDING LEVELS ON TRANSIT SERVICE AND RIDERSHIP

In this chapter, researchers compare the change in funds to the change in service levels and ridership. Researchers compare the change in Section 5311, state and other funding sources to the change in service levels (in terms of revenue miles), and change in ridership (in terms of passenger boardings) by rural transit district.

CHANGE IN SECTION 5311 AND STATE FUNDING BY TRANSIT DISTRICT

A little over half of the monies to fund Texas RTD operating budgets come from Section 5311 and state revenues (approximately \$41 million of \$80 million operating expense in FY10). Although Section 5311 funds have increased in Texas from FY08 to FY10, not all individual transit districts received an increase in these funds. The funding formula for needs and performance includes a provision to limit the maximum decrease that a transit district receives in any one year to 10 percent. In addition, in 2009 the Texas Transit Funding Formula for needs and performance increased the percent allocation for performance. These provisions in the formula resulted in two of the 38 RTDs receiving a decrease in allocated funding from FY08 to FY10 – one limited to the maximum decrease and one impacted by the performance weight (see Table 7). One RTD had a decrease as a result of the transit district's change in methodology of allocating its rural and small urban transit service.

**Table 7. Section 5311 and State Allocated Fund Change by Transit District.
FY08 and FY10**

Transit District	Section 5311 and State Allocated Funds			
	FY08	FY10	\$ Difference	% Difference
AACOG	\$2,062,523	\$2,190,065	\$127,542	6%
ARKT	\$1,325,417	\$1,688,317	\$362,900	27%
ASBDC	\$542,230	\$659,481	\$117,251	22%
BCAA	\$575,475	\$656,690	\$81,215	14%
BTD	\$4,702,372	\$4,516,548	-\$185,824	-4%
CACST	\$721,571	\$804,085	\$82,514	11%
CARTS	\$2,207,489	\$2,653,238	\$445,749	20%
CCART	\$994,199	\$472,352	-\$521,847	-52%
CCST	\$629,401	\$1,338,357	\$708,956	113%
CLEB	\$388,638	\$690,834	\$302,196	78%
CONCHO	\$888,147	\$954,555	\$66,408	7%
CS	\$796,485	\$1,028,115	\$231,630	29%
CTRTD	\$1,215,817	\$1,739,426	\$523,609	43%
CVT	\$754,308	\$934,109	\$179,801	24%
DR	\$467,036	\$637,130	\$170,094	36%
EPC	\$378,271	\$607,998	\$229,727	61%
ETCOG	\$1,974,130	\$2,406,699	\$432,569	22%
FBC	\$216,155	\$652,083	\$435,928	202%
GCC	\$597,603	\$586,853	-\$10,750	-2%
GCRPC	\$1,077,797	\$1,386,665	\$308,868	29%
HCTD	\$1,092,424	\$1,313,609	\$221,185	20%
HOTCOG	\$1,029,034	\$1,122,419	\$93,385	9%
KART	\$564,387	\$855,244	\$290,857	52%
KCHS	\$354,532	\$432,724	\$78,192	22%
LRGVDC	\$727,755	\$813,299	\$85,544	12%
PCS	\$1,907,233	\$2,000,791	\$93,558	5%
PTS	\$755,561	\$1,037,417	\$281,856	37%
REAL	\$719,618	\$916,374	\$196,756	27%
RPMC	\$742,643	\$941,320	\$198,677	27%
SCRPT	\$550,060	\$700,803	\$150,743	27%
SETRPC	\$746,758	\$883,366	\$136,608	18%
SPAN	\$500,530	\$679,800	\$179,270	36%
SPCAA	\$1,661,843	\$1,939,087	\$277,244	17%
SPI	\$516,161	\$915,495	\$399,334	77%
TAPS	\$1,175,955	\$1,337,547	\$161,592	14%
TTS	\$513,055	\$566,396	\$53,341	10%
WEBB	\$495,228	\$626,668	\$131,440	27%
WTO	\$2,218,205	\$2,584,552	\$366,347	17%

CHANGE IN OTHER FUNDING BY RTD

In addition to Section 5311 and state fund changes, researchers assessed the change in other sources of funds by transit district. The other funding source change shown in Table 8 includes funds previously presented in Table 6 with the exclusion of Section 5309 Capital and Section

5303 Planning. Researchers excluded Section 5309 and 5303 as these funds have significant annual fluctuation.

Researchers combined allocated Section 5311 funds, allocated state funds and other sources of funds received to determine the percent change in RTD funding levels (see Table 8).

Researchers included an estimate of Section 5307 funds received in other funding sources. The funds included in this analysis not only include operating but also include some funds to support capital expenses — approximately 10 percent of the funds represented are estimated to support capital.

Researchers found that RTDs that received a decrease in Section 5311 and state funds had a significant increase in other sources of funding revenue. This may be an indication that RTDs leveraged other sources of funds either through new sources or using reserved funds.

**Table 8. Percent Change in Transit District Funding.
FY08 to FY10**

RTD	<i>Allocated</i>		Total
	Section 5311 and State Funding	Other Funding Sources*	
AACOG	6%	-6%	0%
ARKT	27%	8%	20%
ASBDC	22%	35%	26%
BCAA	14%	50%	21%
BTD	-4%	66%	22%
CACST	11%	-26%	4%
CARTS	20%	43%	36%
CCART	-52%	999%	-43%
CCST	113%	-6%	25%
CLEB	78%	-19%	34%
CONCHO	7%	32%	18%
CS	29%	-58%	-13%
CTRTD	43%	43%	43%
CVT	24%	-33%	-5%
DR	36%	82%	52%
EPC	61%	10%	33%
ETCOG	22%	0%	17%
FBC	202%	41%	86%
GCC	-2%	887%	81%
GCRPC	29%	62%	45%
HCTD	20%	4%	12%
HOTCOG	9%	79%	20%
KART	52%	57%	77%
KCHS	22%	-1%	19%
LRGVDC	12%	58%	18%
PCS	5%	21%	11%
PTS	37%	28%	37%
REAL	27%	0%	20%
RPMC	27%	30%	28%
SCRPT	27%	8%	19%
SETRPC	18%	38%	29%
SPAN	36%	38%	37%
SPCAA	17%	-22%	-3%
SPI	77%	18%	70%
TAPS	14%	-8%	4%
TTS	10%	18%	14%
WEBB	27%	1%	17%
WTO	17%	21%	19%
Median	22%	21%	20%
Mean	30%	68%	25%

*The other funding source includes funding categories shown in Table 6 with the exclusion of Section 5309 Capital and Section 5303 Planning.

DID THE FUNDING CHANGE IMPACT THE AMOUNT OF SERVICE RTDS PROVIDED?

Researchers compared the funding change to the change in revenue miles of service from FY08 to FY10. For most RTDs, a decrease in funding resulted in a decrease in service and an increase in funding resulted in an increase in service (see Figure 8).

Of the 33 RTDs that had an *increase* in funds, five had anomalies – where service levels decreased while funding increased (see Figure 8). Three of these (HCTD, CONCHO, and HOTCOG) had a change in service allocation methodology, which artificially caused a large percent decrease in miles (see comments in Appendix B). One (ARKT) reduced service purposefully and chose not to apply Section 5311 allocated funds in FY10 due to closing of large employment centers in the area – the allocated funding increase shown was not applied in FY10. The remaining transit district (CLEB) had a significant decrease in its fixed schedule interurban bus route ridership without decreasing service levels provided.

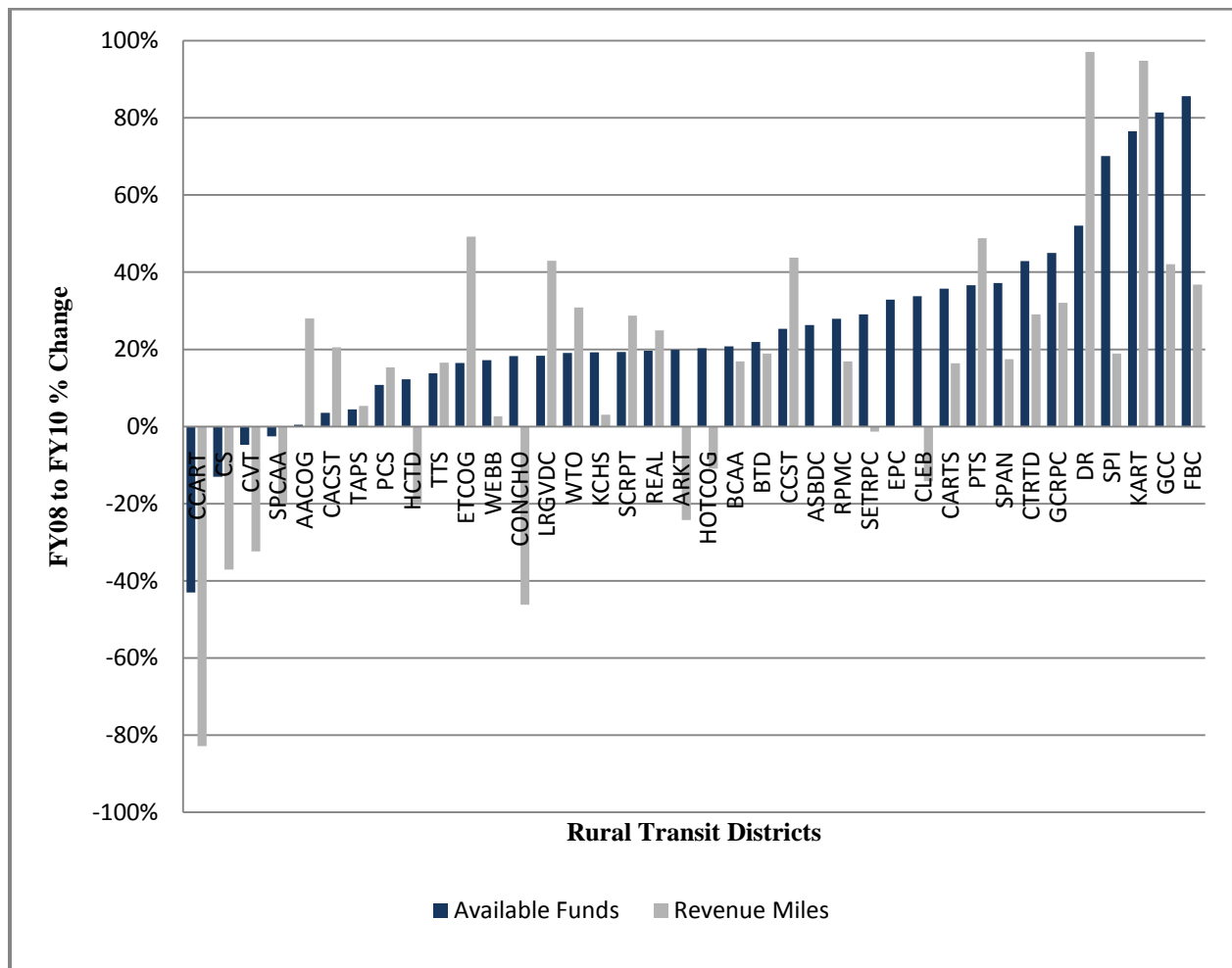


Figure 8. Comparison of Funding and Service Level Change.
(Sorted by funding change)

DID THE CHANGE IN SERVICE LEVELS RESULT IN A CORRESPONDING CHANGE IN RIDERSHIP?

Researchers analyzed the change in revenue miles as compared to change in passenger boardings by using quartile analysis. Quartile analysis was used to better ensure comparison of like groups. Quartiles—as the name suggests—group data into four quarters, each containing 25 percent of the data. Researchers first sorted RTDs by revenue mile percent change and then grouped them into quartiles. Therefore, the first quartile contains 25 percent of transit districts with the largest decrease in revenue miles and so forth (see Table 9). There are nine transit districts in the first quartile, 10 in the second, 10 in the third, and nine in the fourth quartile.

Table 9. Quartile Analysis – Revenue Mile to Passenger Boardings Change.

Quartiles by Revenue Mile Change	Revenue Miles	Passenger Boardings
1 st Quartile Average	-32%	-20%
2 nd Quartile Average	7%	6%
3 rd Quartile Average	23%	2%
4 th Quartile Average	54%	25%

Table 10 provides for each RTD the change in revenue miles compared to the change in ridership for each quartile. Of those RTDs in the first quartile having the largest *decrease* in revenue miles of service, all had a *decrease* in passenger boardings. The average first quartile revenue mile decrease was 32 percent, with the average passenger boardings decreasing less than the miles averaging a 20 percent decrease. Ridership decreased at a rate less than the decrease in revenue miles. This may be because the RTD trimmed lower productive service and could sustain most ridership, or riders needed transit and continued to ride even if service levels decreased.

The second quartile had an average *increase* of 7 percent in revenue miles with an average 6 percent *increase* in passenger boardings. Although the total averages seem consistent, three of these RTDs have large anomalies between revenue miles change and passenger boardings change. Researchers found the following explanation for these anomalies:

- One RTD (PCS) increased revenue miles by 15 percent, that resulted in an 86 percent increase in ridership. This transit district introduced two JARC funded routes to employment centers that are highly productive.
- One RTD (TAPS) had a passenger boardings decrease of 30 percent without a commensurate change in revenue miles. This transit district had a combination temporary reduction in service to pay off debt and implemented a new scheduling system that affected operating data reported.
- The remaining RTD (TTS) increased long distance transportation into large urbanized area of Dallas-Fort Worth-Arlington and has had a steady decrease in general public ridership. The longer distance trips and reduction in general public ridership has resulted in a 19 percent decrease in passenger boardings but an increase in revenue miles.

The third quartile had an average 23 percent increase in revenue miles with a 2 percent increase in passenger boardings. Four of the 10 RTDs in this quartile had a decrease in passenger

boardings despite an increase in revenue miles. Researchers found the following explanation for these four RTDs:

- One RTD (CACST) had a 21 percent increase in miles with a 1 percent decrease in ridership that was due to a correction in miles reported, artificially inflating the miles change.
- One RTD (CTRTD) had a 29 percent increase in revenue miles with a 31 percent drop in ridership. This RTD was temporarily operating an airport shuttle service while the parking area of the local airport was under construction. With the completion of the construction, the shuttle service was discontinued in FY10; at the same time, this RTD began providing new JARC services.
- The remaining two (WTO and SPAN) that had an increase in revenue miles with a 7 and 8 percent drop in passenger boardings respectively was a result of an increase in lower productivity service with long trip lengths.

The fourth quartile had an average 54 percent increase in revenue miles with an average 25 percent increase in passenger boardings. The increase in revenue miles without a similar increase in passenger boardings may be a result of a combination of introduction of new services not fully developed, commuter fixed route service with longer trip lengths, and increase in MTP service with long trip lengths into urban medical centers.

With few exceptions, an increase in revenue miles resulted in an increase in passenger boardings, and a decrease in revenue miles resulted in a decrease in passenger boardings. Researchers found that in the majority of cases, when transit districts increased service levels miles rose faster than ridership. This may be explained by a combination of factors. One explanation may be that as RTDs receive more funding, transit districts can now serve more remote areas not previously served, which may reduce service productivity. In addition, transit districts may be providing more commuter type service or long distance trips into large urbanized areas out of the service area. For example, medical trips into major medical facilities located in metropolitan areas. Last, the introduction of new services including Section 5310, Section 5316, and Section 5317 may not be fully developed where number of passengers on these services will grow in future years.

**Table 10. Percent Change in Revenue Mile and Passenger Boardings.
FY08 to FY10**

RTD	Revenue Miles	Passenger Boardings
CCART	-83%	-41%
CONCHO	-46%	-9%
CS	-37%	-20%
CVT	-32%	-14%
ARKT	-24%	-19%
HCTD	-20%	-11%
SPCAA	-20%	-26%
CLEB	-14%	-32%
HOTCOG	-11%	-4%
1st Quartile Average	-32%	-20%
SETRPC	-1%	0%
ASBDC	0%	-3%
EPC	0%	0%
WEBB	3%	-11%
KCHS	3%	15%
TAPS	5%	-30%
PCS	15%	86%
CARTS	16%	18%
TTS	17%	-19%
BCAA	17%	1%
2nd Quartile Average	7%	6%
RPMC	17%	5%
SPAN	17%	-8%
SPI	19%	8%
BTD	19%	7%
CACST	21%	-1%
REAL	25%	22%
AACOG	28%	3%
SCRPT	29%	22%
CTRTD	29%	-31%
WTO	31%	-7%
3rd Quartile Average	23%	2%
GCRPC	32%	16%
FBC	37%	11%
GCC	42%	36%
LRGVDC	43%	3%
CCST	44%	1%
PTS	49%	5%
ETCOG	49%	37%
KART	95%	83%
DR	97%	33%
4th Quartile Average	54%	25%

DIFFICULT TO CONTROL COST FACTORS

Researchers analyzed how much costs that may be outside the control of rural transit managers may affect the ability to use additional funds on service. Certain costs are difficult for transit managers and staff to control. These costs are market driven. Although service and purchasing strategies can mitigate these costs, the base cost rate is determined outside of the transit staff control. Fuel, labor, and health insurance are examples of factors that are difficult to control and affect transit-operating costs. Researchers documented the change in fuel, labor, and health insurance, and the estimated impact these outside cost influences had on the ability for RTDs to spend funds on service enhancement from FY08 to FY10.

Labor, fringe benefits (which include health insurance), and fuel are significant drivers of a transit provider's operating budget. According to data provided in RMC 0-6194, *Quantifying the Purchasing Power of Public Transportation in Texas* for FY07, salaries and wages are 49 percent RTD operating cost, fringe benefits are 18 percent, and fuel/lubricants are 12 percent (see Table 11) (RMC 0-6194, 2010). Together these three classes of expense represent approximately 80 percent of a transit provider's operating budget in FY07.

Table 11. Operating Expense by Object Class.
FY07 Data

Operating Expense by Object Class	Rural
Salaries and Wages	49%
Fringe Benefits	18%
Fuel and Lubricants	12%
Services	3%
Tires and Tubes	1%
Other Materials and Supplies	7%
Utilities	1%
Casualty and Liability Costs	2%
Miscellaneous Expenses	6%
Leases and Rentals	0.3%

Source: RMC 0-6194 percents to exclude purchased transportation to show full cost across each expense class.

Labor

Wage rates not only impact a RTD's ability to provide a certain quantity of service but also impact the quality of service in terms of attracting and retaining quality staff and providing a consistent staffing level for service. Due to the labor-intensive nature of transit, labor expense is the largest line item in a transit provider's budget (see Table 11). Without conducting a survey of Texas rural and small urban transit providers to determine actual changes in wage rates, researchers used an estimate of a 2 percent increase in the average cost of living wage increase. This assumption is consistent as researchers found from the Texas Bureau of Labor Statistics labor categories associated with transit that from FY08 to FY10, a change in transit related work wages ranged from 0 percent to a 5 percent *annual* change.

To provide an estimate of the impact that a change in wage rates have on RTDs, researchers estimated the impact of a 2 percent annual change in rural transit salaries and wages for FY08 to FY10 (see Table 12). Researchers first estimated the salary and wage expenses based on RMC

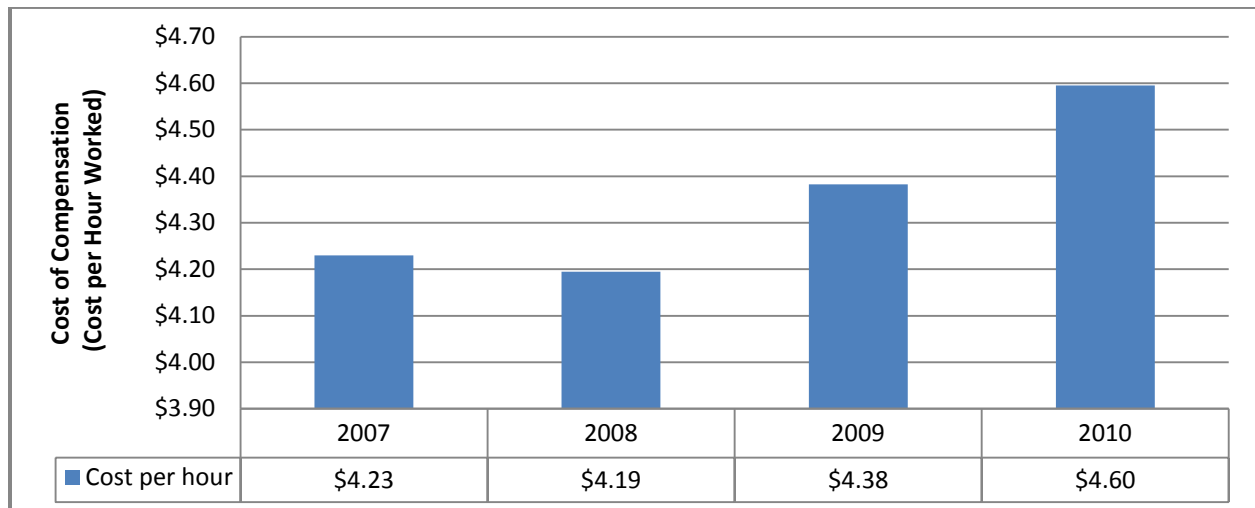
0-6194 line-item data where 49 percent of total rural transit expenses were salary and wages. Researchers then applied a 2 percent annual increase for FY08, FY09, and FY10. An estimated 2 percent change in salaries and wage rates had the impact of adding over \$600,000 *annually* to rural transit expenses as a whole in Texas. The impact of a two percent salary and wage rate change from FY08 to FY10 was an estimated additional \$1.2 million in rural transit expenses.

**Table 12. Estimated Labor Rate Impact.
FY07 to FY10**

	FY07	FY08	FY09	FY10
Annual Rural Transit Operating Expenses	\$61,421,873			
% that is Salaries and Wages	49%			
Salary and Wages Expenses	\$30,096,718			
% Average Annual Change		2%	2%	2%
Estimated Salary and Wage Expense	\$30,096,718	\$30,698,652	\$31,312,625	\$31,938,878
Estimated Annual Impact			\$613,973	\$626,253

Health Insurance

Employer cost of health insurance (medical, dental, and vision) rose by 9 percent since 2007 (see Figure 9). Transit providers determine whether to provide health insurance to its employees by policy decision. Some transit providers provide health insurance to part-time as well as full-time staff. Others manage health insurance costs by hiring a mix of part-time (without benefits) and full-time (with benefits) staff. Because employee benefits are approximately 19 percent of a RTD’s budget and these health insurance benefits have continued to rise, predicting the increase in health related costs based on local policy is important in managing costs.



Source: Bureau of Labor Statistics CMU315000000000D, CMU315000000000P

Figure 9. Employer Health Insurance Cost per Employee Hour.

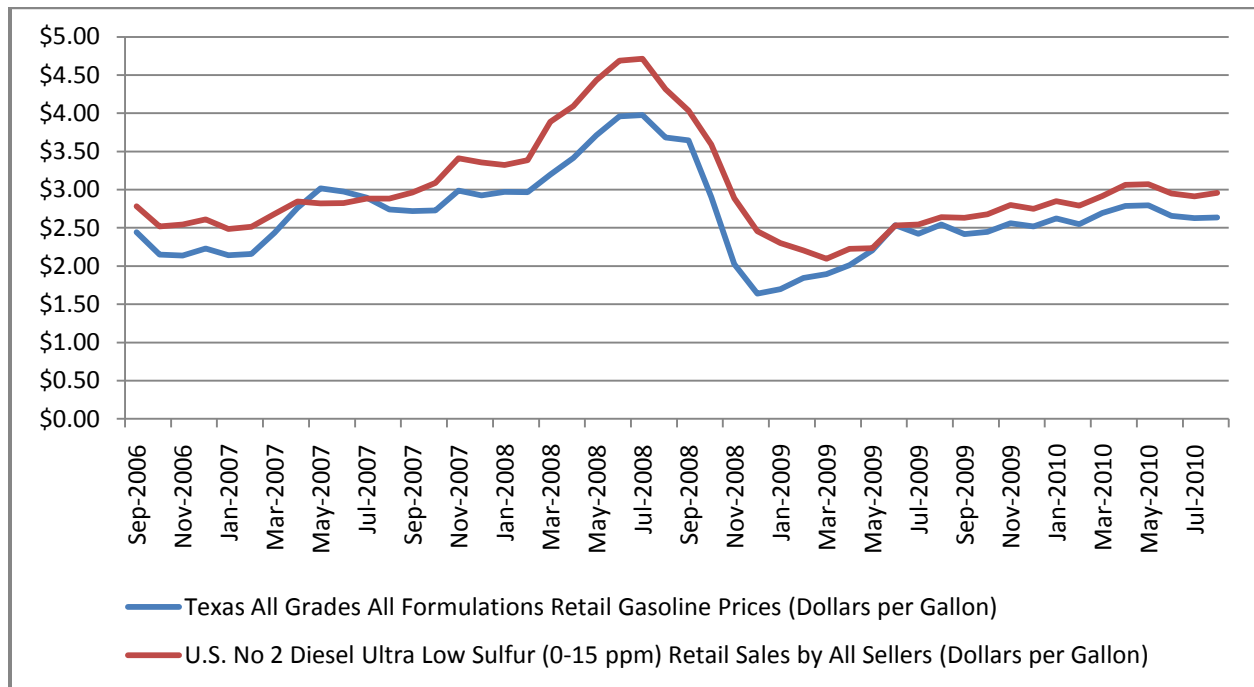
Researchers estimated the impact of the percent change in employer health insurance cost per employee hour to rural transit fringe benefit expenses for FY08 to FY10 (see Table 13). The percent change has the impact of having added an estimated \$1.1 million from FY08 to FY10 in rural transit expenses.

Table 13. Estimated Fringe Benefit Rate Impact.

	FY07	FY08	FY09	FY10
Annual Operating Expense	\$61,421,873			
% that is Fringe Benefits	19%			
Fringe Benefits	\$11,670,156			
% Average Change		-1%	4%	5%
Estimated Fringe Benefits	\$11,670,156	\$11,573,594	\$12,090,888	\$12,677,155
Estimated Annual Impact			\$517,294	\$586,267

Fuel

Fuel cost has been volatile over recent years, peaking in July 2008 at \$3.98 for Texas retail gasoline and \$4.71 for No. 2 Diesel Ultra Low Sulfur (see Figure 10). Although fuel costs dropped at the end of 2008, fuel has been steadily increasing since the beginning of 2009, which makes fuel consumption one of the most important issues facing transit managers.



Source: Energy Information Administration, <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp>

Figure 10. Gasoline and No. 2 Diesel Ultra Low Sulfur Prices. FY07 to FY10

Fuel in FY08, FY09, and FY10 has affected RTDs not only because of fuel cost but because the fluctuation has made it difficult for transit managers to predict. Planning for service expansion or enhancement is difficult when a significant portion of a RTD’s budget is not easy to determine. Table 14 provides the estimated fuel expense from FY07 to year-to-date FY11. Researchers used the Energy Information Administration fuel rates to determine the fuel expense impact. Based on the TxDOT inventory of vehicles, researchers assumed that 70 percent of RTD vehicles are gasoline and 30 percent diesel and estimated a 10 mile per gallon fuel efficiency. Researchers calculated total annual fuel cost based on reported total vehicle miles by transit districts.

Researchers calculated the impact of the increase in gallons of fuel separate from the price increase impact (see last two columns of Table 14). Researchers estimated that RTD total fuel cost in FY08 was \$10.2 million. FY09 fuel prices dropped, having the impact of saving \$3.1 million from FY08 to FY09. Fuel prices approached FY08 levels again in FY10, having the impact of an additional \$900,000 from FY09 to FY10. The fuel price change from FY08 to FY10 had an estimated savings of \$2.1 million in fuel cost. However, researchers estimate in FY11 that fuel price increases will offset a portion of these savings. Researchers estimate the impact of FY11 year-to-date February fuel prices, which have exceeded FY07 levels, will cost an additional \$900,000.

**Table 14. Estimated Fuel Cost Impact.
FY07 to YTD FY11**

FY	Texas Retail Gas Rate *	No 2 Diesel Ultra Low Sulfur Rate**	Total Vehicle Miles	Estimated Gas Gallons ***	Estimated Diesel Gallons ***	Estimated Total Fuel Cost	Price Change Impact	Gallons Change Impact
FY07	\$2.51	\$2.70	28,780,832	2,014,658	863,425	\$7,380,932		
FY08	\$3.27	\$3.80	29,827,201	2,087,904	894,816	\$10,230,755	\$2,490,917	\$358,905
FY09	\$2.28	\$2.65	31,098,201	2,176,874	932,946	\$7,432,548	-\$3,101,979	\$303,772
FY10	\$2.61	\$2.86	33,750,286	2,362,520	1,012,509	\$9,063,583	\$918,822	\$712,213
FY11 ****	\$2.83	\$3.23	33,750,286	2,362,520	1,012,509	\$9,961,228	\$897,645	\$0

*Texas All Grades All Formulations Retail Gasoline Prices (Dollars per Gallon)

**U.S. No 2 Diesel Ultra Low Sulfur (0–15 ppm) Retail Sales by All Sellers (Dollars per Gallon)

***Assumes 70 percent of vehicles are gasoline and 30 percent diesel and estimated 10 miles per gallon fuel efficiency

****Fiscal year-to-date February 2011 fuel prices and assumes FY10 service levels

Source: Energy Information Administration, <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp>

Fuel, Labor, and Health Insurance Combined Impact

The estimated impact of changes in labor (+\$1.2 million), health insurance (+\$1.1 million), and fuel (-\$2.1 million) to rural transit expenses from FY08 to FY10 is a conservative \$200,000 or 3 percent of the \$7.4 million increase in Section 5311 funds. Preliminary numbers show that these categories of expenses have continued to increase in FY11. The estimated combined impact of these expenses in FY11 is an additional \$2.0 million. A larger proportion of the Section 5311 funds will go to covering these difficult to control costs.

CHAPTER 6. WHAT TRANSIT DISTRICTS SAID ABOUT USE OF INCREASED FUNDS

Researchers contacted RTDs that received an increase in Section 5311 and state funding from FY04 to FY10 to request information on where increased revenues were applied. This chapter provides the results of the data collected.

Researchers contacted RTDs that were not selected for the six case studies discussed in the next chapter that had over a 10 percent increase in combined Section 5311 and state funding from FY04 to FY10. There were 29 RTDs contacted of which 21 provided information on revenues applied.

RESULTS ON USE OF INCREASED FUNDS

Table 15 provides the results of the information collected from the 21 transit districts. Researchers grouped the data collected into the following areas of interest:

Increased funds were used to:

- Cover increased fuel cost.
- Cover increased insurance cost.
- Enhance existing or introduce new general public services.
- Support public outreach activities (information, mobility management, travel training).
- Add staff.
- Improve salary/benefits and/or convert part-time to full-time positions.
- Enhance or add training.
- Replace/rehabilitate revenue vehicles and/or provide additional vehicle maintenance.
- Invest in technology.
- Improve or add new facilities.
- Cover extraordinary costs.

Table 15. Reported Uses of Increased Funding.

Increased Funding Use	No. of RTDs	% of 21 RTDs
Cover increases in fuel costs	20	95%
Cover increases in insurance costs	15	71%
Enhance existing or introduce new general public services:		
Enhance EXISTING general public transit service	7	33%
Introduce NEW general public services	5	24%
Introduce new transit service for specific markets (other than general public)	0	0%
Enhance public information and/or outreach materials	6	29%
Add staff:		
Add administrative staff	3	14%
Add operational staff	12	57%
Add vehicle maintenance staff	6	29%
Add travel attendant and travel training services	2	10%
Add mobility management	4	19%
Improve salary/benefits and/or convert part-time to full-time positions:		
Improve competitiveness of salary or benefit levels	5	24%
Increase overtime	2	10%
Convert part-time positions to full-time positions	7	33%
Enhance or add training	5	24%
Revenue vehicle replacement/rehabilitation and vehicle maintenance:		
Replace revenue vehicle fleet	8	38%
Rehabilitate revenue vehicle fleet	6	29%
Expand revenue vehicle fleet	7	33%
Invest in technology:		
Invest in automated scheduling/ dispatching software or equipment	5	24%
Invest in mobile data computers	4	19%
Invest in automatic vehicle location system	5	24%
Invest in telephone call center equipment or software	2	10%
Invest in vehicle maintenance information system	0	0%
Invest in other technology (not listed previously)	1	5%
Improved or new facilities:		
Improve or build new maintenance facility	2	10%
Improve or build new passenger facilities (shelters, transit centers, transfer stations)	2	10%
Improve or build new administrative facility	3	14%
Cover extraordinary costs	1	5%

Cover Increased Fuel and Insurance Costs

RTDs reported that the top use for increased funding levels was to cover fuel and insurance cost increases. Ninety-five percent (20 of 21) of RTDs that received an increase in Section 5311 and state funding from FY04 to FY10 reported using the increase in funding to cover the increase in fuel cost. The one RTD that did not report using the increase in funding for fuel subcontracts all transit service with fuel as the subcontractors' responsibility in the negotiated rate. Seventy-one percent (15 of 21) reported using their increased funding to cover increases in insurance costs.

Enhance Existing General Public Transit Service or Introduce New General Public Services

Nine of the 21 RTDs (43 percent) reported enhancing general public transit service and/or introducing new general public service (three of the nine both enhanced and introduced new general public service). Thirty-three percent reported using funds to enhance existing general public services and 24 percent reported using funds to introduce new general public services. No RTDs reported using Section 5311 or state rural transit funds to introduce non-general public service.

Public Outreach

RTDs reported using funds for public outreach type activities as follows:

- Six of 21 transit districts (29 percent) indicated using funds to enhance public information and/or outreach materials.
- Four of the 21 transit districts (19 percent) reported using funding to add mobility management.
- Two of the 21 transit districts (10 percent) reported using funding for travel training or travel attendants.

Add Staff, Overtime and Enhance/Add Training

The majority of transit districts that reported using funds to add staff added operational staff – 57 percent. Nine of the 12 that reported using funds to add operational staff also reported enhancing or adding service. The two RTDs that reported adding overtime, and the three RTDs that reported adding administrative staff also reported enhancing or adding service. Five (or 24 percent) reported using funds to enhance or add training.

Improve Salary/Benefits and/or Convert Part-Time to Full-Time Positions

Ten of 21 RTD (48 percent) reported using increased funding to improve competitiveness of salary or benefit levels, and/or convert part-time to full-time positions (two of the 10 both improved salary/benefits and converted part-time to full-time). One RTD commented that funds were used to provide for annual salary increases. Improvement in this category of spending should result in employee retention and improved job satisfaction levels.

Revenue Vehicle Replacement/Rehabilitation and Vehicle Maintenance

Nine of 21 RTDs (43 percent) reported replacing revenue vehicles and/or rehabilitating the revenue vehicle fleet with the increase in funding levels (five of the nine both replaced and rehabilitated revenue vehicles). One RTD commented funding enabled 22 percent of the fleet to be rehabilitated. Replacing revenue vehicles decreases the overall fleet age and rehabilitation of revenue vehicles increases fleet longevity. Both replacement and rehabilitation of revenue vehicles should decrease overall maintenance cost, reduce vehicle breakdowns, and improve quality of service. Five of the seven RTDs that indicated using funding to expand the revenue vehicle fleet also reported using funds to enhance general public service or introduce new general public service.

Six of 21 transit districts (29 percent) reported adding vehicle maintenance staff. Three of the six that added vehicle maintenance staff also reported increased or enhanced general public service. Interestingly, those transit districts that rehabilitated vehicles also reported adding vehicle maintenance staff, which may indicate the purpose of the staffing.

Investment in Technology

Seven of the 21 RTD transit districts (33 percent) reported using increased funding to invest in technology (four of the seven reported investing in multiple technology items). RTDs reported all technology investment increases in dispatching and scheduling technology to include automated scheduling/dispatching, mobile data computers, vehicle location systems, call center equipment, and radios (reported as other technology). One RTD commented that investment in technology enabled the transit district to centralize dispatch and expand to five additional counties. No RTD reported using funds to purchase maintenance information systems.

Improved or New Facilities

Six of the 21 RTDs (29 percent) reported using increased funding to improve or build new maintenance, passenger, and/or administrative facilities:

- One reported using funds for both passenger and administrative facilities.
- Two reported using funds for administrative facilities only.
- One reported using funds for passenger facilities only.
- Two reported using funds for maintenance facilities.

One transit district commented that the investment in a maintenance facility included one that housed eight buses with a maintenance bay.

Other Comments

RTDs provided the following comments regarding use of Section 5311 and state funding increases:

- Increased funding levels were used to cover increased cost of contracting.
- Section 5311 funds received allowed maximizing the federal funds at an 80/20 ratio for Purchase of Service. Traditionally, Section 5311 funds for operating are a 50/50 ratio — interested in seeing an increase in state 5311 funds to be more in line with Section 5311 funds.
- In general, Section 5311 formula funds are used to maintain as well as enhance existing service. The funds covered increased costs of fuel, increased costs of telephone service, provided raises to staff each year, added staff, and increased hours and miles of service. The increase in Section 5311 funds freed up other funds that were used to implement automated scheduling and dispatch, mobile data computers, AVLS, and a telephone system for the call center.
- Fort Bend County public transportation services began in 2005. Funding provided over the course of the last 5 years provided new start equipment, buses, scheduling software, etc. and as discretionary funding was made available, vehicle replacements. Fort Bend County does not directly operate bus service. Services are contracted to the private sector. Increased funding received in FY10 offset increases passed on by the contracted provider related to fuel and wage cost increases.

- South Plains Community Action Association officially merged with Caprock Community Action Agency in January 2010. Remaining funding balances of Caprock grants were not transferred until the end of March 2010. South Plains operated transit service in 17 counties with funding for 11 counties during this period.

General Conclusion

Table 16 summarizes funding increase uses by category. RTDs reported the top two use of funds covered fuel and insurance costs. RTDs next highest use of funds went to the addition of staff and improved salary/benefits and converting part-time to full-time positions. Enhancing existing or introducing new service, conducting public outreach activities, and investing in vehicles and vehicle maintenance were the next level of reported funds' use and all ranked equally. Finally, RTDs reported using funding increases to invest in capital items including scheduling/dispatching related technology projects, improving facilities, enhancing training, and covering extraordinary costs.

Table 16. Summary of Uses of Funding Increases.

Funding Use	% of Transit Districts
Cover increased fuel	95%
Cover increased insurance costs	71%
Added staff	62%
Improve salary/benefits and/or convert part-time to full-time positions	48%
Enhance existing or introduce new general public services	43%
Public outreach (information, mobility management, travel training)	43%
Revenue vehicle replacement/rehabilitation and vehicle maintenance	43%
Investment in technology	33%
Improved or new facilities	29%
Add or enhance training	24%
Cover extraordinary costs	5%

CHAPTER 7. CASE STUDIES

The objective of the case study research was to understand the impact of funding change, what changes were made in regard to the funding change and what lessons were learned. Researchers presented the RTDs selected for case study two reports to provide a brief introduction of the purpose of the research:

- FY04 to FY10 change in Section 5311 and state funding.
- Transit district status report including:
 - Operating and financial data trends from FY08 to FY10.
 - Operating data:
 - Passenger boardings by trip type.
 - Revenue miles and revenue hours.
 - Revenue vehicles.
 - Financial data:
 - Revenues by funding source.
 - Operating expenses by functional class (operating, administration, maintenance, planning, purchased transportation) and capital expenses.

Researchers presented FY04 to FY10 funding change to illustrate the impact of SAFETEA-LU as well as the impact of the Texas Transit Funding Formula. Researchers presented operating and financial data beginning FY07, as this was the first year transit districts had received training in data collection and reporting and had used the web-based data PTN-128 reporting system. Researchers focused on the changes in FY08 to FY10 when analyzing change impacts as consistency in data reporting was higher than previous years.

CASE STUDY SELECTION METHODOLOGY

Based on the percent change in RTD Section 5311 and state allocated funding, researchers chose six case studies. Researchers compiled Section 5311 and state RTD funds allocated by RTD from FY04 to FY10 and sorted from highest to lowest percent change (see Table 17). Of those RTDs with large percent increases, researchers chose East Texas Council of Governments, Community Services, Inc., and Alamo Area Council of Governments. Of those with little to no increase or a decrease in funding levels, researchers chose Colorado Valley Transit, Webb Community Action Agency, and Brazos Transit District. The findings for the six case studies selected are presented in the following format:

- Organization Background.
- FY04 to FY10 Change in Allocated Funds.
- FY08 to FY10 Operating Data.
- FY08 to FY10 Operating and Capital Expenses.
- Agency Changes due to State and/or Federal Funds Change.
- Comparative Summary of Findings.

Table 17. Percent Change in Section 5311 and State Allocation.

FY04 and FY10 RTD	Allocation		Change	
	2004	2010	\$	%
East Texas COG	\$560,020	\$2,406,699	\$1,846,679	330%
South Padre Island	\$265,931	\$915,495	\$649,564	244%
Community Services, Inc.	\$406,719	\$1,028,115	\$621,396	153%
West Texas Opportunities	\$1,023,053	\$2,584,552	\$1,561,499	153%
Golden Crescent RPC	\$569,406	\$1,386,665	\$817,259	144%
Alamo Area COG	\$926,067	\$2,190,065	\$1,263,998	136%
Kaufman ART	\$366,047	\$855,244	\$489,197	134%
Ark-Tex COG	\$728,964	\$1,688,317	\$959,353	132%
El Paso County	\$297,217	\$607,998	\$310,781	105%
Fort Bend County	\$0	\$652,083	\$652,083	100%
Heart of Texas COG	\$563,148	\$1,122,419	\$559,271	99%
CC of Southwest Texas	\$703,936	\$1,338,357	\$634,421	90%
Panhandle CS	\$1,079,368	\$2,000,791	\$921,423	85%
Hill Country TD	\$713,322	\$1,313,609	\$600,287	84%
Aspermont SBDC	\$372,304	\$659,481	\$287,177	77%
Central Texas Rural TD	\$1,010,540	\$1,739,426	\$728,886	72%
Public Transit Services	\$641,367	\$1,037,417	\$396,050	62%
Snr. Ctr. Res. & Public Transit	\$438,005	\$700,803	\$262,798	60%
Cleburne	\$456,777	\$690,834	\$234,057	51%
Community Action CST	\$547,506	\$804,085	\$256,579	47%
Kleberg County HS	\$300,346	\$432,724	\$132,378	44%
Concho Valley TD	\$666,393	\$954,555	\$288,162	43%
Texoma Area Paratransit System	\$944,838	\$1,337,547	\$392,709	42%
Del Rio	\$466,162	\$637,130	\$170,968	37%
Rolling Plains MC	\$694,551	\$941,320	\$246,769	36%
South East Texas RPC	\$666,393	\$883,366	\$216,973	33%
South Plains CAA	\$1,586,202	\$1,939,087	\$352,885	22%
CARTS	\$2,186,894	\$2,653,238	\$466,344	21%
REAL	\$766,507	\$916,374	\$149,867	20%
Collin County ART	\$400,462	\$472,352	\$71,890	18%
Bee Community AA	\$569,406	\$656,690	\$87,284	15%
SPAN	\$594,435	\$679,800	\$85,365	14%
Gulf Coast Center	\$534,991	\$586,853	\$51,862	10%
Colorado Valley Transit	\$913,552	\$934,109	\$20,557	2%
Webb CAA	\$638,236	\$626,668	-\$11,568	-2%
Lower Rio Grande Valley DC	\$869,752	\$813,299	-\$56,453	-6%
Brazos Transit District	\$6,044,464	\$4,516,548	-\$1,527,916	-25%
The Transit System	\$772,765	\$566,396	-\$206,369	-27%
Total	\$31,286,046	\$46,270,511	\$14,984,465	

ALAMO AREA COUNCIL OF GOVERNMENTS

Organization Background

Alamo Area Council of Governments is a designated RTD serving an 11-county region of 10,130 square miles (see Figure 11). AACOG serves the counties of Atascosa, Bandera, Comal, Frio, Gillespie, Guadalupe, Karnes, Kendall, Kerr, Medina, and Wilson. AACOG's transit service is called Alamo Regional Transit. AACOG's service area population was 392,995 in Census 2000 population and is expected to grow to 502,000 (28 percent) in Census 2010. A portion of this growth is within the area of New Braunfels that may become a small-urbanized area when the results of the 2010 Census are available. AACOG provides demand response transportation available to the public and Medicaid clientele.

Prior to FY04, AACOG subcontracted with four private operators for demand response service. The process to transition from contracted to direct services began in 2004 and was completed in FY06. In FY10, AACOG directly operated all transportation services.

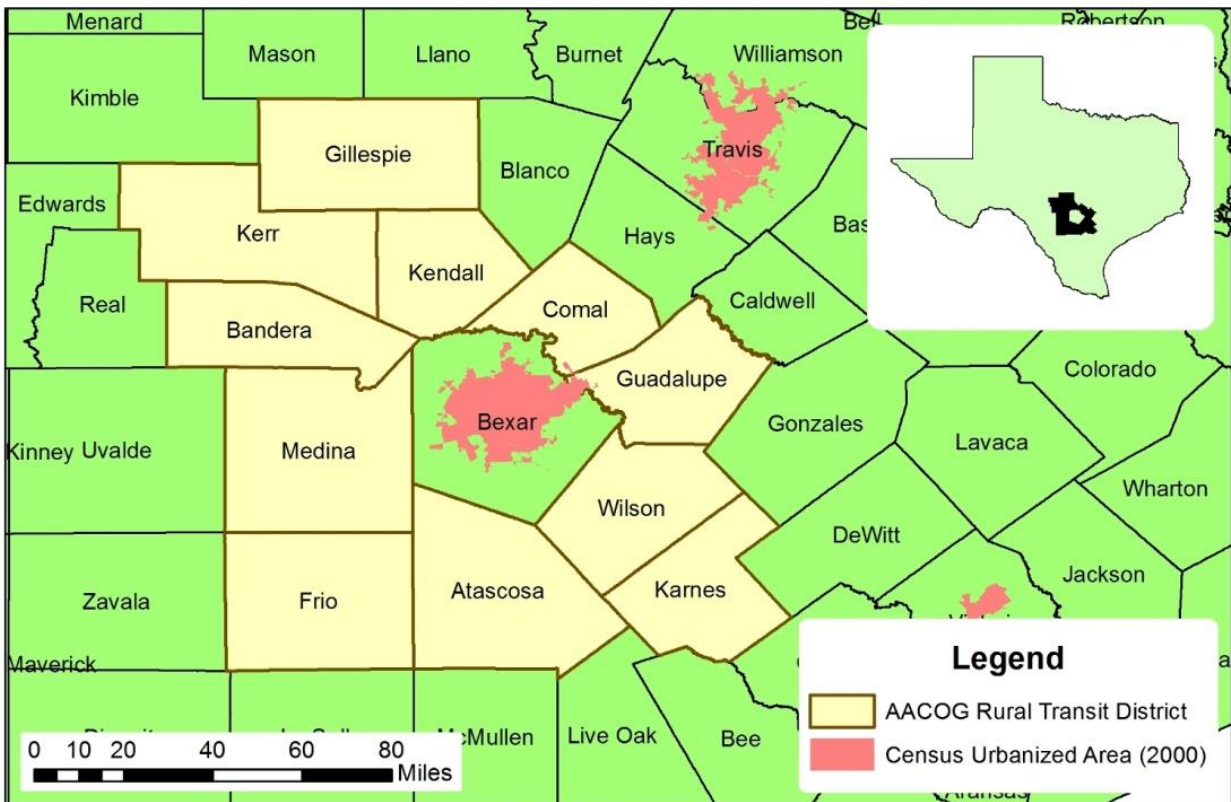
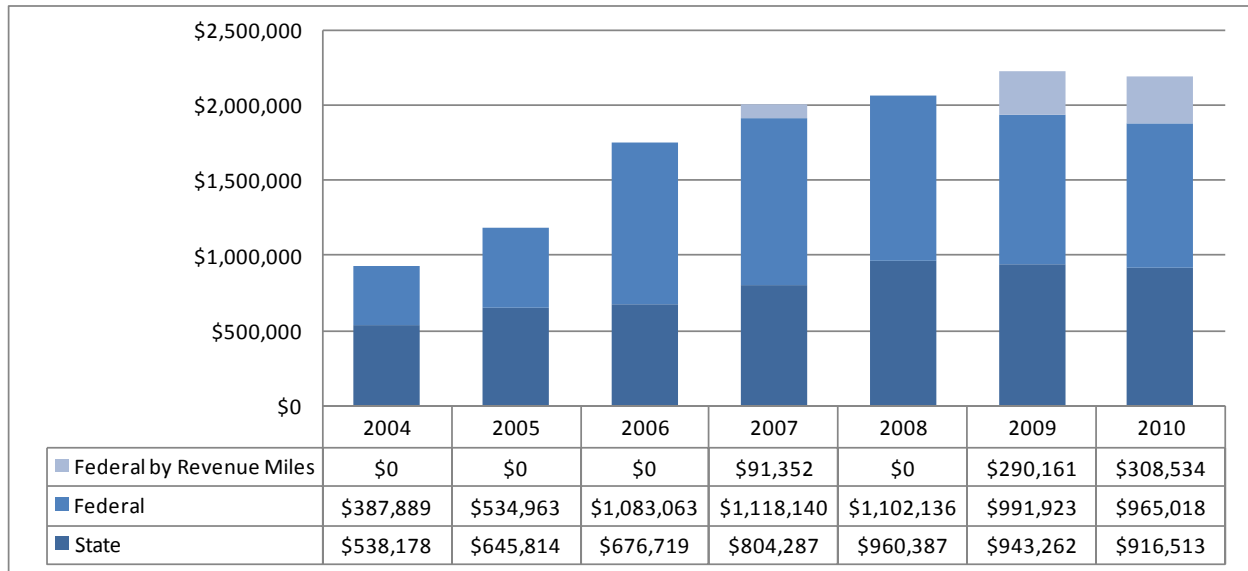


Figure 11. Alamo Area Council of Governments Map.

FY04 to FY10 Change in Allocated Funds

Figure 12 depicts the change in Section 5311 and state rural funding for AACOG. AACOG Section 5311 funds increased 228 percent from FY04 to FY10. Likewise, the amount of state rural allocations increased 70 percent from FY04 to FY10. The combined change in

Section 5311 and state rural allocations from FY04 to FY10 was a net increase of \$1,263,998, or an additional 136 percent.



**Figure 12. ACOG Section 5311 and State Allocated Funds.
FY04 to FY10**

FY08 to FY10 Operating Data

Researchers compared the change in funding from FY08 to FY10 to the operating data reported. ACOG’s Section 5311 and state rural funding increased \$127,542 (6 percent) from \$2,062,523 to \$2,190,065 from FY08 to FY10. ACOG had 3 percent more passenger boardings in FY10 than in FY08. Over the same period revenue, miles increased by 28 percent and revenue hours increased by 33 percent (see Table 18). Over the same period, ACOG increased the vehicle fleet 23 percent.

**Table 18. ACOG Operating Data.
FY08 to FY10**

	FY08	FY09	FY10	FY08 to FY10 % Change
Passenger Boardings	107,751	95,370	110,512	3%
Revenue Miles	983,470	1,097,181	1,258,580	28%
Revenue Hours	57,128	60,094	75,960	33%
Total Revenue Vehicles	79	110	97	23%

AACOG provided five types of trips in FY10 (see Table 19). The proportion of trip by type has remained relatively constant from FY08 to FY10 with 44 percent of total passenger boardings being general public, 34 percent MTP, 14 percent other contracts, 7 percent DADS, and less than 1 percent JARC and Department of Assistive and Rehabilitation Services in FY10.

**Table 19. AACOG Passenger Boardings by Trip Type.
FY08 to FY10**

Passenger Boardings	FY08	FY08 % of Total	FY09	FY10	FY10 % of Total	FY08 to FY10 Change	% Change
General Public	48,652	45%	51,175	48,503	44%	(149)	0%
Medical Transportation Program	33,333	31%	28,612	37,251	34%	3,918	12%
Department of Aging & Disabilities	15,316	14%	10,730	8,030	7%	(7,286)	-48%
Dept. of Assistive & Rehab. Services	27	0%	30	28	0%	1	4%
JARC	1,862	2%	473	803	1%	(1,059)	-57%
Other Contracts	8,561	8%	4,350	15,897	14%	7,336	86%
Passenger Boardings	107,751	100%	95,370	110,512	100%	2,761	3%

FY08 to FY10 Operating and Capital Expenses

Between FY08 and FY10, AACOG's total operational expenses increased 27 percent. Operating expenses increased 24 percent, which is consistent with the increase of 28 percent increase in revenue miles and 33 percent increase in revenue hours. Maintenance expenses decreased by 22 percent, reflecting the new fleet purchase resulting in a reduction in average fleet age. AACOG did not purchase any transportation services and spent funds on planning during FY08 and FY09 (see Table 20). AACOG has expended increasing amounts of capital on assets each year since FY08 (see Table 21).

**Table 20. AACOG Operating Expenses.
FY08 to FY10**

Operational Expenses:	FY08	FY09	FY10	FY10 % of Total	FY08 to FY10 % Change
Operating	\$2,048,360	\$1,947,732	\$2,539,308	77%	24%
Maintenance	\$260,010	\$271,272	\$203,313	6%	-22%
Administrative	\$273,028	\$420,487	\$534,452	16%	96%
Planning	\$2,905	\$33,306	\$0	0%	-100%
Purchased Transportation	\$0	\$0	\$0	0%	0%
Total	\$2,584,303	\$2,672,797	\$3,277,073	100%	27%

**Table 21. AACOG Capital Expenses.
FY08 to FY10**

Capital Expenses:	FY08	FY09	FY10
Capital Asset	\$442,286	\$642,538	\$1,673,717
Capital in Purchased Transportation	\$0	\$0	\$0
Total	\$442,286	\$642,538	\$1,673,717

Agency Changes due to State and/or Federal Funds Change

TTI researchers met with AACOG officials to discuss the impact of the rural funding formula changes on transit service. The five bulleted lists below document changes made due to federal and/or state fund changes in five categories: service changes, fare structure changes, vehicle fleet changes, facilities changes, and personnel changes.

Service Changes

- Increased service availability in remote rural areas and in counties where service was previously limited (i.e., Comal County).
- Increased service in urban areas by planning for and adding specialized services.
 - Planned for, and will soon operate, a flexible transit route in New Braunfels.
 - Began operating a Saturday-only route in Fredericksburg from visitors' center to merchants.
- Expanded ability to serve demand that previously existed and new trips.

Fare Structure Changes

- Reduced local trips fare from \$2.50 to \$1.00 (each way).
- Reduced out-of-county fares.

Vehicle Fleet Changes

- Spent funds to expand, rehabilitate, and replace revenue vehicle fleet.
- Invested in Automated Vehicle Location (AVL) systems and Mobile Data Computers (MDCs).
- Implemented use of vehicle maintenance software.
- ARRA: first disbursement spent on 16 new vehicles and second on 16 in-vehicle camera systems.

Facilities Changes

- Upgraded Shah dispatch software.
- Purchased new and additional office equipment and space to accommodate organizational growth.
- Installed fencing around some parking lots in vehicle parking areas to reduce/eliminate vandalism.
- Added fencing, trees, and security cameras to vehicle facility in Kerrville.

Personnel Changes

- Hired two lead drivers as road supervisors.
- Created Agency Director position (formerly only manager).
- Increased the number of dispatchers from four to seven.
- Hired a dispatch supervisor and personnel for training (i.e., safety/security).
- Added Mobility Manager position to organization as result of regional coordination efforts.
- Hired additional light-maintenance staff.
- Increased the number of drivers from approximately 30 to approximately 60.
- Reduced staff overtime hours.
- Began shifting drivers from 50/50 full-time/part-time to 75/25.
- Increased driver wage from approximately \$7.00 in 2004 to \$10.00 (rate varies whether or not driver has a commercial driver's license).

Comparative Summary of Findings

Figure 13 depicts the relationship between the change in allocated funds and operating expenses, revenue miles, and passenger boardings for AACOG. Funding increased annually from FY04 to FY07; the amount of allocated funds stayed relatively level at around \$2 million since FY07. Since FY08, the number of revenue miles increased annually, operating expenses increased annually, and passenger boardings dropped from ~108,000 in FY08 to ~95,000 in FY09 and then increased in FY10 to ~115,000. These findings correspond with the general nature of AACOG changes recorded in the previous section. AACOG used the increase in funding to implement in-vehicle and dispatch technology, purchase additional vehicles, hire more drivers, and operate service in remote rural areas and on more days than previously. The effect on service, i.e., ridership, appears to be positive in recent terms, since FY09. However, operating costs increased at a much faster pace than miles or passenger boardings. Operating costs may increase sooner and faster than ridership because it is necessary to field additional resources or changes prior to realizing the impact in performance measures.

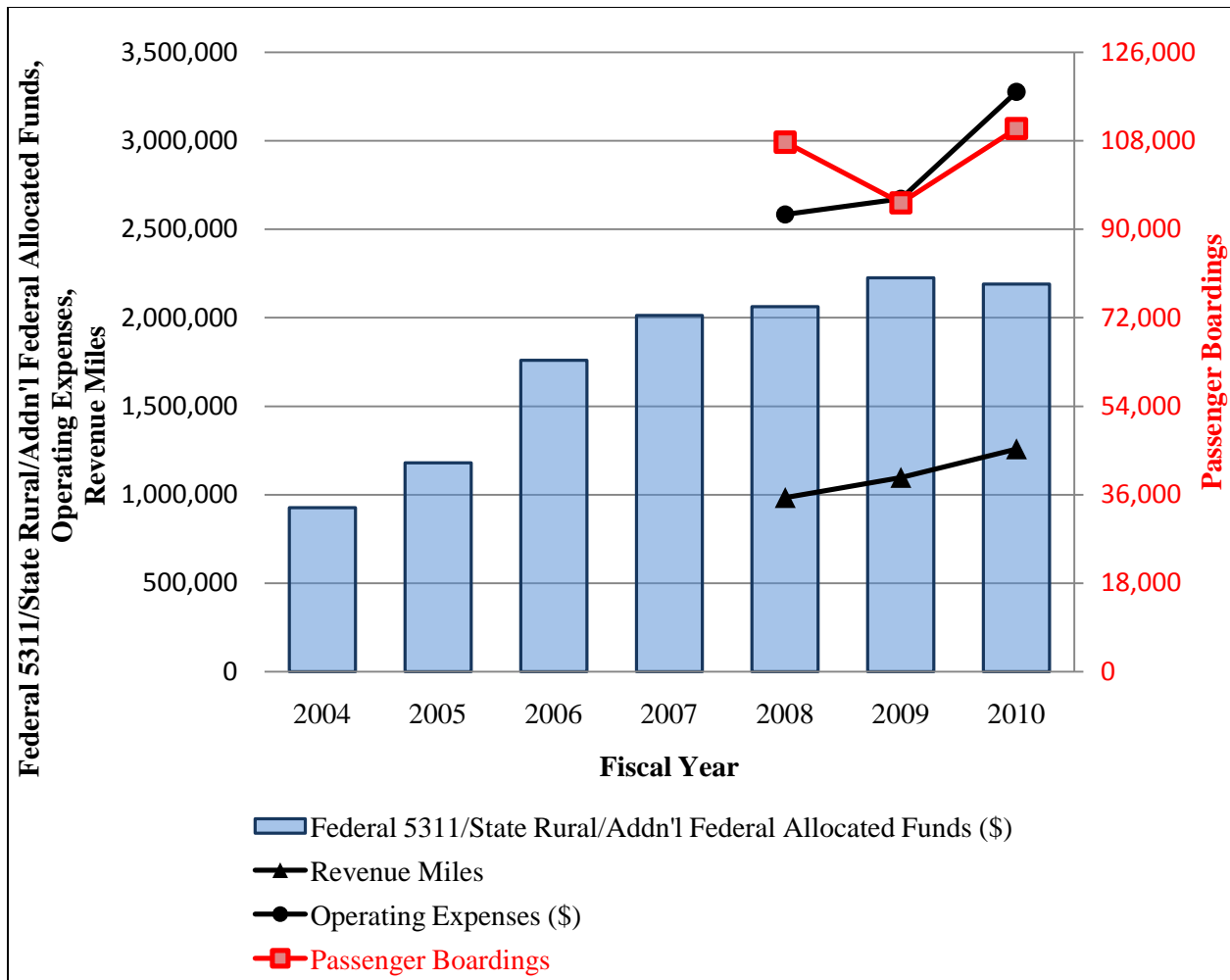


Figure 13. AACOG Comparative Summary.

BRAZOS TRANSIT DISTRICT

Organization Background

Brazos Transit District (BTD) is a RTD serving a large 21-county region that covers 16,910 square miles of non-urbanized land area (see Figure 14). The counties included in the service area are Angelina, Brazos, Burleson, Grimes, Houston, Jasper, Leon, Liberty, Madison, Montgomery, Nacogdoches, Polk, Robertson, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler, Walker, and Washington. Two urbanized areas are within the service area: Bryan-College Station and The Woodlands. BTD is the urban transit district for the two urbanized areas. BTD's rural service area population was 798,164 in Census 2000 population and is expected to grow to 929,000 (16 percent) in Census 2010.

Within the rural portions of the service area, the majority of BTD service consists of curb-to-curb demand response transportation (serving 13 counties). BTD provides rural fixed route transit service within Lufkin and Nacogdoches and flexible route service within the cities of Dayton and Liberty. In addition to public transit available to the general public, BTD is the Medical Transportation Program operator for the seven counties in the Brazos Valley Region. BTD provides transportation to Medicaid-eligible passengers.

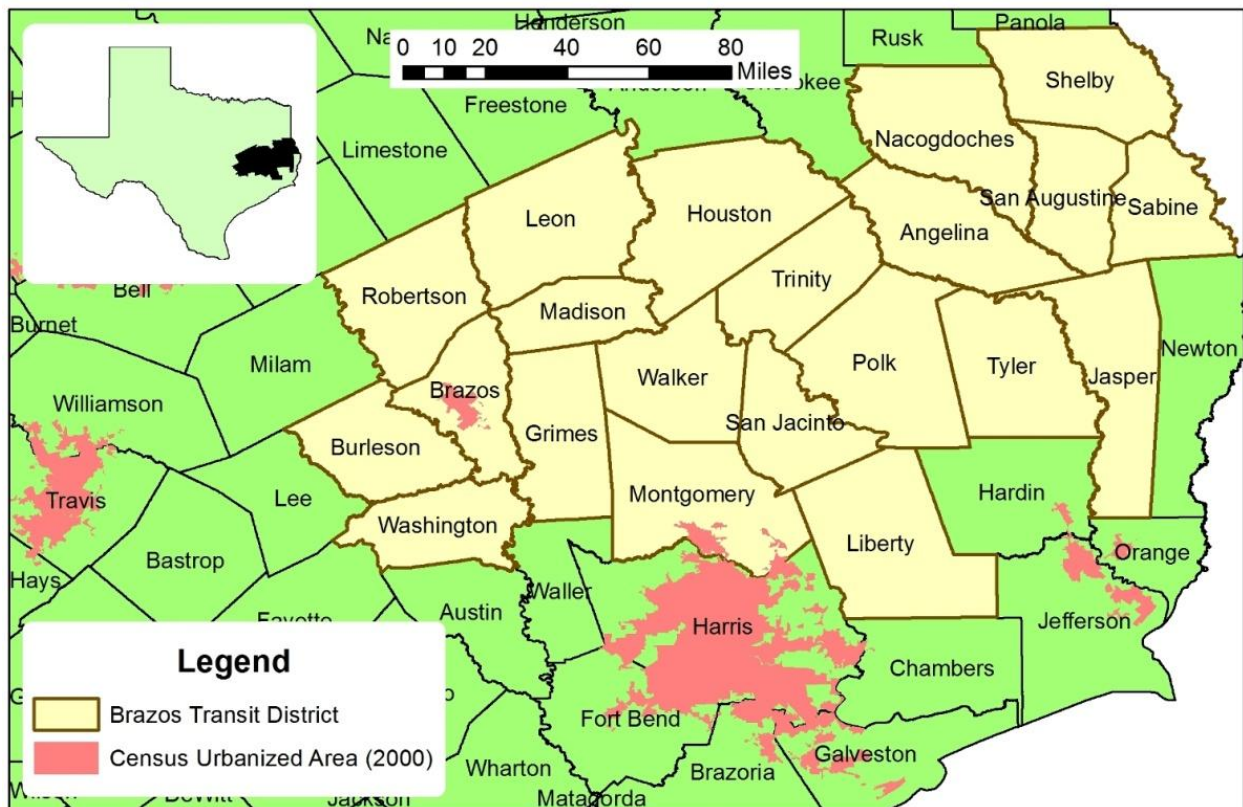
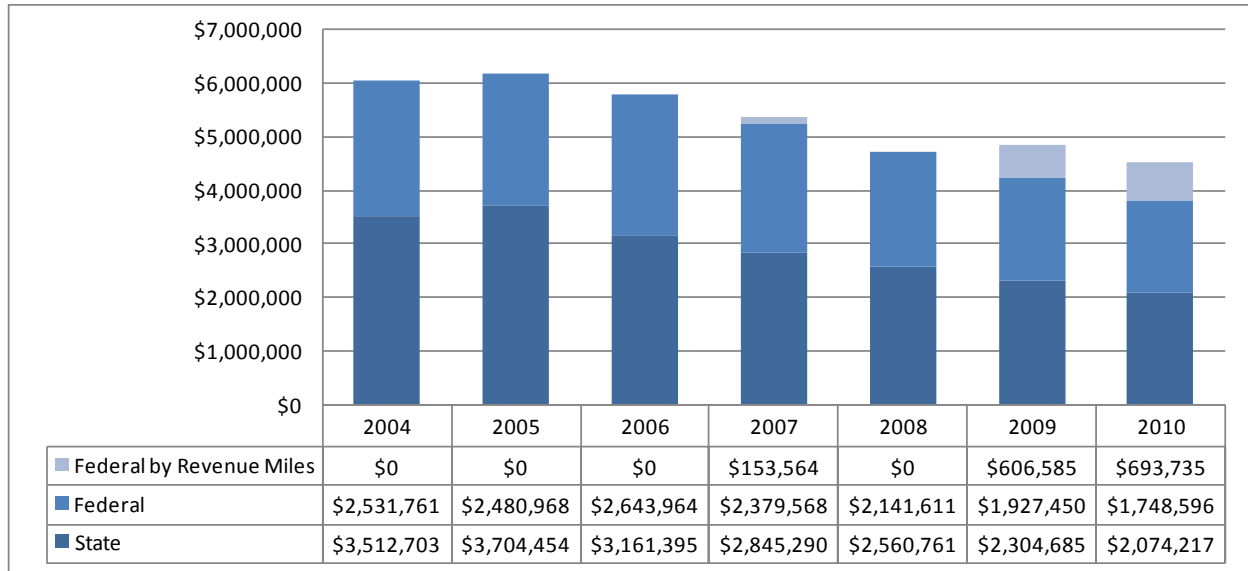


Figure 14. Brazos Transit District Map.

FY04 to FY10 Change in Allocated Funds

Figure 15 depicts the change in Section 5311 and state rural funding allocations for BTD. BTD Section 5311 funds decreased 4 percent from FY04 to FY10. Likewise, the amount of state rural allocations decreased 41 percent from FY04 to FY10. The combined change in Section 5311 and state rural allocations from FY04 to FY10 was a net decrease of \$1,527,916, or a reduction of 25 percent.



**Figure 15. BTD Section 5311 and State Allocated Funds.
FY04 to FY10**

FY08 to FY10 Operating Data

Researchers compared the change in formula funding from FY08 to FY10 to the operating data reported. BTD's Section 5311 and state rural funding decreased \$185,824 (4 percent) from \$4,702,372 to \$4,515,548 from FY08 to FY10. BTD had 7 percent more passenger boardings in FY10 than in FY08. Over the same period, revenue miles increased 19 percent and revenue hours increased by 18 percent (see Table 22). BTD total revenue vehicle fleet consisted of 58 vehicles in FY08 and remained constant over the period.

**Table 22. BTD Operating Data.
FY08 to FY10**

	FY08	FY09	FY10	FY08 to FY10 % Change
Passenger Boardings	638,334	704,078	681,514	7%
Revenue Miles	2,055,958	2,467,004	2,445,187	19%
Revenue Hours	104,275	129,432	123,179	18%
Total Revenue Vehicles	58	58	58	-

BTD provides three types of trips (see Table 23). General public passenger boardings decreased 2 percent and MTP trips increased 40 percent from FY08 to FY10. The number of passenger boardings increased 7 percent over the same period. In FY10, BTD began providing

Section 5310 passenger trips (BTD recently began reporting these trips differently than in the past: BTD has always provided Section 5310 trips through subcontractors).

**Table 23. BTD Passenger Boardings by Trip Type.
FY08 to FY10**

Passenger Boardings	FY08		FY09		FY10		% Change
	FY08	% of Total	FY09	FY10	Total	% of Total	
General Public	627,698	99%	692,902	617,628	91%	-10,070	-2%
Section 5310	-	-	-	50,650	7%	-	-
Medical Transportation Program	9,465	1%	11,176	13,236	2%	3,771	40%
Passenger Boardings	637,163	100%	704,078	681,514	100%	44,351	7%

FY08 to FY10 Operating and Capital Expenses

Between FY08 and FY10, BTD's operating expenses increased 27 percent. The operating expense increase of 40 percent is consistent with the increase of 19 percent in revenue miles and 18 percent in revenue hours. BTD began to purchase transportation in FY08 and spent 18 percent of annual total expenses on purchased transportation in FY10 (BTD has purchased transportation since 1987 but due to changes in reporting requirements reports related expenses in the Section 5311 program). BTD did not have maintenance or planning expenses during the period from FY08 and FY10 (see Table 24). (Purchased transportation hourly rate for park and rides includes funds for planning and maintenance). BTD has expended increasing amounts of capital on assets each year since FY08 (see Table 25).

**Table 24. BTD Operating Expenses.
FY08 to FY10**

Operational Expenses:	FY08	FY09	FY10	FY10 % of Total	FY08 to FY10 % Change
Operating	\$4,817,381	\$5,425,147	\$6,726,022	63%	40%
Administrative	\$1,930,707	\$1,804,912	\$2,002,866	19%	4%
Purchased Transportation	\$1,649,366	\$1,919,582	\$1,961,128	18%	19%
Maintenance	\$0	\$0	\$0	0%	-
Planning	\$0	\$0	\$0	0%	-
Total	\$8,397,454	\$9,149,641	\$10,690,016	100%	27%

**Table 25. BTD Capital Expenses.
FY08 to FY10**

Capital Expenses:	FY08	FY09	FY10
Capital Asset	\$0	\$630,589	\$3,283,440
Capital in Purchased Transportation	\$206,171	\$239,946	\$245,149
Total	\$206,171	\$870,535	\$3,528,589

Agency Changes due to State and/or Federal Funds Change

TTI researchers met with BTD officials to discuss the impact of the rural funding formula changes on transit service. The five bulleted lists below document agency changes made due to

Federal and/or state funds changes in five categories: service changes, fare structure changes, vehicle fleet changes, facilities changes, and personnel changes.

Service Changes

- FY06–FY07:
 - Sustained services using approximately \$2 million of reserve funds while cutting costs in other areas.
- FY08:
 - Eliminated and/or consolidated 12 routes/services.
 - Reduced services due to lack of funds but experienced 20 percent increase in ridership due to increase in fuel cost.
 - Increased funding from Medical Transportation Program.
- FY09:
 - Reduced fixed transit routes in Nacogdoches from five to four.
 - Foresaw trouble with service in Montgomery County (The Woodlands) due to urban/rural split and the upcoming census changes related to the area becoming a small urban service area (50 percent of rural fare box recovery in BTD is from park and ride facilities in rural program in Montgomery County).
 - Worked with city councils in Lufkin, Nacogdoches, Livingston, etc. to ensure continued local contributions despite tough economy and reduced service.
- FY10–Current:
 - Eliminated one fixed route in Nacogdoches, Texas, effective April 4, 2011.
 - Eliminated one fixed route in Lufkin, Texas, effective April 4, 2011.
 - Reduced number of routes in Montgomery County from six to three.
 - Changed policy on starting new coordinated services; now require 100 percent of cost covered by other party:
 - Sanderson Farms park and ride service was funded until recently and will end despite good ridership due to no more private support.
 - Stephen F. Austin University is piloting programs and housing for students with disabilities; interested in transportation but BTD has no funds to assist.

Fare Structure Changes

- Instituted system-wide fare increase, effective April 4, 2011.

Vehicle Fleet Changes

- Ceased purchasing new and replacement vehicles, except when ARRA, discretionary funds, or earmarks were available.
- Improved efficiency and productivity via strict use of MDTs and AVL (Trapeze software) for route selection.
- Experienced increased cost of fuel and insurance.

Facilities Changes

- Closed Livingston maintenance facility.

Personnel Changes

- FY08: froze hiring for all positions and reduced administrative staff.
- FY09:
 - Laid off \$1.2 million worth of non-driver staff: road trainer, two fiscal office staff, three mechanics, office manager, and two routes supervisors.
 - Worked to connect rural and urban mixes of funding that would maintain drivers and essential maintenance staff to preserve service.
 - Staved off even more severe attrition with ARRA and discretionary funds.
- FY10–Current:
 - Changed employee insurance plans to reduce costs (higher co-pay, higher deductible, higher fees for dependents).
 - Staff reduction from January through March 2011 included one Maintenance Director, 1 mechanic, 1 shop attendant, 1 office manager, and five drivers.

Comparative Summary of Findings

Figure 16 depicts the relationship between the change in allocated funds and operating expenses, revenue miles, and passenger boardings for BTD. Funding essentially decreased annually from FY04 to FY10. Since FY08, the number of revenue miles slightly increased, operating expenses increased annually, and passenger boardings increased annually until FY09; in FY10 boardings dropped slightly. These findings correspond with the general nature of BTD changes recorded in the previous section. BTD used reserve funds to stave off service cuts for FY06 and FY07. However, personnel and service cuts were necessary beginning in FY08 and increased in severity annually thereafter. BTD reduced services and personnel in a process of prioritization of resources. Meanwhile, vehicle maintenance and technology implementation were still necessary—indeed BTD used technology to increase service efficiency. Because BTD was able to use reserve funds and efficiency improvements, passenger boardings increased annually until FY10. Service cuts in FY08 to FY10 are likely responsible for the decrease in passenger boardings. Operating costs remain high and continue to increase partially due to fuel costs but also because there are persistent costs related to vehicle fleet (fuel, maintenance, and fleet replacement), dispatch, and administration.

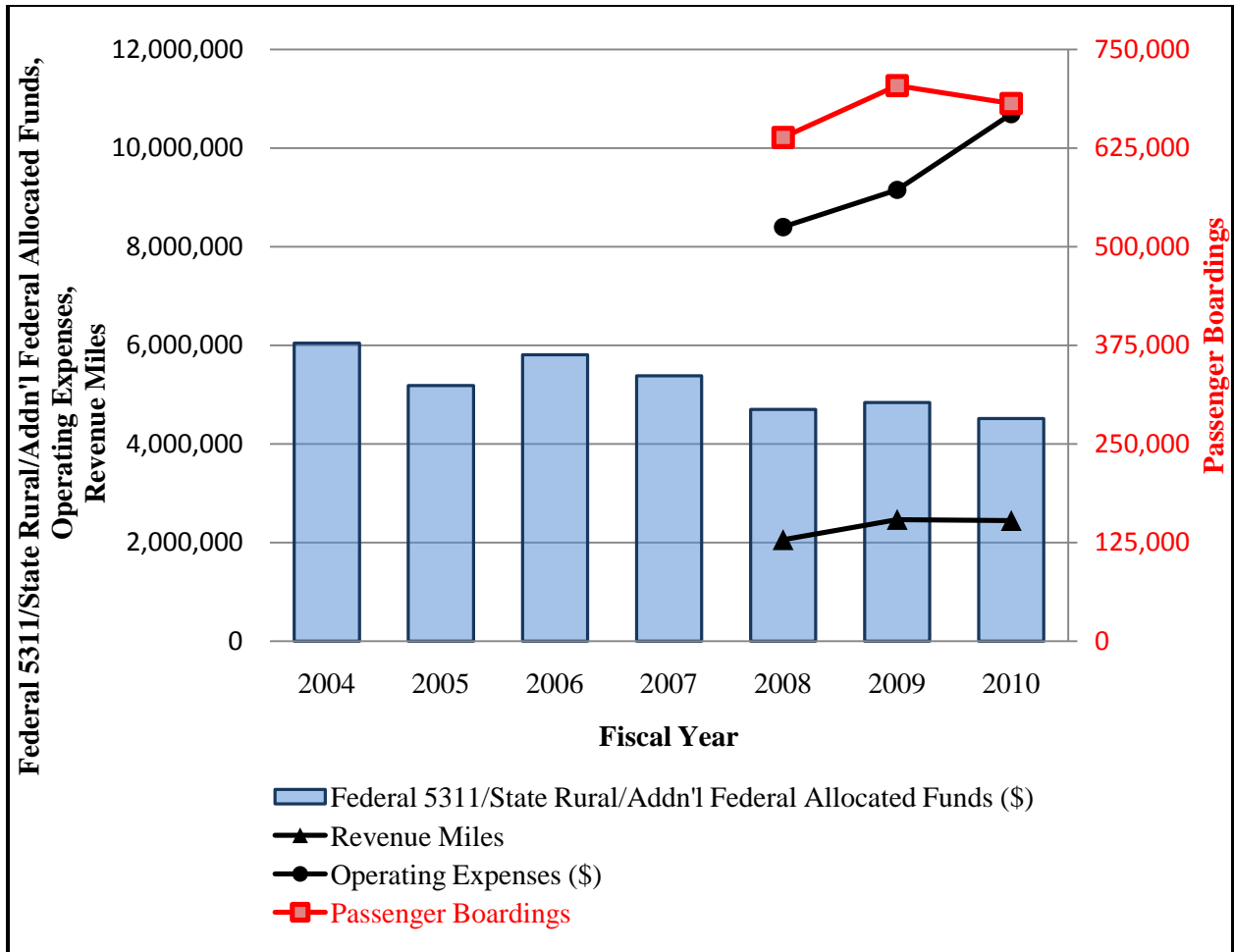


Figure 16. BTD Comparative Summary.

COLORADO VALLEY TRANSIT

Organization Background

Colorado Valley Transit (CVT) is a designated RTD serving a four-county region of 3,220 square miles of non-urbanized land area (see Figure 17). CVT serves the counties of Austin, Colorado, Waller, and Wharton. CVT's service area population was 117,124 in Census 2000 population and is expected to grow to 135,000 (16 percent) in Census 2010. CVT provides demand response transportation and deviated fixed route transportation within the service area.

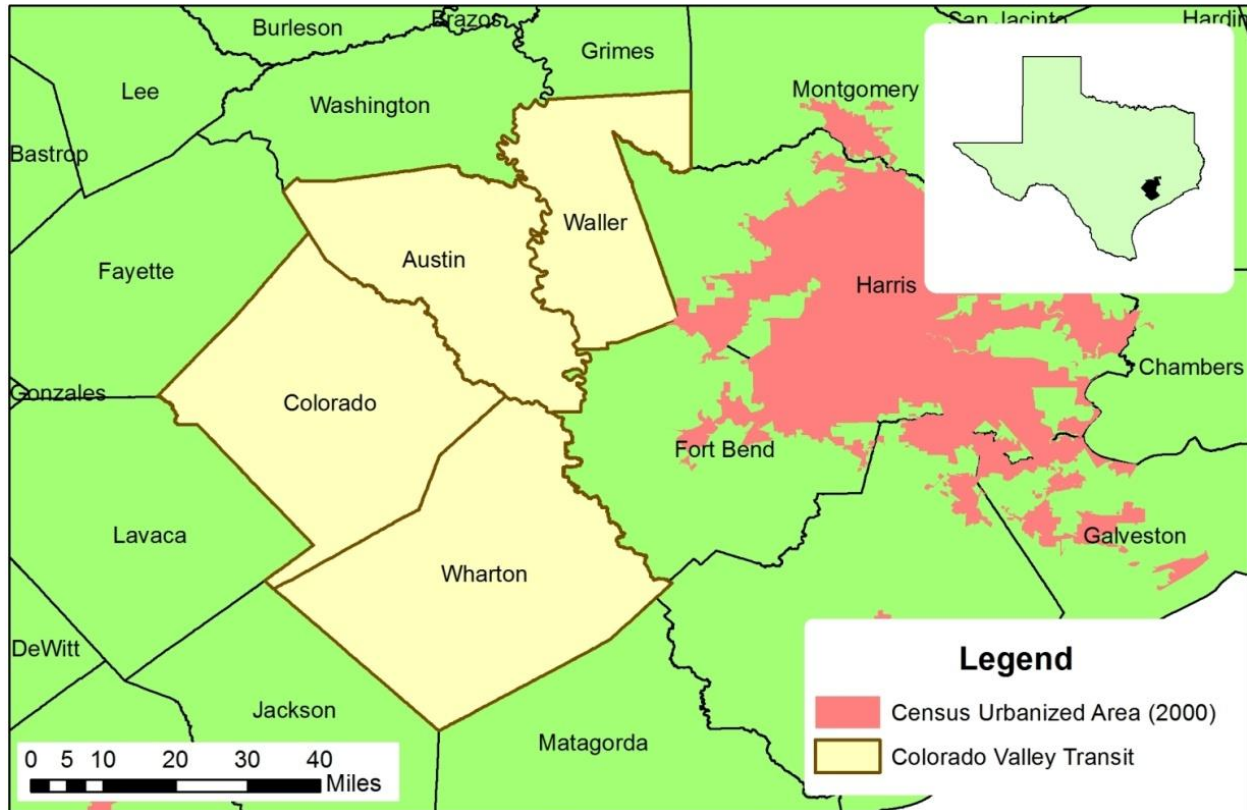
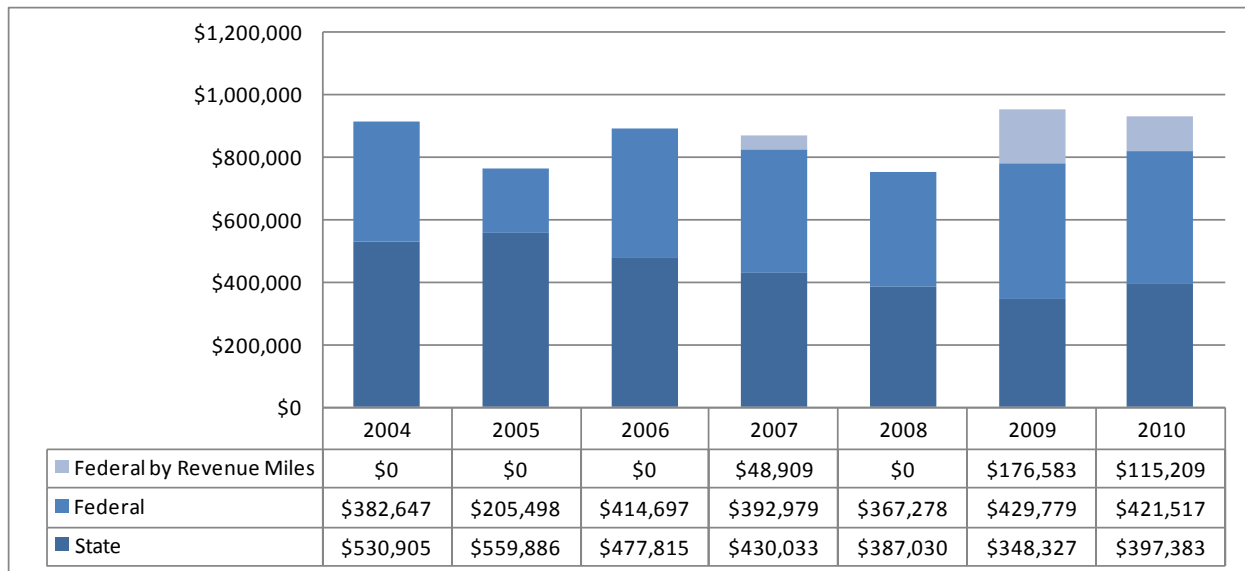


Figure 17. Colorado Valley Transit Map.

FY04 to FY10 Change in Allocated Funds

Figure 18 depicts the change in Section 5311 and state rural funding allocations for CVT. CVT Section 5311 funds distributed increased 40 percent from FY04 to FY10. Conversely, the amount of state rural allocations decreased 25 percent from FY04 to FY10. The combined change in Section 5311 and state rural allocations from FY04 to FY10 was a net increase of \$20,557, or a 2 percent decrease.



**Figure 18. CVT Section 5311 and State Allocated Funds.
FY04 to FY10**

FY08 to FY10 Operating Data

Researchers compared the change in funding from FY08 to FY10 to the operating data reported. CVT’s Section 5311 and state rural funding increased \$179,801 (24 percent) from \$754,308 to \$934,109 from FY08 to FY10. CVT had 17 percent fewer passenger boardings in FY10 than in FY08. Over the same period, revenue miles decreased by 32 percent and revenue hours decreased by 3 percent (see Table 26). CVT decreased revenue vehicle fleet by 7 percent or two vehicles from FY08 to FY10.

**Table 26. CVT Operating Data.
FY08 to FY10**

	FY08	FY09	FY10	FY08 to FY10 % Change
Passenger Boardings	76,306	61,132	65,285	-17%
Revenue Miles	598,510	409,696	404,737	-32%
Revenue Hours	38,397	36,663	37,343	-3%
Total Revenue Vehicles	31	29	29	-7%

CVT currently provides four types of trips (see Table 27). The proportion of trip types changed between FY08 and FY10 due to the addition of Section 5316 (JARC) as a trip type. In FY10, 50 percent of total passenger boardings were general public, 39 percent were Section 5316 JARC, 7 percent were DADS, and 4 percent other contracts.

**Table 27. CVT Passenger Boardings by Trip Type.
FY08 to FY10**

Passenger Boardings:	FY08		FY09	FY10	FY10 to FY08		% Change
	FY08	% of Total			% of Total	Change	
General Public	69,764	91%	39,853	32,398	50%	-37,366	-54%
Section 5316 (JARC)	-	-	14,787	25,343	39%	-	-
Department of Aging & Disabilities	4,506	6%	4,386	5,138	8%	632	14%
Other Contracts	2,036	3%	2,106	2,406	3%	370	18%
Passenger Boardings	76,306	100%	61,132	65,285	100%	-11,021	-14%

FY08 to FY10 Operating and Capital Expenses

Between FY08 and FY10, CVT’s operating expenses decreased by 21 percent. Operating (28 percent), maintenance (4 percent), and administrative (2 percent) expenses decreased from FY08 to FY10. CVT did not purchase any transportation services and spent funds on planning only during FY09 (see Table 28). CVT has expended increasing amounts of capital on assets each year since FY08 (see Table 29).

**Table 28. CVT Operating Expenses.
FY08 to FY10**

Operational Expenses:	FY08	FY09	FY10	FY10 % of Total	FY08 to FY10 % Change
Operating	\$1,037,155	\$855,812	\$809,967	74%	-28%
Administrative	\$197,686	\$185,877	\$193,290	18%	-2%
Maintenance	\$98,352	\$55,013	\$94,870	9%	-4%
Planning	\$0	\$35,850	\$0	0%	-
Purchased Transportation	\$0	\$0	\$0	0%	-
Total	\$1,333,193	\$1,132,552	\$1,098,127	100%	-21%

**Table 29. CVT Capital Expenses.
FY08 to FY10**

Capital Expenses:	FY08	FY09	FY10
Capital Asset	\$234,040	\$292,530	\$1,024,646
Capital in Purchased Transportation	\$0	\$0	\$0
Total	\$234,040	\$292,530	\$1,024,646

Agency Changes due to State and/or Federal Funds Change

TTI researchers met with CVT officials to discuss the impact of the rural funding formula changes on transit service. Prior to FY09, CVT saw a steady decrease in Section 5311 and state funding allocated by formula. Recall that the initial weighting in needs and performance in the Texas State Funding Formula allocation was 80 percent needs and 20 percent performance. Rural systems transitioned by 2009 to 65 percent of funds distributed by needs and 35 percent distributed by performance. This transition resulted in more funding in FY09 and FY10 for CVT, as the performance factor for CVT is stronger than then needs factor. The five bulleted lists below document agency changes made due to federal and/or state funds changes in five

categories: service changes, fare structure changes, vehicle fleet changes, facilities changes, and personnel changes.

Service Changes

- Received JARC funds in FY07 and began operating free service in FY08, resulting in a ridership increase in FY08.
- High fuel cost increased ridership on routes in FY08.
- Provided service in FY08 for Hurricane Ike.
- Reduced span of service hours to reduce cost.
- Reduced service beginning FY09 to the BAE Plant – a large manufacturer of army trucks, which began to lay off workers.

Fare Structure Changes

- Offered free JARC service in FY08.

Vehicle Fleet Changes

- Downsized fleet from FY08 to FY09 by two vehicles.
- Replaced seven vehicles in FY10 with no change in fleet size from FY09 to FY10.
- Experienced increased cost of fuel and insurance.

Facilities Changes

- No changes in facilities due to formula funding changes.

Personnel Changes

- Maintained salary rates at the same level but increased health insurance as an incentive – moved from 80 percent to 100 percent employer coverage.
- Reduced driver staff through attrition rather than laying off.

Comparative Summary of Findings

Figure 19 depicts the relationship between the change in allocated funds and operating expenses, revenue miles, and passenger boardings for CVT. Section 5311 and state funding allocated by formula (excluding the additional federal funds) has been on a downward trend until FY08; important to note, as funds allocated by formula are reliable and somewhat predictable. The transition in the funding formula to 65 percent performance and 35 percent needs as well as the additional federal funds provided in FY09 and FY10 provided an increase in funding levels. Between FY08 and FY10, the number of revenue miles decreased, operating expenses decreased, and passenger boardings decreased as a result of the reduction in span of service hours. The increase in funds received in FY09 and FY10 were used to purchase capital equipment. CVT indicated the slight uptick in passenger boardings from FY09 to FY10 was demand for general public service on deviated fixed route service that did not require additional service resources. CVT staff indicated that they learned from experience with CMAQ grant funds where funding ended in 2003 leaving CVT in a predicament to find funding sources to continue service. CVT

staff stated they learned that once a service is offered to the community, elimination of that service causes community outcry as patrons are left without transportation. CVT better planned for the sustainability of providing service through JARC funds. CVT stated there continues to be community demand for service that goes unmet. Particularly, the demand exists to increase the span of service hours and provide weekend service. Lack of funding has prevented service enhancement implementation, increased wages for staff to prevent turnover, and inability to provide staff for customer service and outreach efforts.

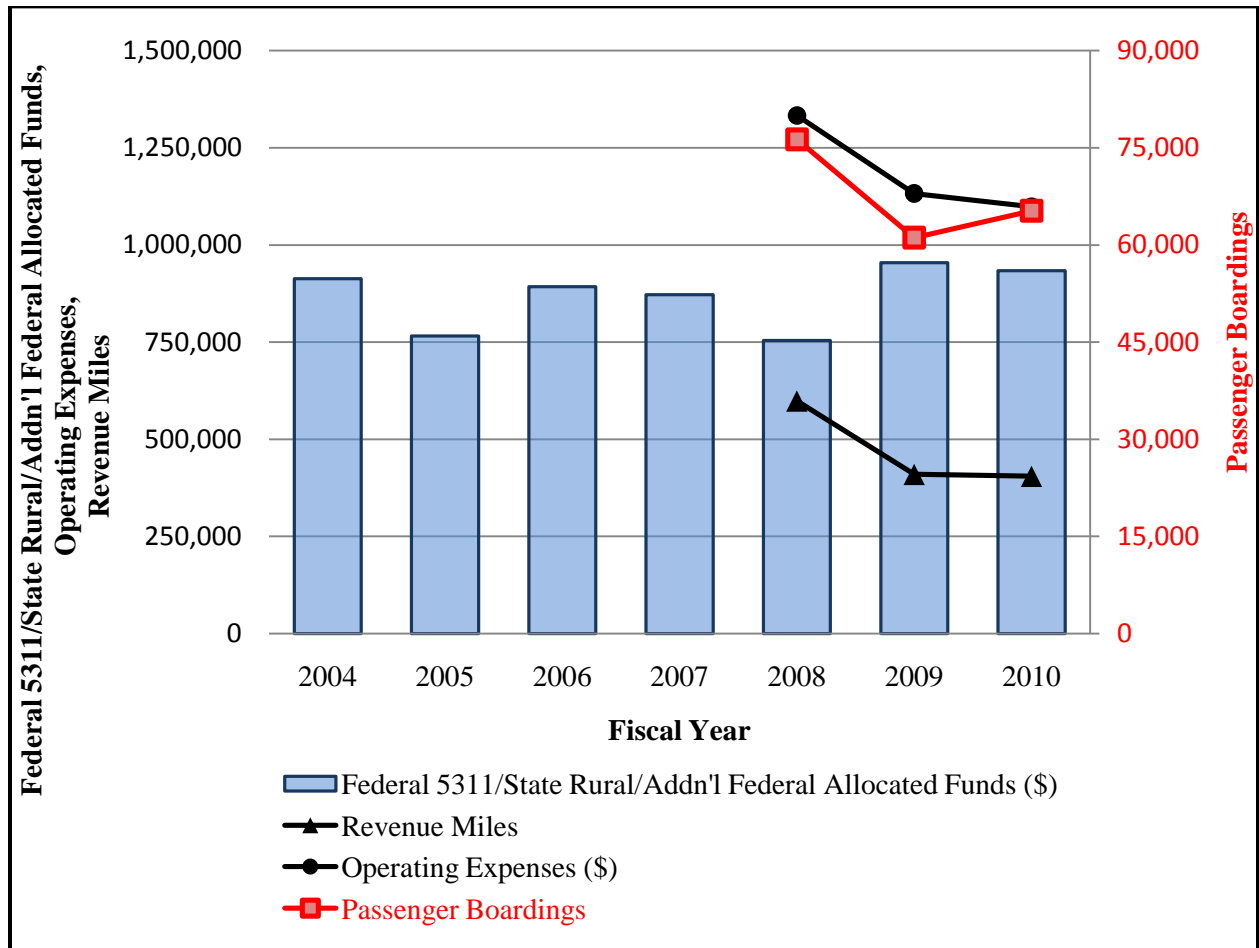


Figure 19. CVT Comparative Summary.

COMMUNITY SERVICES, INC.

Organization Background

Community Services, Inc. (CSI) is a RTD serving a two-county region that covers 1,921 square miles of non-urbanized land area (see Figure 20). The counties included in the service area are Ellis and Navarro. Community Services, Inc.'s rural service area population was 135,414 in Census 2000 and is expected to grow to 170,698 (26 percent) in Census 2010.

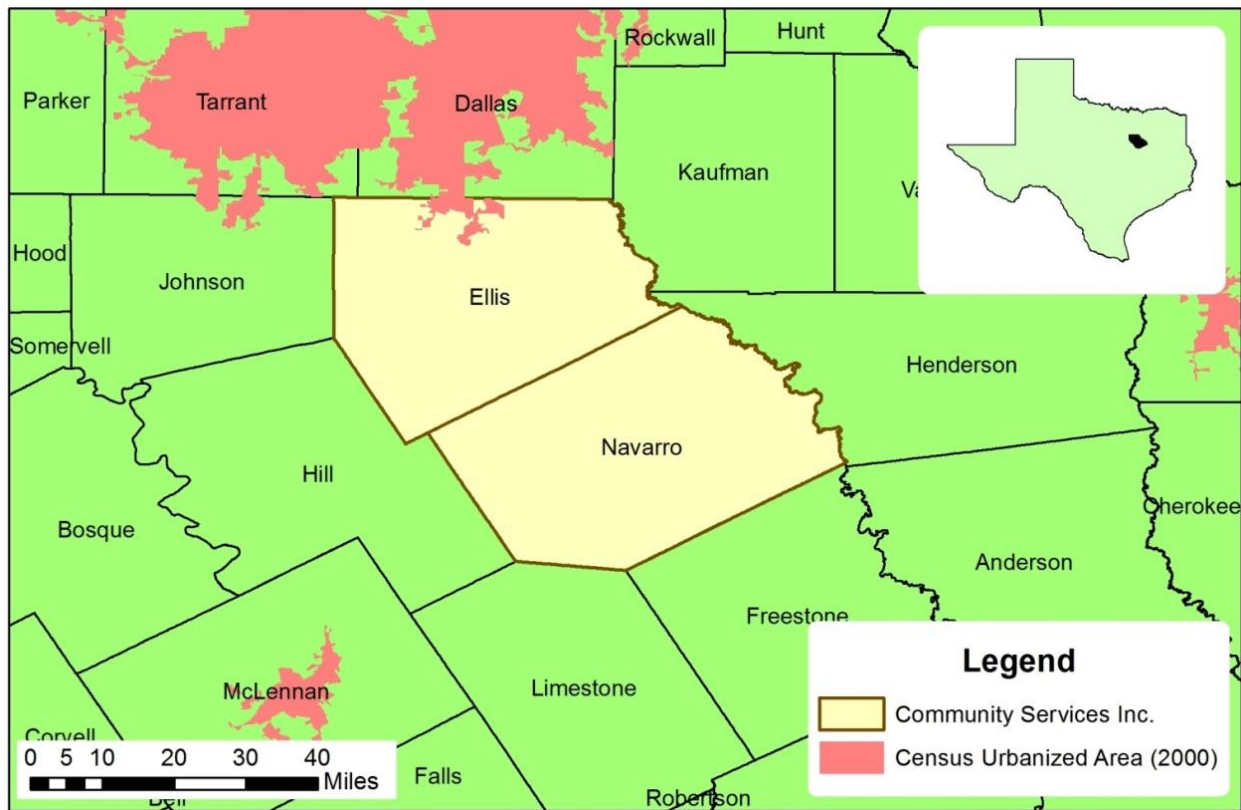
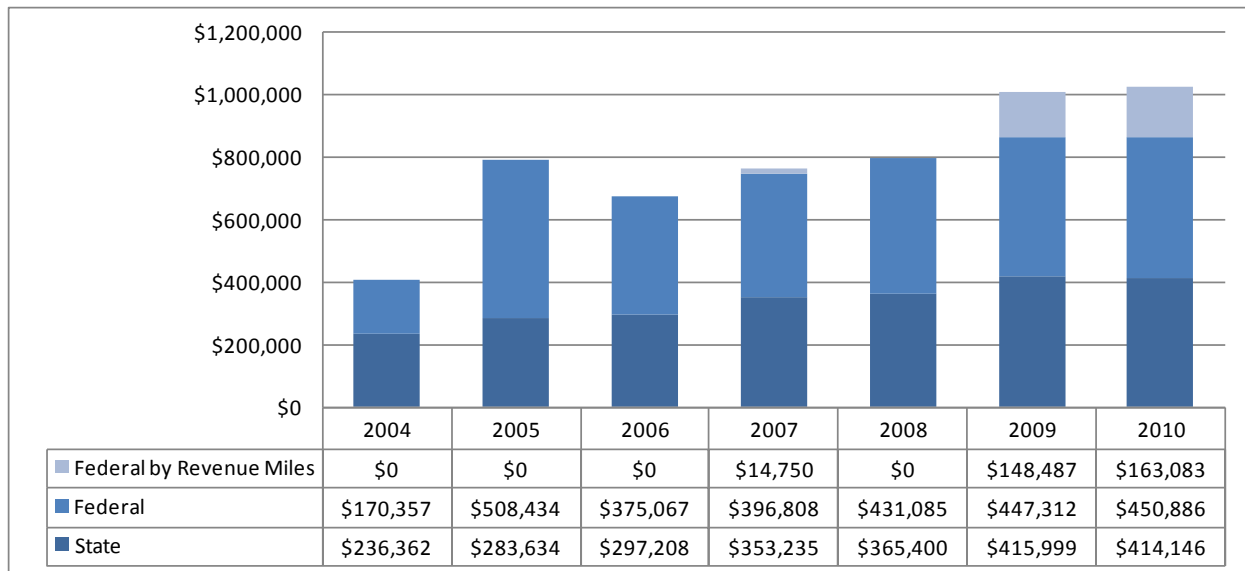


Figure 20. Community Services, Inc. Map.

FY04 to FY10 Change in Allocated Funds

Figure 21 depicts the change in Section 5311 and state rural allocations for CSI. CSI Section 5311 funds increased 260 percent from FY04 to FY10. Likewise, the amount of state rural allocations increased 75 percent from FY04 to FY10. The combined change in Section 5311 and state rural allocations from FY04 to FY10 was a net increase of \$621,396, or an additional 153 percent.



**Figure 21. CSI Section 5311 and State Allocated Funds.
FY04 to FY10**

FY08 to FY10 Operating Data

Researchers compared the change in funding from FY08 to FY10 to the operating data reported. CSI's Section 5311 and state rural funding increased \$231,630 (29 percent) from \$796,485 to \$1,028,115 from FY08 to FY10. CSI had 20 percent fewer passenger boardings in FY10 than in FY08. Over the same period, revenue miles decreased by 37 percent and revenue hours decreased by 14 percent (see Table 30). CSI discontinued Medical Transportation Program trips in FY10. CSI's total revenue vehicle fleet increased from 16 in FY08 to 22 in FY10.

**Table 30. CSI Operating Data.
FY08 to FY10**

	FY08	FY09	FY10	FY08 to FY10 % Change
Passenger Boardings	106,617	117,648	85,518	-20%
Revenue Miles	503,280	579,941	316,428	-37%
Revenue Hours	20,659	24,717	17,847	-14%
Total Revenue Vehicles	16	19	22	38%

CSI provided three types of trips in FY08 and two types of trips in FY10 (see Table 31). In FY10, CSI ceased operating MTP trips. In FY10, CSI served the general public (96 percent) and DSHS (4 percent) trips. Passenger boardings decreased 20 percent from FY08 to FY10.

**Table 31. CSI Passenger Boardings by Trip Type.
FY08 to FY10**

Passenger Boardings:	FY08		FY09	FY10	FY10		%
	FY08	% of Total			% of Total	Change	
General Public	85,238	80%	93,352	81,949	96%	-3,289	-4%
Medical Transportation Program	18,276	17%	19,916	-	-	-	-
Department of State Health Services	3,103	3%	2,747	3,569	4%	466	15%
Department of Aging & Disabilities	-	-	1,633	-	-	-	-
Passenger Boardings	106,617	100%	117,648	85,518	100%	-21,099	-20%

FY08 to FY10 Operating and Capital Expenses

Between FY08 and FY10, CSI's operating expenses decreased 5 percent. An operating expense increase of 80 percent is not consistent with a 37 percent decrease in revenue miles and 14 percent decrease in revenue hours. Maintenance expenses increased 401 percent from FY08 to FY10; however, the increase in real dollars is nominal and probably results from a larger revenue fleet. CSI did not expend funds for planning in any year and spent funds on purchased transportation only during FY08 and FY09 (see Table 32). CSI has expended increasing amounts of capital on assets each year since FY08 (see Table 33).

**Table 32. CSI Operating Expenses.
FY08 to FY10**

Operational Expenses:	FY08	FY09	FY10	FY10 % of Total	FY08 to FY10 % Change
Operating	\$636,516	\$831,459	\$1,147,889	91%	80%
Maintenance	\$25,267	\$41,704	\$101,488	8%	401%
Administrative	\$135,237	\$55,886	\$11,197	1%	-92%
Planning	\$0	\$0	\$0	0%	-
Purchased Transportation	\$534,122	\$478,432	\$0	0%	-
Total	\$1,331,142	\$1,407,481	\$1,260,574	100%	-5%

**Table 33. CSI Capital Expenses.
FY08 to FY10**

Capital Expenses:	FY08	FY09	FY10
Capital Asset	\$269,919	\$303,972	\$461,469
Capital in Purchased Transportation	\$0	\$0	\$0
Total	\$269,919	\$303,972	\$461,469

Agency Changes due to State and/or Federal Funds Change

TTI researchers met with CSI officials to discuss the impact of the rural funding formula changes on transit service. The five bulleted lists below document agency changes made due to federal and/or state funds changes in five categories: service changes, fare structure changes, vehicle fleet changes, facilities changes, and personnel changes.

Service Changes

- Discontinued Medical Transportation Program after FY09 contract completion.
 - MTP required trips out of service area and reduced CSI ability to serve general public trips.
 - MTP contract required prioritization of trips and interfered with general public trips.
 - MTP contract now held by Kaufman Area Rural Transit (KART).
- Increased service to outlying rural areas in the two-county service region.
- Expanded days service is available from limited service on particular days dependent on client location in two-county service region to full Monday–Friday service in all areas.
- Trialed Saturday service for 90 days in FY10 (March thru May) – discontinued due to low demand.
- Provided out-of-town medical trips until January 2011; discontinued due to growth in demand for public demand response transportation and because MTP tended to tie up one bus all day per client (not cost effective).
- Developed relationships with special clients/markets, including the following:
 - Hope Clinic.
 - Counseling Center of Ellis County.
 - Mexia State School.
 - Department of Aging and Disabilities (client transport to community center for lunch and for local medical trips).

Fare Structure Changes

- Fare was \$1.25 for all trips in the two-county service region.
- Fare now based on cards or cash: \$10 for 10-ride card or \$2.00 per trip for cash.

Vehicle Fleet Changes

- Invested in MDCs and AVL.
- Added security cameras to every bus and van (four per bus, two per van).
- ARRA: purchased six vehicles (four new and two replacement).

Facilities Changes

- Refurnished office space to create more efficient and expanded dispatch and administration spaces.
- Purchased new computer systems and implemented updated dispatch software.
- Installed monitors on dispatch wall that display real-time location of vehicles.
- Added security cameras on outside of facility to improve safety/security of equipment and personnel.

Personnel Changes

- Granted cost-of-living wage increases when funding was available.
- Controlled costs the last three fiscal years by not awarding any performance wage increases.
- Stabilized overtime hours.
- Improved morale via change in management.
- Adjusted organization vision to focus on service quality and more trips.

Comparative Summary of Findings

Figure 22 depicts the relationship between the change in allocated funds and operating expenses, revenue miles, and passenger boardings for CSI. In general, the amount of Section 5311 and state rural allocated funds increased annually from FY04 to FY10. Between FY08 and FY09, the amount of revenue miles, operating expenses and passenger boardings increased annually; then in FY10 each decreased—passenger boardings by the greatest percent. These findings correspond with the general nature of CSI changes recorded in the previous section. CSI used the increase in funding to implement in-vehicle and dispatch technology, purchase additional vehicles, hire more drivers, and operate service in remote rural areas and on more days than previously. The effect on service, i.e., ridership, is not clear in Figure 22 because CSI also ceased operating MTP trips in FY10, which accounts for the decrease in miles, costs, and boardings.

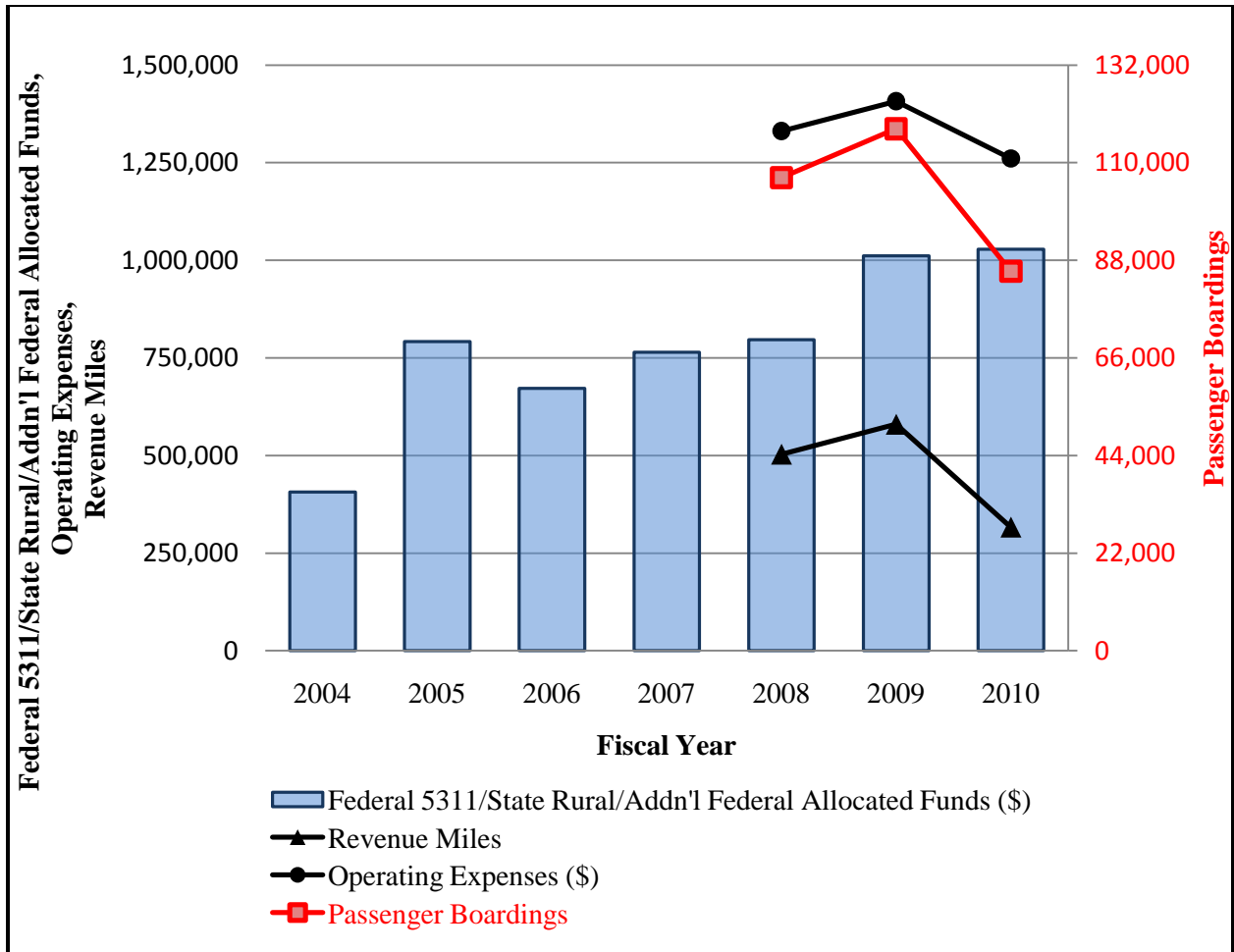


Figure 22. CSI Comparative Summary.

EAST TEXAS COUNCIL OF GOVERNMENTS

Organization Background

East Texas Council of Governments is a RTD serving a 14-county region of 9,613 square miles including Anderson, Camp, Cherokee, Gregg, Harrison, Henderson, Marion, Panola, Rains, Rusk, Smith, Upshur, Wood, and Van Zandt Counties (see Figure 23). The region has two primary urban centers, Tyler in Smith County, and Longview in Gregg County. The City of Tyler is the urban transit provider for the urbanized area in Smith County and the City of Longview is the urban transit provider for the urbanized area in Gregg County. ETCOG non-urbanized service area population was 565,616 in Census 2000 population and is expected to grow to 624,000 (10 percent) in Census 2010. ETCOG provides demand response public transportation for the rural population. In FY10, ETCOG directly operated all rural public transportation services; there were no subcontracted transit services.

ETCOG did not operate public transit directly until FY08; before FY08, the service was known as Minibus and was operated by a private company. ETCOG brought the service inside their organization in September 2007 and renamed the service East Texas Rural Transit. Then, in 2010, ETCOG re-branded the service GoBus; the re-branding effort included new vehicle branding and more marketable materials and information.

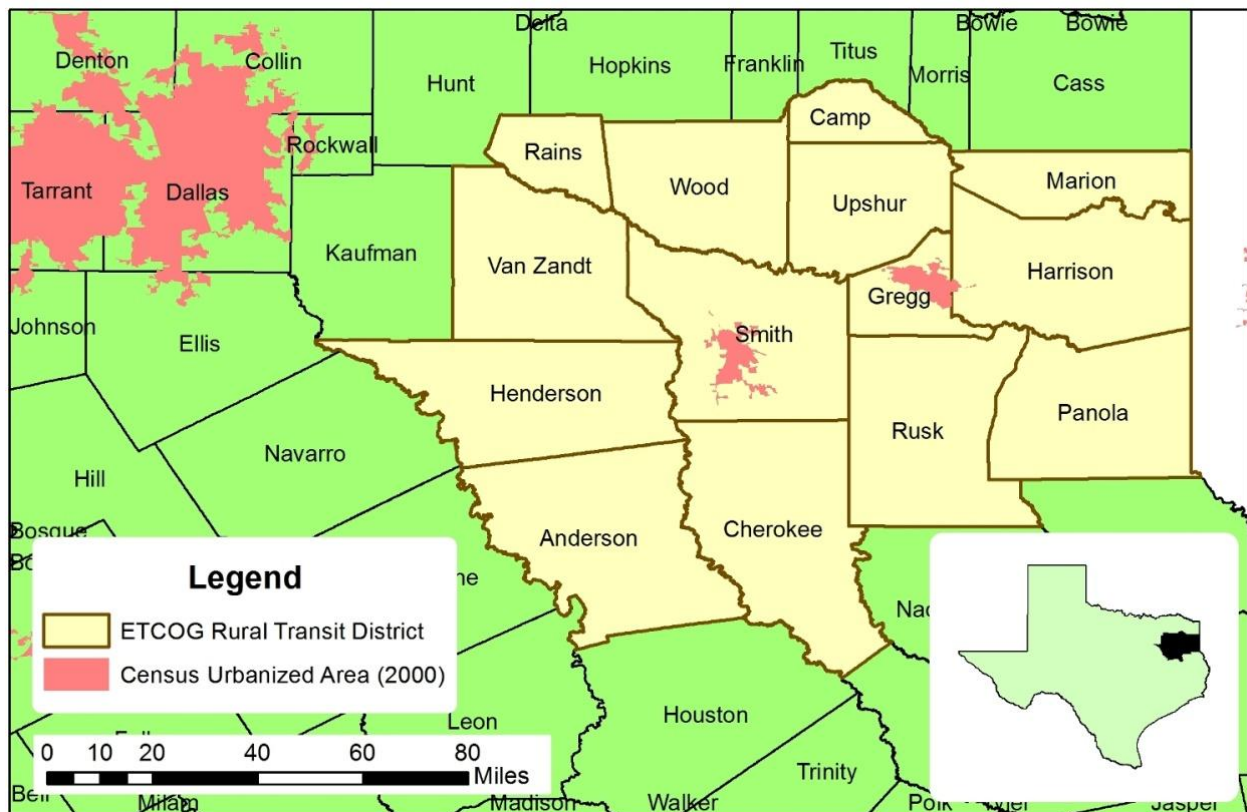
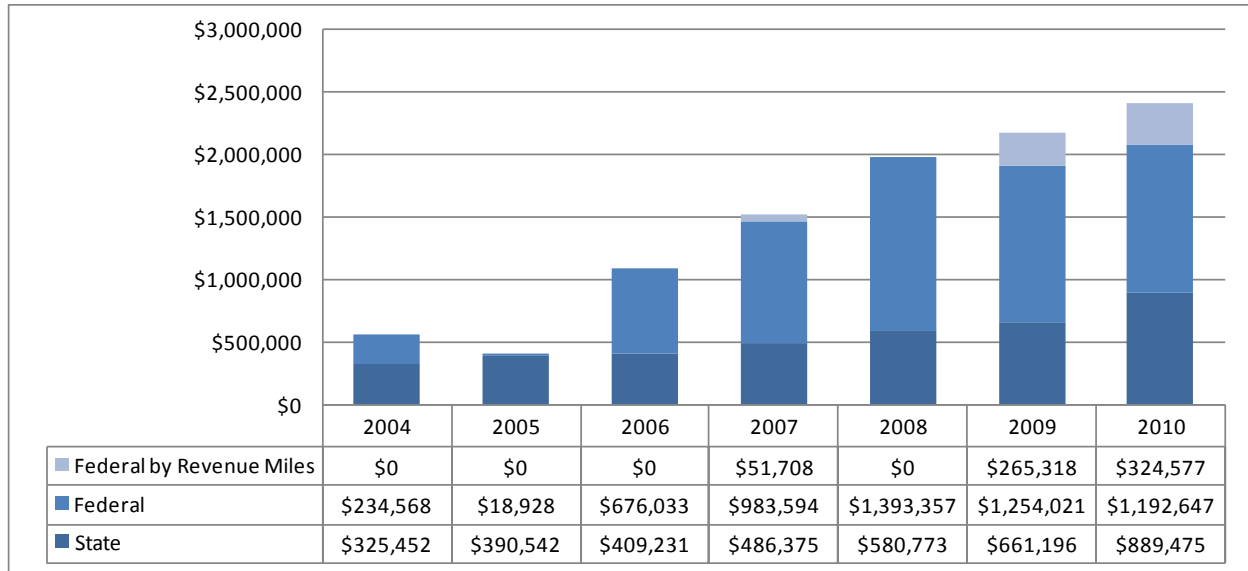


Figure 23. East Texas Council of Governments Map.

FY04 to FY10 Change in Allocated Funds

Figure 24 depicts the change in Section 5311 and state rural funding allocations for ETCOG. ETCOG Section 5311 funds increased 547 percent from FY04 to FY10. Likewise, the amount of state rural allocations increased 173 percent from FY04 to FY10. The combined change in Section 5311 and state rural allocations from FY04 to FY10 was a net increase of \$1,846,679, or an additional 330 percent.



**Figure 24. ETCOG Section 5311 and State Allocated Funds.
FY04 to FY10**

FY08 to FY10 Operating Data

Researchers compared the change in funding from FY08 to FY10 to the operating data reported. ETCOG's Section 5311 and state rural funding increased \$434,569 (22 percent) from \$1,972,130 to \$2,406,699 from FY08 to FY10. ETCOG had 37 percent more passenger boardings in FY10 than in FY08. Over the same period, revenue miles increased by 49 percent and revenue hours increased by 57 percent (see Table 34). ETCOG's total revenue fleet expanded from 42 vehicles in FY08 to 63 in FY10 (50 percent increase); however, 15 of the older vehicles are scheduled for disposition—48 vehicles were in active service FY10.

**Table 34. ETCOG Operating Data.
FY08 to FY10**

	FY08	FY09	FY10	FY08 to FY10 % Change
Passenger Boardings	81,013	106,483	110,828	37%
Revenue Miles	899,268	1,154,234	1,341,635	49%
Revenue Hours	44,433	58,120	69,965	57%
Total Revenue Vehicles	42	46	63	50%

ETCOG provides three types of trips (see Table 35). ETCOG began passenger-boarding trips for JARC in FY09. The proportion of trips has remained near constant from FY08 to FY10, with 79

percent of total passenger boardings being general public, 20 percent Department of Aging & Disabilities, and less than 1 percent JARC in FY10.

**Table 35. ETCOG Passenger Boardings by Trip Type.
FY08 to FY10**

Passenger Boardings:	FY08		FY09	FY10	FY10		%
	FY08	% of Total			% of Total	Change	
General Public	59,821	74%	83,798	87,983	79%	28,162	47%
Department of Aging & Disabilities	21,192	26%	22,512	22,632	20%	1,440	7%
JARC	-	-	173	213	0.002%	-	-
Passenger Boardings	81,013	100%	106,483	110,828	100%	29,815	37%

FY08 to FY10 Operating and Capital Expenses

Between FY08 and FY10, ETCOG’s operating expenses increased 39 percent. An operating expense increase of 55 percent is consistent with the increase of 49 percent in revenue miles and 57 percent in revenue hours. ETCOG operating expenditures on maintenance decreased 23 percent during the same period. ETCOG expended operating funds on purchased transportation only during FY09 (see Table 36). ETCOG has expended increasing amounts of capital on assets each year since FY08 (see Table 37).

**Table 36. ETCOG Operating Expenses.
FY08 to FY10**

Operational Expenses:	FY08	FY09	FY10	FY10 % of Total	FY08 to FY10 % Change
Operating	\$1,177,946	\$1,657,626	\$1,828,133	60%	55%
Administrative	\$763,445	\$1,020,756	\$1,034,694	34%	36%
Maintenance	\$253,371	\$262,808	\$195,932	6%	-23%
Planning	\$0	\$0	\$0	0%	-
Purchased Transportation	\$0	\$514,404	\$0	0%	-
Total	\$2,194,762	\$3,455,594	\$3,058,759	100%	39%

**Table 37. ETCOG Capital Expenses.
FY08 to FY10**

Capital Expenses:	FY08	FY09	FY10
Capital Asset	\$181,272	\$327,492	\$1,073,250
Capital in Purchased Transportation	\$0	\$0	\$0
Total	\$181,272	\$327,492	\$1,073,250

Agency Changes due to State and/or Federal Funds Change

TTI researchers met with ETCOG officials to discuss the impact of the rural funding formula changes on transit service. The five bulleted lists below document agency changes made due to federal and/or state funds changes in five categories: service changes, fare structure changes, vehicle fleet changes, facilities changes, and personnel changes.

Service Changes

- Added the following new services:
 - Coordinated trips for Wiley College.
 - Coordinated shuttle called RangerRide for students of Kilgore College and between cities of Kilgore and Longview.
 - Coordinated with City of Marshall to establish flexible transit routes in FY10.
- Expanded demand response service to Monday–Friday in all counties (previously counties, such as Panola, only had service on particular days of the week).
- Expanded service hours in FY09 from service until 6:00 p.m. to 7:00 p.m.

Fare Structure Changes

- No fare structure changes due to state or federal funds change.

Vehicle Fleet Changes

- Increased vehicle fleet from approximately 22 in FY04 to approximately 45 vehicles in service in FY10.
- Changed half of fleet (22 buses) to paperless operation (planning for more).
- Invested in AVL and MDCs.
- Added cameras to vehicles to improve safety.
- ARRA: added vehicles (19 total new, 14 replacements and 5 additional vehicles).

Facilities Changes

- Expanded dispatch and operations office in Longview, Texas.
- Planned for, and currently working on, moving personnel in Longview office into Kilgore office.
- In process of finalizing grant agreement to establish bus stop shelters for Marshall flex-routes.

Personnel Changes

- Added Mobility Manager position in FY11.
- Increased number of drivers as necessary, nearly doubling over this period.
- Transitioned from use of staffing agencies for operators and dispatch personnel to direct employment.
- Improved effectiveness of dispatchers via training and operational familiarization with a part of the service region.
- Continued to outsource maintenance.
- Improved benefits for full-time employees when ETCOG assumed direct operation of service on September 1, 2007.

Comparative Summary of Findings

Figure 25 depicts the relationship between the change in allocated funds and operating expenses, revenue miles, and passenger boardings for ETCOG. Section 5311 and state rural allocations increased annually (except for FY05) from FY04 to FY10. Since FY08, the number of revenue miles increased steadily each year, operating expenses increased drastically from FY08 to FY09 but decreased in FY10, and passenger boardings increased each year (from ~80,000 in FY08 to ~110,000 in FY10). These findings correspond with the general nature of ETCOG changes recorded in the previous section. ETCOG used the increase in funding to implement in-vehicle and dispatch technology, purchase additional vehicles, hire more drivers, and operate service in remote rural areas and on more days than previously. The effect on service, i.e., ridership, appears to be positive. However, operating costs increased at a much faster pace than miles or passenger boardings. Operating costs may increase sooner and faster than ridership because it is necessary to field additional resources or changes prior to realizing the impact in performance measures.

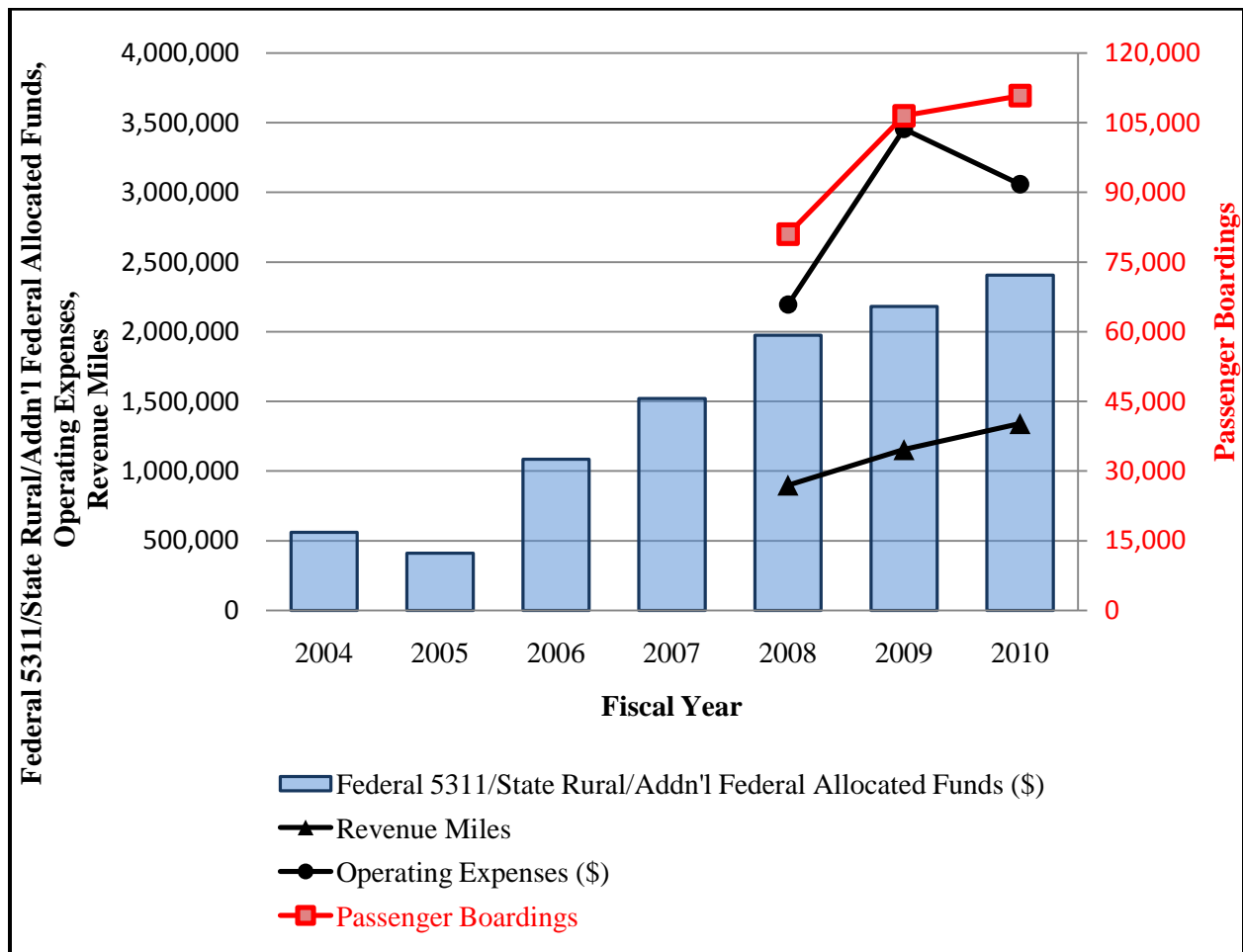


Figure 25. ETCOG Comparative Summary.

WEBB COUNTY COMMUNITY ACTION AGENCY

Organization Background

Webb County Community Action Agency (Webb), El Aguila Rural Transportation, is a designated RTD serving the non-urbanized portions of Webb County of 3,314 square miles of non-urbanized land area (see Figure 26). The county contains the Laredo urbanized area, which the City of Laredo serves. Webb's rural service area population was 17,531 in Census 2000 population and is expected to grow to 30,388 (73 percent) in Census 2010. Webb provides fixed route service to Webb County using a fleet of 23 vehicles. The fixed route system provides long distance round-trips from outlying rural communities of Webb County into the city of Laredo, Texas. ADA paratransit service is provided as needed. Webb rural routes are coordinated with El Metro urban routes to allow passengers to transfer from one service to the other. The transit services stop at the Laredo Transit Center, which is also a hub for Greyhound.

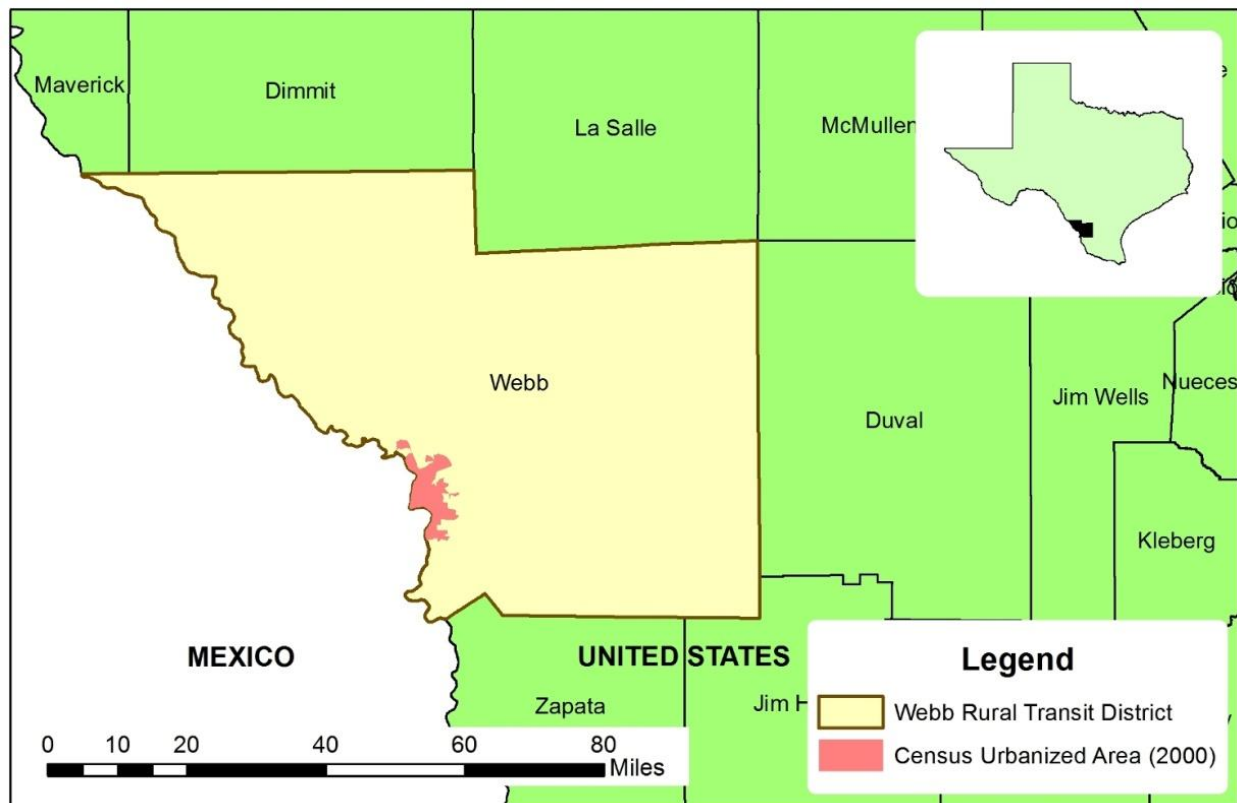
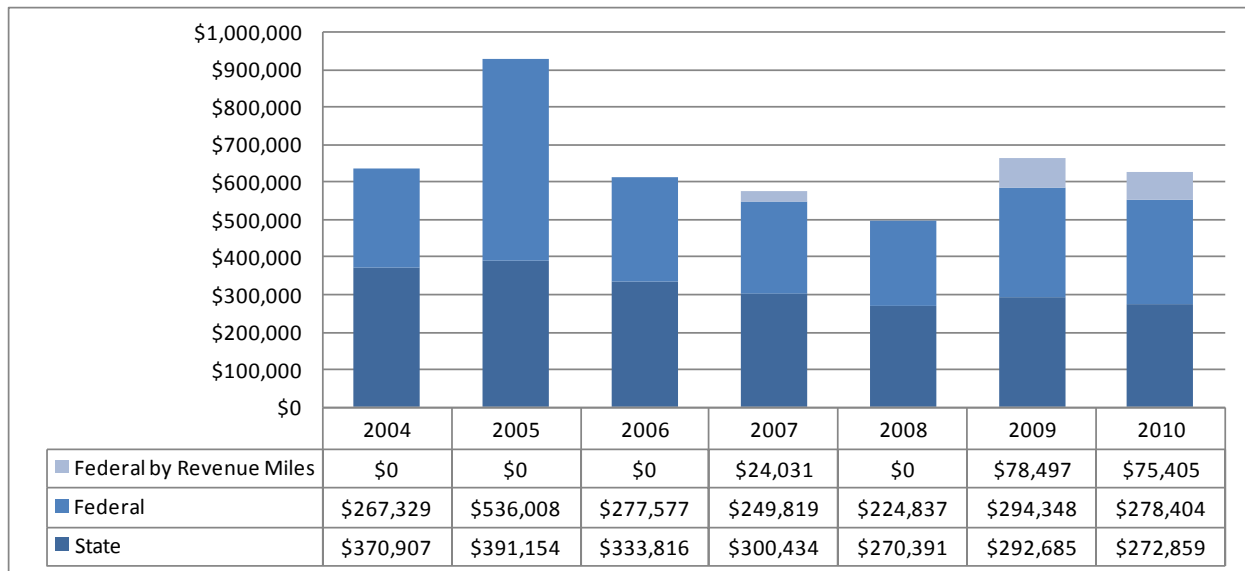


Figure 26. Webb County Community Action Agency Map.

FY04 to FY10 Change in Allocated Funds

Figure 27 depicts the change in Section 5311 and state rural funding allocations for Webb. Webb Section 5311 funds increased 32 percent from FY04 to FY10. Conversely, the amount of state rural allocations decreased 26 percent from FY04 to FY10. The combined change in Section 5311 and state rural allocations from FY04 to FY10 was a net decrease of \$11,568, or a 2 percent reduction.



**Figure 27. Webb Section 5311 Allocated Funds.
FY04 to FY10**

FY08 to FY10 Operating Data

Researchers compared the change in funding from FY08 to FY10 to the operating data report. Webb’s Section 5311 and state rural funding increased \$131,440 (27 percent) from \$495,228 to \$626,668 from FY08 to FY10. Webb had 12 percent fewer passenger boardings in FY10 than in FY08. Over the same period, revenue miles increased 3 percent and revenue hours decreased by 2 percent (see Table 38). Over the same period, Webb increased the vehicle fleet by 5 percent. From FY08 to FY10, the only type of trips Webb provided were general public trips.

**Table 38. Webb Operating Data.
FY08 to FY10**

	FY08	FY09	FY10	FY08 to FY10 % Change
Passenger Boardings	112,752	102,157	100,269	-12%
Revenue Miles	266,059	268,150	273,190	3%
Revenue Hours	13,328	13,386	13,128	-2%
Revenue Vehicles	22	26	23	5%

FY08 to FY10 Operating and Capital Expenses

Between FY08 and FY10, Webb’s operating expenses decreased 9 percent. Over the same period, operating decreased 16 percent however administrative and maintenance expenses increased 7 and 19 percent, respectively. During the same period, Webb did not purchase any transportation services or expend funds on planning (see Table 39). Webb has expended increasing amounts of capital on assets each year since FY08 (see Table 40).

**Table 39. Webb Operating Expenses.
FY08 to FY10**

Operational Expenses:	FY08	FY09	FY10	FY10 % of Total	FY08 to FY10 % Change
Operating	\$578,367	\$575,652	\$484,739	65%	-16%
Administrative	\$164,789	\$175,686	\$175,636	23%	7%
Maintenance	\$75,914	\$78,831	\$90,286	12%	19%
Planning	\$0	\$0	\$0	0%	-
Purchased Transportation	\$0	\$0	\$0	0%	-
Total	\$819,070	\$830,169	\$750,661	100%	-9%

**Table 40. Webb Capital Expenses.
FY08 to FY10**

Capital Expenses:	FY08	FY09	FY10
Capital Asset	\$58,435	\$180,644	\$566,945
Capital in Purchased Transportation	\$0	\$0	\$0
Total	\$58,435	\$180,644	\$566,945

Agency Changes due to State and/or Federal Funds Change

TTI researchers met with Webb officials to discuss the impact of the rural funding formula changes on transit service. Recall that the initial weighting in needs and performance in the Texas State Funding Formula allocation was 80 percent needs and 20 percent performance. Rural systems transitioned by 2009 to 65 percent of funds distributed by needs and 35 percent distributed by performance. This transition resulted in more funding in FY09 and FY10 for Webb, as the performance factor for Webb is stronger than the needs factor. The five bulleted lists below document agency changes made due to federal and/or state funds changes in five categories: service changes, fare structure changes, vehicle fleet changes, facilities changes, and personnel changes.

Service Changes

- Combined fixed route to reduce least productive runs and increase productivity – more passengers with service hours/miles.
- Acquired CDL for fleet maintenance coordinator and transit analyst staff as on-call drivers for ADA paratransit service on an as needed basis – very few ADA paratransit trips are requested – full-time staff is not required.

Fare Structure Changes

- No fare changes.

Vehicle Fleet Changes

- Purchased replacement vehicles.

Facilities/Equipment Changes

- Moved to a less expensive radio communication system.

Personnel Changes

- Maintained pay rates with no standard of living increases in an effort to contain costs.
- Reduced overtime.
- Increased the proportion of part-time staff to full-time staff.

Comparative Summary of Findings

Figure 28 depicts the relationship between the change in allocated funds and operating expenses, revenue miles, and passenger boardings for Webb. Section 5311 and state funding allocated by formula (excluding the additional federal funds) has been on a downward trend until FY08. Webb County increased county spending on transit to approximately \$80,000 annually from approximately \$45,000. The transition in the funding formula to 65 percent performance and 35 percent needs, as well as the additional federal funds provided in FY09 and FY10 provided an increase in funding levels. With increased federal and state formula funds, Webb County decreased county spending on transit to prior year levels to approximately \$47,000. Between FY08 and FY10, the number of revenue miles remained near level, operating expenses decreased, and passenger boardings decreased annually (from ~110,000 in FY08 to ~100,000 in FY10).

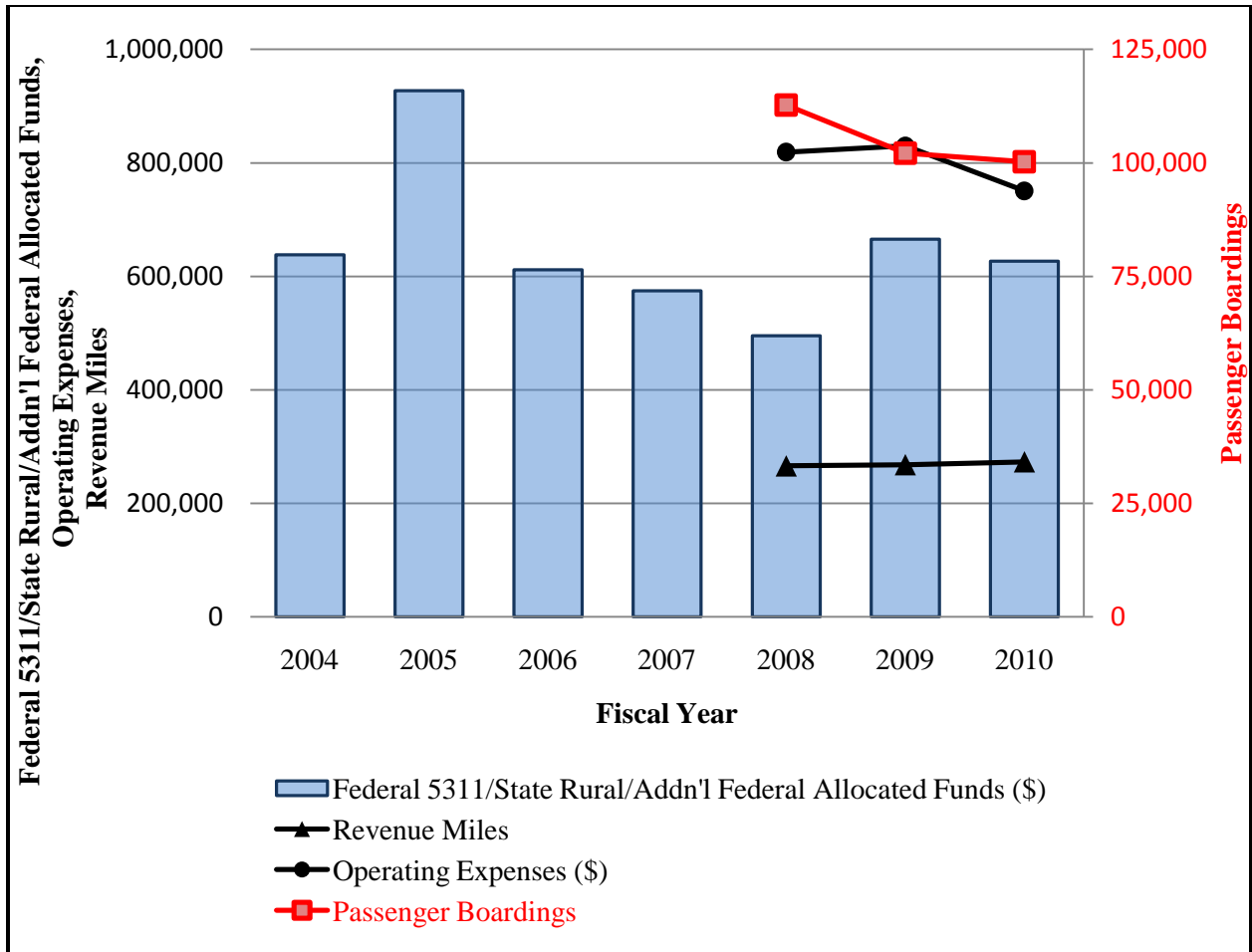


Figure 28. Webb Comparative Summary.

CHAPTER 8. FINDINGS AND IMPLICATIONS

This chapter discusses findings for the changes in Texas rural transit funding and presents the impact of funding change on local match requirements, service levels and ridership levels, and potential implications for future changes in the formula for allocating federal and state rural transit funding.

RESEARCH FINDINGS

The following section summarizes research findings about changes in Texas rural transit funding, service, and ridership.

Rural Transit Funding and Local Match Requirements

Section 5311 funds allocated to Texas RTDs increased from FY04 to FY10 by \$14.5 million while state funds have increased by only \$500,000. In fact, state funds have not increased since FY06. The impact is that state funds are losing ground to provide the match requirements of federal funds. As shown in Table 41, the ratio of state funds to Section 5311 funds is on the decline.

RTDs receive funding from a variety of federal programs. Researchers calculated that \$23.9 million in federal funds (excluding ARRA) were received by RTDs in FY10. State funds cover an estimated 78 percent of total local match requirements – a shortfall of \$5.3 million.

**Table 41. Section 5311 and State RTD Funds.
FY04 to FY10**

	FY04	FY05	FY06	FY07	FY08	FY09	FY10
State	\$18,181,694	\$20,178,496	\$18,681,694	\$18,681,694	\$18,681,694	\$18,681,694	\$18,681,694
Section 5311	\$13,104,352	\$15,019,197	\$20,104,352	\$21,804,352	\$20,104,352	\$27,690,659	\$27,588,817
Total	\$31,286,046	\$35,197,693	\$38,786,046	\$40,486,046	\$38,786,046	\$46,372,353	\$46,270,511
State to Section 5311	139%	134%	93%	86%	93%	67%	68%

Other Sources of Funding Change

Researchers found that for RTDs that received a decrease in Section 5311 and state funds from FY06 to FY10 increased other sources of revenue. Of the rural transit districts that lost funds or had limited increases in funds (those in the bottom quartile of change in Section 5311 and state funding), the average percent increase in other sources of funds was 230 percent (see Table 42). Interestingly, those transit districts with the largest increase in Section 5311 and state funding had an average increase of 36 percent in other sources of funds. This may reflect the effort of RTDs to find local sources of match to access increases in federal monies. In addition, an incentive exists to leverage local investment in the Texas Transit Funding Formula that includes the performance indicator of *local investment per operating expense*.

**Table 42. Average Change in Funds by Quartile.
FY08 to FY10**

Quartiles by Section 5311 and State Funding Change	Section 5311 and State Funding	Other Sources of Funds
1st Quartile	-1%	230%
2nd Quartile	18%	18%
3rd Quartile	28%	6%
4th Quartile	78%	36%

Impact of Funding Change on Service Levels

Thirty-three of the 38 RTDs had an increase in available funding (combined Section 5311, state and other sources) from FY08 to FY10. Of the remaining five RTDs, one had *no change* and four had a *decrease* in available funds. In general, an increase in available funds corresponded to an increase in service levels, and a decrease in funds corresponded to a decrease in service levels. Table 43 presents the average change in available funds by quartile as compared to the change in level of service (revenue miles).

**Table 43. Average Change in Funds as Compared to Revenue Miles and Ridership.
FY08 to FY10**

Quartiles by Available Funding Change	Total Available Funds	Revenue Miles
1st Quartile	-4%	-14%
2nd Quartile	18%	13%
3rd Quartile	27%	9%
4th Quartile	59%	46%

Service Change Impact on Ridership

Figure 29 provides in a scatter diagram format the FY08 to FY10 percent change in revenue miles and passenger boardings by RTD. In the top right quadrant of the diagram, RTDs have both an increase in revenue miles and an increase in ridership. The bottom left quadrant are those RTDs with both a decrease in revenue miles and a decrease in ridership. The bottom right quadrant shows six transit districts with anomalies where an increase in revenue miles shows a decrease in ridership. There were no RTDs that had a decrease in revenue miles with an increase in ridership.

In the six cases where revenue miles resulted in an increase in passenger boardings (shown in red), one of these was a correction in the reporting, one ceased operating an airport shuttle service circulator while adding new JARC services, and the remaining cases changed the mix of service provided, adding service with long trip distances with fewer passengers.

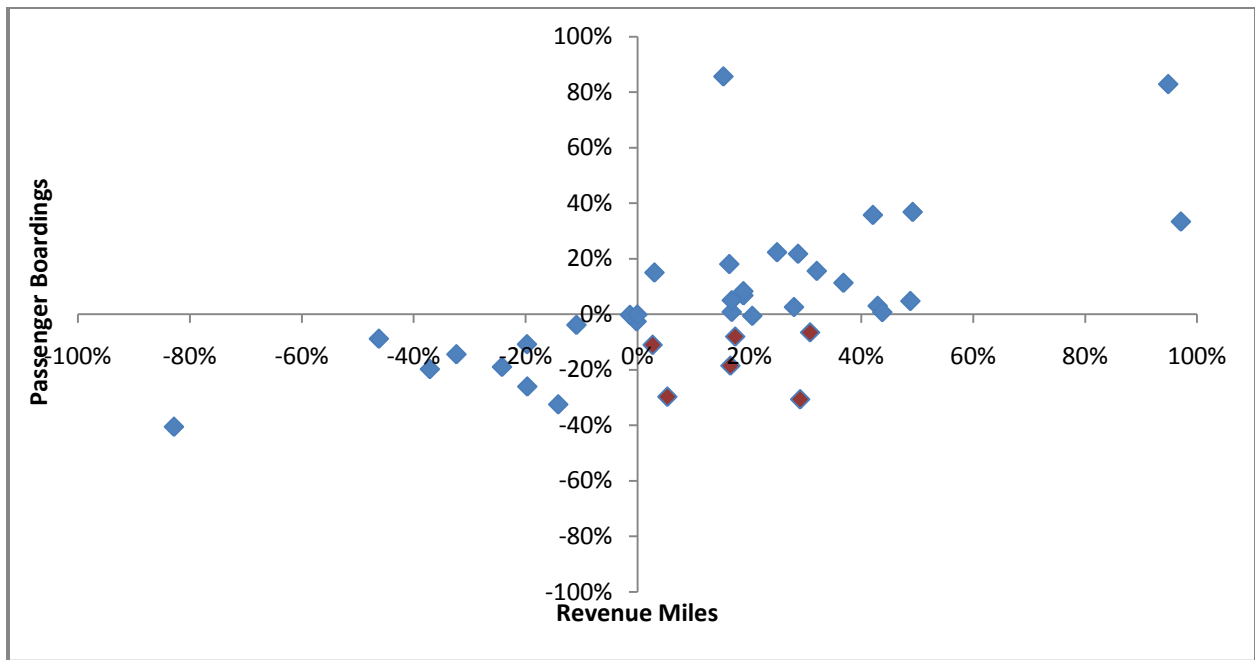
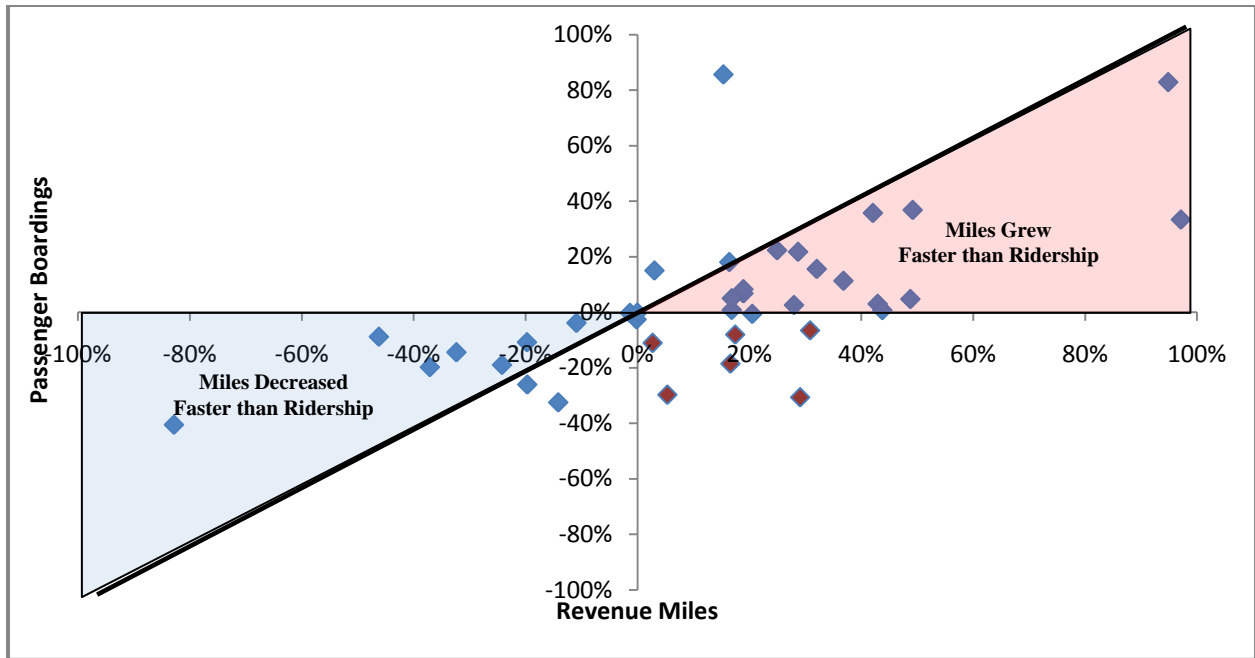


Figure 29. Scatter Diagram of Revenue Mile and Passenger Boarding Change. FY08 to FY10

Researchers wanted to know if in the majority of cases, an increase in revenue miles resulted in less, more, or the same increase in ridership. To graphically analyze, Figure 30 shows an “equivalent change line” where a change in revenue miles has the same percent change in passenger boardings. For the majority of RTDs with an increase in revenue miles, revenue miles increased faster than passenger boardings (see red shaded area). A possible explanation that a revenue mile change did not result in an equivalent ridership change may be that new services introduced had not matured, or that RTDs could now afford to provide new transit service to reach longer distances or more remote areas that could not afford to be provided before.

Researchers also looked at whether a decrease in revenue miles resulted in less, more, or the same decrease in ridership. For the majority of RTDs with a decrease in revenue miles, revenue miles decreased faster than passenger boardings (see blue shaded area). This may indicate where transit districts cut less productive service or passengers continued to ride, but at different times when the RTD cut service hours (for example, reducing span of service or days of the week).



**Figure 30. Scatter Diagram and Equivalency Line.
FY08 to FY10**

Fuel, Labor, and Health Insurance Combined Impact

Fuel, labor, and health insurance are difficult-to-control costs and represent approximately 80 percent of a rural transit provider’s budget. Continued increases in these expenses would result in less money available for service enhancements. An estimated additional \$2.0 million was needed to cover these costs in FY11 alone.

Use of Increased Funding

RTDs reported that before using funds to enhance existing or introduce new general public services, funds were used to cover those costs that could be classified as difficult-to-control costs—fuel, insurance and salary/benefits. After funds were used to cover fuel, insurance, and labor, then rural transit providers indicated funds were used to enhance existing or introduce new general public services, to conduct public outreach activities, and invest in vehicles and vehicle maintenance. With the enhancement of service, RTDs reported adding operational, administrative, maintenance, mobility management, and travel training staff.

Case Study Findings

The following discussion provides an overview of the case study results followed by Table 44 that compares and contrasts case studies with increased funding levels versus case studies with decreased funding levels.

Increased Funding Case Studies

Researchers visited with staff from three RTDs that received large increases in Section 5311 and state rural transit funding. Increased funding helped these RTDs to offer enhanced service, more efficient service, serve more people, and offer better quality service. These RTDs reported using additional funds to:

- Pay for fuel and insurance costs.
- Provide competitive salaries.
- Operate service in remote rural areas.
- Operate service on more days, expanded hours or increased frequency.
- Implement in-vehicle and dispatch technology.
- Purchase additional vehicles.
- Increase coordination and/or mobility managers.
- Hire more drivers.

The impact on ridership was positive in two cases and could not be determined in the third case as MTP service ceased operation in FY10. Operating costs increased at a faster pace than miles or passenger boardings. Operating costs may increase sooner and faster than ridership because it is necessary to field additional resources or changes prior to realizing the impact in performance measures.

Decreased Funding Case Studies

Researchers visited with staff from three RTDs that had decreases in Section 5311 and state rural transit funding. Changes made as a result of these reductions were varied. A decrease in funding ultimately resulted in a decrease in service. These RTDs reported making the following changes as a result of the reduction in funds:

- Use reserve funds to provide essentials and to stave off service cuts.
- Cut in personnel.
- Decrease in service levels.
- Attain other federal transit grant funding – JARC funding.
- Forgo cost of living increases for staff.
- Decrease in driver staff through attrition.
- Forgo customer service and outreach efforts.

Case Study Comparison

Researchers created a table to compare the RTDs with increased Section 5311 and state funds to the RTDs with decreases. Table 44 provides this comparison, grouping the changes by category of impact.

Table 44. Change in Funding Case Study Comparison.

Change Category	RTD Changes with Increased Funds	RTD Changes with Decreased Funds
Salary/Wage Rates	Provide competitive salaries.	Forgo cost of living increases for staff.
Service Levels	Operate service in remote rural areas. Operate service on more days, expanded hours or increased frequency.	Decrease in service levels. Attain other federal transit grant funding – JARC funding.
Fuel/Insurance	Pay for fuel and insurance costs.	Use reserve funds to pay for essentials and stave off service cuts.
Vehicles	Purchase additional vehicles.	No change.
Technology	Implement in-vehicle and dispatch technology.	No change.
Driver Staffing	Hire more drivers.	Decrease in driver staff through attrition.
Other Staffing	Increase coordination and/or mobility managers.	Cut in personnel. Forgo customer service and outreach efforts.

IMPLICATIONS

The following sections present implications for consideration regarding future changes in Section 5311 and state funding.

Implications of Flat Transit Funding Levels

Without future increases in state funding, transit districts will face an increased burden to find local sources of funding for federal local match requirements. Transit districts will be faced with increased operating costs while at the same time trying to maintain service levels.

Introduction of New Services Not Fully Realized

Rural transit ridership in Texas has been steadily increasing with the average RTD increasing between 2 and 3 percent annually. Still, study findings indicate that ridership increases lag behind the increase in service levels (revenue miles). This may be the impact of new services introduced that may not yet be fully realized in ridership, particularly JARC and New Freedom new service. New services often take time to develop in terms of ridership and expenses may initially be high as expenditures first go to planning routes, purchasing vehicles/communication equipment, and hiring/training additional drivers. The implication is that as these services mature, ridership will catch up with the increased levels in service. Sustainable funding sources to continue these services and provide match are needed.

Implications of Census 2010 on Rural Transit

A redistribution of funds is likely with the results of Census 2010, as population change in rural areas will affect the Texas Transit Funding Formula needs (population and square miles) side of the formula allocation. The reallocation of funds means some transit districts may once again lose funding in order to redistribute dollars to the transit districts with higher population growth. According to this study, those transit districts losing Section 5311 and state funding have looked to reserves or other sources of funding to sustain service. With the current economic state, these other sources of funding and reserves may not be available in future years, leaving no monies to sustain current service levels.

According to RMC 0-6199, *Estimated Impacts of the 2010 Census on the Texas Transit Funding Formula*, the population in RTDs is growing and is expected to increase approximately 12 percent. Further, an estimated one-fourth of the population will be living in rural districts, while approximately one-third of the population will be age 65 and over or have a disability. These changes will likely increase the demand for public transportation in rural areas. This increased demand may be difficult to serve without increased sources of state and local funding.

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APPENDIX A: LOCAL MATCH NEED ESTIMATE

FY10	Total	Operating	PM	Admin	POS	Planning	Capital
Estimated Percent of Funds by Expense Category:							
Section 5311 Federal		67%	1%	21%	1%	0%	10%
ARRA							100%
Section 5307		100%					
5303 Planning						100%	
5309 Capital							100%
5310 Elderly & Disabled			35%		21%		44%
5316 JARC		39%	3%	0%	0%	2%	56%
CMAQ		44%					56%
5317 New Freedom		27%			7%		66%

Total Federal Revenues:

Section 5311 Federal	\$24,410,431	\$16,354,989	\$339,104	\$5,126,191	\$244,104	\$0	\$2,346,043
ARRA	\$27,345,993		\$11,018				\$27,334,975
Section 5307	\$2,800,000	\$2,800,000					
5303 Planning	\$312,438					\$312,438	
5309 Capital	\$3,274,627						\$3,274,627
5310 Elderly & Disabled	\$3,776,014		\$1,132,804		\$1,510,406		\$1,132,804
5316 JARC	\$1,969,427	\$787,771	\$551,440			\$39,389	\$590,828
CMAQ	\$1,757,843	\$773,451					\$984,392
5317 New Freedom	\$278,448	\$75,181			\$19,491		\$183,776
Total Federal Revenues	\$65,925,221	2	\$2,034,366	\$5,126,191	\$1,774,001	\$351,827	\$35,847,445

Federal Maximum Share:

Section 5311 Federal		50%	20%	20%	20%	20%	20%
ARRA			0%				0%
Section 5307		50%	20%	20%	20%	20%	20%
5303 Planning						20%	
5309 Capital							20%
5310 Elderly & Disabled			20%		20%		20%
5316 JARC		20%	20%			20%	20%
CMAQ		20%					10%
5317 New Freedom		20%	20%		20%		20%

Estimated Match Required Need:

Section 5311 Federal	\$18,368,849	\$16,354,989	\$84,776	\$1,281,548	\$61,026	\$0	\$586,511
ARRA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Section 5307*	\$2,800,000	\$2,800,000	\$0	\$0	\$0	\$0	\$0
5303 Planning	\$78,110	\$0	\$0	\$0	\$0	\$78,110	\$0
5309 Capital	\$818,657	\$0	\$0	\$0	\$0	\$0	\$818,657
5310 Elderly & Disabled	\$944,004	\$0	\$283,201	\$0	\$377,601	\$0	\$283,201

FY10	Total	Operating	PM	Admin	POS	Planning	Capital
5316 JARC	\$492,357	\$196,943	\$137,860	\$0	\$0	\$9,847	\$147,707
CMAQ	\$302,740	\$193,363	\$0	\$0	\$0	\$0	\$109,377
5317 New Freedom	\$69,612	\$18,795	\$0	\$0	\$4,873	\$0	\$45,944
Total Match Need	\$23,874,329	\$19,564,090	\$505,837	\$1,281,548	\$443,500	\$87,957	\$1,991,397

* FTA Section 5307 funds based on estimates as RTDs report these funds within Section 5311 revenues.

Researchers assumed Section 5307 funds were used for operating requiring a 50 percent match.

APPENDIX B:

COMPARISON OF FUNDING CHANGE TO SERVICE LEVELS AND RIDERSHIP

FY08 to FY10 Change

Rural Transit District	Allocated Section 5311 Federal and State Funding		Other Funding Sources*	Available Funds	Service Investment	Ridership Impact	Comment on Unusual Data Changes
				Combined Section 5311 Federal, State and Other Funding	Total Revenue Miles	Total Passenger Boardings	
AACOG	6%	-6%		0%	28%	0%	Miles: Increased allocation prior to FY08 enabled expansion of service and fleet
ARKT	27%	8%		20%	-24%	20%	Miles and Passengers: ARKT did not draw down all funding in FY10. Major plant closings reduced service and ridership.
ASBDC	22%	35%		26%	0%	26%	
BCAA	14%	50%		21%	17%	21%	
BTD	-4%	66%		22%	19%	22%	
CCSWT	11%	-26%		4%	21%	4%	Miles: Correction in miles reporting – no significant service change
CARTS	20%	43%		36%	16%	36%	
CCART	-52%	999%		-43%	-83%	-43%	Allocated Funds: CCART revised methodology for allocating Section 5307 service – moved to small urban report. Other Funding: Gained DADS and Section 5310 funding in FY10 impacting Other Funds Miles and Passengers: Allocation methodology change between urban and rural systems.
CACST	113%	-6%		25%	44%	25%	

Rural Transit District	Allocated Section 5311		Available Funds	Service Investment	Ridership Impact	Comment on Unusual Data Changes
	Federal and State Funding	Other Funding Sources*	Combined Section 5311 Federal, State and Other Funding	Total Revenue Miles	Total Passenger Boardings	
CLEB	78%	-19%	34%	-14%	34%	Miles and Passengers: Interurban bus route losing significant ridership – no change in service provided
CONVA	7%	32%	18%	-46%	18%	Miles and Passengers: Allocation methodology change between urban and rural systems
CS	29%	-58%	-13%	-37%	-13%	Miles and Passengers: Loss of non-emergency medical contract (MTP) decreased miles and boardings; 2010 vehicles include non-active vehicles awaiting disposal – artificial increase
CTRTD	43%	43%	43%	29%	43%	Passengers: Discontinuation of temporary airport parking shuttle after airport construction complete; at the same time, began providing new JARC services – impact total boardings and miles change
CVT	24%	-33%	-5%	-32%	-5%	
DR	36%	82%	52%	97%	52%	
EPC	61%	10%	33%	0%	33%	
ETCOG	22%	0%	17%	49%	17%	
FBC	202%	41%	86%	37%	53%	Federal and State Funding: New rural transit district first received <i>state</i> performance funding in fiscal year 2010 – result in data reflecting a high % change in Federal and State funding. Also, FBC received an additional 380K in Section 5307 reflected in other sources of funds.

Rural Transit District	Allocated Section 5311 Federal and State Funding Other Funding Sources*		Available Funds	Service Investment	Ridership Impact	Comment on Unusual Data Changes
			Combined Section 5311 Federal, State and Other Funding	Total Revenue Miles	Total Passenger Boardings	
GCC	-2%	887%	81%	42%	81%	Other Funding Source: Social Service Block Grant in FY10 impacted other funding source change.
GCRPC	29%	62%	45%	32%	45%	
HCTD	20%	4%	12%	-20%	12%	Miles and Passengers: Change in allocation of Bell County trips to urban Temple; decrease in Head Start and AAA trips
HOTCOG	9%	79%	20%	-11%	20%	
KART	52%	57%	77%	95%	55%	
KCHS	22%	-1%	19%	3%	19%	
LRGVDC	12%	58%	18%	43%	18%	
PCS	5%	21%	11%	15%	11%	
PTS	37%	28%	37%	49%	33%	
REAL	27%	0%	20%	25%	20%	
RPMC	27%	30%	28%	17%	28%	
SCRPT	27%	8%	19%	29%	19%	
SETRPC	18%	38%	29%	-1%	29%	
SPAN	36%	38%	37%	17%	37%	
SPCAA	17%	-22%	-3%	-20%	-3%	Miles and Passengers: SPCAA and Caprock Community Action Agency merged in fiscal year 2010. Data correction.
SPI	77%	18%	70%	19%	70%	
TAPS	14%	-8%	4%	5%	4%	Passengers: Reduced service to pay off debt temporarily
TTS	10%	18%	14%	17%	14%	
WEBB	27%	1%	17%	3%	17%	
WTO	17%	21%	19%	31%	19%	Passengers: Added low density counties to service area decreased productivity

			Available Funds	Service Investment	Ridership Impact	Comment on Unusual Data Changes
			Combined Section 5311 Federal, State and Other Funding	Total Revenue Miles	Total Passenger Boardings	
Rural Transit District	<i>Allocated</i> Section 5311 Federal and State Funding	Other Funding Sources*				
Median	22%	21%	20%	17%	20%	
Mean	30%	68%	25%	13%	23%	

*Excludes Section 5311 ARRA funds, Section 5309, and Section 5303 funds.

Source: TTI compiled Texas Transportation Commission Minute Orders and the TxDOT PTN-128 web-based system reporting of financial and operational data.



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