CAMBRIDGE SYSTEMATICS

TCRP Project J-11, Task 14

Alternative Local and Regional Funding Mechanisms: A 2007-2009 Recession Performance Assessment

final

report

prepared for

Transit Cooperative Research Program

prepared by

Cambridge Systematics, Inc.

with

Robert Stanley

The information contained in this report was prepared as part of TCRP Project J-11, Task 14, Transit Cooperative Research Program.

SPECIAL NOTE: *This report IS NOT an official publication of the Transit Cooperative Research Program, Transportation Research Board, National Research Council, or The National Academies.*

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The work was guided by a technical working group with representatives from transit agencies, transit associations, advocacy organizations, private consulting organizations, and the American Public Transportation Association.

Disclaimer

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Transit Agency Name Abbreviations

Transit Agencies	Abbreviation
San Francisco Bay Area Rapid Transit District (California)	BART
Chicago Transit Authority (Illinois)	CTA
Corvallis Transit System (Oregon)	CTS
Greater Hartford Transit District (Connecticut)	GHTD
Greater Lafayette Public Transportation (Indiana)	GLPT
Hillsborough Area Regional Transit Authority (Florida)	HART
Hampton Roads Transit (Virginia)	HRT
Kalamazoo Metro Transit (Michigan)	KMT
Metro St. Louis (Missouri)	MSL
Madison Metro Transit (Wisconsin)	MTW
Northern Arizona Intergovernmental Public Transportation Authority (Arizona)	NAIPTA
New York Metropolitan Transit Authority (New York)	NYMTA
Ohio Valley Regional Transit Authority (West Virginia)	OVRTA
Park City Transit (Utah)	PCT
Potomac and Rappahannock Transit (Virginia)	PRTC
Pullman Transit (Washington)	PTW
RoadRUNNER Transit (New Mexico)	RRT
Denver Regional Transportation District (Colorado)	RTD
Portland TriMet (Oregon)	TriMet
Triangle Transit Authority (North Carolina)	TTA
Washington Metropolitan Area Transit Authority (District of Columbia)	WMATA

Executive Summary – Alternative Local and Regional Funding Mechanisms: A 2007-2009 Recession Performance Assessment

The recent economic recession has impacted the local and regional funding sources that transit agencies rely on. Transportation Cooperative Research Program (TCRP) Project J-11/Task 14 *Assessment of Alternative Local and Regional Funding Mechanisms* evaluated the extent of these impacts on a range of mechanisms and approaches that provide critical funding for transit. The intent of this research was to:

- Gain insight on the funding sources that will be most vulnerable to economic dislocations;
- Provide information to transit agencies on how they might investigate alternative mechanisms and approaches to help protect against the impacts of future economic downturns; and
- Examine how transit agencies can best introduce new or expanded funding sources in a period of economic challenge.

EVALUATION CRITERIA FOR FUNDING SOURCES

Twenty transit agencies were interviewed for this research study, varying in size and geographic location and encompassing diverse local and regional funding arrangements. The data and anecdotal information obtained through these interviews was analyzed to rate funding sources based on their **adequacy and stability of yield**, and the general **applicability** of these funding sources to support public transportation.

- **Adequacy of yield** refers to the amount or magnitude of revenues generated by a funding source.
- **Stability of yield** refers to whether and to what extent the revenue source is subject to uncertain fluctuations that can impact a transit agency's ability to manage resources.
- **Applicability to transit** refers to the general availability of local and regional funding in support of public transportation.

These criteria were considered in the context of the broad political acceptability of dedicating certain types of taxes and fees to transit (e.g., through enabling legislation), or whether transit must compete with other public services for a specific funding source. That context is key as transit agencies weigh their options for new or expanded local funding to support public transportation investments and services.

Table ES.1 summarizes the local/regional funding source evaluation based on the interview findings and data analysis. Key research findings of this study are summarized below. A more extensive discussion of each funding source in the Table ES.1 is presented in the full report.

Table ES.1 Summary of Funding Sources and Yield Performance during the 2007-2009 Recession

	Yield		Applicability
Funding Source	Adequacy	Stability	to Transit
Traditional Tax- and Fee-Based Transit Funding Sources			
Sales taxes	High	Low-Medium	High
Property taxes	High	Low-Medium	High
Motor fuel taxes	High	Low-Medium	Medium
Vehicle fees			
Vehicle registration/license fees	Medium	High	Low-Medium
Car rental taxes	Medium	Medium	Low-Medium
Toll revenue	Medium	Medium	Low-Medium
Taxi fees	Low	N/A	Low-Medium
General (non-dedicated) revenues			
General Fund Allocations (part of budgeting/appropriations process)	Medium	High	Medium
Local Assistance[a]	Low	High	Medium
Local Funding/Cost Allocation Contributions[b]	High	High	High
Agency-generated revenues			
Contract/Service Agreements	Low	High	High
Ancillary (e.g., advertising, parking revenues)	Low	Medium	High
Common Business, Activity and Related Funding Sources			
Employer/payroll and income taxes	High	Low-Medium	Medium
Utility taxes	Low-Medium	High	Low-Medium
Room/occupancy taxes	Medium	Medium	Low-Medium
Realty transfer taxes/Mortgage recording fees	Medium	Low-Medium	Low-Medium
Business-related taxes	Medium	Medium	Low-Medium
Revenue streams from projects			
Impact fees	Low	Low-Medium	High
Tax increment financing districts	Low-Medium	Low-Medium	High
Special assessment districts	Medium	Low-Medium	High
Joint development	Low	Medium	High

[a] For transit agencies with dedicated revenues.
[b] For transit agencies without dedicated revenues.

KEY FINDINGS FOR ALTERNATIVE FUNDING SOURCES

Important funding sources with "High" adequacy, i.e., a broad tax base, were also the sources negatively affected during the most recent recessionary period. For example, the two most common local and regional funding sources used by the transit agencies interviewed were sales and property taxes. Prior to the recession, these taxes accounted for a significant share of the local transit funding portfolio and generated the highest yields. But through the recession, they saw the steepest and fastest revenue declines. By comparison, non-dedicated funding from local governments experienced less funding volatility during the recent recession by the transit agencies interviewed during this research.

- **Sales Tax Revenues.** Historical transit agency data show, not surprisingly, that sales tax revenues tend to decline during recessionary periods. This was the case in the early 2000s following 9-11, as well as the recent recession beginning in 2007. At a time of economic uncertainty, with increased job losses and unemployment rates and decreased consumer confidence and disposable incomes, people tend to adopt conservative spending behavior that leads to lower sales tax revenues. Data from all transit agencies interviewed showed a decline in sales tax revenues immediately after the recession began.
- **Property Tax Revenues.** Compared to sales taxes, property taxes have not been as affected in previous recessionary periods, based on the limited data available from the transit agencies interviewed for this study. For example, there appeared to be no impact to property tax revenues received by transit agencies during the 2001 recession. However, the national housing market crisis that helped spark the 2008 recessionary period caused great instability in property tax revenues. This impact lagged in time as compared to other revenue sources, based on the schedule of property value assessments and the timing of revenue collections which can be offset by at least one year.
- **Non-dedicated funding from local governments** was the most stable revenue source, based on the experience from most transit agencies interviewed. This funding was typically provided through annual budget appropriations or through local agreements and contracts to provide service. For the transit agencies relying on non-dedicated funding, the jurisdictions were committed to a level of funding agreed upon during the budgeting process; this process reduces volatility. Still, even though these funding sources remained stable during the recent recession, there is a level of uncertainty inherent in non-dedicated funding, since transit must compete with other critical public services (such as schools and police) for its share.

Transit agencies with **diverse funding portfolios** were reported to be more financially stable during the recent recession than those relying on one major funding source. For example, transit agencies like NYMTA and Park City experienced declines in sales tax revenues, but their diverse funding portfolio (coupled with budget management and cost control actions) allowed these agencies to weather the recessionary impacts. Other transit agencies relying primarily on one major local funding source (e.g., sales taxes for Denver RTD and Metro St. Louis, and property taxes for HART in Florida, a state particularly hard hit by the housing crisis) experienced significant budget problems affecting service, as revenue yields drastically declined.

There is no "one-size-fits-all" funding portfolio, as state, regional, and local considerations play a significant role in determining what may be the most appropriate or legislatively permitted funding options for each transit agency. That said, transit agencies can learn from their peers, and examine the applicability of funding solutions that have performed well in the past and under varied economic conditions. When considering what local and regional funding sources might be pursued to supplement public transportation revenues, transit agencies should consider:

- **Availability –** The limits and restrictions contained in constitutional, statutory and regulatory language. While these can be altered to favor new transit funding arrangements, to do so requires actions on a broad political stage or even popular referendum, rather than simply reallocating already available budgetary resources.
- **Competition for Funding –** The extent of competition that exists for available or prospective sources of revenues, and the strength of the rationales for committing resources across any number of worthy public services.
- **Barriers to Implementation –** The existence of historic budget, revenue-raising and political philosophies that may stand in the way of new, nontraditional revenue-raising initiatives.

INITIATIVES TO INTRODUCE NEW OR EXPAND EXISTING FUNDING FOR TRANSIT

The study reviewed several initiatives to introduce new or expand existing funding sources for transit in the midst of great economic uncertainty. Perhaps surprisingly, even in tough times, some transit agencies were successful in obtaining voter or legislative approval to increase local and regional revenues. Key elements of these successes as gleaned through literature review and interviews with transit agencies that pursued additional funding in recent years (both approved and failed measures), are as follows:

- **Assess and identify the transit need –** The need for the new revenues for transit services must be clearly demonstrated to the stakeholders, and that need must align with stakeholder interests. It is also critical to understand the history and context in which voters and elected officials will consider the initiative before the transit funding campaign starts. Equally important is engagement with the community and stakeholders early on, particularly in the development of a transit investment plan, if that is part of the initiative.
- **Ensure an equitable distribution of benefits and impacts –** The benefits and impacts of the initiative to increase funding for transit must be distributed as equitably as possible with respect to geography, jurisdiction, mode of travel, economic and social factors.
- **Find a champion –** Identify a "big believer in transit," a leader who is committed to the initiative and preferably one that holds a key political position. This champion must be able to devote a significant amount of time to the campaign while having a passion for the transit funding issue.
- **Seek the support of key elected officials and the business community –** Other support is needed from key elected officials who can organize a variety of constituents and interest groups and can help resolve disagreements among various interests. These leaders can also help raise the profile of the transit funding campaign. In particular, obtaining support from the business community further legitimizes business case for transit and mobility and the funding initiative.
- **Develop an effective marketing and outreach campaign –** Engage stakeholders and the public from many different angles and using different means. Transit funding campaigns must include educating the stakeholders and the public in general, through public meetings, speaking engagements, print ads, television and radio commercials, strong Internet and social media presence, rider testimonials, campaign slogans, and general promotion of the effort among public figures in the business, athletic, religious and education fields.
- **Know your opposition –** Anticipate the level and extent of opposition that may arise and be prepared to respond to critics with the facts about the benefits of public transportation and more specifically, the benefits expected from the proposal or funding initiative.
- **Show the transit agency's stewardship, credibility, and transparency –** It is crucial for the transit agency to demonstrate it has effectively managed its system in order to present a convincing case for the need of additional funds. Transit agency stewardship of existing revenue sources and commitment to transparency in its finances, plans and expenditures will help maintain and earn credibility in the eyes of the public, the elected officials, and the media.

1.0 Introduction

1.1 PROJECT DESCRIPTION

The Transportation Cooperative Research Program (TCRP) Project J-11/Task 14 *Assessment of Alternative Local and Regional Funding Mechanisms* evaluated the impact of the recent economic recession on local and regional funding sources used by transit agencies in terms of funding stability and adequacy of yield, in addition to their general applicability to public transportation. In addition, this project looked at recent initiatives by transit agencies to increase existing funding or introduce new funding sources.

1.2 PROJECT BACKGROUND AND PURPOSE

The Transit Cooperative Research Program (TCRP) Report 129 *Local and Regional Funding Mechanisms for Public Transportation* reported on a wide variety of funding sources used by public transportation agencies across the country to fund their operations and their ongoing capital needs including expansion projects. There is variation in funding strategies from state to state and to some extent within states at the local level, depending on the size of both the transit agency and the urbanized area served, the type of public transportation services provided, and other factors. Many regional transit agencies have pursued dedicated sources of funding to obtain stability rather than relying on local governments' annual budgeting and decision-making process. However, even these dedicated funding sources have proven to be affected adversely by cyclical variation in the economy. Some funding mechanisms have been more volatile than others and have been affected at different points in the economic cycle.

For example, the recent economic recession, which in part was prompted by the crash of the real estate market, had an impact on local revenue sources that went well beyond typical business cycles. Property taxes, which are the main funding source of local governments for basic services, have remained stable during typical recessionary periods. A Rockefeller Institute analysis[1] of U.S. Census data on state and local government tax revenues shows that property tax revenues have continued to grow (albeit at a slower rate) during recessionary periods, while sales tax and personal income taxes experience decline during business cycles. However, the study also found that in the most recent recessionary period, sales and personal income taxes began to increase with the

[1] Dadayan, Lucy, The Nelson A. Rockefeller Institute of Government, *The Impact of the Great Recession in Local Property Taxes*. July 2012.

economic recovery, whereas property taxes have declined over six consecutive quarters (through the first quarter of 2012). This is in line with the drop in property values after the housing bubble burst.

The recent economic recession has underscored how volatile these funding sources can be and the severe impacts on transit services and fares when funds diminish. The most recent American Public Transportation Association (APTA) survey, published in August 2011, showed that 71 percent of the transit agencies responding to the survey had experienced a decline in local and/or regional funding; 83 percent of the transit agencies received less state funding to support their needs.

To respond, transit agencies have resorted to increasing fares, cutting service, drawing from reserve funds, and/or taking administrative actions such as hiring freezes and furloughs. Access to capital markets, which had been impacted by the recent credit crisis, is also affected by the volatility of revenue sources dedicated to debt service, which in turn affects credit ratings and the cost of debt, and further reduces the availability of resources to pay for transit operations, maintenance, and capital needs.

As a result, there is widespread interest in examining how a more balanced portfolio of funding sources can provide greater stability for public transportation agencies. While TCRP Report 129 provided valuable information on the advantages and disadvantages of various funding sources, it did not examine the stability of these various sources in great detail or explicitly rate funding sources on this measure.

The purpose of TCRP Project J-11 Task 14 is to develop a resource that: 1) enables transit systems to meaningfully understand alternative local and regional funding mechanisms; 2) provides guidance for transit systems seeking to add new or increase existing sources of revenue to achieve greater funding stability and support improved public transportation; and 3) assists transit systems in developing a balanced portfolio of funding and improving financial management.

It should be noted that the emphasis of this project is on local and regional funding sources, not Federal and state funding. However, when looking at funding, the entire portfolio was considered, especially when reductions in funding occurred at all levels of government, affecting the overall financial health of transit agencies.

1.3 APPROACH

The project was conducted in three phases. In the first phase, the research team conducted a literature review, to identify potential new funding sources that could have emerged in recent years and to expand on advantages and disadvantages of known funding sources. The literature review also examined recent reports documenting the impacts of the recent recession and economic

cycles on revenues for public transportation and the related impacts on fares and services. Finally, reports documenting the factors and key steps that need to be taken to successfully enact new or additional funding mechanisms were reviewed.

The second phase consisted of gathering information through interviewing 20 transit agencies and gathering relevant local and regional revenue data to assess the impact of the recession. In addition, the research team interviewed six transit agencies with respect to their recent efforts to increase existing or implement new funding sources.

Lastly, in the third phase, the team analyzed the data and anecdotal information obtained through the interviews, rated funding sources based on their adequacy and stability, and summarized findings and conclusions.

1.4 ORGANIZATION OF THE REPORT

This report summarizes the findings of an analysis of existing funding strategies for public transportation, the effect on funding sources of changes in local, regional, and national economies, and the analysis of the initiatives to increase funding from existing sources or the introduction of new sources of revenue to support public transportation.

The report is organized around the following major sections:

- **Section 2.0 – Analysis Framework of Local and Regional Funding Sources** introduces the local and regional funding sources evaluated in this project, and presents the evaluation criteria with respect to the impacts on adequacy and stability of funding sources during a recessionary period.
- **Section 3.0 – Local and Regional Funding Sources Trends** summarizes the interview and data analysis findings from 20 transit agencies, and provides a brief overview of mitigating actions to address funding shortfalls during the recessionary period.
- **Section 4.0 – Impact of the Recession on Existing Local and Regional Funding Sources** documents the general findings and conclusions related to the effects of the recession by revenue source. This section also presents ratings for various revenue sources based on the analysis framework criteria presented in Section 2.0.
- **Section 5.0 – Analysis of Initiatives to Increase Existing or Introduce New Local and Regional Funding Sources** documents the analysis of initiatives that transit agencies have carried out to increase funding from their existing sources or to introduce new sources of revenue, particularly during the most recent economic recession.
- **Section 6.0 – Conclusions.**
- **Section 7.0 – Bibliography**.

Appendices are provided in a separate volume, including:

- Appendix A – Literature Review.
- Appendix B – Agency Selection and Interview Process.
- Appendix C – Interview Guides.
- Appendix D – Local and Regional Economic Conditions.

2.0 Analysis Framework of Local and Regional Funding Sources

2.1 HISTORIC SOURCES OF PUBLIC TRANSPORTATION FUNDING

Funding for public transportation includes Federal, state, and local funding that are both dedicated and non-dedicated.

Enactment of the Highway Trust Fund in 1956 to support design and construction of the initial Interstate Highway System provided the first nationwide, Federal source of funds for development of our national system of Interstate and Defense Highways – the Interstate System. In combination with state funding, these "user fees" from gasoline taxes, diesel fuel taxes, and other user fees were used predominantly for Interstate highway investment as well as improvements to elements of the Federal aid portion of the nation's highway system other than the Interstate. Over time, states also enacted motor fuel taxes and fees to support the states' contribution to highway construction and improvement and to match Federal funding. Historically, however, many states' motor fuel tax revenues were subject to statutory and constitutional prohibitions against their use for other than highway purposes.

In 1964, the Urban Mass Transportation Act was enacted to support the buy-out of failing, formerly private local and regional public transportation systems as well as related capital investments. In 1983, the Federal responsibility for public transit was expanded with a portion of the Federal user fees – motor fuel taxes – dedicated to public transportation. The Mass Transit Account of the Highway Trust Fund provides the vehicle for this multimodal investment. Recently, declining motor fuel revenues coming into the Highway and Mass Transit accounts of the trust fund have signaled the need to consider new means of providing continued Federal support to transit and highways.

The evolution of Federal highway and transit funding provides an important context and backdrop for subsequent efforts as well as current initiatives to fund public transportation through Federal, state, and local revenues. Combining the intergovernmental responsibility for surface transportation – highways and transit – has resulted in a wide range of budgetary and revenue-raising philosophies and responses among the state and local partners. In a handful of states – New Jersey, Connecticut, Rhode Island – states play the dominant role in raising and programming available revenues for public transportation. In other states like Texas, the responsibility for transit investment continues to lie largely with funding from Federal and local governments.

As the role of public transportation continues to expand, the need for increased investment has been met through a variety of approaches that continue to reflect these historic budget and revenue-raising philosophies as well as budget realities affecting a wide range of services that compete for local funding. The need for substantially expanded investment in transit in large metropolitan regions as well as small communities, combined with increased competition for public funding for all services has led local elected officials to examine sources which, in combination, provide a yield adequate to meet rising needs, are stable enough to sustain investment over time and through varied economic cycles, and are equitable enough to elicit broad political support.

These varied budget and revenue philosophies and the greater competition for funds have led local officials to enact transit funding that continues to vary considerably. For instance, state authority to enact dedicated local and regional sales taxes to support transit has emerged as a popular model in many states. In contrast, budget priorities and funding flows in other states have led to different approaches. In Michigan, for instance, the authority to collect sales taxes is reserved to the state in constitutional language. No sales tax authority exists at the local, county, and regional level to support transportation. In the mid 1900s, the state sales tax was raised to support education and a more equitable distribution of education funds, statewide, in exchange for property tax relief. Because of this budgeting and revenue-raising philosophy, local and regional sales taxes are not a significant source of transit funding in Michigan at the local level. Instead, transit agencies in Michigan have relied largely on successful local property tax initiatives to support public transportation. In another example, New York officials have recognized the role transit plays in supporting the nation's largest regional economy by enacting a broad and unique set of fees and taxes on varied business and development activities in the New York metropolitan area.

This context is important because it indicates that in addition to evaluating the particular characteristics of individual potential transit funding sources, the approaches adopted across the country to fund public transportation continue to reflect varied budget, revenue, and political philosophies inherent in funding all public services. These varied philosophies and the increasingly stiff competition for all public funding and investment continue to be as important to the examination of transit funding initiatives as are the particular characteristics of alternative funding sources themselves.

The material and conclusions contained in this report illustrate the often unique circumstances that face local political and community leaders in meeting growing public transportation requirements.

2.2 POTENTIAL LOCAL AND REGIONAL FUNDING SOURCES

Local and regional funding sources are defined as "*… those that are raised from local and/or regional residents/organizations only and made available for local/regional transit use, regardless of how funds are collected, administered, or (re)allocated*."[2]

There are five major typologies of funding sources: 1) traditional tax- and fee-based transit funding sources; 2) common business, activity, and related funding sources; 3) revenue streams from projects; 4) new user or market-based funding; and 5) finance mechanisms.[3] Finance mechanisms, however, were not included in this project, but rather emphasis was placed on actual sources of revenue. Finance typically entails borrowing money through bonds, loans, or other financing mechanisms, thus it requires a repayment source. This project only considered actual revenue sources that can be used to support ongoing operations and maintenances as well as capital spending through pay-as-you-go or as repayment sources for financing mechanisms.

Based on the local and regional funding available to the transit agencies interviewed, the analysis focused on the following sources (see Table 2.1).

Table 2.1 Local and Regional Funding Sources Evaluated

Funding Type	Definition	Funding Sources
Traditional Tax- and Fee-Based Transit Funding Sources	Common taxes and fees that are available or used for transit capital investment or to support operations.	• Sales taxes • Property taxes • Motor fuel taxes • Vehicle fees • General (non-dedicated) revenues • Agency-generated revenues (e.g., advertising, concession, contract or purchase-of-services revenues)
Common Business, Activity and Related Funding Sources	These are not as widely employed by transit agencies as the traditional transit funding sources above. Some of the transit agencies interviewed, however, receive dedicated revenues from these types of funding sources.	• Employer/payroll and income taxes • Utility taxes/fees • Room/occupancy taxes • Realty transfer taxes/mortgage recording fees • Business-related taxes
Revenue Streams from Projects	Various arrangements that can be used to capture revenue from income streams of private business and related development activities benefiting from the proximity to specific transit facilities and services.	• Impact fees • Tax increment financing (TIF) districts • Special assessment districts • Joint development

[2] Transit Cooperative Research Program (TCRP) Report 129 – *Local and Regional Funding Mechanisms for Public Transportation,* 2009.

[3] Ibid.

Traditional Tax- and Fee-Based Transit Funding Sources

The most common local and regional funding sources for transit include the following taxes and fees:

- **Sales Taxes –** The most widely used source of dedicated local and regional funding for transit. Rates typically range from 0.25 to 1 percent applied to purchased goods or services.
- **Property Taxes –** Applied on the value of land and real property. Property taxes are generally the principal source of revenue for local governments, but some states provide enabling legislation that allows property tax revenues to be dedicated for transit.
- **Motor Fuel Taxes –** Includes indirect highway user fees, generally levied as an excise tax (i.e., cents per gallon). In some cases, however, states and local governments also apply a sales tax on the sales of gasoline, with levies dedicated to transportation. Motor fuel taxes are the primary funding source at all levels of government (Federal, state, local) dedicated to transportation spending, primarily for roads. Motor fuel tax revenues are not a common funding source for transit at the local level, although they have been authorized and used by some transit agencies.
- **Vehicle Fees –** Refers to taxes and fees related to vehicle use (other than motor fuel taxes), such as vehicle registration fees, driver license fees, car rental taxes, and tolls.
- **General (Non-Dedicated) Revenues –** Refers to funding provided by local governments for transit services, whether it is through a jurisdiction's annual budget and appropriations process, through grants/contributions, or through negotiations or local agreements between a transit service provider and the jurisdictions within the transit service area:
  - General fund allocations;
  - Local assistance; and
  - Local allocation agreements (by formula).
- **Agency-Generated Revenues –** Includes revenues from local contracts with institutions (such as schools and universities), investment income, parking fees, advertizing, among others. Fare revenues were not included as part of this project.

Common Business, Activity, and Related Funding Sources

These revenue sources are not as widely employed by transit agencies as the funding sources noted above. Some of the transit agencies interviewed, however, receive dedicated revenues from one or more these funding sources.

- **Employer/Payroll and Income Taxes –** Refers to taxes imposed directly on employers for the amount of gross payroll paid for service performed within

a transit district. Self-employed individuals are also subject to this tax where it has been enacted. Income taxes are applied to individual earnings, but are less common at the local level.

- **Utility Fees/Taxes –** Refers to local utility charges to property for access to the transportation system, mainly used for local roads and streets. Transportation utility rates can be set using different measures**,** including fees that apply per unit of housing or parking space, fees based on square footage or gross floor area, and fees that vary with the trip generation rate for a given property type.
- **Room/Occupancy Taxes** – These are applied either as a sales tax on the cost per room or as a daily fee per room, and are dedicated typically to tourism or tourism-related facilities. These taxes are not generally dedicated to transit or transportation where applied at the local level, but some local governments have enacted this type of tax to support transportation investments where infrastructure improvements or transportation services are needed to enhance visitor experience, accessibility, and mobility.
- **Real Estate Transfer Taxes/Mortgage Recording Fees** – Refers to taxes on real estate transactions.
- **Business-Related Taxes** – Refers to taxes levied on businesses. For the purpose of this project, it refers specifically to those business-related taxes levied by NYMTA (corporate franchise tax surcharge on certain businesses within the NYMTA service district) and by Park City Transit (business license fee based on trip generation by business type).

Revenue Streams from Projects (Value Capture)

This category include various arrangements that can be used to capture revenue from income streams of private business and related development activities benefiting from the proximity to specific transit facilities and services. Broadly referred to as **"**value capture**,"** these sources include special types of "property taxes" or fees that are targeted to capture the benefits or cost of infrastructure that serves property development. There are various mechanisms to capture the future value of real estate or to charge for additional infrastructure needs as a result of development. The most common of these include:

- **Impact Fees –** One-time charges to developers on new development. Revenues typically are used to pay for infrastructure improvements resulting from the growth generated by the new development.
- **Tax Increment Financing (TIF) Districts –** Captures the increase in property tax levies over the base or expected future levies as a result of infrastructure improvements. The additional levies typically are pledged to bonds issued to finance infrastructure improvements.

- **Special Assessment Districts –** Special district where property owners agree to pay an additional property tax that is dedicated to infrastructure improvements serving the district.
- **Joint Development –** Involves a partnership between a public entity and a private developer; for transit, it is used commonly for transit-oriented development (TOD) on land at or adjacent to transit stations.

2.3 EVALUATION CRITERIA

Funding sources are generally evaluated based on the following criteria: revenue yield, cost-efficiency, economic efficiency, technical feasibility, and political/public acceptability; this project emphasized yield and political/public acceptability as related to the recent economic recession. The definition of revenue yield addresses the adequacy and stability of revenue sources. In addition, the applicability of the regional and local funding sources to public transportation was evaluated based on availability of necessary enabling legislation as well as the strength of competition among other public investments, e.g., roadways or other public infrastructure and services.

Public/political acceptance has also been noted as an important criterion to be revisited in light of the recent economic downturn. This criterion is further explored in Section 5.0 of this report, based on recent transit agency experiences to gain support for increasing existing sources or enacting new revenue sources.

Yield – Adequacy and Stability

In general, yield refers to the overall amount of revenues a funding source is capable of generating. Revenue sources are given a "high" rating if they are capable of producing a lot of revenue, and generally have a large tax base. Sources or strategies are given a "low" revenue yield rating if they are inherently short term or have a small tax base. For example, sales taxes receive generally a "high" rating for yield because of their broad tax base, while impact fees would have a "low" yield given their narrow tax base and the fact that they are often imposed as a onetime charge.

Besides magnitude, yield considers the stability of the revenues generated and specifically effects during recessionary periods. Adequacy and stability are further defined below.

Adequacy of Yield

Adequacy refers to present and future revenues in comparison with needs for current and future expenditures. There are two aspects to adequacy of yield that are important to consider. First, there is the adequacy of a revenue source when compared to other sources. For example, a revenue source is considered adequate if revenue streams are higher than other existing revenue sources, and the levies can support a transit project and/or program over the long term.

Using an earlier example, sales taxes would be more adequate than impact fees, because the revenue streams from sales taxes are higher than those from impact fees.

The second aspect of adequacy, considers the revenue source with respect to the needs of a transit agency. For example, two transit agencies (one large and one small) collect $10 million each from an assessment district. From the large transit agency perspective, the revenues from this assessment district are not adequate to support systemwide operations; however, the assessment district revenues may be adequate to support the small transit agency's operation and maintenance costs. In this case, the assessment district could be rated "low" for the large transit agency, but it could be rated "high" for the small transit agency.

Stability of Yield

The stability of yield refers to whether the revenue source is subject to uncertain fluctuations that can impact a transit agency's ability to manage resources. Most revenue sources, in general, are impacted during economic slowdowns and recessionary periods, and they recover as the economic conditions improve, but the fluctuations can be more significant for some revenue sources compared to others.

Table 2.2 defines the ratings for yield adequacy and stability. These definitions will be applied to the revenue sources evaluated in Section 4.2.

Table 2.2 Rating Definition for Revenue Criteria for Transit

Criteria	Low	Medium	High
Adequacy	Revenue streams are low and may not provide sufficient funding for transit capital and/or operating needs, or can only be implemented over the short term.	Revenue streams may partially support transit capital and/or operating needs, and could be leveraged through finance.	Revenue streams are higher than existing revenue options. Levies can support transit capital and/or operating needs over the long term.
Stability	Revenue fluctuations are uncertain and highly volatile, making it difficult to predict future revenue streams. Fluctuations in revenues are highly variable year to year, and specific factors affecting stability cannot be identified.	Fluctuations in revenues are relatively predictable and consistent over time, and the factors affecting stability are generally known, such as economic downturns.	Revenue streams are highly predictable, with a long history of revenues for which trends can be easily identified. Fluctuations in revenues are low or nonexistent.

Applicability to Transit

This criterion refers to the general availability of a local and regional funding source for support of public transportation and the political acceptability of dedicating its revenue to transit. It also addresses whether transit must compete with other public services for a specific funding source. For example, general

funds are the broadest funding source (generally comprised of a combination of taxes and fees that are not dedicated to a specific use), and would be the source for which transit investments would face the highest competition. Revenues from motor fuel taxes are restricted to road and highway investments in 30 states,[4] restricting applicability to transit. In addition, only a few states have enacted enabling legislation allowing local governments to adopt local option motor fuel taxes, further limiting its applicability to transit. Both dedicated local sales and property taxes are the most common local/regional funding sources used by transit agencies, since more states provide enabling legislation allowing dedication to public transportation. These considerations of applicability must be weighed as transit agencies decide what local and regional revenue sources should be pursued to support public transportation investments and services.

The following considerations were applied to the rating of this criterion:

- Low to Medium – Very limited application to transit based on current practice and/or legislative restrictions, high competition from other public services, and an adequacy that falls below Medium.
- Medium – Very limited application to transit based on current practice and/or legislative restrictions, high competition from other public services, but generating significant revenues.
- High – Widely used for transit.

[4] The Brookings Institution Series on Transportation Reform, *Fueling Transportation Finance: A Primer on the Gas Tax*, March 2003.

3.0 Local and Regional Funding Sources Trends

This section o the report presents the interview and data analysis results organized by funding source. Table 3.1 summarizes the funding sources used by the transit agencies interviewed and the effect of the recent recession on these funding sources based on individual transit agency experience. Observations on the effects of the recession are, in part, qualitative, based on the data analysis and anecdotal information provided by the transit agencies through the interviews. For funding sources lacking extensive historical data on revenues and taxation rates, the extent of the data analysis is limited to recent trends. In addition, most funding source data were available through 2010 only, limiting the assessment of the potential lag associated with recessionary impacts.

The growth and yield trends by funding source were evaluated using data collected through the interviews or the National Transit Database (NTD) when data were not provided by the transit agency, review of budgets and financial statements available on-line, and observations from the perceived performance of revenue sources by the transit agencies.

The recent recession started in late 2007, with recovery starting in the summer of 2009. For the purpose of this project, the recessionary period encompasses 2008 and a portion of 2009.

Table 3.1 Summary of Funding Sources from Interviews and Effect of the 2007-2009 Recession

Funding Source	Transit Agency	Dedicated	Effect of Recession[a]
Traditional Tax- and Fee-Based Transit Funding Sources			
Sales Taxes	Bay Area Regional Transit (BART)	●	Declined
	Chicago Transit Authority (CTA)	●	Declined
	New York Metropolitan Transit Agency (NYMTA)	●	Stable
	Denver Regional Transit District (RTD)	●	Declined
	Metro St. Louis	●	Declined
	Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA)	●	Declined
	Park City Transit (UT)	●	Declined
Property Taxes	Bay Area Regional Transit (BART)	●	Declined
	TriMet (OR)	●	N/A
	Greater Lafayette Public Transportation/City Bus		Stable
	Kalamazoo Metro Transit	●	Declined

Funding Source	Transit Agency	Dedicated	Effect of Recession[a]
	Ohio Valley Regional Transit Authority (OVRTA)	●	Increased
	Hillsborough Area Regional Transit (HART)	●	Declined
Motor Fuel Tax	RoadRUNNER Transit (NM)		N/A
	Potomac and Rappahannock Transit (PRTC)	●	Declined
Vehicle Fees			
Vehicle Registration/ License Fees	Triangle Transit (NC)	●	Stable
	New York Metropolitan Transit Agency (NYMTA)	●	Implemented in 2009
Car Rental Fees	Triangle Transit (NC)	●	Declined
	New York Metropolitan Transit Agency (NYMTA)	●	Implemented in 2009
Toll Revenue	New York Metropolitan Transit Agency (NYMTA)		N/A
	Bay Area Regional Transit (BART)	●	Stable
Taxicab Tax	New York Metropolitan Transit Agency (NYMTA)	●	Implemented in 2009
General (non-dedicated) Revenues			
General Fund Allocations	Greater Hartford Transit District		Stable
	Metro Transit Madison (WI)		Stable
	RoadRUNNER Transit (NM)		Stable
Local Assistance	Hillsborough Area Regional Transit (HART)		Stable
	New York Metropolitan Transit Agency (NYMTA)		Stable/Increased
	Triangle Transit (NC)		Declined
	Park City Transit (UT)		Stable
Local Funding/Cost Allocation Contributions	Hampton Roads Transit (HRT)		Increased
	Washington Metropolitan Area Transit Authority (WMATA)		Increased
Agency-Generated Revenues			
Contract/Service Agreements	Bay Area Regional Transit (BART)	●	Declined
	Greater Lafayette Public Transportation/City Bus	●	Increased
	Kalamazoo Metro Transit	●	N/A
	Metro St. Louis	●	Increased
	Corvallis Transit System (OR)	●	Stable
	Pullman Transit (WA)	●	Stable
	RoadRUNNER Transit (NM)	●	Stable
Ancillary (e.g., advertising, parking revenues)	Bay Area Regional Transit (BART)	●	Increased
	Denver Regional Transit District (RTD)	●	Stable
	TriMet (OR)	●	Stable
	Washington Metropolitan Area Transit Authority (WMATA)	●	Declined

Funding Source	Transit Agency	Dedicated	Effect of Recession[a]
	Hillsborough Area Regional Transit (HART)	●	Stable
	Hampton Roads Transit (HRT)	●	Declined
	Kalamazoo Metro Transit	●	Stable
	Metro Transit Madison (WI)	●	Stable
	Potomac and Rappahannock Transit (PRTC)	●	Stable
	Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA)	●	Stable
	Park City Transit (UT)	●	Stable
	Corvallis Transit System (OR)	●	Stable
	RoadRUNNER Transit (NM)	●	Stable
Common Business, Activity, and Related Funding Sources			
Employer/Payroll and Income Taxes	TriMet (OR)	●	Declined
	Greater Lafayette Public Transportation/City Bus		Stable
	New York Metropolitan Transit Agency (NYMTA)	●	Implemented in 2009
Utility Taxes/Fees	Pullman Transit (WA)	●	Stable
	Corvallis Transit System (OR) – Transit Operations Fee	●	Implemented in 2011
Room/Occupancy Taxes	Park City Transit (UT) – (Resort Tax)	●	Declined
	Park City Transit (UT) – (Nightly Rental Property Fee)	●	Stable
Realty Transfer Taxes/ Mortgage Recording Fees	New York Metropolitan Transit Agency (NYMTA)	●	Declined
	Chicago Transit Authority	●	Declined
	Park City Transit (UT)	●	Declined
Business-Related Taxes	Park City Transit (UT) – Business License Fee	●	Stable
	New York Metropolitan Transit Agency (NYMTA) – Franchise Surcharge	●	Declined
Revenue Stream from Projects (Value Capture)			
Impact Fees	Hillsborough Area Regional Transit (HART)		N/A
Tax Increment Financing Districts	Hillsborough Area Regional Transit (HART)		N/A
Special Assessment Districts	Hillsborough Area Regional Transit (HART)	●	Declined
Joint Development	Washington Metropolitan Area Transit Authority (WMATA)	●	Declined

[a] Effect of Recession:

Increase: Revenues generally increased during and/or after the recession.

Stable: Annual growth remained at previous level, with modest growth or decline during and after the recession.

Declined: Revenues generally declined during and/or after the recession.

3.1 TRADITIONAL TAX- AND FEE-BASED TRANSIT FUNDING SOURCES

Sales Taxes

Local sales taxes are one of the most common sources of revenue dedicated to public transit. Of the 20 transit agencies interviewed, seven have dedicated local sales taxes. Table 3.2 summarizes the findings pertaining to sales tax revenues by transit agency.

Table 3.2 Sales Tax Characteristics by Transit Agency

Transit Agency	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
Large Agency					
BART					
Three-County	0.5%	High	Y	Both	Decline
Measure B (Alameda)	0.5%	Low	N	Both (specific projects and operating expenses)	Decline
Measure A (San Mateo)		Low	N	Both (specific projects and operating expenses)	Decline
Measure J (Contra Costa)		Low	N	Capital (project-specific)	Decline
CTA					
RTA Sales Tax I	1% (City of Chicago and Suburban Cook)	High	Y	Operations	Decline
RTA Sales Tax II	0.25% (RTA six-county region)	High	Y	Operations	Decline
NYMTA	0.375%	High	Y	Both	Stable
RTD Denver	1%	High	Y	Both	Decline
Midsize Agency					
Metro St. Louis					
Half cent	0.5% (city and county)	High	N	Both	Decline
Proposition M	0.25% (city and county)	High	Y	Both	Decline
Proposition M2 (approved in 1997; collection began in 2010)	0.25% (city)	High	Y	Both	N/A[b]
Proposition A (approved in 2010)	0.5% (county)	High	N	Both	N/A[b]
Small/Rural Agency					
Northern Arizona Intergovernmental Public Transportation Authority	0.295%	High	Y	Both	Decline
Park City Transit	½%	High	Y	Both	Decline

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase.

[b] Prop M2 and Prop A sales taxes passed in November 2010. While there is no data on collections, given that they rely on the same tax base as the Half-cent and Proposition M, it is expected that they would exhibit the same trends.

Table 3.3 highlights the years in which sales tax revenues declined by transit agency, represented by an "X"; the highest rate of revenue decline is also noted for each agency. Data for most transit agencies were available through 2010. It should be noted that dedicated sales tax rates for most of these transit agencies have changed over the last decade, as noted below. Understanding these changes is important for data analysis; data were normalized to ensure that growth trends were observed on the same tax base, and not as a result of a tax increase.

- **NYMTA –** In 2005, by state legislative action, the sales tax rate was increased from 0.25 percent to 0.375 percent within the Metropolitan Commuter Transit District (MCTD).
- **Denver RTD –** In 2005, Denver's regional sales tax increased from 0.6 percent to 1 percent, with additional funding from the rate increase dedicated to Denver's RTD FasTraks transit expansion program.
- **CTA –** In 2008, the Illinois legislature approved and enacted a sales tax increase of 0.25 percent in the six-county region served by the Regional Transit Authority (RTA) and its transit Service Boards (i.e., CTA, Metra, and Pace).
- **Metro St. Louis –** A ballot measure (Proposition M2) in 1997 was approved in the city of St. Louis for an additional 0.25 percent sales tax dedicated to Metro. However, it required the passage of a countywide measure that failed in 1997 and then again in 2008. The county measure (Proposition A) passed in April 2010, and enabled Proposition M2 to take effect. It should be noted that St. Louis County revenues from the half-cent and Proposition A sales taxes are not fully dedicated to transit, with a portion going to roadways.
- **NAIPTA –** A sales tax rate increase was approved in 2008 in Flagstaff, Arizona, bringing the sales tax rate from 0.175 percent to 0.295 percent. Part of the ballot measure was to extend the original sales tax (0.175 percent) for another 10 years, and a 0.12 percent increase for specific uses (e.g., upgrades to hybrid electric fleet, bus rapid transit, service expansion and increased frequency).

Table 3.3 Sales Tax – Years of Revenue Decline

Transit Agency	2007	2008	2009	2010	2011
BART			X -9.6%	X	
CTA		X	X -8.3%		
NYMTA				X -7.7%	No data
RTD Denver		X	X -10.0%		No data
Metro St. Louis			X -14.0%	X	Flat
Northern Arizona Intergovernmental Public Transportation Authority[1]	N/A	N/A	N/A	N/A	N/A
Park City Transit			X -16.3%		

Source: Cambridge Systematics analysis of sales tax data by agency.

Note: Years when revenues declined are represented by "X"; the percentage rates shown represent the highest annual decline.

[a] Northern Arizona Intergovernmental Public Transportation Authority data for sales tax revenues are combined with "participant fees," which includes general fund allocations and Federal assistance from the cities of Cottonwood and Sedona, Arizona.

Revenues from sales taxes declined for all transit agencies interviewed. NYMTA interviewees reported sales tax revenues to be stable during the recent recession. Data show, however, a decline in revenues by 7.7 percent in 2010, at a lag compared to other transit agencies and regions.

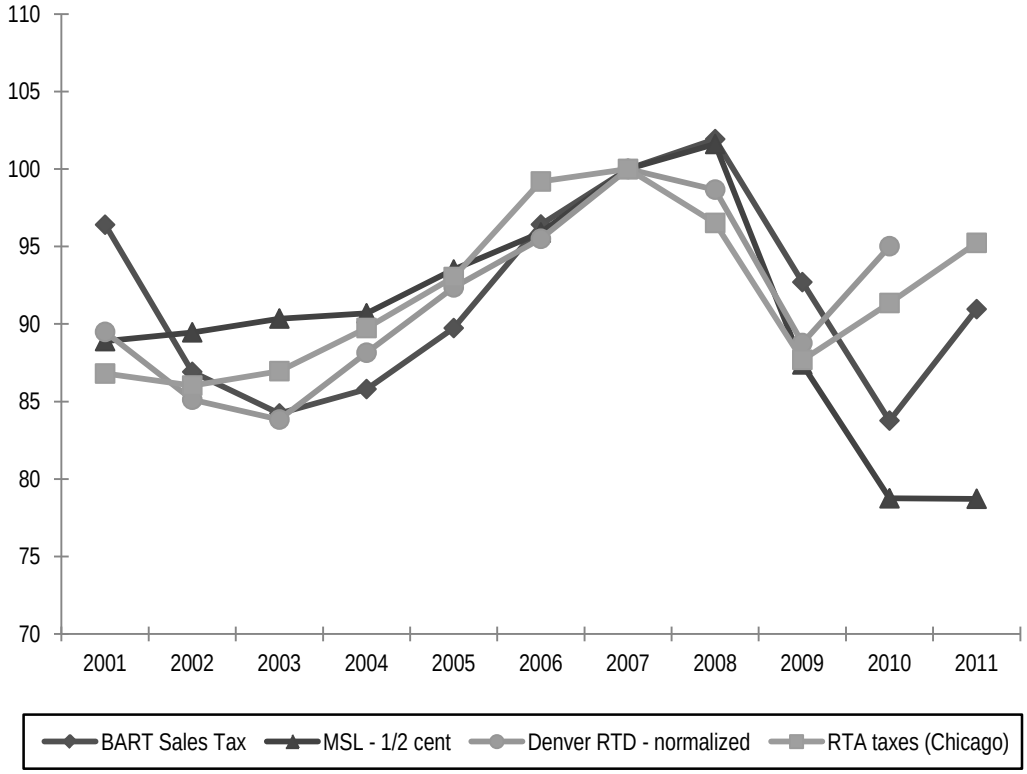
Sales tax revenues in Chicago and Denver saw an immediate decline in 2008; for other transit agencies, the revenue loss from sales taxes is observed in 2009 (based on agency data). Sales tax revenues began to recover within two years for most transit agencies. However, even for those transit agencies for which sales tax revenues began to recover in 2010, levies were still below prerecession (2007) levels. Only Park City has reported sales tax revenues exceeding prerecession levels in 2011.

Data from BART, CTA, Metro St. Louis, and Denver RTD were available to observe trends during the previous recessionary period in the early 2000s. The 2001 recession started when the dot.com bubble burst, after a decade of strong growth in the U.S., and was further affected by the terrorist attacks of

September 11, 2001. According to the National Bureau of Economic Research, the recession period was between March and November 2001, a much shorter period than the recent recession of the late 2000s. Available NYMTA data available went back to 2003, showing growth in sales tax revenues ever since, although growth slowed with the recent recession. Denver RTD staff noted through the interview that the recessionary impact to sales tax revenues has been more prolonged and severe than previous cycles, and the recovery has also been more modest. Figure 3.1 charts sales tax revenues indexed for these four transit agencies. Observations from the agency data include:

- **BART** sales tax revenues experienced a significant decline in 2002 and 2003, and started to grow slowly thereafter. Sales tax revenues reached prerecession levels by 2006. Revenue loss was steeper for the 2008 recessionary period, but data show a stronger recovery, at least for the first year (2011). It is too early to tell whether revenues will reach prerecession levels sooner compared to the recovery from the 2001 recession. With technology being one of the main industries in the San Francisco metropolitan region, it is likely that the dot.com bust in the 2001 recession may have led to a longer recovery period for sales taxes in the region, compared to the 2008 recession.
- For the Chicago MSA, **RTA** sales tax data (collections within the six-county region) were used to assess the impact of the 2001 economic recession. The data show that the impact of the 2008 recession on sales tax revenues was more significant than the previous recession. For example, sales tax revenues reached prerecession levels within a year (i.e., by 2003), whereas sales revenues have yet to reach prerecession levels after the 2008 recession. For the 2001 recession, sales tax revenues in the region declined by almost 1 percent in 2002, and growth began immediately in 2003. For the 2008 recession, sales tax revenues declined almost 12 percent between 2007 and 2009.
- Based on historical data from **Metro St. Louis**, the half-cent sales tax experienced no decline as a result of the 2001 recession. Sales tax revenues continued to increase, albeit at a slower rate (below actual inflation) through 2004, when the growth rate increased significantly, compared to previous years. With the recent recession, sales tax from the half-cent sales tax revenues declined 23 percent by 2010, over a two-year period. Data for 2011 show no signs of recovery.
- Data for the **Denver RTD** sales tax show that for the 2001 recession, revenues declined in 2002 and 2003, with recovery starting in 2004. By 2005, revenues had reached prerecession levels. The rate of revenue loss from the 2008 recession over a two-year period was higher compared to the previous recession. Initial recovery seems stronger compared to the previous recession, although revenues remain below prerecession levels.

Figure 3.1 Sales Tax Trend for Selected Transit Agencies
2001 through 2011 (Indexed 2007 = 100)



Property Taxes

Based on the survey data, property taxes are the second most commonly dedicated funding source for public transit. Of the 20 transit agencies interviewed, six have dedicated property taxes. Table 3.4 summarizes the property tax revenue trends for the transit agencies interviewed for this project.

For the most part, property taxes declined as a result of the recession, especially considering that one of the main culprits of this recession was the housing crisis that began in 2007. Indexing property tax revenues for comparison across transit agencies showed variability in growth trends for property taxes. The assessment of property taxes was, therefore, conducted individually by transit agency, before reaching general conclusions about this revenue source. Table 3.5 shows the years in which property tax revenues declined by transit agency.

Table 3.4 Property Tax Characteristics by Transit Agency

Transit Agency	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
Large Agency					
BART	$0.05 per $100 Assessed Value	Medium	Y	Both	Decline
TriMet	Varies	Low	Y	G.O. Bonds	N/A[b]
Midsize Agency					
Greater Lafayette Public Transportation (Indiana)	1%-3%	High	N	Both	Stable
HART (Tampa, Florida)	Up to 0.5 mil	High	Y	Both	Decline
Kalamazoo Metro Transit (Michigan)	0.6 mil (city)	Low	Y	Operations	Decline
	0.4 mil (county)	High	Y	Operations	Decline
Small/Rural Agency					
Ohio Valley Regional Transit Authority (OVRTA)	$0.125-$0.25 per $100 Assessed Value	High	Y	Both	Increase

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase.

[b] Revenues from property taxes dedicated to TriMet are based on debt service requirements.

Table 3.5 Property Tax – Years of Revenue Decline

Transit Agency	2007	2008	2009	2010	2011
BART				X	X -2.0%
TriMet[a]		X -6.9%	X		
Greater Lafayette Public Transportation[b]					
HART			X	X -12.8%	X
Kalamazoo Metro Transit		X	X -8.0%	X	
OVRTA[c]				X -6.8	N/A

Source: Cambridge Systematics analysis of property tax data by transit agency.

Note: Years when revenues declined are represented by "X"; the percentage rates shown represent the highest annual decline.

[a] Based on requirements to meet debt service of outstanding G.O. Bonds.

[b] No decline in property tax revenues over the 2007-2011 period. No information about tax rates was available to assess potential decline in property tax yield.

[c] Wheeling, West Virginia allocations only.

BART

BART receives property tax revenues from a dedicated $0.05 per $100 of assessed value in the three counties that form its district; these revenues are used to cover transit operations. The assessed value of property is calculated at 100 percent of market value. Property valuation, however, cannot be adjusted by more than 2 percent annually, unless the property is sold or transferred, as stipulated by Proposition 13.[5]

Proceeds from BART's district property taxes were also impacted by the recent recession, but at a lesser degree compared with sales tax revenues. Revenues declined at a lag, starting in 2010. The real estate market in the San Francisco Bay area performed better than other parts of the country, in part due to Proposition 13 and how property valuation remained stronger compared to real market values. In many instances, for property values reassessed due to changes in ownership, the reassessed value was higher, thus increasing the tax base and levies on property taxes. Consequently, property tax revenues remained fairly constant, or were not severely affected by the recession between 2007 and 2011. The data show that property tax revenues increased through 2009, declining in 2010 and 2011, by 0.8 percent and 2 percent, respectively.

Historical data on property tax revenues show that there was no impact on property tax revenues from the 2001 recession.

TriMet

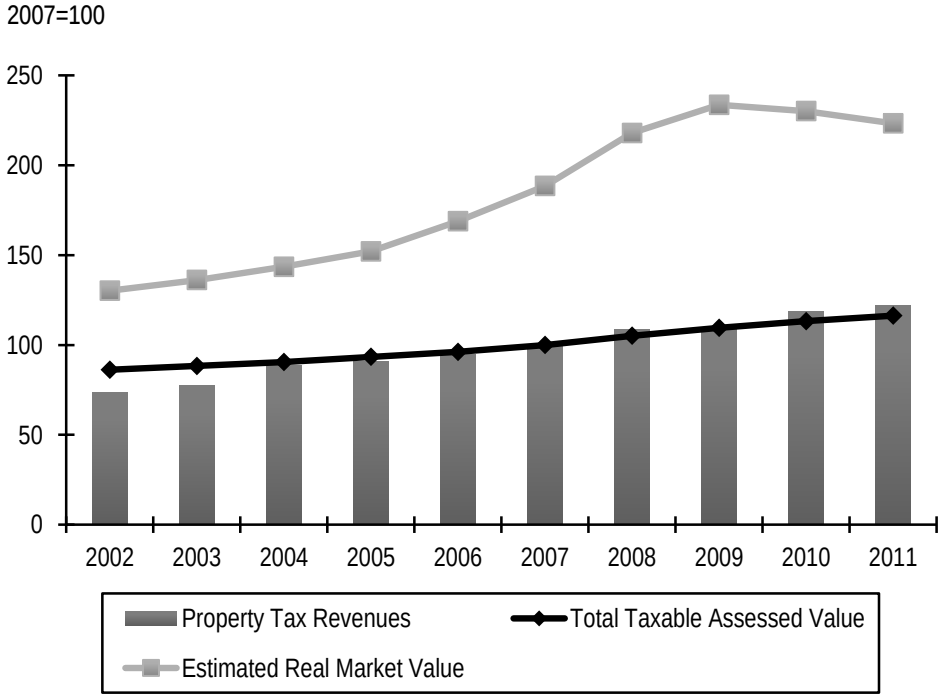
By legislation, TriMet can levy property taxes at 0.15 percent for capital, and up to 0.5 percent for operations and debt service (although the rate can be higher for repayment of bonds). Currently, property taxes are levied in an amount sufficient to pay the annual principal and interest on all voter-approved general obligation bonds. The rate typically is determined year by year, depending on outstanding bond obligations; therefore, the variability in property tax revenues is unrelated to economic conditions.

It should be noted, however, that property tax revenues in the Portland region were not impacted by the economy. Revenues generated from property taxes in the City of Portland have increased contrary to the experience in other regions of

[5] Proposition 13 was passed by the California voters in 1978 amending the California Constitution to limit the assessment and taxation of property in California. Except in certain instances, real property is assessed at its 1975-1976 base year level and cannot be increased by more than two percent annually. Real property is reassessed, however, at its current fair market value at the time a change in ownership occurs, establishing a new base year. Proposition 13 also limits the amount of taxes that can be charged to an owner of locally assessed property to one percent of the property's taxable value, plus any voter approved bonded indebtedness, service fees, improvements bonds, and special assessments.

the country, because properties in Oregon are assessed at a much lower value than the real market value (RMV). The Maximum Assessed Value (MAV) was set in 1997 for all existing properties at 90 percent of the RMV in 1995. The MAV can only increase up to 3 percent each year by legislation, regardless of changes in the RMV. Property taxes are levied based on the lower of the two values. Historical data show the MAV has remained below the RMV. Therefore, even though the RMV has declined, property taxes are levied on the MAV (which continued to increase and is more stable) as long as the RMV remains higher (see Figure 3.2). This effectively removed the uncertainty from the real estate market and home values in the Portland region.

Figure 3.2 Total Taxable Assess Values, Real Market Values and Property Tax Revenues, City of Portland



Source: CAFR for the City of Portland, Oregon.

Greater Lafayette Public Transportation

Local property taxes levied in Lafayette and West Lafayette generate about a third of the revenues for the transit agency, at over $3 million. The tax rate is 1 percent of the assessed value for single-family residential property, 2 percent for multifamily residential, and 3 percent for other uses (such as commercial or farm). Any changes to the property tax must be approved by the Board of Directors for CityBus, and does not require voter approval.

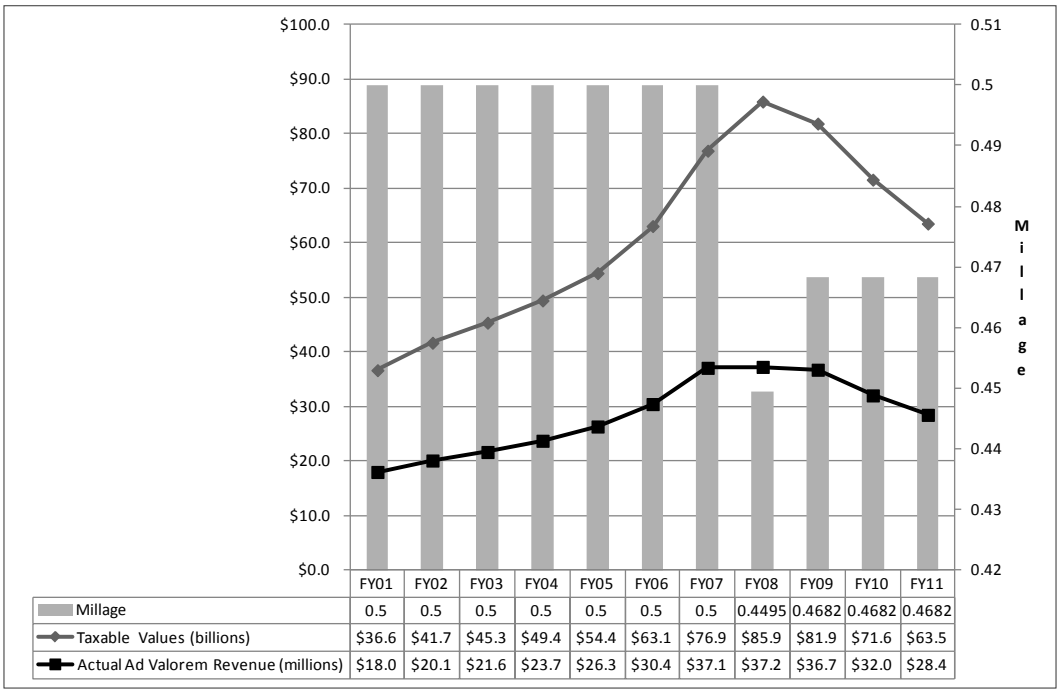
Property tax revenues are allocated through the annual appropriations process. Funds allocated to the transit agency increased over the 2007-2010 period, although it is unclear from the data whether allocations were determined based on the agency's budgetary needs.

Hillsborough Area Regional Transit Authority (HART)

HART is authorized to levy an ad valorem tax of up to one-half mill ($0.50 per $1,000 of assessed value) on real and tangible personal property within the jurisdiction of its members (i.e., City of Tampa, City of Temple Terrace, and unincorporated Hillsborough County) without voter approval. The tax rate could be increased up to three mills through public referendum, although this option has not been exercised by the transit agency to date.

HART's ad valorem taxes are based on assessed values at January 1, and are levied on November 1 of each year. Therefore, there is a one-year lag between when property values are assessed and when taxes are collected. Data on property tax revenues show that revenues remained relatively flat in 2008, due to a reduction in the millage rate from 0.5 mills to 0.4495 mills in 2008, just as taxable values reached a peak. Taxable values declined in 2009, as a result of the housing crisis, and even though the millage rate was raised to 0.4682, property tax revenues declined in 2009 – a trend that has continued through 2011. (See Figure 3.3).

Figure 3.3 Property Taxable Values, and HART's Dedicate Millage Rate and Ad Valorem Revenues



	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Millage	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4495	0.4682	0.4682	0.4682
Taxable Values (billions)	$36.6	$41.7	$45.3	$49.4	$54.4	$63.1	$76.9	$85.9	$81.9	$71.6	$63.5
Actual Ad Valorem Revenue (millions)	$18.0	$20.1	$21.6	$23.7	$26.3	$30.4	$37.1	$37.2	$36.7	$32.0	$28.4

Source: HART Fiscal Year 2012 Budget Reference Guide.

Property tax revenues were normalized to observe actual yield trends. Had HART maintained the property tax rate at 0.5 mills, property tax revenues could have increased by almost 12 percent in 2008.

HART ad valorem tax revenues were also evaluated to assess the impact of the 2001 recession. Revenues increased during and over the years following the recession. Similar to BART, there was no impact on property taxes by the previous recession.

Revenues from the ad valorem tax went from about two-thirds of the operating revenue to less than half in the 2006-2011 period. HART's future financial health depends on the real estate market to improve. Recent state estimates indicate it could take up to three years for property values to increase again, delaying the recovery by several more years, considering the lag in property tax collections.

Kalamazoo Metro Transit

The State Constitution of Michigan (Article 8, Section 8, revised and adopted in 1964) reserves exclusively to the state the authority to levy general sales and use taxes ("consumption" taxes). As a result, local and regional sales taxes that are widely used across the country as a source of funding for public transportation are generally not available to local governments or transit agencies in Michigan.

In the mid-1990s, the state sales tax was raised for the first and only time to date, from 4 percent to 6 percent. The additional two cents was used to add support for K-12 education statewide, and in the process relieved school district funding disparities and provided property tax relief. This additional sales tax revenue also helped ease some of the competition for property tax revenues among other services, including transit.

Today, local governments are authorized to levy local income and/or property taxes to support local services. Most transit agencies, including Kalamazoo Metro Transit, levy dedicated property taxes to support transit services. In the Kalamazoo region, property taxes are renewed every three years. Currently, Kalamazoo Metro Transit receives property tax revenues from:

- **Countywide millage rate of 0.4 –** Approved in 2009 to provide demand response services and some bus routes outside the City of Kalamazoo boundaries.
- **Citywide millage rate of 0.6 –** Approved in 2009 to provide fixed-bus routes within the city.

Data on property values in the City and County of Kalamazoo show a drop in the total assessed value of taxable property beginning in 2009 and further declining in 2010. Property taxable values are based on 50 percent of the market value, and annual growth is limited to 5 percent or the Consumer Price Index (CPI), whichever is lower. In general, property tax revenues declined in 2010, according to data from the City and County financial reports.

Actual revenues from property taxes dedicated to transit declined from 2008 through 2010. Staff interviewed, however, indicated that the transit agency remained stable during the recessionary period mainly because of the variety of revenue sources, which includes Federal and state funding. Kalamazoo Metro Transit receives significant operating assistance from the State of Michigan Comprehensive Transportation Fund.

Ohio Valley Regional Transit Authority (OVRTA)

Property taxes are the main source of revenue for OVRTA, accounting for more than 60 percent of local funds, and over 30 percent of the total funding (including state and Federal funding). OVRTA's property tax levies must be voted for renewal every three years, and require a super majority vote.

The West Virginia Constitution specifies that the assessed value of property is 60 percent of its fair market value. All property is reappraised once every three years and annual adjustments are made to the assessments for those properties for which a change in value is determined.

The current tax rate on the excess levy imposed in the municipalities served by OVRTA is 12.5 cents per $100 of assessed value for residential and 25 cents per $100 of assessed value for commercial properties.

Unlike other parts of the country where property tax revenues were severely affected during the housing crisis, the Ohio Valley region was not severely affected. Property tax allocations to OVRTA from the city of Wheeling show funding increasing through 2009, declining by 6.8 percent in 2010.

Motor Fuel Taxes

Of the 20 transit agencies interviewed, two receive motor fuel tax revenues – the Potomac & Rappahannock Transportation Commission (PRTC in Virginia) and RoadRUNNER (Las Cruces, New Mexico), covering a midsize and small/rural transit agency, respectively (see Table 3.6). Of the large transit agencies, NYMTA receives revenues from dedicated motor fuel taxes (four cents per gallon of gasoline and eight cents per gallon of diesel) and Petroleum Business Tax revenues through the Mass Transit Trust Fund and the Mass Transit Operating Assistance, but these taxes are dedicated at the state level and, therefore, not included in this analysis.

Motor fuel taxes are commonly levied by states for transportation and with the exception of states with Constitutional or statutory restrictions, most of the state funding for transit comes from fuel tax revenues. At the local/regional level, motor fuel taxes are generally dedicated to roadways, although some local governments can dedicate local option fuel taxes to transit (e.g., Florida).

Table 3.6 Motor Fuel Tax Characteristics by Transit Agency

Transit Agency	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
PRTC	2.1%	Medium	Y	Operations	Decline
RoadRUNNER	2 cents per gallon	Low	N	Operations	Uncertain

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

As shown in Table 3.6, the basis for levying motor fuel taxes differs for both transit agencies. PRTC levies are based on fuel price (2 percent through half of FY 2010, retailer-based; changed to 2.1 percent, distributor-based, for second half of FY 2010), and fluctuations are directly correlated to the price of fuel. At higher fuel prices, more revenues are generated. In 2008, the average price of fuel increased by 17 percent ($3.35 per gallon),[6] and then declined by 27 percent in 2009 ($2.44 per gallon). PRTC's fuel tax revenues increased by 14 percent in 2008, and declined by 17 percent in 2009 (see Table 3.7). As fuel prices have continued to increase, PRTC fuel tax revenues have also increased. The revenue growth trend tracks closely to fuel prices, as shown in Figure 3.4.

Table 3.7 Gasoline Taxes – Years of Revenue Decline[1]

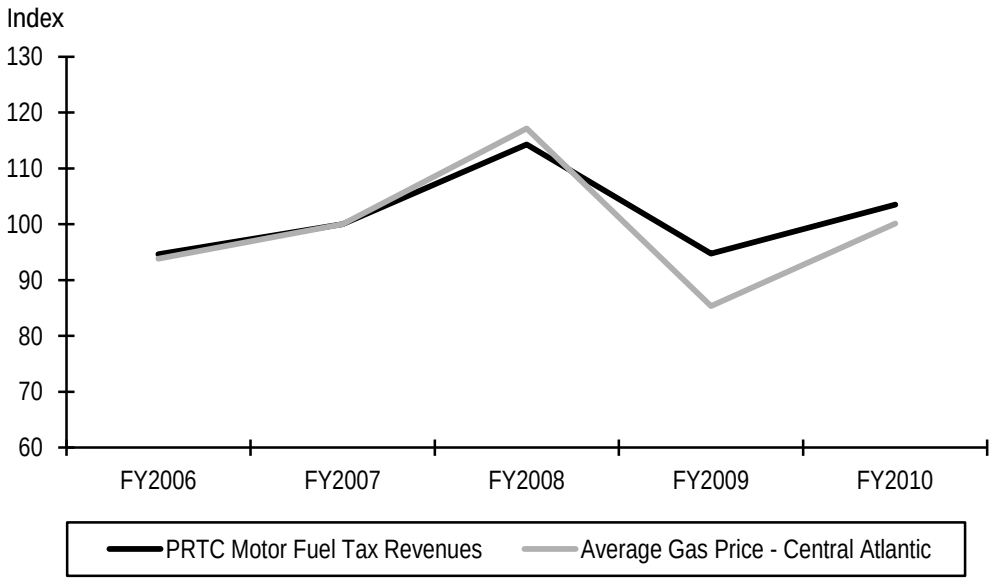
Transit Agency	2007	2008	2009	2010	2011
PRTC			X		
			-17.1%		
RoadRUNNER	X		X		

Source: Cambridge Systematics analysis of motor fuel tax data by transit agency.

Note: Years when revenues declined are represented by "X"; the percentage rates shown represent the highest annual decline.

[6] Energy Information Administration (EIA), average annual fuel price, Central Atlantic region.

Figure 3.4 Motor Fuel Tax Revenue and Gasoline Price Trends for PRTC (Indexed 2007 = 100)



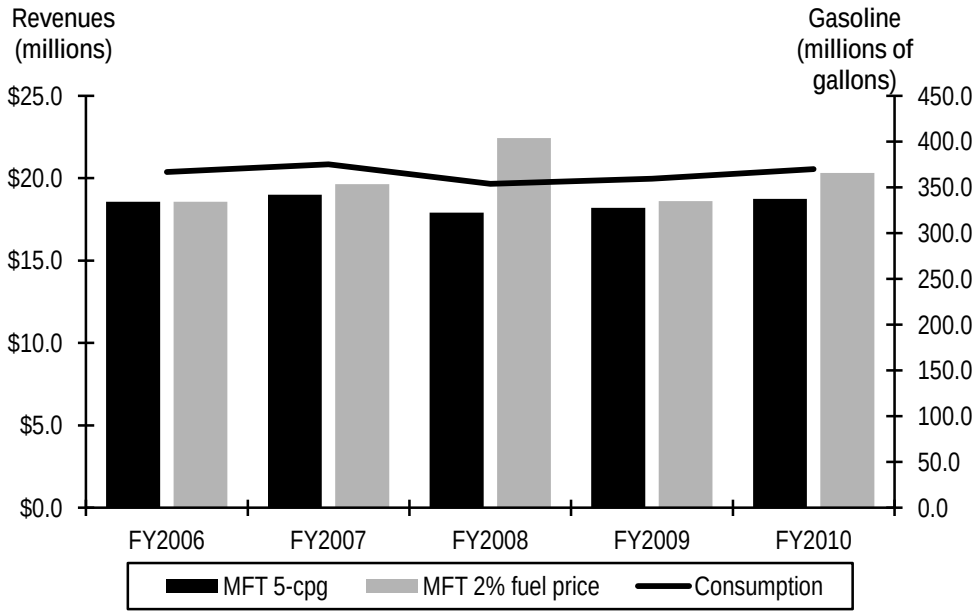
Source: Comprehensive Financial Plans and U.S. Energy Information Administration.

In contrast, RoadRUNNER levies rely on consumption. However, local gas tax revenues are not dedicated to transit. Revenues are collected by the city, and after debt obligations are met, the remaining gas tax levies are then transferred to RoadRUNNER Transit. Therefore, fluctuations in gas tax revenues do not necessarily track any trends associated with actual collections and the region's economic status. Local gas tax revenues reported to the NTD have fluctuated between $1,045,000 in 2008 to $180,000 in 2009. The local gas tax revenues combined with general fund appropriations are the main local funding sources for transit in Las Cruces. In combination, revenues from gas taxes and general fund appropriations have been generally stable.

Figure 3.5 illustrates a comparison of the revenue potential of motor fuel taxes based on price versus consumption, using PRTC data and assuming a hypothetical excise tax in cents per gallon (cpg). Using 2006 data, it was estimated that an excise tax of about 5.1 cpg would generate approximately the same revenue as the 2 percent tax on gasoline's retail price. With significant increases in fuel prices, tax revenues could decline with less travel/reduced demand if the tax is an excise tax (in cents per gallon). On the other hand, gas tax revenues could increase if the tax is based on fuel price rather than a per gallon rate, as experienced by PRTC. An estimate of the total gallons of gasoline taxed over the analysis period shows that consumption declined in 2008 as fuel price increased. Yet although demand for fuel declined, tax revenues increased given the significant increase in the price of gasoline, which offset potential revenue losses due to reduced consumption, as illustrated in Figure 3.5. In FY 2008, estimated fuel tax revenues from the 5.1-cpg excise tax were about

$4.5 million lower compared to the 2 percent motor fuel tax revenues, as fuel price increased by $0.55 to $3.17 per gallon (average). In FY 2009, fuel prices dropped close to FY 2006 prices, resulting in a decline in motor fuel tax revenues from the 2 percent tax. Over the five-year period, revenues from the motor fuel excise tax (5.1-cpg) remained relatively stable, compared to the tax on fuel price, which fluctuated significantly with the volatility of fuel prices over that period. At 2 percent of the retail price, however, the PRTC motor fuel tax generated an additional $7 million, compared to the 5-cpg tax. Over the long term, the impacts of high fuel prices are reflected in a higher fuel efficient and alternative fuel vehicle mix, that continues to erode the revenue potential of fuel taxes as a result of lower consumption.

Figure 3.5 Motor Fuel Tax Revenues – Sales Tax versus Excise Tax



Vehicle Fees

For simplicity, vehicle-related taxes and fees dedicated to transit are combined in this section. Because they are not in widespread use for transit, the trends described can only be associated with the region where these taxes and fees are collected and should not be assumed to represent national trends. Table 3.8 summarizes the trends for these vehicle-related taxes and fees.

Vehicle-related taxes and fees include:

- **Vehicle Registration fees:** Triangle Transit, NYMTA;
- **Car Rental taxes:** Triangle Transit, NYMTA;
- **Tolls:** BART, NYMTA; and
- **Taxi fee:** NYMTA.

Table 3.8 Vehicle-Related Taxes and Fees Characteristics by Transit Agency

Transit Agency	Type of Tax/Fee	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
NYMTA	Vehicle Registration	$25/year	Low	Y	Both	N/A[b]
	License Registration	$1/six-month interval	Low	Y	Both	N/A[b]
	Car Rental Tax	5%	Low	Y	Both	N/A[b]
	Tolls	N/A	Medium	Y	Both	N/A[c]
	Taxi fees	$0.50/per ride	Low	Y	Both	N/A[b]
Triangle Transit	Vehicle Registration	$5	Medium	Y	Both	Stable
	Car Rental Tax	5%	Medium	Y	Both	Decline
BART	Tolls	$1.00	Medium	Y	Capital	Stable

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

[b] Enacted in 2009 as part of fees dedicated to the MTA Aid Trust.

[c] NYMTA receives excess revenues from Bridges and Tunnels toll revenues for transit; impact could not be determined with data available.

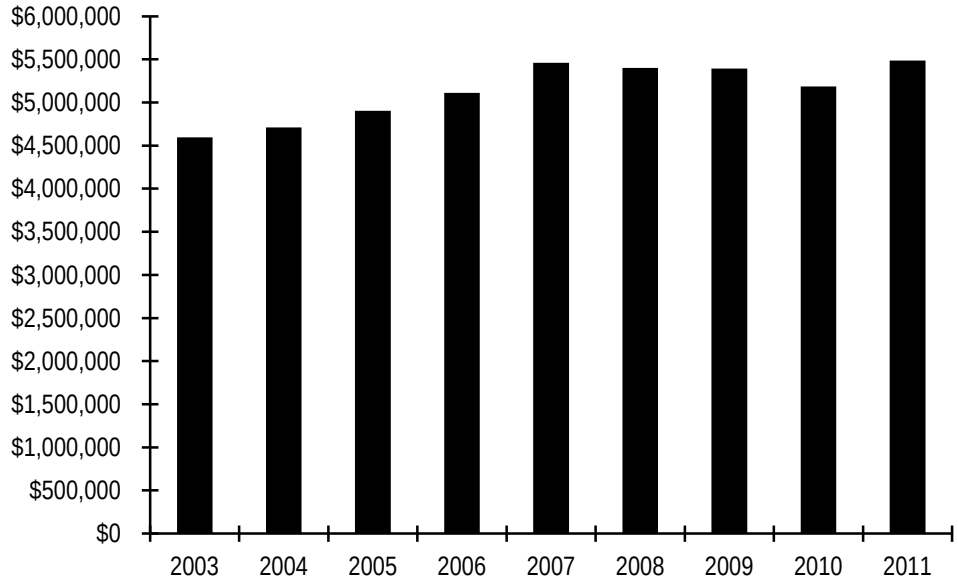
For transit agencies using some type of vehicle fee, these revenues are generally part of an agency's broader funding portfolio, typically providing only a small proportion of the total local funding. Triangle Transit is an exception, relying primarily on vehicle fees at the local level to support operating and capital spending.

Collection of vehicle registration and license fees, car rental taxes and taxi fees dedicated to the MTA Aid Trust Fund did not begin until 2009. For the purpose of assessing the recession's impact, these vehicle-related taxes and fees are not included in the analysis.

Vehicle Registration Fees

Triangle Transit receives revenues from a $5 registration fee per vehicle collected in the counties of Durham, Wake, and Orange. In 2011, vehicle registration levies were estimated at $5.5 million. Data show that revenues declined in 2008 through 2010, with recovery starting in 2011 (see Figure 3.6). The revenue loss was not significant, however, and remained relatively stable compared to other sources. For example, in 2010, vehicle registration revenues declined by less than $210,000, accounting for only a 3.9 percent revenue loss.

Figure 3.6 Triangle Transit Revenues from Vehicle Registration Fees



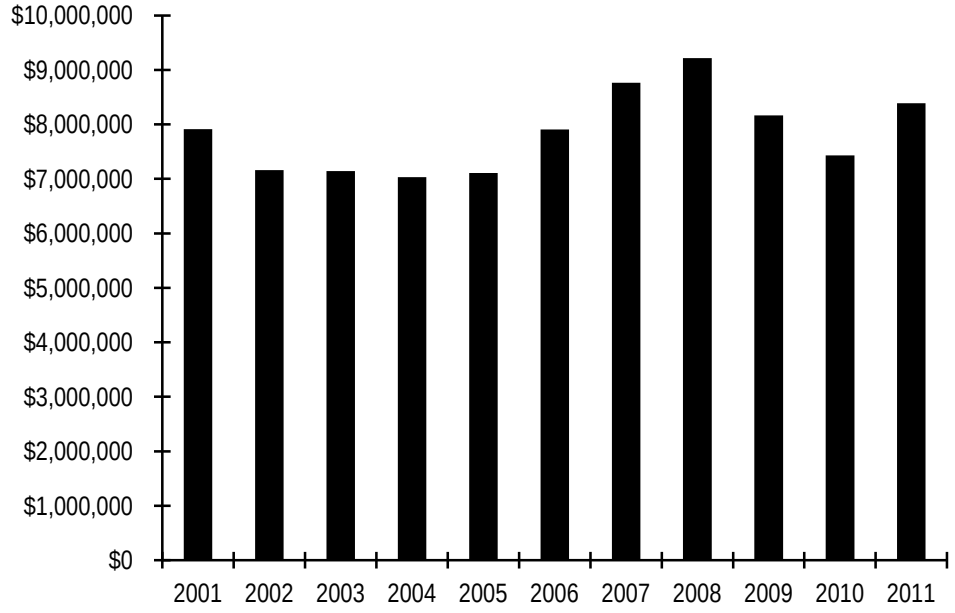
Source: Triangle Transit.

Car Rental Taxes

Triangle Transit receives dedicated revenues from a 5 percent vehicle rental tax applied to gross receipts from short-term rentals within Durham, Orange and Wake counties. One of the factors affecting vehicle rental tax revenues in the Triangle Transit region is passenger volume at the Raleigh-Durham International (RDU) Airport.

Figure 3.7 shows Triangle Transit car rental revenues over the last decade. Data show that revenues declined in 2009 and 2010, with recovery starting in 2011. During the previous recession, revenues declined between 2001 and 2004, and recovery began in 2005. In addition to the recession, the impact of the terrorist attacks of September 11, 2001 on air travel and the bankruptcy of Midwest Airlines (which had its hub at the RDU airport) impacted travel into the Raleigh-Durham region, which in turn affected car rental revenues in this earlier period. Since then, JetBlue, Southwest, and Delta have expanded service in RDU, bringing passenger volumes to a peak in 2007. However, the 2008 recession again affected travel into the Raleigh-Durham region resulting in car rental tax revenues declining in 2009 and 2010. Car rental revenues began increasing again in 2011.

Figure 3.7 Triangle Transit Revenues from Car Rental Tax



Source: Triangle Transit.

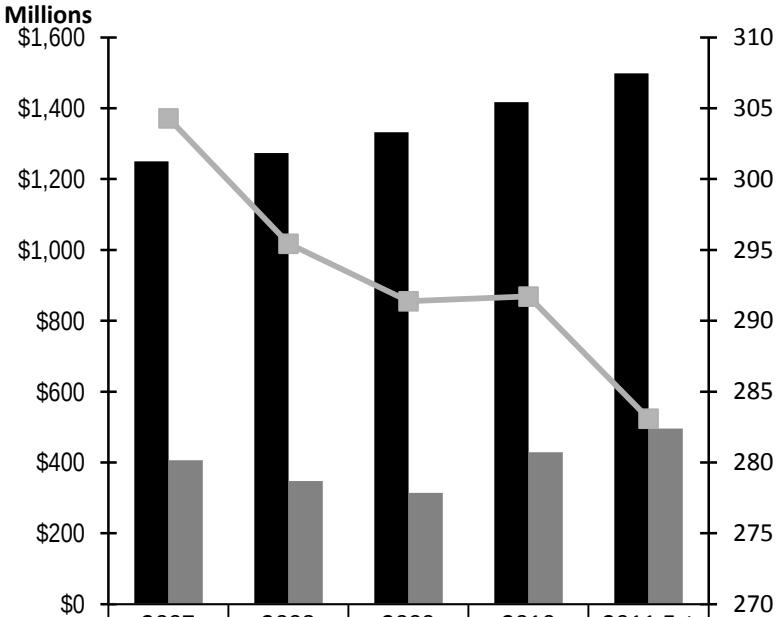
Tolls

Tolls are direct user fees paid by drivers for travel on a highway, tunnel, or bridge. Typically, the use of toll revenues is restricted to pay debt issued to support

construction or other capital investments, and operations and maintenance associated with the facility where the tolls are collected. In some regions, however, surplus toll revenues can be used to support other highway investments or programs, with a few toll authorities providing funding for transit. Of the transit agencies interviewed, only NYMTA and BART receive toll revenues.

NYMTA receives transfers from toll operating surpluses from the Bridges and Tunnels division to fund public transportation services and/or to finance capital projects. Toll rates have increased five times over the last decade (2003, 2005, 2008, 2009, and 2011). While overall toll revenues have increased since 2007, revenues available to MTA from the operating surplus have varied, mainly as a result of toll rate increases, although toll transactions have declined over the same period (see Figure 3.8). Traffic data show transactions declining after 2007, which can be the result of several factors, such as toll rate increases, gas prices, mode shift to transit, and recession impact.

Figure 3.8 NYMTA Tunnels and Bridges Traffic, Toll Revenue, and Operating Surplus (Millions)



	2007	2008	2009	2010	2011 Est
B & T Toll Revenue	$1,251	$1,274	$1,332	$1,417	$1,499
B&T Operating Surplus	$406	$347	$314	$429	$496
B & T Toll Traffic	304	295	291	292	283

Source: NY MTA Annual Disclosure, Appendix A, April 2011, Monthly NYMTA Ridership, 2007-2010 provided by NYMTA Staff, and 2011 Estimates from NYMTA 2012 Adopted Budget.

Similarly, BART receives toll revenues as a local match for Federal formula grants and for capital expansion projects. In this case, annual funding from tolls

are not directly tied to economic conditions, but to capital spending and to specific project commitments and matching needs.

General (Non-dedicated) Revenues

Many transit agencies, large and small, receive funding that is allocated through the annual appropriations/budget process from regional and local governments. But for some transit agencies, these local/regional funding allocations are the main source of funding; these agencies lack a dedicated tax to support their operating and capital needs.

General (non-dedicated) revenues were classified under three major categories:

- General fund allocations (as part of local government annual budgeting/ appropriation process):
  - Greater Hartford Transit District;[7]
  - RoadRUNNER Transit (Las Cruces, New Mexico); and
  - Metro Transit (Madison, Wisconsin).
- Local Assistance (transit agencies with other dedicated revenues):
  - HART;
  - NYMTA;
  - Triangle Transit; and
  - Park City Transit.
- Local funding/cost allocation agreements (transit agencies without dedicated revenue):
  - Hampton Roads Transit (by service level); and
  - WMATA (by formula).

Table 3.9 summarizes the trends and characteristics of these non-dedicated sources.

[7] GHTD is currently funded with Federal and State funds only, and have not received general fund allocations since the end of its Dial-A-Ride contract with the City of Hartford, which expired in February 2011. The information presented here regarding general fund allocation is based on historical data from 2006 through 2011.

Table 3.9 Local/Regional Non-Dedicated Funding (General Fund and Local Agreement Allocations) Characteristics by Transit Agency

Transit Agency	Type of Tax/ Fee	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
Greater Hartford Transit District	General Fund[b]	Variable; based on service	Low	N	Operations	Stable
RoadRUNNER (Las Cruces, New Mexico)	General Fund	N/A	High	N	Operations	Stable
Metro Transit (Madison, Wisconsin)	Property Tax/ General Fund	N/A	High	N	Both	Stable
HART	Local Contributions	N/A	Low	N	Both	Stable
NYMTA	Local Subsidies	N/A	Medium	N	Operations	Stable/Increase
Triangle Transit	Local Grant for TDM Program	N/A	Low	N	Operations	Decline
Park City Transit	Regional Transit Revenues (County Contribution)	N/A	High	N	Both	Stable
Hampton Roads Transit (HRT)	Local Contributions	Variable, based on service levels	Medium	N	Both	Increase
WMATA	State/Local Contributions	Subsidy Allocation Equations	High	N	Both	Increase

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

[b] Until February 2011.

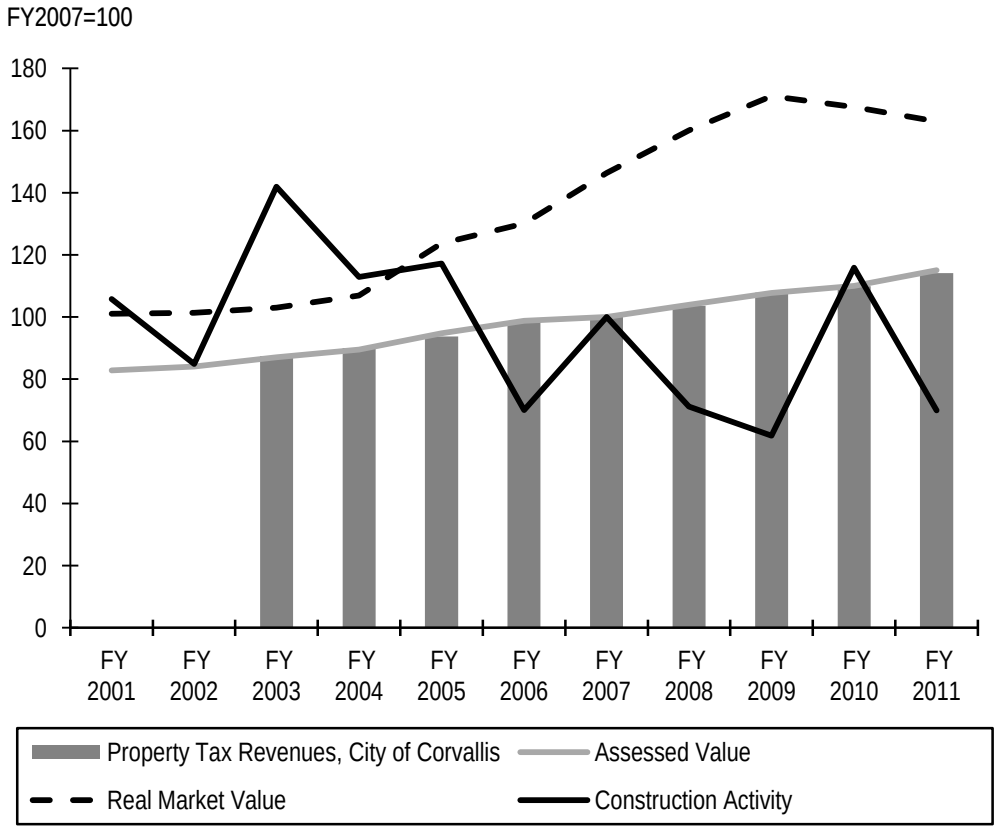
General Fund Allocations

General fund allocations refer to funding provided to transit providers that are a function of the local government, as other public services (e.g., schools, fire, police). Therefore, their local funding is subject to the annual budgeting and appropriation process of the locality they serve. Las Cruces' RoadRUNNER Transit and Madison's Metro Transit receive funding from general fund allocations.

- **The Greater Hartford Transit District (GHTD)** is mainly funded by Federal and state funds. GHTD, however, received general fund allocations from the City of Hartford to support Dial-A-Ride contracted services through February 2011, at which time the contract expired. At the time, general fund allocations were based on level of service provided, and there is no correlation between the level of funding and the state of the economy.
- Similarly, the **RoadRUNNER** receives local funding through annual appropriations. Revenues have fluctuated over time, presumably with operating needs. According to transit agency staff, this funding source has been stable over the recessionary period. Funding allocation from the general fund of Las Cruces increased significantly in 2009, in what appears to be a response to lower transfers from local gas tax revenues.
- **Madison Metro Transit** receives general fund (property tax) revenue allocations through the Madison city budget. This revenue source is considered stable by agency staff. These property tax revenue allocations account for approximately one-third of total transit agency revenues (including Federal and state funds). Revenue allocations from this source depend on the size of the transit agency's funding gap. Madison Metro Transit's budget is set in November of each year, when the amount of funding it will receive from the city is determined. Because Madison Metro is a department within city government, the city of Madison is ultimately responsible for any budget shortfalls the transit agency faces. Transit agency officials observed that property values have declined in the area, but not much compared to other places around the State of Wisconsin and around the country. As a result, they see an advantage to using general fund revenues (based on property taxes), since they are not affected in the same way as sales taxes. Overall, this funding source has been stable throughout the recession, rising to make up for deficits and falling as other revenues (e.g., farebox revenues) increase.
- Before its transition to utility fees in 2011, the **City of Corvallis** provided local funding to the transit system through general fund (property tax) allocations; therefore, transit services competed with other public services for funding. The recession impacted the local housing market and residential construction activity, but, as discussed under the *Property Tax* subsection, Oregon's legislation limiting the growth of taxable property values and the

establishment of the maximum assessed value (MAV) has helped keep property tax revenues relatively stable, as shown in Figure 3.9.

Figure 3.9 City of Corvallis (Oregon), Property Tax Revenues and Real Estate Valuation Data



Source: Cambridge Systematics analysis of Comprehensive Annual Financial Reports and the Construction Activity summaries from the Corvallis Development Services Division.

Local Assistance (Transit Agencies with Other Dedicated Revenues)

Some transit agencies with dedicated revenue sources also receive local assistance that is subject to the annual budget and appropriations process. However, these general fund allocations represent only a small portion of their local funding, in comparison to dedicated sources.

- **HART** receives operating and capital assistance from three funding partners:
  - The city of Tampa provides funding to subsidize operations of the Downtown Evening Connector service (two bus routes);
  - Hillsborough County provides matching funds for state capital grants, and provides matching funds for state operating funds; and
  - The Tampa Port Authority provides funding for streetcar operations.

- **NYMTA** receives local operating assistance/subsidies from New York City and the counties within the MTA service area as match for state operating assistance. New York City also provides funding to subsidize city bus operations. Other local assistance includes local contributions for commuter system passenger stations. Overall, local subsidies have increased moderately since 2007.
- **Park City Transit** receives funding from Summit County to subsidize regional transit services. Funding allocations are determined by a cost allocation model that allocates total system cost across three cost categories: miles, hours, fixed costs.

Local Funding/Cost Allocation Agreements (Transit Agencies with No Dedicated Revenues)

Some transit agencies have formalized agreements and/or cost allocation formulas defining how much funding will be allocated every year and how the funding shares by funding partners are determined. These transit agencies generally do not have a dedicated funding source, and most of their revenues come from jurisdictions within the service area.

Both Hampton Roads Transit (HRT) and WMATA provide transit services across multijurisdictional regions. Instead of having a dedicated funding source levied in each of the jurisdictions they serve, the local funding model distributes operating and capital needs across the jurisdictions. The process by which the funding levels for each jurisdiction is determined is described below for both transit agencies.

Hampton Roads Transit

The cities and municipalities within HRT's service area provide funding to balance the budget after other revenues are considered (i.e., farebox revenues, and state and Federal assistance). The local shares are determined based on the level of service provided to each jurisdiction.

Every year, as part of the budget process, HRT proposes a public transportation services program (TSP) for the region describing the hours of service, estimated cost, estimated revenue, and estimated city share of the cost of service for each route. Each city reviews its portion of the TSP and recommends revisions where appropriate to ensure it can pay its share. Once each city has approved the cost allocation, it agrees to pay its portion of administrative, capital, and net operating costs of the approved TSP on a quarterly basis. With this agreement, each city determines the type, amount, and location of the transit services for which it provides funds within its borders. If there is a balance (or deficit) remaining at the end of the fiscal year, there is a "true up" process that reconciles for each city the difference. The municipalities can chose to apply any surplus towards the first payment of the next fiscal year or if there is a deficit, they will be invoiced for that amount. Any mid-year additions to the transportation service plan is not accounted in the allocation of Federal or state operating

assistance and therefore the municipalities will pick up the full operating cost of the additional service until the start of the following fiscal year.

Capital costs are prorated to each city on the basis of the percentage of total transportation services received (revenue hours). Capital investments for a single transportation service are locally funded by the participating cities receiving the service.

Operating costs are equitably allocated by city based only on the net cost of providing public transportation services. Each transit route service is analyzed separately to determine its operating costs and passenger revenues. Then, total costs on each route are allocated to each city based on the relative share of in-service hours or in-service miles operated by HRT in each city. Farebox revenues and state and Federal funds are applied to calculate the funding deficit to be subsidized by each municipality.

The cost allocation agreement has allowed HRT to endure the economic impact of the recession as each city determines how much service is to be provided in their area. However, if a city cannot afford a certain level of service, HRT has to implement service cuts to balance the budget. This also results in some jurisdictions having more frequent and extensive transit services than others.

Local contributions have increased during the most recent economic recession as the operating deficit has increased with declining revenues from fares, state, and Federal assistance. Municipal contributions went from 28 percent in 2007 to 33 percent in 2011 of the operations and maintenance expenses funding share.

WMATA

State and local jurisdiction contributions account for approximately 43 percent of WMATA's operating costs. The agency receives subsidy contributions from: Washington D.C., the State of Maryland (for service in Montgomery and Prince George counties); Arlington, Fairfax, and Loudoun counties (Virginia), and the cities of Alexandria, Fairfax and Falls Church in Virginia.

Each jurisdiction has representation in WMATA's Board of Directors. They are responsible, among other things, for approving WMATA's operating and capital budget. WMATA is required to annually adopt a balanced operating budget where operating revenues and subsidies equal expected operating expenses every fiscal year. In accordance with the "Metro's Compact,"[8] if there is an operating deficit after estimated revenues from all operating revenue sources are accounted for, the deficit is allocated to the jurisdictional funding partners using six different subsidy allocation formulas. These subsidy allocation formulas (regional bus, non-regional bus, rail maximum fare, rail base, paratransit and debt service) are based on weighted factors like population density, ridership,

[8] Metro's Compact is the interstate agreement signed in 1967 (as amended) that led to the creation of WMATA.

and service levels. During this process, the jurisdictions review the estimated contributions as stipulated by the allocation formula. Once the Board approves the budget, local jurisdictions pay their share of the operating subsidy according to the approved subsidy calculations.

Local subsidies have increased since 2008. There was a decline in 2008, due to a higher level of revenues from other sources (e.g., fares, parking, and other miscellaneous) that helped offset growth in operating expenses and subsidy requirements. Operating expenditures increased considerably in 2009, which required a higher level of subsidy, even with a large increase in fare revenues.

Agency Generated Revenues

In addition to farebox revenues, transit agencies generate funding from miscellaneous sources, such as advertising, parking fees, investment income, etc. The yield from these ancillary revenues is generally low, providing less than 5 percent of the total operating funding, although there are some exceptions. These revenues have remained generally stable during the past recession, and given the low yield, changes and revenue losses may not cause a significant impact, unless they account for a significant share of a transit agency's operating budget. Table 3.10 summarizes the findings associated with this type of transit agency-generated funding for some of the transit agencies interviewed.

Another type of transit agency-generated funding includes contractual agreements to provide transit service. Most of these contract services are with universities within the service area of the transit agencies interviewed, with a few exceptions. Contract services are also summarized in Table 3.10.

Table 3.10 Transit Agency Generated/Miscellaneous Funding Characteristics by Agency

Transit Agency	Type of Tax/Fee	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]	Comments
Large Agency							
BART	Parking Fees	Varies	Low	Y	Operations	Increase	
	Operating Agreements	Varies	Low	Y	Operations	Decline	Operating agreements for specific BART stations
Regional Transportation District (Denver, Colorado)	Advertising/Ancillary Revenues	N/A	Low	Y	Operations	Stable	
Portland TriMet	Advertising	N/A	Low	Y	Operations	Stable	
WMATA	Business Revenue/ Parking Fees	N/A	Low	Y	Operations	Business Rev – Decline; Parking Fees – Stable	
Midsize Agency							
Greater Lafayette Public Transportation (CityBus)	Service Contract	N/A	Medium	Y	Operations	Increase	Service contract with Purdue University and Ivy Tech State College. Negotiated annually. Purdue contract generates about 14% of CityBus revenues
HART	Advertising/Interest Income/Misc.	N/A	Low	Y	Operations	Stable	
	Endowment (naming rights)	N/A	Low	Y	Operations	N/A	The streetcar line receives Operating funding from an endowment created with levies from naming rights (system/vehicle/station/seats)
Hampton Roads Transit	Advertising	N/A	Low	Y	Operations	Decline	
Kalamazoo Metro Transit	Advertising	N/A	Low	Y	Operations	Stable	
	Service Contract	N/A	Low	Y	Operations	N/A	Three-year contract with Western Michigan University; started in 2010
Metro St. Louis	Service Agreement	N/A	Low	Y	Operations	Increase	Service agreements with St. Clair County (Illinois) and Madison County.

Transit Agency	Type of Tax/Fee	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]	Comments
Metro Transit (Madison, Wisconsin)	Advertising	N/A	Low	Y	Operations	Stable	
Potomac and Rappanahock Transit (Virginia)	Advertising	N/A	Low	Y	Operations	Stable	
Small/Rural Agency							
Corvallis Transit System (Oregon)	Advertising	N/A	Low	Y	Operations	Stable	
	Service Contract	N/A	Low	Y	Operations	Stable	Contract with Oregon State University
Northern Arizona Intergovernmental Public Transit	Advertising	N/A	Low	Y	Operations	Stable	
Park City Transit (Utah)	Advertising/Donations	N/A	Low	Y	Both	Stable	
Pullman Transit (Washington)	Service Contract	Fixed fee per student (WSU)	Low	Y	Operations	Stable	Service contract with Washington State University and local school
RoadRUNNER Transit (Las Cruces, New Mexico)	Advertising	N/A	Low	Y	Operations	Stable	
	Service Contract	Level of service	Low	Y	Operations	Stable	Service contract with the Town of Mesilla

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

3.2 COMMON BUSINESS, ACTIVITY AND RELATED FUNDING SOURCES

Employer/Payroll and Income Taxes

Of the 20 transit agencies interviewed, three (NYMTA, TriMet, and Greater Lafayette Public Transportation) receive local funding through payroll/income taxes. The payroll tax is generally imposed on the gross payroll paid for services performed within the transit district and is paid by the employer, whereas the income tax is imposed on employee earnings. Tax levies based on payroll/ income are expected to decline during a recessionary period, in relationship to an increase in unemployment and job losses. Table 3.11 summarizes the payroll/ income tax trends for the transit agencies interviewed for this project.

Table 3.11 Payroll/Income Tax Characteristics by Transit Agency

Transit Agency	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
NYMTA	0.34%	High	Y	Both	N/A[b]
TriMet					
Payroll Tax	0.6818% (2011)	High	Y	Both	Decline
Self Employment Tax	0.6818% (2011)	Low	Y	Both	Decline
Greater Lafayette Public Transportation	N/A	Low	N	Operations	Stable

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

[b] Collection of the Payroll Mobility Tax was initiated in 2009; therefore, there is not sufficient data to assess the impact of recession to this new funding source.

Of the three transit agencies, only data from TriMet can be used to assess the impact of the recession on local payroll/income taxes. Information on NYMTA and Greater Lafayette payroll/income taxes is also provided for informational purposes.

TriMet

The payroll tax and self-employment tax are the main sources of local funding for TriMet. Oregon is one of five states[9] that do not levy sales taxes; therefore, transit agencies must rely on revenue sources other than sales taxes at the local level.

[9] Alaska, Delaware, Montana, New Hampshire, and Oregon.

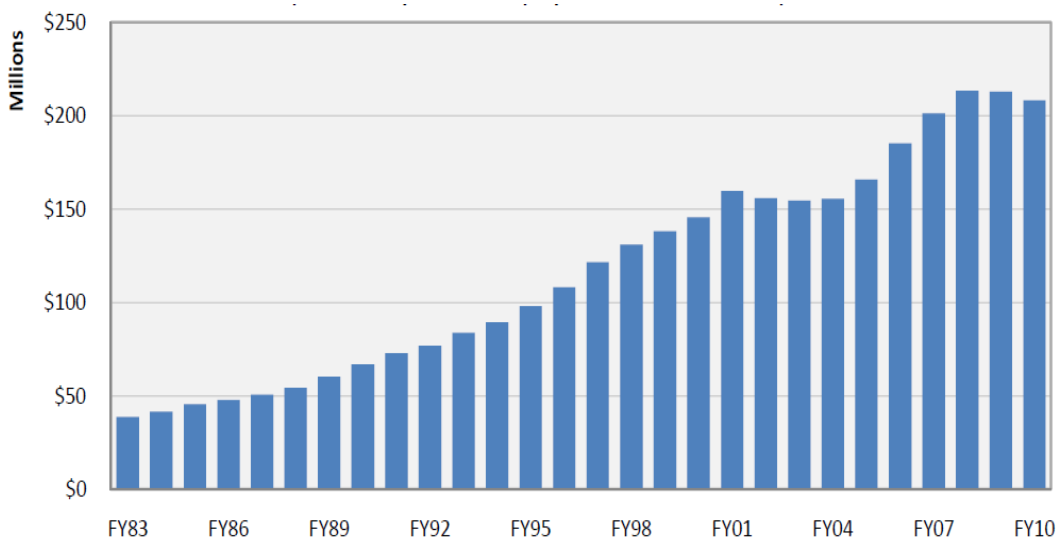
The payroll tax is imposed on employers with respect to wages earned within the TriMet service district. The self employment tax is imposed on self-employed individuals with respect to their net earnings generated within the TriMet service district. The state government pays in lieu tax payments to TriMet for jobs within the TriMet district.

In 2004, the TriMet Board of Directors adopted an increase in TriMet's employer payroll and self employment tax rate, to be phased over a 10-year period, increasing by 0.01 percent annually. By 2014, the payroll and self-employment tax will increase to 0.7018 percent ($7.018 per $1,000).

Based on actual revenues, payroll tax revenues decreased 2.4 percent in fiscal year 2009 and 1.0 percent in fiscal year 2010. However, because the payroll tax rate has increased every year, the decline has been larger than estimated, at least in absolute terms. Based on adjusted data, the decline in 2009 was estimated at 3.9 percent. In fiscal year 2011, payroll tax revenues reflected a recovering economy characterized by slow job growth, resulting in a revenue increase of 9.4 percent (7.8 percent adjusted), compared to fiscal year 2010.

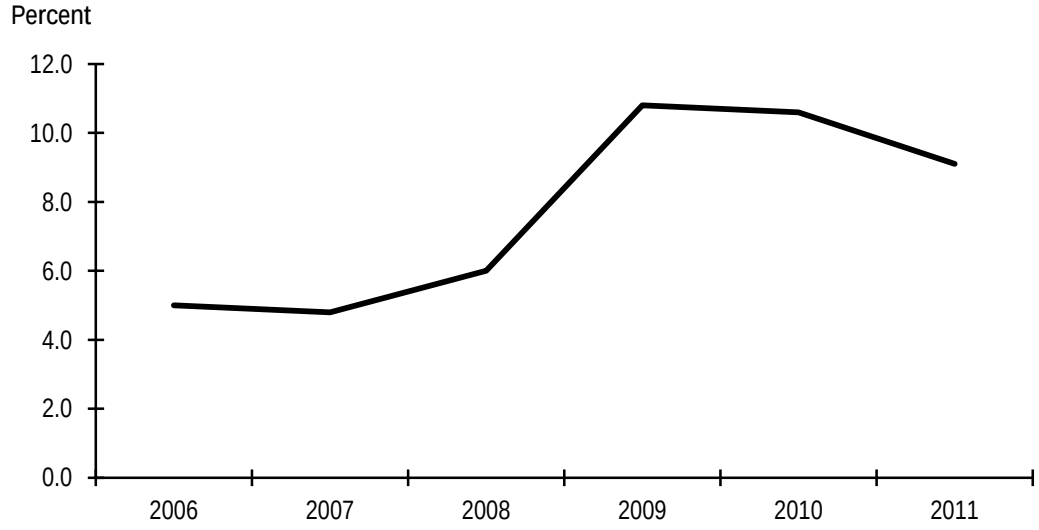
Figure 3.10 shows tax revenues since the 1980s. Payroll revenues have been affected during high unemployment periods, which align with economic recessions. During the past decade, TriMet saw payroll revenues decline in 2002, 2003, 2009, and 2010. The observed trend from TriMet indicates that payroll taxes declined for a two-year period after the recession, and the decline in revenues is in line with increasing unemployment rates (see Figure 3.11). Payroll revenues began declining in 2009, as unemployment rates reached the highest levels in recent history, as shown in Figure 3.11.

Figure 3.10 Total Payroll Tax Revenues for TriMet (including Payroll, Self-Employment, and State-in-Lieu)



Source: TriMet FY 2012 Adopted Budget.

Figure 3.11 Unemployment Rate
Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area



Source: Bureau of Labor Statistics.

NYMTA and Greater Lafayette Public Transportation

The **NYMTA** payroll mobility tax was enacted through state legislation in 2009, as part of several new revenue sources dedicated to transit that increased available funding for the agency. The tax is applied to the payroll expense of every employer engaging in business within the MCTD and the net self-employment earnings of individuals that are attributable to the MCTD.

In 2010, the first full year of collections of the tax, the payroll mobility tax (PMT) revenues totaled $1.4 billion. However, in December 2011, the Governor of New York made significant changes to the payroll mobility tax by eliminating or reducing the PMT for certain taxpayers, including public and private schools, small employers and self-employed with income below a legislated threshold ("December Act"). By reducing the tax base, the PMT yield for 2011 was reduced. The impact of the recession on this revenue source cannot be determined, given that collection began two years after the recession ended.

Greater Lafayette Public Transportation (known also as CityBus) receives a distributive share of the county's total collection of county option income tax (COIT). Data on COIT revenues for CityBus from public records were available starting in 2008 through 2011. These data show COIT revenues increasing through 2010. Revenues from COIT declined in 2011 by almost 15 percent. In comparison to employment loss and unemployment trends, with job losses in 2009 and 2010, as well as a high unemployment rate, it would appear that the impact to COIT revenues occurred at a lag.

Utility Taxes/Fees

Of the transit agencies interviewed, two small/rural transit agencies (Corvallis Transit and Pullman Transit) received local dedicated funding from utility taxes/ fees. Both transit agencies are located in the Northwest. Utility fees are widely used in Oregon for operations and maintenance expenditures and capital improvements of transportation infrastructure, including local roads and streets. Local governments in other states such as Florida, Texas, and Washington have enacted utility fees for transportation, but their use is not widespread.

Corvallis Transit System

In February 2011, the Corvallis Transit System began collecting revenues from a Transit Operations Fee, consisting of a monthly utility fee. The fee is indexed to the average price of a gallon of gas in the preceding year and adjusted each February. In 2012, is the fee was $3.73 per month for single family residences and $2.58 per unit per month for multifamily properties. This utility fee replaced general fund allocations and farebox revenues (i.e., the system became a fare free service). Given that it was enacted in 2011, there are no data available to assess any potential impacts as a result of the economic recession. Levies rely significantly on housing occupancy in the region where collected, which is fairly high due to the presence of Oregon State University within the service area.

Pullman Transit

Pullman Transit in Washington State levies a voter-approved 2 percent utility tax on natural gas, electricity, telephone, water, sewer, and garbage collection services within the city of Pullman. This tax brings in between $1.05 and $1.2 million annually. It has been very stable over time, without recession-based fluctuation. According to Pullman Transit staff, this is the only transit agency in Washington State using a utility tax; other transit agencies use local sales taxes to fund public transportation.

According to transit agency officials, utility revenues vary significantly, but are not affected much by the overall economy. Weather conditions are a chief cause of revenue fluctuation. For example, cold versus mild winters have impacts on the amount of natural gas used. Transit agency staff noted that revenues from the utility tax did not increase significantly prior to the recent recession, nor decline significantly during the recession. Overall, this funding source was reported to be stable.

Data from the National Rural Transit Assistance Program (RTAP) database show local funding from the utility tax for operations and capital spending increasing from over $621,000 in 2007 to $1.4 million in 2009. An analysis of the stability of this funding source during the recessionary period could not be conducted because local funding data combine utility tax revenues with other local funds. The FY 2012 Budget for the city of Pullman reported utility tax revenues at almost $1,089,000 in 2010, and budgeted a similar amount from utility taxes

dedicated to the Transit fund for 2011. Budget estimates for FY 2012 include $1,076,000 from utility fees.

Room/Occupancy Taxes

Park City Transit in Utah is the only system in the study sample that receives local funding from room occupancy taxes. Revenues come from two types of taxes: a resort tax and a nightly rental property fee. Table 3.12 summarizes the trends for these two taxes.

Table 3.12 Room/Occupancy Tax Characteristics – Park City, Utah

Source	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
Resort Tax	¼%	High	N[b]	Both	Decline
Nightly Rental Property Fee	Based on square footage of property	Low	Y	Both	Stable

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

[b] Pledged, but not statutorily dedicated to transit.

The economy of Park City is highly dependent on tourism activity, which also drives resort taxes and the nightly rental property fees. Park City saw a drop in visitors and in visitor spending in 2009, which led to a decline in room/ occupancy taxes.

The resort tax (0.25 percent) is pledged but not statutorily dedicated to transit. The City Council has allocated all revenues from this source to transit over the past few years. In 2009, however, a portion of this tax was diverted to the General Fund as a one-time recession strategy. Revenues from the resort tax allocated to transit declined from $1.7 million in 2007 and 2008, to about $900,000 in 2009, a revenue loss of almost 50 percent, including revenues diverted to the General Fund. Accounting for the General Fund transfer, the revenue loss in 2009 was around 18 percent. In 2010 and 2011, resort tax revenues began to grow again, and were reported at $1.5 million and almost $1.7 million, respectively. Although revenues are showing signs of recovery, the resort tax levies remain below 2007/2008 levels.

The second local revenue source is the Nightly Rental Property Fee, which is another type of room occupancy tax. The fee is paid by property owners each time they rent their properties, and is based on square footage. Revenues dedicated to transit declined in 2008, but then increased in 2009. Revenues again declined by 3 percent in 2011. Revenues from the rental property fee ranged between $139,000 (in 2008) and $224,000 (in 2010) over a five-year period. Overall, this funding source is relatively stable, in comparison to the share of

local funding for transit, but it is expected that variations will result from economic and other local conditions affecting visitation and tourism activity.

Hotel/room occupancy fees have also been dedicated to public transportation in Savannah, Georgia, to fund free public transportation services (express shuttle, ferry, and streetcar) connecting downtown Savannah with the International Trade and Convention Center across the river from downtown. These services are funded in part with a city-authorized 'Per Occupied Room Fee' (POR) of $1.00 per room per night ($1.75 for facilities on Hutchinson Island across the river from downtown) charged to visitors staying in the 29 hotels that have more than 25 rooms and located in the designated downtown Convention District. The room fee generated slightly more than $1.0 million in 2009.

Realty Transfer Taxes/Mortgage Recording Fees

Two of the largest transit agencies interviewed, CTA and NYMTA as well as Park City Transit from the small/rural agency sample, receive dedicated funding from taxes associated with real estate transactions, including mortgage recording fees and real estate transaction taxes (RETT). Table 3.13 summarizes the characteristics and trends for this type of tax.

Table 3.13 Realty Transfer Tax/Mortgage Recording Fees Characteristics by Transit Agency

Agency/Source	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
CTA Real Estate Transfer Tax (RETT)	$3/$1,000	Low	Y	Operations	Decline
NYMTA					
Urban Tax	–	Medium	Y	Both	Decline
MRT-1[b]	$0.30 per $100	Medium	Y	Both	Decline
MRT-2	0.25%	Medium	Y	Both	Decline
Park City RETT	0.25%	Low	Y	Capital	Decline

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

[b] MRT: Mortgage Recording Tax.

This type of funding source declined as a result of the recession, given the role of the housing crisis and how the real estate market has been severely impacted over the last few years.

For example, **CTA** receives funding from a RETT levied within the city of Chicago. This new dedicated revenue source was enacted by the state legislature in 2008. The first year of collection coincided with the time of the housing

market crisis. The original forecast of RETT revenues assumed this source would generate about $100 million annually; however, the RETT has yielded only $30 million annually. The volume of real estate sales in Cook County (which includes the city of Chicago) declined significantly from 2006 through 2009. There has been an increase in foreclosure sales, which means that the actual value of sales also has declined, further impacting the RETT yield. Data on RETT revenues show an increase in 2010, but revenues declined again in 2011.

NYMTA receives funding from three Mortgage Recording Taxes (MRT) and a RETT.

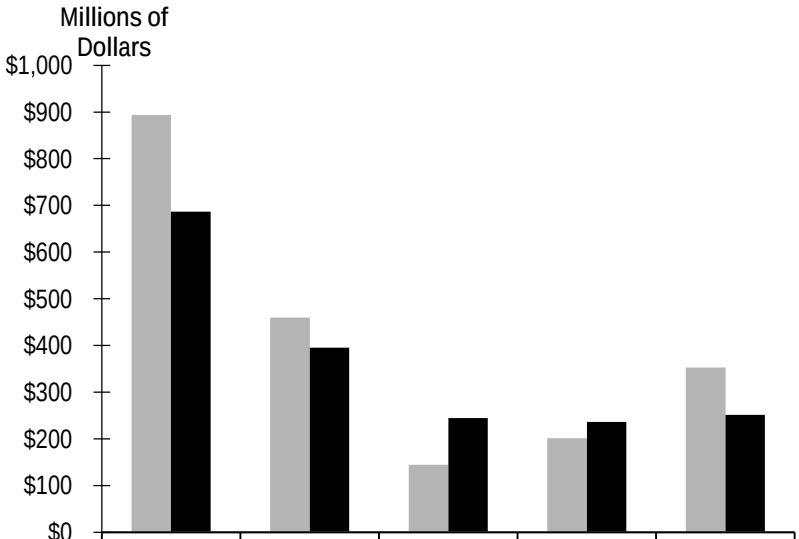
- MRT-1: $0.30 per $100 on recorded mortgages of real property collected by New York City and the seven counties within the MTA service area, paid by the borrower.
- MRT-2: 0.25 percent of certain mortgages secured by real estate improved or to be improved by structures containing one to nine dwelling units in the MTA's service area; the tax is imposed on institutional lenders.
- The Urban Tax consists of two taxes:
  - A MRT on mortgages over $500,000 on New York City commercial properties; and
  - A RETT imposed on New York City commercial properties valued over $500,000.

Revenues from the MRTs have been declining since 2006, and remained relatively flat from 2009 through 2011. Revenues from the Urban Tax have also declined significantly, although its decline began one year later compared to the MRT-1 and MRT-2. Revenues from the Urban Tax began increasing after 2009, but revenues still remain below 2007 levels.

Both MRT and Urban Tax revenues were significantly impacted during the housing crisis, and it was the most impacted funding source for NYMTA. From a combined $1.5 billion in 2007, revenues dropped to $389 million in 2009 (Figure 3.12).

Park City Transit receives a dedicated local contribution from a RETT used exclusively for capital projects. According to Park City Transit staff, this revenue source declined during the recession. Park City Transit revenues from the RETT were highly variable over the 2007-2011 period. RETT revenues reached a high of $610,000 in 2008, and then dropped the following year to $122,000.

Figure 3.12 NYMTA Real Estate-Related Tax Revenues



	2007	2008	2009	2010	2011 Est
Urban Tax	$893.7	$459.8	$144.7	$201.4	$353.0
Mortgage Recording Tax (MRT)	$686.9	$395.5	$244.6	$236.1	$251.1

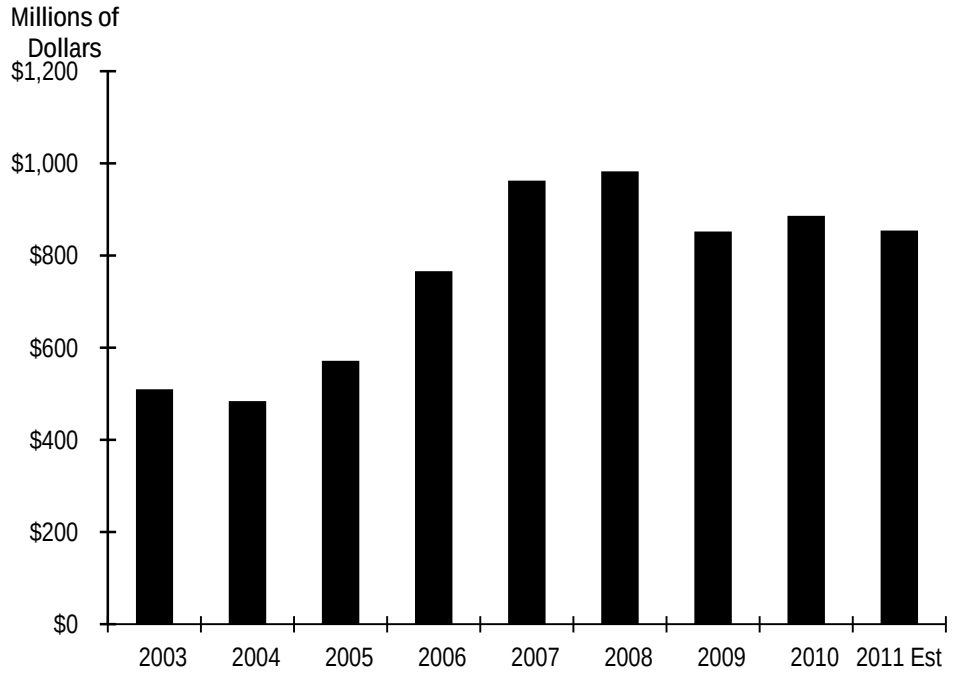
Source: Consolidated Subsidies 2003-2011, Accrual Basis, provided by NYMTA staff.

Business-Related Taxes

Of the transit agencies interviewed, NYMTA and Park City Transit receive funding from business-related taxes.

The Corporate Franchise Tax Surcharge is a 17 percent surcharge on the state franchise taxes imposed on certain companies within the **NYMTA** service district. This tax was originally imposed in 1982 as a temporary measure, but it has been amended several times by the state legislature to postpone its expiration, most recently in 2008, and is currently scheduled to expire in 2013. Revenues from this tax are deposited into the Mass Transit Operating Assistance (MTOA) fund. Revenues fluctuate with business cycles. Data show revenues increasing from 2003 through 2008. In 2009, revenues declined by 13 percent. Figure 3.13 shows revenues and trends since 2003.

Figure 3.13 NYMTA – Corporate Franchise Tax Surcharge



Source: Consolidated Subsidies 2003-2011, Accrual Basis, provided by NYMTA staff.

Park City Transit receives funding from a Business License Fee. This fee is calculated based on trip generation, so that businesses pay for their share of transportation impacts. This funding source has generated between $780k and $840k, and it has remained fairly stable in recent years.

3.3 REVENUE STREAMS FROM PROJECTS (VALUE CAPTURE)

Of the transit agencies interviewed, the Hillsborough Area Regional Transit Authority (HART) in Tampa, Florida receives funding from several value capture options, including impact fees, a special assessment district, and tax increment financing (TIF). In addition, WMATA in Washington, D.C. has a very active joint development program, partnering with developers to promote transit-oriented development in the vicinity of Metro stations. Table 3.14 summarizes the characteristics and trends of value capture funding for these two transit agencies.

Table 3.14 Value Capture Characteristics by Transit Agency

Agency/Source	Rate	Yield	Dedicated? (Y/N)	Operations, Capital or Both	Impact of Recession[a]
HART:					
Impact Fees	3%	Low	N	Capital	N/A[b]
Special Assessment District	0.33 mill	Medium	Y	Operations	Decline
Tax Increment Financing (TIF)	N/A	Low	N	Operations	N/A[c]
WMATA Joint Development	N/A	Low	Y	Operations	Decline

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

[b] No data available to determine impact.

[c] Funding provided as gap closing for streetcar service.

Impact fees and revenues from TIF are provided by the City of Tampa as capital and operating assistance, respectively. Revenues from impact fees provide matching funds for bus capital projects. TIF funding is provided by the City of Tampa's Community Redevelopment Area (CRA) to close the operating funding shortfall for Tampa's streetcar system. TIF funding has increased over the last few years (from $150,000 in 2008 to $450,000 in 2011) as dedicated funding for the streetcar operations has declined. No data were available to evaluate the trends on impact fees and TIF funding due to the recent economic recession.

A special assessment district, including downtown Tampa, the central business district (CBD), the Channel District, Ybor City, and Channelside[10] was created in 2000 to provide funding for the TECO Line Streetcar System. Properties within the district are taxed a one-third mill ($0.33 per $1,000 of value). HART operates the streetcar under contract to the Tampa Historic Car, Inc. (THS). Similar to the trends for dedicated property taxes for HART operations discussed earlier, special assessment revenues began declining in 2009, as a result of the housing bubble and a drop in property values. It should be noted that special assessment district revenues increased by almost 47 percent in 2008, which resulted from the inclusion of Channelside in the district, plus any growth in property values within the original district.

In the case of joint development, WMATA received about $8.1 million in revenue, which amounts to 1 percent of its operating revenues, and about 0.6 percent of its operating budget in 2009. Data from 2007 through 2011 were obtained from WMATA's FY 2012 budget. Joint development revenues have declined since 2007. Revenues from joint development increased in 2010, but dropped again in 2011.

[10] Added in 2008.

3.4 MITIGATING ACTIONS

During the interviews, transit agencies were asked to describe what actions they have taken to address any funding shortfall that occurred during the recession. Only two reported not being impacted by the recession: Greater Hartford Transit District (GHTD) and Park City Transit. GHTD relies mainly on Federal and state funding, and funding allocations to support GHTD needs were not impacted during the recessionary period. Park City Transit indicated that its varied funding portfolio allowed the agency to withstand the recession, and it maintains a healthy reserve to address any potential funding gap.

Table 3.15 summarizes transit agency actions in three major areas: service, budget/funding management, and administration. Cutting or reducing service and fare increases were the most common actions taken by transit agencies to address the funding issues, and were reported mainly by large and midsize transit agencies. It should be noted that the impact of service cuts as a result of the economic recession was evaluated under TCRP Project J-11/Task 15 *Impacts of Cuts and Reductions in Public Transportation Funding*. The information provided here was obtained from the transit agency interviews, and is not intended to present an assessment of the impacts of mitigating actions taken by agencies to address funding shortfalls during the recent recession.

Service

All large and most midsize transit agencies and four small transit agencies reported taking some type of service-related action to reduce costs, such as:

- **Limited/No Service Growth** – TriMet, Northern Arizona Intergovernmental Public Transportation Authority, and RoadRUNNER reported postponing planned service expansion due to the recession.
- **Service Reduction/Cuts** – Most large and midsize transit agencies implemented service reductions or cuts to address the funding gaps. For example, Metro St. Louis reduced approximately 14 percent of vehicle-revenue miles (based on NTD data). Bus service was reduced by 44 percent, MetroLink (light rail) service by 32 percent, and demand response services by 15 percent.[11] After passage of the sales tax, approximately 97 percent of the service was restored.
- **Operating Efficiencies** – Some transit agencies reported implementing cost cutting measures, such as locking in the price of fuel to provide stability to operating expenditures, shifting to more fuel-efficient fleet to reduce fuel cost, contracting out operations to the private sector, and making service plan adjustments (schedule, rerouting) to increase efficiency and improve performance.

[11] St. Louis Business Journal, *Commuters face Metro service cuts*, March 30, 2009, http://www.bizjournals.com/stlouis/stories/2009/03/30/daily2.html (last accessed April 24, 2012).

Table 3.15 Mitigating Actions

	Service			Budget/Funding Management						Administrative		
Transit Agency	Limited/ No Service Growth	Service Cuts/ Reductions	Operating Efficiencies	Reduced/ Delayed Capital Expending	Debt Management	Fare Increases	New/ Increase Funding	Flexing Capital Funding to Operations	Use of Funding Reserves	Layoff/ Hiring Freeze	Salary Freeze/ Reductions	Other Labor-Related Actions
Large Transit Agencies												
BART		x	x		x	x				x		x
CTA		x						x		x	x	x
NYMTA		x	x			x						x
RTD		x		x		x			x	x	x	x
TriMet	x	x		x					x	x	x	
WMATA			x	x		x				x	x	x
Midsize Transit Agencies												
GLPT		x										
HART		x				x	x	x		x		
HRT		x	x					x				
KMT			x			x						
MSL		x				x	x	x		x	x	
MTW			x								x	x
PRTC		x				x		x		x		
TTA			x									
Small/Rural Transit Agencies												
CTS	x											
GHTD												
NAIPTA	x					x						
OVRTA			x					x				
PCT												
PTW											x	
RRT	x					x						

Budget/Funding Management

Budget and funding management actions in response to the recession included:

- **Fare increases –** Passenger fares are an important source of revenue for transit agencies. Table 3.16 summarizes farebox revenue information and trends from the transit agencies interviewed for this project. Most large and midsize transit agencies implemented fare increases during the recession to reduce the budget gap, although some transit agencies already have policies to regularly raise fares. Only two of the small/rural transit agencies implemented fare increases during that period. Policies dictating regular fare increases can help minimize the general public discontent and the political implications of raising fares.
- **Reduced/Delayed Capital Spending –** Three of the large transit agencies (Denver RTD, TriMet, and WMATA) reported reducing or deferring capital spending to address funding shortfalls. For instance, WMATA limited spending to safety and state-of-good-repair projects, and delayed some system expansion projects. Denver RTD reported delaying capital replacement.
- **Debt Management –** BART refinanced its debt to retire outstanding bonds and reduce debt service obligations, projecting savings of $6 million in FY 2012.
- **New/Increase Funding –** Only Metro St. Louis and HART pursued increasing dedicated revenues. HART's ballot measure to implement a local option sales tax was aimed at providing revenues for new capital investments (bus rapid transit and light rail), and not necessarily to address budgetary issues related to lower property tax revenues. This measure failed, however. For Metro St. Louis, it was another attempt at implementing a much needed revenue source to support its current operation and restore service cuts made in response to budget constraints as noted above. This measure passed, and services were restored. Corvallis Transit System reported that the agency is considering asking for an increase in the direct funding contributions from Oregon State University (OSU) to cover service increases and increasing operating costs. The OSU direct contribution for transit was initiated in 2004 and it has not been increased since its implementation.
- **Flexing Capital Funding to Operations –** Six transit agencies (CTA, HART, Hampton Roads Transit, Metro St. Louis, PRTC and Ohio Valley Regional Transit Authority) reported using capital funding (including FTA formula fund transfer) to cover operations.
- **Use of Funding Reserves –** Denver RTD and TriMet reported using cash reserves to address budget gap issues.

Table 3.16 Farebox Revenues Characteristics by Agency

Transit Agency	Rate	Approx. Farebox Recovery Ratio	Fare Increase Policy	Recent Fare Increases	Impact of Recession[a]
Large Agency					
BART	Distance-based	50%	CPI – adjusted every two years through 2012	June 2009	Increase[b]
CTA	Variable	40%	Operating ratio (including fare revenues and other operating funds) no less than 50%	2009	Increase[b]
NYMTA	$2.25	40%	Increase by 7.5% every two years	2008, 2009, and 2011	Increase[b]
Regional Transportation District (Denver, CO)	$2.25	20%	Every three years	2008, 2009, and 2010[c]	Increase[b]
Portland TriMet	By zone	30%		2008	Increase[b]
WMATA	Distance- and time-based (rail)	50%	Every two years	2008 and 2010	Increase[b]
Midsize Agency					
Greater Lafayette Public Transportation	$1.00	25%		N/A	Increase
HART	$1.75	20%		2009	Increase[b]
Hampton Roads Transit	$1.50	20%		N/A	Stable
Kalamazoo Metro Transit	$1.50	20%		2010	Stable
Metro St. Louis	$2.25	25%		2009	Increase[b]
Metro Transit (Madison, WI)	$2.00	20%		2009	Increase[b]
Potomac and Rappanahock Transit (VA)	Varies	30%		2009 and 2010	Increase[b]
Triangle Transit	$2.00	15%			Increase
Small/Rural Agency					
Corvallis Transit System (OR)	Free				
Greater Hartford Transit District	Varies	5%			Increase
Northern Arizona Intergovernmental Public Transit	$1.25	15%		2011	Increase
Ohio Valley Regional Transit Authority	$1.30	10%			Stable
Park City Transit (UT)	Free				
Pullman Transit (WA)[d]	$0.50	50%[d]			
RoadRUNNER Transit (NM)	$1.00	5%		2008 and 2009	Increase[b]

Source: Transit Agency Interviews and Data Analysis by Cambridge Systematics.

[a] Impact of Recession = Decline, Stable, Increase, Uncertain.

[b] Revenues increased because of fare increases.

[c] Consecutive fare increases to address budget shortfalls.

[d] Includes Washington State University contract revenues.

Administrative

Administrative actions implemented by transit agencies to address funding issues during the recessionary period included:

- **Layoffs/Hiring Freeze –** Eight transit agencies reported either reducing staff or implementing a hiring freeze. PRTC, Denver RTD, WMATA, and BART implemented a hiring freeze.
- **Salary Freeze/Reductions –** Eight transit agencies reported implementing a salary freeze to deal with budgetary issues. No transit agency reported salary reductions, although CTA required employees to take furloughs, and Denver RTD gave salaried employees the option to take furloughs.
- **Other Labor/Administrative-Related Actions –** Other actions taken by transit agencies included changes in benefits, pension reform, union contract and labor negotiations, and reduction or cuts to discretionary nonsalary spending (e.g., travel).

Most transit agencies resorted to a combination of administrative actions. For example, CTA reduced administrative positions, implemented a salary freeze for nonunion employees, required these employees to take unpaid furlough days, and enacted pension reform. CTA is currently engaged in labor negotiations to reduce costs further.

Of the small transit agencies, only Pullman Transit in Washington State reported implementing a salary freeze to deal with budgetary issues. It went on to expand service in 2009 and 2011, but this service growth was driven by state and Federal grants.

4.0 Impact of the 2007-2009 Recession on Existing Local and Regional Funding Sources

This section summarizes the findings from the transit agency interviews, in an effort to understand the impact of the recent recession on local and regional funding sources.

4.1 KEY FINDINGS AND OBSERVATIONS

The objective of the data and survey analysis presented in Section 3.0 was to respond, to the extent possible, to the following questions:

- Which funding sources were affected first during the recession?
- Which funding sources were most affected by the recession and which were more stable?
- Which funding sources were most affected by local economics?
- Does the legislation in some states limit transit agencies to more volatile sources?
- Were the funding sources used for ongoing operations more or less affected by the recession than those used for major new capital projects?
- What were the impacts on financing? Specifically, how has a decline in revenues impacted transit agencies' ability to access the credit market, or if they have outstanding debt, their ability to meet obligations and their credit ratings?
- What were the observed trends for:
  - Dedicated versus Non-Dedicated Funding Sources?
  - Transit Agency Generated Revenues versus Tax Revenues?
- How did funding stability for agencies with diverse portfolios compare with agencies relying on a major funding source?

After analyzing the data and responses provided by the transit agencies, the key findings in response to the research questions are summarized below.

Which funding sources were affected first by the recession?

Revenues from **mortgage recording fees and real estate transfer taxes** declined first, as early as 2006, before the official start of the recession, reflecting the role of the housing crisis in the recession, as experienced by NYMTA.

Sales taxes were affected immediately, with some transit agencies losing revenues beginning in 2008. In some areas, sales tax revenues post-recession have not reached pre-recession levels.

Property taxes dedicated to transit generally experienced their decline on a lagged basis, typically beginning the year after the end of the recession, and by 2010, the effect of the housing crisis further suppressed property tax revenues, an effect which is still evident in many areas. This is because the schedule of property value assessments dictates when the impact of the housing crisis will be reflected in property tax revenues.

Which funding sources were most affected by the recession and which were more stable?

Sales and property taxes (including value capture revenues) were the funding sources most affected during the recent recessionary period. In general, both types of taxes account for a significant share of the local transit funding portfolio and generate the highest yields, but through the recession they saw the largest revenue declines.

Revenue losses from local sales taxes during this period were significant and transit agencies relying on these sources were forced to reduce spending through services cuts and administrative actions, while also pursuing funding increases or alternative funding sources. Sales taxes, which have the highest yield among dedicated funding sources, were also the most volatile sources during recessionary periods (both the 2001 and 2008 recessions).

Property taxes were significantly impacted in the recent recession, primarily because the housing crisis was a precursor and key factor of this recession. A review of data from the early 2000s shows no comparable effect on property taxes during the 2001 recession, yet sales tax revenues were negatively impacted during that period.

Non-dedicated funding from local governments was the most stable revenue source, based on the experience from most transit agencies interviewed. This funding was typically provided through annual budget appropriations or through local agreements to provide service. The level and stability of funding will depend on local budgetary pressures and competition with other public services. For instance, in the case of local agreements, the level of funding is based on cost allocations determined through formulas during the transit agencies' annual budgeting process.

Agency-generated revenues (excluding farebox revenues) were generally stable, although some transit agencies noted fluctuations in revenues over the recessionary period. However, these fluctuations have low financial impact given that agency-generated revenues sources represent less than 5 percent of total operating funding for most transit agencies.

Which funding sources were most affected by local economics?

Based on the interviews and data analysis, **property taxes** are the funding source most directly affected by local economics. They are also affected by legislation that dictates growth in and the level of assessed values. The housing crisis took a greater toll on some states and regions of the country than others, and that is observed in how dedicated property taxes were affected for transit agencies in those areas. For example, the State of Florida, including the Tampa MSA was severely impacted by the housing crisis. With the significant drop and frequent (i.e., annual) reassessment of property values, HART, which depends primarily on property taxes and value capture funding, experienced significant revenue losses during the recent recessionary period.

Car rental tax is another example of how the local economy impacts funding, for example as experienced by Triangle Transit's regional car rental tax. A key factor in the performance of this funding source is air travel and how RDU airport is performing. With the effect of September 11, 2001 on air travel, airline bankruptcies, and reduced air travel during the 2001 and 2008 recessionary periods, car rental fees as a funding source for Triangle Transit have proven to be less stable than desired over recessionary periods of the last decade.

Other taxes that would rely significantly on the local economic situation include:

- **Employer/Payroll and Income Taxes –** These taxes have been affected by the job market and high unemployment during and after recessionary periods.
- **Room/Occupancy Taxes –** Levies will depend on local economic activity for areas that rely heavily on tourism and business travel.

Does the legislation in some states limit transit agencies to more volatile revenue sources?

Local sales and property taxes are the key sources of state and local revenue for many transit agencies because state enabling legislation (and/or constitutional language) dictates which revenue sources can be enacted to support public transportation. Sales taxes were a volatile source during past recessionary periods. Property taxes were stable in the 2001 recession, but were then very volatile in the recent recession because of the housing crisis. To the extent that the use of other types of taxes and fees for transit is limited by legislation, transit agencies may be precluded from developing a funding portfolio that can help them maintain financial stability in uncertain times.

There are certain factors driving the reliance on specific revenue sources for transit. For example, in California, the passage of Proposition 13[12] in the late 1970s has resulted in an increasing reliance on sales and excise tax revenues to support public transportation at the state and local levels. While sales taxes are the dominant source of dedicated funding for transit in other local and regional settings, especially in large urban areas, the role they play in California has stemmed from the extraordinary popular and political sentiment to limit the rise of property taxes. Local sales tax measures have been approved in 20 counties and are permanently used by four transit agencies, including BART. From the interviews with BART and TriMet, it was evident that restrictions put in place in the 1970s related to taxable values and growth effectively provided stability to property tax revenues dedicated to these transit agencies during the housing crisis.

Transit agencies in Michigan, on the other hand, rely heavily on property taxes. As described earlier, the reliance on property taxes stems from a Constitutional provision reserving exclusively to the state the authority to levy general sales and use taxes ("consumption" taxes). Today, local governments are authorized to levy local income and/or property taxes to support local services. Most urban transit agencies in Michigan were organized in the 1980s and have taxing authority. Transit agencies in rural Michigan receive their funding from the counties levying a transportation millage. Some transit systems do, however, have taxing authority.

Were the funding sources used for ongoing transit operations more or less affected by the recession than those used for major new capital projects?

Operations and capital spending were equally affected by the volatility of major revenue sources.

Capital budgets were reduced given that most local funding revenues are dedicated first to operations and/or debt service. In addition, some transit agencies reported transferring capital funds to operations (such as FTA 5307 Urbanized Area Formula funds) and deferring/delaying capital investments.

Operating budgets were affected since most transit agencies reported service reductions and cuts as well as enacting fare increases, both of which were aimed at managing operating and maintenance budgets as a result of reduced local revenues.

[12]Proposition 13 limits property taxes to no more than one percent of a property's assessed value, and limits the annual increases to no more than two percent. In addition, it included provisions requiring two-thirds vote in local elections to enact "special taxes" to support public investment, which was later voted on and established with the passage of Proposition 218.

What were the impacts on financing? Specifically, how has a decline in revenues impacted transit agencies' ability to access the credit market, or if they have outstanding debt, their ability to meet obligations and their credit ratings?

Dedicated local funding is generally pledged to outstanding debt, and revenues are used first to meet debt obligations. Revenues after debt service then are used for operating and maintenance costs and capital needs.

Some of the transit agencies interviewed for the project experienced **no impact on debt financing**. For example, BART was able to retire and refinance some of its debt, reducing the agency's annual debt service obligations. Likewise, TriMet's was unaffected, since property taxes are levied in an amount sufficient to meet annual debt service obligations.

However, **downgraded bond ratings** were experienced by other transit agencies. For example, CTA and Metro St. Louis had their bond ratings downgraded in 2009. For CTA, bonds were downgraded by Moody's from Aa3 to A1, in part due to sales tax and RETT revenue volatility during the recession.[13] The bond rating for Metro St. Louis debt was downgraded in 2009, and more recently again in January 2012 by Fitch (from A- to A), also due to the economic uncertainty of sales tax revenues.[14]

What trends were observed for Dedicated versus Non-Dedicated Funding Sources?

Non-dedicated funding (from general revenues) was reported by most transit agencies to be stable. Hampton Roads Transit and WMATA reported an increase in funding from its funding partners, in line with the increase in operating cost and reduced contribution from Federal and state funds. While these funding sources remained stable during the recent recession, there still is a level of uncertainty with this type of funding, since transit must compete with other public services (such as schools and police) for funding from general revenues.

Dedicated funding, based on data and interviews, appears to have been more affected by the economic recession when compared to non-dedicated funding sources. The decline in revenues has also led to operational and administrative adjustments.

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[13] The Bond Buyer, *Chicago Transit Dropped – Moody's Lowers $1.9 billion to A1*, September 22, 2009 http://www.bondbuyer.com/issues/118_182/chicago-transit-authority-1000359-1.html (last accessed on April 24, 2012).

[14] Reuters, *Fitch Provides Additional Commentary on Bi-State Development Agency of MO-IL Metro District Downgrade*, January 19, 2012 http://www.reuters.com/article/2012/01/19/idUS206584+19-Jan-2012+BW20120119 (last accessed on April 24, 2012).

What trends were observed for Transit Agency Generated Revenue Sources (e.g., Advertising) versus Tax Revenues (e.g., Sales Taxes)?

Fare revenues increased at most transit agencies during the recessionary period primarily due to fare increases that were implemented in reaction to lower revenues from other sources. Another factor affecting farebox revenues during this period was the rise in fuel prices that led to increases in transit ridership across the nation.

Other transit agency generated revenues (excluding fare revenues) account for a small fraction of operating costs. However, it should be noted that those revenues were reported stable in comparison to dedicated taxes.

How did funding stability for transit agencies with diverse portfolios compare with agencies relying on a major funding source?

Diverse funding portfolios were reported to be more stable overall than those relying on one major funding sources, whether a local sales or property tax.

For example, sales tax revenues declined between almost 8 percent (for NYMTA) up to 16 percent (for Park City Transit). In the case of NYMTA, although sales tax revenues declined significantly, the agency's diverse portfolio of revenues (including recently state-enacted revenue sources) combined with budget management and cost control strategies helped NYMTA weather the recessionary impacts. Park City Transit, a small transit system, was similarly able to withstand the recession and the impact on sales tax revenues with a diverse portfolio of revenues.

Non-diversified funding portfolios can be more impacted by a recession. Transit agencies relying mainly on sales tax revenues, such as Denver RTD and Metro St. Louis, experienced major problems as revenues from sales taxes declined and their funding portfolios did not have other resources to withstand the revenue loss. HART revenues, which rely on property tax and value capture-related revenues (both of which depend on real estate and property value) were impacted during the recent recession, since Florida was one of the states significantly affected by the housing crisis.

4.2 EVALUATION OF FUNDING SOURCES BASED ON ANALYSIS FRAMEWORK

Table 4.1 summarizes the local/regional funding source evaluation, using the analysis framework described in Section 2.0, and based on the literature review, interview findings and data analysis. A few general observations by funding source are provided below:

Table 4.1 Summary of Funding Sources and Yield Performance during the 2007-2009 Recession

	Yield		Applicability
Funding Source	Adequacy	Stability	to Transit
Traditional Tax- and Fee-Based Transit Funding Sources			
Sales taxes	High	Low-Medium	High
Property taxes	High	Low-Medium	High
Motor fuel taxes	High	Low-Medium	Medium
Vehicle fees			
Vehicle registration/license fees	Medium	High	Low-Medium
Car rental taxes	Medium	Medium	Low-Medium
Toll revenue	Medium	Medium	Low-Medium
Taxi fees	Low	N/A	Low-Medium
General (non-dedicated) revenues			
General Fund Allocations (part of budgeting/appropriations process)	Medium	High	Medium
Local Assistance[a]	Low	High	Medium
Local Funding/Cost Allocation Contributions[b]	High	High	High
Agency-generated revenues			
Contract/Service Agreements	Low	High	High
Ancillary (e.g., advertising, parking revenues)	Low	Medium	High
Common Business, Activity and Related Funding Sources			
Employer/payroll and income taxes	High	Low-Medium	Medium
Utility taxes	Low-Medium	High	Low-Medium
Room/occupancy taxes	Medium	Medium	Low-Medium
Realty transfer taxes/Mortgage recording fees	Medium	Low-Medium	Low-Medium
Business-related taxes	Medium	Medium	Low-Medium
Revenue streams from projects			
Impact fees	Low	Low-Medium	High
Tax increment financing districts	Low-Medium	Low-Medium	High
Special assessment districts	Medium	Low-Medium	High
Joint development	Low	Medium	High

[a] For transit agencies with dedicated revenues.
[b] For transit agencies without dedicated revenues.

Traditional Tax- and Fee-Based Transit Funding Sources

Sales Taxes

Adequacy: High

Stability: Low-Medium

Applicability: High

As noted throughout the report, sales taxes are the most widely used local/ regional revenue source for transit. Revenues from sales taxes support operations, maintenance, and capital costs for many agencies. Many large projects and capital programs are funded with sales tax revenues, such as Denver RTD's FasTrak program.

While sales taxes have a broad tax base and can generate significant revenues, the data provided by transit agencies showed that sales taxes were affected during the recent recession. Although fluctuations can be highly variable, the availability of historical data can help transit agencies assess the potential impact of an economic recession and other factors to future revenues and on the transit agency's ability to address any funding shortfalls.

At a time of economic uncertainty, with job losses and unemployment rates reaching unprecedented levels, and both consumer confidence and disposable incomes in decline, people would tend to adopt a conservative spending behavior that leads to lower sales tax revenues. Data from all agencies interviewed showed an immediate decline in sales tax revenues as the recession began.

Property Taxes

Adequacy: High

Stability: Low-Medium

Applicability: High

Similar to sales taxes, property tax revenues are widely used for transit operations, maintenance, and capital expenses, including support for large projects (e.g., Central Corridor Light Rail in St. Paul-Minneapolis, Minnesota).

Property taxes, like sales taxes, have a broad base. Data gathered from the interviews suggest property taxes generate a significant share of dedicated local funding for midsize and small/rural transit agencies. For large transit agencies interviewed for this project, property taxes were part of the funding mix, but not the main local funding source.

Compared to sales taxes, property taxes seem to have been less affected in recessionary periods in general, based on the limited data available from the transit agencies interviewed for this project. For example, there was no impact to BART's and HART's property tax revenues during the 2001 recession. However,

during the 2008 recessionary period, the stability of property taxes was impacted, since the national housing market crisis was one of the main factors behind the more recent recession. This impact was more notable for HART, which relies heavily on property taxes as its primary local funding source. In the case of BART, property taxes are a secondary revenue source and statutory limitations on general taxable values helped in reducing the volatility and growth of property tax revenues. The recessionary impact on property taxes lagged in time, compared to other revenue sources.

From the interviews, it appears that legislation restricting growth in property tax revenues may have dampened the revenue impact of the housing crisis, by providing stability in annual receipts from property taxes. These factors have not prevented property tax revenue losses altogether, but have kept these losses at lower levels compared to the larger revenue losses experienced by transit agencies relying on sales tax revenues.

Motor Fuel Taxes

Adequacy: High

Stability: Low-Medium

Applicability: Medium

Motor fuel tax revenues are used at the Federal, state, and local levels for transportation, primarily for highway and road investments. At the local level, motor fuel tax revenues dedicated to transit are not as common as sales or property tax revenues. Six states have enabling legislation allowing local gasoline taxes for transit, in addition to three states that allow local gasoline taxes for any purpose (e.g., New Mexico). The examples included in this project reported using motor fuel tax revenues for operating and maintenance costs only, although transit agencies in Florida can use revenues from local gas taxes for capital spending, mostly at the project level.

Motor fuel taxes have significant revenue generating potential, but the level of funding provided for transit has been minimal compared to other revenue sources. Specifically, at the local level, permitted tax rates are generally lower compared to state motor fuel tax rates, which further restricts the revenue potential in most areas.

No specific conclusions can be drawn regarding the impacts of the recession on motor fuel tax revenues based on the interviews and data collected for the two transit agencies that receive motor fuel tax revenues. However, there are several factors to consider regarding fuel tax trends during recessionary periods, based on the literature review and general trends observed in the transportation industry.

First, the demand for fuel is impacted during recessionary periods as unemployment levels increase and, as a consequence, work trips decline. In addition, high unemployment reduces disposable income, and as a result

discretionary travel also declines, further reducing the demand for fuel. If an increase in fuel price is added to the mix (as happened during the 2008 recession), the demand for fuel will be further impacted. Over the long term, the impacts of high fuel prices are reflected in a more fuel efficient and alternative fuel vehicle mix, and higher public transportation usage, that continues to erode the revenue potential of fuel taxes as consumption is reduced.

Vehicle-Related Taxes and Fees

Adequacy: Variable by type

- Vehicle registration/license fees: Medium
- Car rental taxes: Medium
- Toll revenues: Medium
- Taxi fees: Low

Stability: Variable by type

- Vehicle registration/license fees: High
- Car rental taxes: Medium
- Toll revenues: Medium
- Taxi fees: N/A

Applicability: Low-Medium (all)

For simplification purposes, different types of local/regional vehicle fees were combined into a single "vehicle fees" category, but rated individually, as shown in Table 4.1.

The use and dedication of revenues from vehicle fees by transit agencies is limited, and therefore cannot be seen as a primary source of revenue, particularly for large to midsize transit agencies. As a result, these findings are based on information obtained from the interviews and should not be assumed to represent widely applicable trends. Similar to motor fuel taxes, historically local vehicle fees are typically dedicated to local street and road investments with limited applicability to transit.

- **Vehicle registration and driver license fees** were assigned a ***Medium*** rating for adequacy, mainly based on the level of funding generated for Triangle Transit and NYMTA. The tax base is somewhat narrower compared to other revenue sources, e.g., sales taxes. Vehicle registration/license fees are not generally impacted by recession, and can be fairly predictable, thus rated ***High*** for stability.
- **Car rental taxes** adequacy and stability was rated ***Medium***, based mainly on the experience of Triangle Transit. For NYMTA, however, the revenue yield is low compared to other sources. Car rental taxes can be impacted by economic conditions, particularly at the local level, as has been the case in the

Raleigh-Durham region. In markets where most car rental transactions are associated with air travel, for example, reduced travel associated with a weak economy will result in lower car rental tax revenues.

- **Toll revenues** have been used for transit by two of the largest U.S. transit agencies interviewed: NYMTA and BART.[15] In general, toll revenues are dedicated to operations, maintenance, and capital costs of the facilities where collected. In some cases excess revenues are applied to transit or other transportation-related capital investments. For its narrower tax base (only users of the facility pay), it is rated *Medium* for adequacy. For stability, a ***Medium*** rating was assigned, since the economic recession and other factors, such as fuel prices, mode shift and changes in job market distribution, would impact revenues.
- **A taxi fee** was implemented in 2009 dedicated to NYMTA, therefore, there is no data to assess the recession impact. The revenue yield is *Low*, however, in relation to other sources of revenue dedicated to NYMTA. Overall, adequacy also would be ***Low***. There is no information available to reach a conclusion related to its volatility during a recessionary period.

General (non-dedicated) Revenues

Adequacy: Variable by type

- General fund allocations: Medium
- Local assistance: Low
- Local funding/cost allocation contributions: High

Stability: High (all)

Applicability: Variable by type

- General fund allocations: Medium
- Local assistance: Medium
- Local funding/cost allocation contributions: High

General revenues were the most stable source of transit funding through the recent recession, according to the information provided by the interviewed transit agencies. While local economic conditions impact base revenues available to funding partners, the political challenge to balance non-dedicated funding among competing services often served transit well.

[15]Other examples of toll revenues used for transit include Operating funding provided for bus operations on San Diego I-15 HOT lanes, and capital funding provided for the Dulles Corridor Metrorail project.

- Transit agencies receiving g**eneral fund allocations** rely on the localities' annual budgeting and appropriations process. In this case, transit services are a function of the local or regional government. General revenue allocations typically vary based on transit agency budgetary needs, in relation to the funding needs of other public services and available resources.
- **Local assistance** refers to general revenues that are provided to transit agencies with dedicated funding sources usually as subsidies or matching funds for specific transit needs. The yield adequacy is *Low*, as it supplements other dedicated local and regional funding. As such, competition with other public services is higher and there is no guarantee that funding will be provided.
- **Local funding/cost allocation contributions** refer to general revenues provided by jurisdictions served by a transit agency that does not have dedicated funding. The level of general revenue allocations is established through intergovernmental or cost allocation agreements. Adequacy is rated *High*, since general revenues are usually expected to cover agreed upon subsidy requirements after all other funding sources have been considered. For transit agencies receiving local funding/cost allocation contributions, the applicability to transit can be considered *High*, as these agreements serve as an assurance of the local government's commitment to support transit (even if funding allocations are reduced during periods of economic uncertainty).

Agency-generated Revenues

In addition to farebox revenues, transit agencies generate funding from miscellaneous sources, such as contractual service agreements and other ancillary revenues (e.g., advertising, parking fees, investment income)

Contract Service Agreements

Adequacy: Low

Stability: High

Applicability: High

Some transit agencies enter into contractual agreements with higher education institutions and/or employers to provide transit service targeting a specific market (e.g., students). Stability and applicability are rated *High* for contract service agreements, since the level of funding is generally established by contract. However, revenues generally provide only enough funding to cover the subsidy requirement of specific routes or services, which leads to a *Low* rating for adequacy.

Ancillary Revenues

Adequacy: Low

Stability: Medium

Applicability: High

As noted in previous sections, ancillary revenues (e.g., advertising, investment income, parking fees) remained generally stable for most transit agencies interviewed. However, the revenue yield is generally *Low*, compared to needs and other revenues sources.

Common Business, Activity and Related Funding Sources

Employer/Payroll and Income Taxes

Adequacy: High

Stability: Low-Medium

Applicability: Medium

Employer/payroll and income taxes are another funding source of revenue not commonly dedicated to transit, although these sources do generate significant revenues for two large transit agencies, TriMet and NYMTA. Enabling legislation for local payroll and income taxes exists in 16 states, mostly as a general fund source, but only five states have dedicated payroll/income taxes for public transportation. Its applicability historically has been limited.

No general conclusions can be drawn regarding the impacts of the recession on employer/payroll and income taxes; the rating assessment is based on the interviews. Data available from TriMet indicate that payroll tax revenues will decline as employment contracts, and rise based on how fast the job market recovers. The effect on revenues is almost immediate as employment drops, especially if tax collections are on a quarterly basis. In the case of income tax, it is expected that recessionary impacts could lag by a year, since income tax reporting and collection is based on the earnings from the previous year.

The broad tax base for payroll and income taxes provides significant revenues. In a state with local funding restrictions on sales and property taxes, such as Oregon, local payroll and income taxes have proven critically important to transit. The effects of a recessionary period with increased unemployment and its impact on businesses will lessen stability.

Utility Taxes/Fees

Adequacy: Low-Medium

Stability: High

Applicability: Low-Medium

Utility taxes and fees have been applied in small/rural transit agencies. Based on experience in Pullman, WA, they appear appropriate in that context where they can generate a large share of the funding needs relative to the cost of operations and maintenance. When based as a percentage of utility services costs applicability to transit is limited. However, utility taxes and fees could be explored further as a revenue source for small/rural transit agencies where low yield revenue sources can still provide sufficient funding; for large and midsize transit agencies, applicability could be assessed as part of a diversified funding portfolio.

Room/Occupancy Taxes

Adequacy: Medium

Stability: Medium

Applicability: Low-Medium

Room/occupancy tax revenues for transit have been used by small/rural transit agencies in areas that rely on tourism activity. Transit agencies serving a large tourism market could benefit from dedicated room/occupancy taxes. During an economic recession, their yield will be affected in line with general impacts to the tourism industry where these taxes are collected. Both adequacy and stability are therefore rated *Medium*. Their applicability to transit is *Low-Medium*, because states generally limit the use of these revenues to tourism-related activities.[16]

Realty Transfer Taxes/Mortgage Recording Fees

Adequacy: Medium

Stability: Low-Medium (electricity, gas), revenues from a utility business tax are mainly affected by consumption, which in turn may be affected by factors beyond economic conditions (e.g., weather). Based on existing industry experience, the

Applicability: Low-Medium

Based on historic trends, mortgage recording and real estate transfer taxes have low applicability to transit. Revenues from these sources were impacted during the 2008 recession, similar to the impacts to property taxes, due to the housing crisis. As with value capture, adequacy was rated *Medium* in line with the revenue potential compared to other broader taxes. Stability was rated *Low-Medium* in line with how property taxes were rated.

[16] Institute of Transportation Studies, University of California at Berkeley, *Local Option Transportation Taxes in the United States – Part 1: Issues and Trends*, March 2001.

Business-Related Taxes

Adequacy: Medium

Stability: Medium

Applicability: Low-Medium

In general, business-related tax revenues are levied on profit or taxable assets, and are correlated with economic activity. Therefore, during a recessionary period associated with high unemployment, revenues are expected to decline with lower business activity. The Park City business tax is based on trip generation by business type rather than business revenues, so the tax revenues vary based on how many businesses remained operating throughout the recessionary period. A rating of *Medium* was assigned to both adequacy and stability based on the information gathered through the interviews. The applicability to transit is *Low*, based on current industry trends, as well as competition for business-related taxes to support other public services beyond transportation.

Revenue Streams from Projects (Value Capture)

Adequacy: Variable by type

- Impact fees: Low
- Tax increment financing districts: Low-Medium
- Special assessment districts: Medium
- Joint development: Low

Stability: Variable by type

- Impact fees: Low-Medium
- Tax increment financing districts: Low-Medium
- Special assessment districts: Low-Medium
- Joint development: Medium

Applicability: High (all)

The adequacy of revenues from value capture will be generally lower than property taxes since the technique applies to a narrower, project-oriented or small area tax base. Stability, on the other hand, is mostly in line with property tax revenues. The applicability to transit is *High*, as all value capture options are directly correlated to the benefits and costs of transit investments.

Impact fees and special assessment districts are more suitable for supporting a specific project or corridor, or specific elements of a transit investment plan. While revenues generated from value capture have been used for operating and maintenance costs (e.g., HART and WMATA), capital spending also has been supported, most often on a project level.

5.0 Analysis of Initiatives to Increase Existing or Introduce New Local and Regional Funding Sources

During the recent recessionary period, some transit agencies pursued initiatives to increase funding from their existing sources or to introduce new sources of revenue for several reasons, including declining revenues, support for increasing costs of delivering transportation, and expanded transit services. Some sources were subject to voter approval, while others were provided through legislation enacted at the state level. The transit agencies that reported ballot initiatives and/or the implementation of a new and/or expanded funding source between 2007 and 2011 were asked a more detailed set of questions about these efforts. The findings from these interviews are summarized in this section.

This section also highlights key findings that emerged from the approval and disapproval of the initiatives analyzed and the literature published on this topic.[17] These findings are expected to be relevant not only during recessionary periods, but at any point when transit agencies are evaluating new or expanded revenue options.

[17] The following reports were reviewed: Center for Transportation Excellence (CTE) *Building Communities Through Public Transportation – A Guide for Successful Transit Initiatives* (2005) and *Transportation Finance at the Ballot Box – Voters Support Increased Investment and Choice* (2006); Mineta Transportation Institute (MTI) *Factors Influencing Voting Results of Local Transportation Funding Initiatives with a Substantial Rail Transit Component: Case Studies of Ballot Measures in Eleven Communities* (2001) and *Revisiting Factors Associated with the Success of Ballot Initiatives with a Substantial Rail Transit Component* (2011); National Cooperative Highway Research Program *NCHRP 20-24 (62) – Making the Case for Transportation Investment and Revenue* (2009); and Smart Growth America (SGA) *Transit Campaign Planning: A strategy template for organizers* (2011). A summary of key findings from each of these reports is included in Appendix A.

5.1 BALLOT INITIATIVES AND LEGISLATIVE ACTIONS TO INCREASE OR INTRODUCE NEW LOCAL/ REGIONAL FUNDING

A total of six transit agencies were interviewed about their experience as they pursued initiatives to increase existing funding or develop new funding sources, particularly during the economic downturn. Table 5.1 summarizes these initiatives, all of which represent either new or increased taxes subject to voter approval during the most recent economic recession.

Table 5.1 Summary of Ballot Initiatives for Public Transit Funding

Urban Area	Transit Agency	Increase Existing or New Funding	Funding Source Pursued	Ballot Date	Election Results
Roaring Fork Valley, Colorado	Roaring Fork Transportation Authority (RFTA)	Introduce New Funding Source	Sales Tax (0.4%) and $44.5M Bonds	November 2008	Approved 55% to 45%
Kalamazoo County, Michigan City of Kalamazoo, Michigan	Kalamazoo County Transportation Authority (KCTA)	Increase Existing Funding Source	Property Tax: 0.4 mill (County) 0.6 mill (City)	May 2009 November 2009	Approved 63% to 37% 76% to 24%
St. Louis County, Missouri	Metro Transit	Increase Existing Funding Source	Sales Tax (0.5%)	April 2010	Approved 63% to 37%
Glen Dale, West Virginia Moundsville, West Virginia	Ohio Valley Regional Transit Authority (OVRTA)	Introduce New Funding Source	Property Tax 12.5¢/$100 – maximum for Residential,	May 2010 November 2010	Defeated 49.8% to 50.2% 43% to 57%
Wheeling, West Virginia Bethlehem, West Virginia		Renew Existing Funding Source	25¢/$100 – maximum for Commercial	November 2010	Approved 76% to 24% 74% to 26%
Hillsborough County, Florida	Hillsborough Area Regional Transit (HART)	Introduce New Funding Source	Sales Tax (1%)	November 2010	Defeated 42% to 58%
Durham County, North Carolina	Triangle Transit Authority (TTA)	Introduce New Funding Source	Sales Tax (0.5%)	November 2011	Approved 60% to 40%

In addition to ballot initiatives to fund transit, revenue bills can be introduced and enacted through state legislatures to increase existing local funding sources or introduce new local funding mechanisms to cover transit operations and capital expenses. Three transit agencies interviewed introduced new funding

sources via direct legislative action during the most recent recession. These are summarized in Table 5.2.

Table 5.2 Summary of Legislative Actions to Increase Local Revenues for Transit

Urban Area	Transit Agency	Increase Existing or New Funding	Funding Source Pursued	Bill Date
New York, New York	New York Metropolitan Transportation Authority (NYMTA)	Increase and New Funding Source	Increase: Motor Veh. Reg. Fee ($25) Increase: Driver License Fee ($2) Increase: Car Rental Tax (5%) New: Payroll Mobility Tax (0.34%) New: Taxicab Ride Tax (50¢)	May 2009 – Legislation A.8180/Silver
Durham County, North Carolina	Triangle Transit	Increase Funding Source	Vehicle Registration Fee ($7)	2009 –House Bill 148
Chicago, Illinois	Chicago Transit Authority (CTA)	Increase and New Funding Source	Increase: Regional Sales Tax (0.25%) New: Real Estate Transfer Tax ($3/$1,000)	January 2008 – Illinois General Assembly P.A. 95-0708

5.2 KEY FINDINGS

There are lessons to be learned from the approval and disapproval of the initiatives reviewed for this project, although each case is unique. The following findings are based on the literature reviewed and the experience of the transit agencies interviewed. A checklist that can be used as a quick reference to the key steps to take when developing an initiative to increase existing or add new funding sources is provided in Appendix A.

Need for and Process to Promote Increased Transit Funding

Before embarking on the process of proposing new or expanded revenue sources, transit agencies should assess and identify the public transportation needs, interests, and concerns of the community. It is critical to understand the history or context in which voters and elected officials will consider the initiative before the transit funding campaign starts. At the same time, it is important to engage the community and stakeholders early on, particularly in the development of a transit investment plan, if that is part of the initiative.

The decision to increase funding for the transit agencies interviewed was driven by two main needs:

- **The need to provide funding for a specific project or program of capital investments and/or support new and expanded transit services.** This was illustrated in three of the seven transit agencies interviewed, HART in Hillsborough County, Florida, Triangle Transit serving Durham County, North Carolina and RFTA in Roaring Fork Valley, Colorado. Each went to

the ballot to obtain the approval for a dedicated funding source to implement new transit capital projects. OVRTA in the Ohio Valley Region in West Virginia wanted to expand its service area and needed additional revenues to fund the expansion. The existing revenues were insufficient to fund the capital and operation expenses for the additional transit services envisioned.

- **The need to provide additional funding for operations due to a declining funding source.** On the other hand, St. Louis County, Missouri, Kalamazoo County and City, Michigan and the NYMTA in New York, New York decided to pursue additional funding because they required additional operating funds to cover their existing transit services. In the case of St. Louis County and NYMTA, the economic recession had negatively impacted their funding levels, requiring both transit agencies to develop plans to increase available revenues.

As previous studies have suggested, all transit agencies interviewed documented and validated their transit need before requesting additional funds as the first key element of a transit funding campaign. HART, Triangle Transit, and KRTA conducted technical studies describing why additional revenues were needed. The creation of the 25-year Bus and Rail Investment Plan in Durham County and the HART Rapid Transit Investment Plan demonstrated how those regions would benefit from the short- and long-term improvements that were only achievable with new transit funding. St. Louis County and NYMTA prepared financial reports which clearly demonstrated the dire financial situation they were facing. Without the additional funding, St. Louis County would have cut service by 30 percent, and NYMTA would have to increase fares by 30 percent.

Type of Funding Pursued

Determining the type of funding or mix of funding sources that transit agencies will pursue depends largely on two factors: the expected yield and whether the funding source is legally or statutorily available to the transit agency.

- **Expected Yield –** Sales taxes continue to be the favored mechanism contained in transit ballot measures, in part because they provide the largest yield for transit projects. This was the case for Hillsborough County, Florida, Durham County, North Carolina, and Roaring Fork Valley, Colorado, all of which pursued a sales tax as their dedicated funding source in order to collect enough money to pay for the capital and operation expenses of their planned premium transit services.
- **Limited Revenue-Raising Authority –** In the case of Kalamazoo, Michigan and the Ohio Valley region in West Virginia, state legislation limits local government revenue-raising options to property taxes to fund local expenses, including public transportation services. Therefore, Kalamazoo County and City and several communities in the Ohio Valley region in West Virginia pursued an increase in their millage or the renewal of the millage in order to continue providing transit services to the communities currently served.

Champion

The support of key elected officials, the business community, the transit agency board members and community groups was a critical element of all the transit initiatives analyzed. With the support of these groups, the ballot and legislative actions are more likely to succeed. Identifying a strong leader that champions the initiative was perceived to be the main factor for the successes in St. Louis County and Durham County. However, in some cases, a dedicated champion, as in Hillsborough County, does not translate into the approval of additional transit funding. In other words, having a strong leader is essential but does not assure the success of the initiative. An effective champion is a leader who is able to devote a significant amount of time to the campaign while having a passion for the transit funding issue.

Political Acceptance, Public Support, and Outreach

In addition to a committed champion, allies and advocates of the funding measure/initiative (including local officials) are equally important to achieve the political acceptance and public support needed to pass a ballot measure or legislation.

- **Key Elected Officials –** For the sales tax referendum in St. Louis County, having the support of the County Executive was crucial in convincing the County Council to put the measure back on the ballot after it had failed in past elections. Former elected officials can also be important, as was the case for the St. Louis County measure, where a former mayor was key in convincing suburban mayors to support the ballot measure. In Durham County, the endorsement of the mayor of Durham was important to the success of the sales tax funding campaign. And in New York, the NYMTA transit funding bill required support of the majority of the legislature to pass. However, in Hillsborough County the support of the mayor of the city of Tampa, who was the most vocal supporter of the sales tax referendum, was not enough to pass the ballot measure. Key elected officials are leaders who can organize support among a variety of constituents and interest groups, including help resolve disagreements among political factions. They also help raise the profile of the transit funding campaign.
- **Transit Agency (Board Members) –** In other cases, the champion of the increase in transit funding might be the transit agency and its Board members. The Board members of KCTA in Kalamazoo, Michigan, which are appointed officials, were important supporters of the property tax ballot measures. In Roaring Fork Valley, Colorado and in New York, the President/CEO of the transit agency and its Board members were key in leading the transit funding campaign.
- **Business Community –** Also important to the success of a transit funding campaign is the sponsorship of the business community, including Chambers of Commerce. This was the case in Durham County and New York. Still, in

Hillsborough County, while the business community led the transit funding campaign, the measure did not pass. Counting on the support from the business community is important as business leaders help legitimize the need to address transit and mobility and raise the importance of public transportation not only to the public sector, but to the private sector as well.

- **Marketing Campaign –** The effective use of media and public outreach activities must also be an integral part of a transit funding campaign. It is important to engage stakeholders and the public from many different angles and using different means.
  - **Media –** OVRTA in West Virginia relied on print materials and radio and TV spots to promote its ballot measure. Transit agencies should consider all possible alternatives to promote the ballot measure, such as print ads, television and radio commercials, and strong Internet and social media presence.
  - **Public Meetings –** Meeting directly with the voters and stakeholders at several public meetings and making presentations to communities is one common element of all the case studies analyzed in order to target key audiences for the approval of the ballot initiative.
  - **Political and Educational Campaign –** A political and educational campaign conducted simultaneously in St. Louis County was crucial for the passing of the funding measure. Testimonials from actual riders and endorsements from elected officials, professional athletes in the area, as well as figures from the business community were key to the success of the County sales tax increase.
  - **Know the Opposition –** Transit agencies should anticipate the level and extent of opposition that may arise and respond to critics with the facts about the benefits of public transportation and the more specifically, the benefits expected from the proposal or funding initiative. This was the case in Roaring Fork Valley, Colorado, where the campaign knew and expected the opposition and built a strategy to blunt their message with compelling information describing the benefits of the transit project.

The main goals of the public outreach effort are to convince citizens and stakeholders that: 1) the transit vision being proposed is worthy of their support; 2) the implementation of the new projects, both new capital investments or expansion of services is worthy of new taxes and fees to be levied; and 3) the benefits of making the proposed investments or continuing to provide transit service at existing levels are greater than the perceived costs. Therefore, more than demonstrating the needs, the transit agency must demonstrate how the additional funding will benefit the various interest groups and how the benefits and impacts of the initiatives are distributed as equitably as possible throughout the voting area with respect to geography, jurisdiction, mode of travel, economic and social factors.

Finally, the transit agencies should demonstrate that they have effectively managed their systems in order to present a convincing case for the need of additional funds. Transparency about the transit agency finances and the use of existing resources is important when requesting additional transit funds to maintain or earn credibility in the eyes of the public, the elected officials, and the media.

Transit Funding Initiative Development Process

Processes and plans developed to promote increases in transit funding varied among the transit agencies reviewed. The timeframe and resources involved varied depending on the type of transit improvements proposed and type of funding pursued.

- **Timeframe –** How long the transit funding initiative or campaign will take can vary substantially. Based on the case studies analyzed, the transit funding initiatives took from as little as six months to up to three years to develop. The initiatives to implement a new transit project or capital program take longer due to the development of an investment plan and the public outreach necessary to promote the plan. For example, processes in Hillsborough County and Roaring Fork Valley, Colorado took at least three years from when the first technical studies were conducted to when the election took place. Those initiatives meant to increase funding for existing operations usually have a shorter timeframe due to the urgency of additional funds to maintain existing transit operations, particularly during the most recent economic recession. This was the case in New York where in less than a year a bill was passed to avoid deep fare increases and service cuts.
- **Resources –** Certainly the resources involved are significant. Internal and external staff, volunteers (advocacy groups, business community, citizens), fund raising activities, consultants, media buys, office supplies, legal counsel, printing expenses, and travel budget are all necessary to carry out a transit funding initiative.

Challenges

Carrying out a transit funding initiative, either a ballot measure or a legislative action, is no easy task. Challenges need to be faced and overcome. And those challenges multiply during recessionary periods as the general public struggles with making ends meet (i.e., higher gas and other consumer prices, high unemployment, etc.), and the need for other public services also increase.

The following factors were found to be challenges for the transit agencies interviewed in their efforts to pass or approve a transit funding initiative.

- **Timing of the Election –** When to conduct the election can be a challenge. Timing the St. Louis County ballot initiative during a municipal election turned out to be challenging since voter turnout tends to be lower in these instances.

- **Restrictions on Agency's Involvement –** Transit agencies legally cannot use any agency resources for the campaign and employees could not campaign during work hours or use work e-mail accounts or phones to advocate for the additional transit funding. Since transit agencies are the best positioned to advocate for themselves, this restriction presents a substantial hurdle in the process. This was the case for St. Louis Metro, HART in Hillsborough County, and RFTA in Roaring Fork Valley, Colorado.
- **Geographical Equity –** Concerns with geographical equity were an issue in Hillsborough County and in New York. The "fair" distribution of benefits from increased transit funding or imposition of taxes throughout the region should be balanced. In Hillsborough County, the voters from unincorporated Hillsborough County defeated the sales tax ballot measure because they are not well served by HART. The suburban counties in New York also felt the imposition of a payroll tax on their businesses was unfair given those businesses are not directly served by the transit services in and to New York City.
- **Lack of Support from Elected Officials –** The lack of support from elected officials in promoting an increase in transit funding to expand transit services was a factor in the defeat of the imposition of an excess ad valorem tax in two West Virginia communities. City commissioners did not ask OVRTA to promote extensively the ad valorem excess tax in part because the property tax would have competed with other fees/taxes they needed to raise to balance local budgets.
- **Legislation Required –** When a legislative action is required to develop additional funding mechanisms, the process is longer and more complicated. The more extensive the political dialogue and compromise process, the longer and more time-consuming the initiative effort becomes. In Kalamazoo, the State of Michigan statutes had to be amended just for Kalamazoo County to authorize a countywide authority to levy more than one millage rate within its boundaries for public transportation services. In New York, the legislation that resulted in an additional package of dedicated taxes for NYMTA was delayed for weeks until legislators agreed on the dedicated tax plan.
- **Conditions of the Economy –** Another timing consideration is the condition of the economy at the time of the transit funding campaign. An NCHRP study[18] indicates that "the general consensus is that it is easier to secure approval of a transportation revenue increase during good economic conditions than bad, when the public is more focused on increased living expenses." This was a factor in the failure of the Hillsborough County sales

[18] National Cooperative Highway Research Program *NCHRP 20-24 (62) – Making the Case for Transportation Investment and Revenue* (2009).

tax initiative. The economy of the Tampa Bay region was badly hit by the most recent economic recession and as the campaign was launched in 2008, the economy of the region continued to deteriorate. Asking Hillsborough County voters to increase their sales tax under these conditions proved to be one of the biggest challenges, and one of the key factors in the failure of the sales tax initiative to pass.

6.0 Conclusions

The findings and lessons learned regarding local and regional funding for transit and the impact of recession on yield are based on the experience of the 20 transit agencies interviewed for this project. The selection process attempted to capture a diverse array of transit agencies, not only in size and geographic location, but also with diverse local and regional funding arrangements.

There is no "one-size-fits-all" funding portfolio, as state, regional, and local considerations play a significant role in determining what may be the most appropriate funding options for each transit agency. That said, transit agencies can learn from their peers, and examine the applicability of funding solutions that have worked in the past and understand how these funding sources perform during varied economic conditions. In general, the research shows that:

- Most funding sources with "High" adequacy (i.e., broad tax base) were also the sources most likely to be negatively affected during a recessionary period that decreases stability.
- Non-dedicated revenues were more stable during the recent recession compared to dedicated revenues.
- Generally, transit agencies with a limited funding portfolio relied on revenue sources that ranked "High" on adequacy, but "Low" in stability.
- Many of the transit agencies with more diverse funding portfolios have seen those portfolios perform better during the recession, even if their funding mix included some revenue sources with low stability.

When considering what local and regional funding sources should be used to supplement public transportation revenues, transit agencies should consider:

1. **Availability.** The limits and restrictions contained in constitutional, statutory and regulatory language. While these can be altered to favor new transit funding arrangements, to do so requires actions on a broad political stage or even popular referendum, rather than simply reallocating already available budgetary resources.
2. **Competition for funding.** The extent of competition that exists for available or prospective sources of revenues, and the strength of the rationales for committing resources across any number of worthy public services.
3. **Barriers to implementation.** The historic budget, revenue-raising and political philosophies that may stand in the way of new, nontraditional revenue-raising initiatives.

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- U.S. Department of Commerce, Bureau of Economic Analysis, GDP by MSA (millions of current dollars), and Non-farm Personal Income by MSA (millions of current dollars).
- Bureau of Labor Statistics Data, U.S. Department of Labor, Seasonally Adjusted Total Non-Farm Employment, All Employees and Local Area Unemployment Statistics for Metropolitan Areas.

CAMBRIDGE SYSTEMATICS

TCRP Project J-11, Task 14

Appendices

final report

volume 2

prepared for

Transit Cooperative Research Program

prepared by

Cambridge Systematics, Inc.

with

Robert Stanley

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appendices

TCRP Project J-11, Task 14

Alternative Local and Regional Funding Mechanisms: A 2007-2009 Recession Performance Assessment

prepared for

Transit Cooperative Research Program

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A. Literature Review

The first task of this study was to conduct a literature review building on the work done for the TCRP Report 129 *Local and Regional Funding Mechanisms for Public Transportation*, with a particular focus on recent literature of the varied funding sources used for public transportation and the strategies public transportation agencies are using or could use to achieve a more balanced, stable, and predictable portfolio of funding sources. The purpose of the literature review was to:

- Identify additional dedicated and non-dedicated funding sources for public transportation that were not addressed in the TCRP Report 129 (if any) or that may have emerged since its publication, and describe their characteristics and advantages/disadvantages;
- Expand on the advantages and disadvantages of transit funding sources identified and described in TCRP Report 129, as appropriate;
- Identify the impacts of the recent recession and economic cycles on the public sources of revenue for public transportation and the related impacts on fares and services;
- Identify funding sources used by other publicly supported services that may have some applicability to public transportation;
- Identify recent advances in public sector financial planning that have relevance to the predicament of public transportation agencies; and
- Understand the factors and the key steps that need to be taken to successfully enact new or increase existing transit funding mechanisms.

The study team also conducted interviews with transit agencies that pursued ballot initiatives for additional transit funding during the recent recession, or received additional funding from new local/regional revenue sources through state legislation. Brief summaries of the interviews are provided in this Appendix.

The following sections summarize the key findings of the literature review. In addition, a checklist summarizing key steps to follow when developing an initiative to increase existing or implement new transit funding is provided at the end of this Appendix.

A.1 ASSESSMENT OF FUNDING SOURCES FOR PUBLIC TRANSPORTATION

The TCRP Report 129 provides a comprehensive list of current and potential dedicated and non-dedicated local and regional funding sources for public transportation as shown in Table A.1. Since its publication in 2009, no innovative funding sources have emerged based on recent publications on the subject, but the literature review identified a small number of funding sources which were not fully described in the TCRP 129 report. Where applicable, advantages and/or disadvantages of these funding sources are expanded in the sections below.

Table A.1 Public Transportation Funding Typology

Traditional Tax- and Fee-Based Transit Funding Sources	
• General Revenues	• Lease Revenues
• Sales Taxes (variable base of goods and services, motor fuels)	• Vehicle Fees (title, registration, tags, and inspection)
• Property Taxes (real property, includes vehicles)	• Advertising Revenues
• Contract or Purchase-of-Service Revenues (by human service agencies, school, private organizations, etc.)	• Concession Revenues
Common Business Activity and Related Funding Sources	
• Employer/Payroll Taxes	• Room/Occupancy Taxes
• Car Rental Fees	• Business License Fees
• Vehicle Lease Taxes and Fees	• Utility Fees/Taxes
• Parking Fees	• Income Taxes
• Realty Transfer Taxes/Mortgage Recording Fees	• Donations
• Corporate Franchise Taxes	• Other Business Taxes
Revenue Streams from Projects (Transportation and Others)	
• Transit-Oriented Development/Joint Development	• Impact Fees
• Value Capture and Beneficiary Charges	• Tax-Increment Financing Districts
• Special Assessment Districts	• Right-of-Way Leasing
• Community Improvement Districts/Community Facilities Districts	
New "User" or "Market-Based" Funding Sources	
• Tolling	• Emissions Fees
• Congestion Pricing	• VMT Fees
Financing Mechanisms	
• General Obligation (GO) Bonds	• Grant Anticipation Revenue Vehicles (GARVEE)
• Private Activity Bonds (PAB)	• Revenue Anticipation Notes (RAN)
• Tax Credit Bonds	• Certificates of Participation (COP)
• Grant Anticipation Notes (GAN)	• State Infrastructure Bank (SIB) Loans

Source: Table 3.1 Potential Local and Regional Public Transportation Revenue Sources from TCRP Report 129 – *Local and Regional Funding Mechanisms for Public Transportation*, 2007.

Traditional Tax- and Fee-Based Transit Funding Sources

- **Advertising Revenues** – TCRP Report 129 describes advertising revenues as a source of earned income with a revenue yield typically modest. Recent reports indicate transit agencies are now willing to be creative in establishing new streams of revenue with corporate sponsorship and naming rights, given their tight budgets. Selling naming rights is common practice for sports and entertainment arenas, but some transit agencies have sold naming rights as a

revenue tool. The Chicago Transit Authority (CTA) is studying the feasibility of corporate sponsorship for CTA's physical and intangible assets to generate revenue.[1] CTA has identified two of its newest real-time information technologies, Bus Tracker and Rail Tracker, which are already very popular among transit riders, as potential assets that can attract corporate sponsors. Other traditions, such as the Penny Rides on New Year's Eve and the Holiday Trains during the Christmas holiday season, are also potential candidates for sponsorships, including selling their naming rights (e.g., The Macy's Holiday Train). CTA also received $4 million from Apple to renovate the Lincoln Park Station, located near an Apple store, and it is considering selling the naming right to the station upon a request from Apple. Other agencies that have considered or sold naming right of transit assets include the New York MTA and SEPTA in Philadelphia. SEPTA received $3 million from AT&T and renamed a station on the Broad Street subway line. Barclays paid New York MTA for the naming rights at a station near a stadium (currently under construction) that will also carry the bank's name. The Tampa Historic Streetcar, Inc. is authorized to raise funding for operations by selling naming rights for the system, stations, and vehicles, and the revenues are deposited into an endowment fund. So far, the system naming right was sold to TECO Energy for $1 million; naming rights to two streetcars and eight stations have also been sold. These innovative advertising techniques may not yield significant increases in revenue for they are subject to market conditions. Today, CTA's advertising revenue is currently one percent of the transit agency's operating cost, but the agency expects the feasibility of corporate sponsors and eventual sponsorship transactions will result in higher advertising revenues for the agency.

Common Business Activity and Related Funding Sources

- **Parking Fees –** Generally, agency-owned parking facilities are another common source of revenue for transit agencies. Parking fees are implemented at transit agency-owned parking facilities for revenue generation or for parking management purposes. In addition, transit agencies could also receive funding from commercial parking taxes or fees from nontransit agency-owned parking facilities. As a user fee-based mechanism, parking taxes are less controversial to enact than a more conventional tax increase like a sales tax. A 2010 report on finance alternatives for the Atlanta region and the 2006 report *Parking Taxes, Evaluating Options and Impacts* by the Victoria Transport Policy Institute

[1] *CTA Selects IMG to Assist with Corporate Sponsorship Feasibility Plan*, CTA Press Release, August 10, 2011.

(VTPI) expand on the options of collecting revenues from parking fees,[2,3] as detailed below. These studies indicate that a portion of the parking tax revenue generated can certainly become a source of transit revenue.

- *Transactional or Commercial Parking Tax* – A fee is collected on every transaction made for parking as a percentage of the overall parking cost. This bears a resemblance to a sales tax on parking. The VTPI study reports the City of San Francisco imposes a 25 percent tax on all commercial off-street, nonresidential parking transactions with its revenues divided between the City's general revenue, public transportation, and senior citizen funds.
- *Ownership Tax or Per-Space/Area Levy* –An owner of a parking lot is taxed through yearly billing on a per-space basis or based on area. Most likely, the owner of the parking lot would pass on the cost to the user thus generating revenue for the owner to pay the tax. The VTPI study reports that a Commercial Concentration Tax (CCT) of $1 per square foot per annum on commercial properties larger than 200,000 square feet, including large-scale paid parking facilities, was implemented in the Toronto area to fund transit and road programs.

- **Taxi Surcharges** – In New York, taxi surcharges are used to generate added revenues to the New York Metropolitan Transportation Authority (MTA).[4] The $0.50 per ride surcharge on New York City medallion taxi fares implemented in November 2009 was expected to raise $80 to $85 million per year according to the Balance Transportation Analyzer created by the Nurture New York's Nature (NNYN) organization.[5] While the taxi surcharge would barely cover one percent of the MTA's budget, it would help balance the transit agency's budget and sustain essential services like system cleaning and maintenance. NNYN argues an indirect benefit of the surcharge is a reduction in taxi usage, freeing up capacity and improving travel speeds, thus providing travel time saving for car and truck drivers as

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[2] *Bridging the Gap 2010: Investigating Solutions for Transit Funding Alternatives in the Atlanta Region*. Atlanta Regional Commission. July 2010.

[3] *Parking Taxes, Evaluating Options and Impacts* by Todd Litman. Victoria Transport Policy Institute. May 2006.

[4] *Public Transportation Funding Strategies Putting Customers and Communities First*. New York Public Transit Association (NYPTA). October 2010.

[5] The BTA is an analytic tool developed by NNYN in connection with the Kheel Report on balancing free transit and congestion pricing in New York City (http://nnyn.org//kheel_plan_bta.htm). Last accessed on September 14, 2011.

well as bus passengers.[6] The surcharge would also encourage some taxi trips to switch to transit, which can result in increased transit farebox revenues.

Revenue Streams from Projects

- **Tax-Increment Financing (TIF) Districts –** A 2009 report prepared for the Miami-Dade Transit (MDT) on innovative financing mechanisms expanded on the advantages of the TIF structure which are summarized below:[7]
  - Leverages local funds thereby decreasing reliance on Federal sources;
  - Does not increase taxes, which would be unpopular; it captures the incremental tax from increased property values;
  - Can be used to redevelop areas that would otherwise not be redeveloped;
  - TIF bonds are not necessarily backed by city governments; therefore, they do not put the cities at legal or financial risk; and
  - Can be used in conjunction with development subsidies to private developers to stimulate growth.

New "User" or "Market-Based" Funding Sources

- **Tolling –** High-Occupancy Toll (HOT) lanes are identified in *The Most for Our Money* 2011 report as one strategy at "taxpayer-friendly cost" which has relieved congestion where it had been implemented. In many cases, tolls collected from users are funding maintenance of the highway corridor and also paying for express bus service that would not have otherwise been possible in the congested lanes.[8] Transit agencies with bus express service on HOT lanes have been benefiting from the operations and maintenance subsidy provided by HOT toll revenues. This has been the case of the Miami-Dade Transit and Broward County Transit express bus service to downtown Miami on 95 Express HOT lanes in South Florida, as well as transit service in the I-680 and I-580 Express HOT lanes in Alameda County. Other HOT lanes in construction or development where toll revenues will pay for transit service on the lanes include the I-495 Capital Beltway HOT lanes proposed in Maryland and the I-595 HOT lanes being constructed in Fort Lauderdale, Florida.

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[6] http://www.streetsblog.org/2009/11/12/taxi-surcharges-and-congestion-pricing-they-go-great-together/. Last accessed on September 14, 2011.

[7] *Evaluation Innovative Financing Opportunities for Miami-Dade Transit*. Infrastructure Management Group, Inc. October 2009.

[8] *The Most for Our Money, Taxpayer-Friendly Solutions for the Nation's Transportation Challenges*. Reason Foundation, Transportation for America, and Taxpayers for Common Sense. 2011.

Other Innovative Funding Sources and Financing Mechanisms

- **Public Sector Partnerships –** The third edition of the *Lessons Learned in Transit Efficiencies, Cost Reductions, and Revenue Generation* prepared by the National Center for Transit Research,[9] identified several examples of transit agencies which have partnered with other public agencies to leverage their limited resources by forging new partnerships that bring nontraditional source of support to transit agencies. A few examples included in this study as reported by the transit agencies interviewed are noted below:
  - Charging cities for snow removal by putting snowplows and salt spreaders on buses.
  - Performing vehicle emission inspection services ($28 per test) for the State Department of Motor Vehicles. In addition, the transit agency earns fees for administering the DMV vehicle registration (three percent for first $500,000, and five percent for everything above).
  - Performing vehicle maintenance work (for profit) for other public agencies out of the facilities of the transit agency.
  - Washing other public and private vehicles (for profit) with transit agency's bus wash equipment.
  - Creating a new division where part-time bus operators are used for street sweeping, graffiti removal, and a variety of other community services to generate new revenues, community support, and reduced costs associated with turnover among part-time bus operators.
- **Local Funding Incentives** – Another approach reported by the New York Public Transportation Association to improve the local share of state funding support for transit agencies is a matching incentive program.[10] For instance, a state would provide additional state operating assistance funds to local governments that increase their share of transit funding. This, however, requires transit agencies to increase their local funding first.
- **Asset Monetization –** Another technique identified as a possible funding opportunity in Miami-Dade is asset monetization where assets owned by the public, in this case the transit agency, can be sold or entered into a long-term lease to produce revenue. Usually, an up-front fee is paid by a private investor for the right to operate the asset. In other cases, surplus property, such as land, is sold to the private sector. However, asset monetization only

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[9] *Lessons Learned in Transit Efficiencies, Cost Reductions, and Revenue Generation – Third Edition*. Joel Volinski, Director, National Center for Transit Research, University of South Florida, CUTR Webcast Series. February 10, 2011.

[10] *Public Transportation Funding Strategies Putting Customers and Communities First*. New York Public Transit Association (NYPTA). October 2010.

generates revenues at the moment of the transaction, thus it may only provide financial relief in the short term. If the asset sold or leased generates any revenue to the transit agency (e.g., a parking facility), those revenues are foregone over the long term, and it would be equivalent to a cash advance or loan in exchange for a long-term revenue stream.

- **Railroad Rehabilitation and Improvement Financing (RRIF) –** The MDT report on innovative financing options also identified another Federal loan program available to local and regional transit agencies running commuter rail service.[11] The RRIF provides loans for rail projects, including intercity rail. They have typically been provided to freight rail lines in the past but there is nothing in the statute preventing the use of RRIF for commuter rail lines. A recent example of a RRIF loan for transit is the Denver Union Station project. Transit agencies providing commuter rail service should consider these loans which are subordinate to senior debt and flexible in terms. While similar in some ways to TIFIA, there are some key differences that must be noted. There is no project size minimum to be eligible for a RRIF loan and the project sponsor may apply for a loan up to 100 percent of the project cost. The cost of issuing a RRIF loan, however, is higher for the applicant, compared to a TIFIA loan, because loan applicants must pay: 1) a Credit Risk Premium to cover the cost of the government providing financial assistance; and 2) an Investigation Fee to defray FRA's cost of evaluating the RRIF applications. These costs are covered through Congress appropriations for the TIFIA program.

Examples of Local and Regional Public Transportation Funding Sources Used Internationally

Funding sources used internationally by local and regional entities to fund public transportation were also reviewed as part of this literature research. TCRP Report 129 listed several major sources of revenue for Canadian and European transit systems as shown in Table A.2.

[11] *Evaluation Innovative Financing Opportunities for Miami-Dade Transit*. Infrastructure Management Group, Inc. October 2009.

Table A.2 Examples of Funding Sources for Canadian and European Transit Systems

Funding Source	Location
Property Taxes	Rome and Vancouver
Gas Taxes	Toronto, Montreal and Vancouver
Motor Vehicle Fees	Montreal
Regional Payroll Taxes	Paris
Contract Service Fees	Montreal
Parking Taxes (Sales)	Vancouver
Income Taxes	Barcelona and Madrid
Value-Added Tax	Barcelona and Madrid
Congestion Fees	London
Various Business Taxes	Madrid
Hydroelectricity Tax	Vancouver

Source: TCRP Report 129 – *Local and Regional Funding Mechanisms for Public Transportation*, 2007.

The following section summarizes other funding sources used abroad to fund public transportation not addressed in TCRP Report 129.

- The "vale-transporte" in **Brazil** is an obligation imposed on employers to finance part of the commuting costs of their employees.[12] It is considered a local tax, or tax-like vehicle, used to supplement user charges for transport services, including public transport. Companies pay the benefit monthly, together with the employee's salary, to ensure a convenient and effective daily commute by workers between their homes and their places of work, regardless of the distance involved.[13]
- In **Hong Kong**, the Mass Transit Railway (MTR) Corporation is involved in a wide range of business activities in addition to its railway operations, particularly in the development of residential and commercial projects.[14] The Transport Politic which reports to the MTR is, in association with the local government, one of Hong Kong's major property developers and has used the profits generated from its new housing, commercial, and retail

[12] "Chapter 10: Urban Transport Pricing and Finance." *Cities on the Move: A World Bank Urban Transport Strategy Review*. World Bank. http://siteresources.worldbank.org/// chapter10.pdf.

[13] http://www.brasil.gov.br/para/worker/work-job-and-income/public-transport-subsidy-vale-transporte/br_model1?set_language=en. Last accessed on September 12, 2011.

[14] http://www.mtr.com.hk/eng/overview/profile_index.html. Last accessed on September 12, 2011.

developments to partially pay for the cost of constructing new subway lines despite the worldwide economic recession and the resulting government cutbacks.[15] Land in Hong Kong is all owned by the government, thus the City leases its land to MTR for long-term periods, and the transit agency is expected to pay the government the land costs estimated based on a no-rail scenario. As a result, MTR is rewarded for the added value it will produce once its new transportation project is completed on the leased land. This approach eliminates the problem of escalating land values that many agencies in the United States face when they use eminent domain to take land for a transit investment. Proposing a similar finance method in the United States may be difficult since there is residual fear of letting the public sector or even public-private partnerships engage more aggressively in land development. It is important to note that Hong Kong may be a unique case given that its geographic constraints force all new development to be quite dense, and therefore, conditions are ideal for transit-oriented development.

- Ecotaxes in **Germany**, like the German Mineral Oil Tax (Mineraloelsteuer), are being imposed on polluters with the idea that those who cause a problem compensate for the cost imposed on the community. In this case, the compensation paid through the ecotax is then used to fund public transport, an alternative, less polluting form of transport.[16] The explicit use of cross-subsidies from other sectors to support public transport are still common in Germany but becoming rare elsewhere.

A.2 IMPACTS OF THE RECESSION AND ECONOMIC CYCLES ON LOCAL TRANSIT FUNDING

The recent economic recession has had a significant impact on public sources of revenue for public transportation systems. While very few studies have been conducted on the impacts of the current recession on local transit funding,[17] the few that are available show that transit agencies have faced extreme challenges during the past several years.

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[15] *Hong Kong's Expanding Metro a Model of Development-Funded Transit*. The Transport Politic. December 14, 2010. http://www.thetransportpolitic.com/2010/12/14/hong-kongs-expanding-metro-a-model-of-development-funded-transit/. Last accessed on September 14, 2011.

[16] *The Financing of Public Transport Operations*. FOCUS, A UITP Position Paper, International Association of Public Transport (UITP). April 2003.

[17] The *TCRP Project J-11, Task 15 – Impacts of Cuts and Reductions in Public Transportation Funding Study* will examine in more detail the effects of significant reductions in transit services that have occurred as a consequence of the recent economic downturn.

Extent of Impacts

A March 2010 survey of transit agencies by the American Public Transportation Association (APTA) found that 90 percent of transit agencies reported flat or decreased local funding in 2009.[18] A 2011 update of the survey saw that figure at 71 percent for 2010. This led to 69 percent of agencies projecting budgetary shortfalls in 2010 and 35 percent projecting shortfalls in 2011.[19]

These shortfalls impacted transit agencies across the nation. Seven of the largest 25 transit agencies – who collectively provide about two-thirds of all transit trips in the country – projected deficits of 10 percent or larger in 2009. Twelve of the largest agencies increased fares by 10 percent or more in 2009.[20]
Looking nationally at 2009, 44 percent of surveyed agencies implemented service cuts, 44 percent implemented fare increases, and 28 percent did both. In 2010, these figures moved to 47 percent implementing service cuts, 34 percent implementing fare increases, and 20 percent doing both, as shown in Table A.3.

Table A.3 Transit Agency Actions Implemented to Address Recession Impacts

	2009	2010
Service Cuts	44%	47%
Fare Increase	44%	34%
Fare Increase ***and*** Service Cuts	28%	20%
Fare Increase ***or*** Service Cuts	N/A	51%
Transfer of Funds from Capital Use to Operations	59%	35%
Use of Reserves	49%	42%

Source: *Impacts of the Recession on Public Transportation Agencies: Survey Results*. American Public Transportation Association. March 2010 and August 2011.

Beyond raising fares and cutting service, many transit agencies took other measures to close the budget gaps. About half of surveyed agencies transferred funds from capital use to operations in 2009, and more than a third did so in 2010. This will have an impact in the long term, as agency capital assets fall further away from a state of good repair. Reserve funds were used by about 40 percent of agencies in both 2009 and 2010 to shore up the budget.

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[18] *Impacts of the Recession on Public Transportation Agencies: Survey Results*. American Public Transportation Association. March 2010.

[19] *Impacts of the Recession on Public Transportation Agencies 2011 Update: Survey Results*. American Public Transportation Association. August 2011.

[20] *Stranded at the Station: The Impact of the Financial Crisis in Public Transportation*. Transportation for America. August 2009.

Federal stimulus funding through the American Recovery and Reinvestment Act (ARRA) provided some short-term help to many agencies, mostly on the capital side. Personnel have been strongly impacted: a third of agencies laid off staff in 2009, with 20 percent more doing so in 2010. Hiring freezes, salary freezes, furloughs, and reductions in benefits are also taking their toll on transit agency employees.

Internationally, very few studies are available that document the impacts of the recession on local transit funding. In Paris, France, the Régie Autonome de Transports Parisiens (RATP) was able to maintain fiscal balance despite the recession due to two factors. The taxes that pay for transportation in Paris are less likely to vary significantly during recessions because they are payroll taxes – these are less volatile than sales taxes especially due to difficulty of firing workers in France. Secondly, government subsidies, both from the Federal and regional level, are designed to compensate when other tax revenues begin to fall short.[21]

In Canada, the Federal and provincial governments responded to the fall in local revenues, by including $500 million in support for GO Transit in Toronto in 2009. Similarly, TTC received additional subsidy of $91 million from the City of Toronto in order to avoid fare hikes or service cuts.

Causes

There are several reasons for the budget problems. First, costs are rising – driven by large increases in fuel prices since 2008. The cost of construction also rose significantly in the past decade, although the economic recession has caused some of the cost of construction to drop in more recent years, due to increased competition among contractors. Additionally, revenue sources were impacted significantly by the recession. Sales tax revenues, the most common local funding source for transit,[22] have fallen with reduced consumer spending. Payroll tax revenues, like those funding transit agencies in Eugene, Oregon and New York City, have also dropped with increases in unemployment rates. Property tax revenues, used to fund transit in places, including Minneapolis, Minnesota and Ann Arbor, Michigan, have been significantly impacted by the nationwide housing bust. When combined with reductions in funding from the state level, transit agencies across the country have faced severe problems in their budgets.

For example, Community Transit of Snohomish County, Washington expects 2011 sales tax revenue to be 18 percent lower than what was collected in 2007

[21] *How to Fix Transit Funding*, The Transport Politic. March 4, 2009, http://www.thetransportpolitic.com. Last accessed on September 14, 2011.

[22] *TCRP Report 89 – Financing Capital Investment: A Primer for the Transit Practitioner*. Transit Cooperative Research Program. 2003.

and 40 percent below prerecession forecasts. In Phoenix, a transit sales tax that passed in 2004 called "Proposition 400" was expected to bring in $5 billion over two decades. As a result of the recession, the latest forecasts estimate sales revenues of just $3 billion during that time. New York Metropolitan Transportation Authority (MTA) collects fees on real estate and mortgage transactions, and experienced a decline in revenues from these sources in 2009, according to MTA's audited financial statements.

Credit Crisis

The 2008-2009 credit crisis also had an impact on the borrowing ability of transit agencies. Loss of tax revenue and the poor economy resulted in some agencies receiving credit rating downgrades, impacting the availability and cost of issuing debt.[23] As revenue sources fall, agencies are seeing a higher percentage of their budgets directed to debt service payments, resulting in reduced funding for service or maintenance.

During the credit crisis, investors moved to the safest available investments, which in turn increased interest rates for debt with lower credit ratings. In early 2009, only 4 percent of transit agencies were rated by Moody's as "Aaa," while 58 percent were rated "Aa" and 38 percent were at "A." Agencies with ratings at "A" or below were most significantly impacted during this time. Most recently, Fitch ratings downgraded New York MTA's credit rating due to budgetary pressures that showed the agency heavy reliance in borrowing to continue operating.

The credit crisis has also had an effect on the ability of agencies to partner with private firms in Public-Private Partnerships (PPP). As noted by the Moody's in a 2009 report on Canadian PPPs, "there is a potential for P3 projects to be increasingly unable to show value for money, meet affordability tests, or even complete their funding."

A.3 FUNDING SOURCES AND FINANCIAL PLANNING USED BY OTHER PUBLICLY SUPPORTED SERVICES

Local and Regional Funding Mechanisms for Public Services

The literature review identified various funding and revenue strategies currently being used by local units of government to finance publicly supported services other than surface transportation services. The review focused on: water and sewer services, solid waste services, environmental services, parks, airports, electric, gas, and telephone services. Local governments have historically relied

[23] *Impacts of the Financial Crisis on the Transit Industry: Challenges and Opportunities.* American Public Transportation Association. April 2009.

on three major revenue sources: income, property, and sales taxes. This is not different from some of the common funding sources to support transit services. However, caps on property tax increases, the current economic recession, and diminished state and Federal funding for sustaining the physical infrastructure and public services have forced local governments to adopt alternative mechanisms to cover the cost of providing their services. The following are mechanisms commonly used across the broad range of public services that were reviewed:

- **User fees** are the most common way to recover the costs of providing a service. These fees can be tied directly to the use of a resource or facility (e.g., recreation fees, museum entrance fees, and health and hospital services). User fees are also charged to residents who require administrative services or as a requirement to comply with local or regulations (e.g., driver's license fees, building permits, zoning ordinances). User fees are also the principal source of revenue that supports public utility services (a.k.a. utility charges). Utility charges are fees associated with services necessary for a community and normally vary with consumption (e.g., electric, gas, sewer, water, trash collection, and telephone).
- **Impact fees** transfer the costs of infrastructure services (roads, sewers, stormwater treatment, etc.) needed for private development directly to developers or property owners. Unlike user fees, which recover costs over the life of a project or service, impact fees are usually collected in one lump sum at the beginning of a project. These fees are particularly attractive to local governments because they relieve up-front financing pressures on local budgets.
- **Special assessment districts** is a method by which a group of property owners share the cost of infrastructure improvements, such as installing water and sanitary sewer lines, building sidewalks, streetlights, installing stormwater management systems, etc. The city undertakes all aspects of design, financing, and construction of improvements and sells bonds to provide cash for the project. Property owners within the benefit district repay the money through special assessments, usually over 15 to 20 years.
- **Franchise fees** are privileges granted by a local government or agency to a specific business that allows them to have their facilities on public property. The franchise agreement is a special type of rent for using public right-of-way or public facilities. For instance, many local water districts have developed agreements with wireless communication companies for the privileges of renting space on their water towers to install antennas. Other examples of businesses that pay franchise fees include: cable television companies, electric utilities, and oil and natural gas pipelines.
- **Revenue bonds** are repaid solely from revenues generated from the services rather than taxes. Bonds are not revenue, however, and require a dedicated revenue source to pay debt over time.

- **Tax Increment Financing** (TIF) are commonly used to finance redevelopment projects. TIF involves the issuance of tax-exempt bonds to pay front-end infrastructure and eligible development costs in partnership with private developers. As redevelopment occurs in a district, the "tax increment" resulting from redevelopment projects is used to retire the debt issued to fund the eligible redevelopment costs. The public portion of the redevelopment project funds itself using the additional taxes generated by the project.

Table A.4 provides a general overview of specific mechanisms commonly used in five publicly supported services: water and sewer, solid waste services, environmental services, parks and greenspace services, and airports. The actual mix of strategies and level of revenues vary between states, counties, and cities.

Table A.4 Funding Mechanisms of Publicly Supported Services

Water and Sewer	Solid Waste Services	Environmental Services	Parks, Trails, and Greenspaces	Airports
• Property Taxes • Connection Fees • Local Improvement Districts • Revenue Bonds • Hotel Taxes • Impact Fees • Utility Charges • Grants • Franchise Fees	• Property Taxes • User Charges • Tipping Fees • Service Fees • Recycling Revenues • Gate Fees • Grants • Pay-As-You-Throw • Solid Waste Funds	• Special License Plates • Grants • Local Taxes • Land Leases • Impact Fees • Stormwater Utility Fees • User Fees • Surcharge on Fishing License • Surcharge Boat Registrations	• Property Taxes • Revenue Bonds • Impact Fees • Franchise Taxes • Recreation/Fees • Local Improvement Districts • Tax Allocation Districts	• Revenue Bonds • Federal Grants (AIP) • Parking Fees • Passenger Facility Charges • Terminal Concessions • Fees Charged to Aircraft Operators • Advertising/Programs • Commercial Development

Source: Cambridge Systematics, Inc.

The recent economic downturn has highlighted the need for revenue diversification. Local and regional governments are seeking alternative sources of revenues to supplement their traditional mechanisms. The following sources have received a fair amount of attention to generate more revenues instead of raising local taxes and service charges.

- **Naming Rights** – Naming rights provide a business or organization with the right to place their name or logo on public property in exchange for financial or in-kind support. Generally naming rights are granted to donors for facilities such as schools, libraries, parks, and hospitals. The sale of naming rights has already taken part of local transportation infrastructure around the country.

- **Corporate Sponsorship** – Sponsorship allows a business or organization to support a public program with financing or in-kind products in exchange for being associated with the specific program, often as an "official sponsor" or "proud partner." Sponsorship provides the organization the ability to market to a targeted group of residents. The City of San Diego in California was one of the pioneers in adopting this funding mechanism. The City's current Corporate Partnerships include:
  - Pepsi Bottling Group: "Official Provider of Cold Drink Vending Machines;"
  - Verizon Wireless: "Official Wireless Partner;" and
  - San Diego Metropolitan Credit Union: "Official Credit Union."
- **Advertising –** A common trend is for municipalities to negotiate with a business or organization the right to place advertisements or signage on public property. Advertising rights can be a portion of a larger partnership agreement (such as sponsorship) or can be sold separately. Advertisements can be displayed on physical property such as public vehicles and facilities or on digital property such as a municipality's web site.
- **Exclusive rights** are provided through an agreement in which a municipality exclusively uses, sells, or promotes a particular company's product. Examples of exclusive rights contracts are vending and concession agreements.

Financial Planning at the Public Sector

Financial planning in the public sector has evolved over the years. As state and local governments face the increasing pressure of fiscal constraints, public agencies have been developing long-term financial plans as a complement to the annual budgeting process. Long-term financial planning (LTFP) is a multiyear approach that combines trend analysis, financial projections, and strategizing that allow public agencies to assess the sustainability of its future services in terms of cost and availability of revenues.[24,25] This long-term perspective provides insight into future needs and how future investments will be financed. Best practices recommend LTFP forecasts to extend at least five years into the future and be regularly monitored and periodically updated. The Government Finance Officers Association (GFOA) emphasizes the importance of combining the forecasting of revenues with the forecasting of expenses in a comprehensive financial model and to prepare a baseline case scenario along with alternative scenarios to determine a wide range of possible outcomes. Unfavorable

[24]Township of Livingston, *Long-Term Financial Plan*, 2010.

[25]Shayne Kavanagh, *Protect Your Community with Financial Planning*, 2007.

outcomes should be accompanied with contingency plans in case a shortfall is discovered and avoid taking reactionary measures.

The review of the literature reflects that long-term financial planning involves three distinct but interrelated activities:

1. Analyzing historical trends;
2. Assessment of the current fiscal environment to identify current challenges that may have an impact on long-term fiscal stability; and
3. Project potential revenues and expenditures to uncover potential future fiscal gaps.

It was found that for analyzing historical trends and fiscal environments the public sector utilizes a number of financial indicators developed by the International City Managers Association (ICMA) and published in *Evaluating Financial Condition*.[26] This financial manual presents a comprehensive system for monitoring financial trends and provides benchmarks and guidance for analyzing revenue and expenditure trends. Table A.5 shows a sample of core financial indicators used by local units of governments for analyzing historical trends and their fiscal environments. These indicators are grouped in six areas: revenues, expenditures, operating position, debt structure, unfunded liabilities, and condition of capital plant. The ICMA manual assists in compiling information from budgetary and financial reports and, combined with economic and demographic data, creates measures and indexes that are used to monitor changes in financial condition over time.[27] These indicators can be used to:[28]

- Present a picture of financial strengths and weaknesses;
- Gain a better understanding of, and monitor changes in, financial condition;
- Identify existing problems and develop corrective solutions;
- Anticipate emerging problems in time to make necessary adjustments;
- Project future financial needs;
- Introduce long-range considerations into the annual budget process; and
- Provide a starting point for setting financial policies.

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[26] http://icma.org/en/press/home. Last accessed September 6, 2011.

[27] In addition to the measures tracked by the National Transit Database for transit agencies, the ICMA manual can be used by transit agencies to 1) evaluate their financial strengths and weaknesses; 2) project future financial needs; and 3) get a better picture of their financial condition.

[28] Township of Livingston, *Long-Term Financial Plan*, 2010.

In projecting future revenues and expenditure, research shows that state and local governments typically employ one or a combination of three techniques, which include: expert opinion, historical trends, and deterministic/econometric models. Expert opinion is a qualitative approach that relies on the experience of senior managers who typically understand the drivers of revenue yield and expenditures. Historical trend forecasting consists of extrapolative techniques to evaluate historical values and predict future values based on rates of change.

Table A.5 Sample of Core Financial Indicators

Revenues	Expenditures
• Revenues per Capita	• Expenditures per Capita
• One-Time Revenues	• Fixed Costs
• Property Tax Revenues	• Employees per Capita
• Elastic Revenues	• Fringe Benefits
• Sales Tax Revenues	• Expenditure by Function
Operating Position	**Debt**
• User Fee Coverage	• Current Liabilities
• Fund Balances	• Long-Term Debt
• Liquidity	• Debt Service
Unfunded Liabilities	**Condition of Capital plan**
• Tax Appeals	• Maintenance Effort
• Accumulated Employee Leave	• Capital Outlay

Source: Adapted from Township of Livingston Long-Term Financial Plan (2010) and San Clemente Financial Trend Analysis (2008).

Deterministic/econometric forecasting combines economic principles with statistical techniques and do not rely solely upon the past, instead, they consider impacts such as unemployment rates, population changes, and per capita income among other economic indicators. The review reflects that the best technique depends on the expertise of the forecaster although experience has shown that the most common and effective technique is hybrid forecasting, that is, the combination of quantitative technique and qualitative techniques.[29]

[29] The evolution of data sources and analysis tools allow for projections to be made far more easily than has been historically the case. One example is MuniCast, a financial forecasting model designed for local governments. Users can construct long range-projections of revenues and expenditures, as well as multiple economic, spending and debt scenarios.

Financial Planning for Public Transportation Systems

It is not uncommon of transit agencies to prepare long-term financial plans. For example, all MPO are required to develop long-range transportation plans (LRTP), and transit services are an element of these plan. LRTPs must be fiscally constrained; therefore, only those projects and services for which funding has been identified are included in the plan. Most MPOs also maintain a list of unfunded needs, which includes projects that could be advanced if funding is identified in the future. In addition, some states (e.g., Virginia and Florida) require transit agencies to prepare 5- to 10-year plans. In Florida, for example, the Transit Development Plans encompass a period of 10 years, and are a requirement to receive state transit funding. On the Federal side, transit agencies pursuing FTA New Starts grants are required to develop 20-year financial plans that demonstrate the sponsor agency's financial capacity.

The validity of a LTFP depends on the reliability and stability of the revenue sources and the estimates of the expenditures. A growing number of financial management systems have been developed with the capabilities of evaluating variations in expenditure and revenue scenarios. In addition, it was found that many public agencies in the United States and internationally that manage capital assets have incorporated the principles of asset management into their planning activities. Asset management is a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their life cycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decision-making based on quality information and well-defined objectives. Asset management is a performance-based approach that is driven by policy and where different types of works, options, and tradeoffs are evaluated. For instance, the City of Port Adelaide Enfield, in Australia, integrates asset management plans to predict infrastructure consumption and renewal needs and consider infrastructure requirements to meet future community service expectations. The plans set out the forecast capital requirements of the Council for a period of 10 years. The expenditure requirements are incorporated in their long-term financial plan to ensure projected investment in infrastructure can be accommodated without detriment to Council's financial sustainability. At the Federal level, the state of good repair (SGR) of transit assets and facilities has become an area of focus in recent years. FTA is currently developing a technical assistance program to improve asset management knowledge and practices in the transit industry.

A.4 INITIATIVES TO INCREASE TRANSIT FUNDING

Several reports are available from the Center for Transportation Excellence (CFTE) and the Mineta Transportation Institute (MTI) on ballot referenda initiatives to increase transit funding. These reports, based on several case studies, include a list of the factors associated with the success of transit ballot initiatives and a complete guide for successful transit initiatives. The National

Cooperative Highway Research Program (NCHRP) also published a report, NCHRP 20-24 (62), presenting step-by-step actions on how to make the case for transportation investment and revenue. Although the NCHRP report is not specific to transit, the guidelines have application to most transportation investment and revenue initiatives, including those supporting transit. Finally, Smart Growth America (SGA) has published a strategy template for transit campaign organizers interested in winning a dedicated funding source for transit infrastructure and transit-oriented development.

Center for Transportation Excellence

The CFTE's report, *Building Communities Through Public Transportation – A Guide for Successful Transit Initiatives (2005)*, is a comprehensive toolkit currently available on how to organize a campaign for a successful public transportation referendum. Based on case studies from actual transit efforts, both successful and unsuccessful, the report identifies the steps and key actions presumed necessary to conduct a successful transit funding initiative.

CFTE's follow up report, *Transportation Finance at the Ballot Box – Voters Support Increased Investment and Choice* (2006), on the actual results of transportation ballot measures from 2000 to 2005, documents the key trends observed in these elections. Particular attention was given to the trends in those initiatives and referenda[30] whose purpose was to adopt or approve some variety of specific financing mechanisms for transportation projects. Based on CFTE's review of recent ballot measures related to financing, sales taxes, property taxes, and bonds were the three most common revenue sources found in transportation ballot measures. Other revenue sources included gasoline taxes, rental car fees, vehicle registration fees, and tolls. Key findings from CFTE's review are highlighted below:

- **Sales taxes** are the most popular revenue source contained in transportation ballot measures. The study found sales taxes also provide the largest revenue yield of sources approved by ballot measure.
- **Property taxes** have also become an important source for transportation funding, particularly in portions of the Midwest. Between 2000 and 2005, property tax measures had the highest victory rate of any transportation revenue ballot measure.
- **Bond issuance** to underwrite transportation plans and projects has also become popular, particularly at the state level. In November 2006, California voters approved Proposition 1B, the largest infrastructure bond in state

[30] Initiatives require a citizen-led petition process. Referenda are proposals referred to voters by elected or appointed bodies for final approval.

history at $37 billion, with $20 billion dedicated to transportation investments.[31]

- **Gas tax** increases are being pursued by fewer states presumably because of concern over recent increases in gas prices.
- **Other fees on transactions such as driver's licenses, vehicle registrations, or car rentals,** are being proposed by states and municipalities**,** sometimes including measures to dedicate existing fees to transportation spending or to alter spending formulas to broaden project or modal eligibility.

The CFTE report included several successful case studies which identified the challenges experienced while developing and implementing the transit funding campaigns, the key strategies used that resulted in a successful measure, and the implementation or performance metrics used to assess the benefits associated with the transit funding measure. Table A.6 summarizes the challenges, key strategies, and implementation and performance factors found in the several case studies summarized by CFTE in their ballot measure review. These factors are likely relevant in most circumstances and should be considered when developing and implementing a transit ballot initiative.

Table A.6 Challenges, Key Strategies, and Implementation/Performance of Successful Transit Funding Ballot Initiatives

Challenges	Key Strategies	Implementation/ Performance
Opponents and Critics (including environmentalists and diverse groups)	Plan Early	Ridership
Voter Mentality	Gain Community Support	Economic Benefits
Lack of Organization	Gain Business Support	Benefits to Businesses
Lack of Publicity	Form Coalitions	Congestion Relief
Lack of Fundraising	Frame the Message	Environmental Benefits
Previous Failure	Get the Message Out	Accessibility
	Attack the Opposition	
	Respond to All Criticism ASAP	
	Use of Consultant	

Source: Center for Transportation Excellence, *Transportation Finance at the Ballot Box – Voters Support Increased Investment and Choice* (2006).

Note: Case Studies reviewed: *Denver FastTrack*, *Lansing, MI*, *Alameda County*, *New York State, and Maricopa County, AZ*.

[31] http://www.cfte.org/success/2006Updates_CABond.asp. Accessed 4/2/2012.

Mineta Transportation Institute

The Mineta Transportation Institute (MTI) conducted in 2001 and replicated in 2011 an analysis of transit funding ballot initiatives in urban areas across the nation. The 2001 study, *Factors Influencing Voting Results of Local Transportation Funding Initiatives with a Substantial Rail Transit Component: Case Studies of Ballot of Eleven Communities,* concluded with the identification of 17 community-level factors with potential impact on the success of ballot measures for sales tax increases to fund transportation packages with substantial rail components, as summarized below:

1. **Perception of a Congestion "Crisis"** – If traffic problems are perceived to be significant, motivation to support tax increases is higher.
2. **Sponsorship by Business Community – Support** from business leaders legitimize the need for a tax increase which helps measures pass.
3. **Sponsorship by Key Elected Officials –** Mayors and well-recognized officials can assemble support among a variety of groups and help squelch disagreement among political factions.
4. **Total Fundraising Amount –** Poorly funded campaigns can easily fail given the significant expenditures required for an effective campaign (consultants, research, publicity, media, direct mail, etc.).
5. **Recent Initiative Experience –** The experience of creating and carrying out a campaign allows supporters to learn from their mistakes and make necessary adjustments to prevail the next time around.
6. **Support from Environmental Groups –** Endorsement and support offered by environmental groups provide a cue for some voters, while its absence can signal potentially negative publicity.
7. **Multimodal Proposal –** Multiple modes attract different kinds and groups of voters creating more of a challenge for the opposition.
8. **Highway Funding –** Providing funding for highways helps dispel opposition from opponents of transit systems.
9. **Benefits distributed throughout Area –** Failure to disperse benefits associated with transportation tax measures may lead to geographically based pockets of opposition, creating divisions among voters.
10. **Sunset Provision of 20 Years or Less –** Voters are more likely to support measures with finite time limits, where indefinite tax proposals make the measure more vulnerable to opponent's charges of unlimited taxation.
11. **Extension of Existing Rail System –** Voters are more likely to support an incremental rail improvement than a new system.
12. **Lack of Problems with Existing Transit System –** Keeping a positive image of competence and efficiency helps instill trust in the electorate.

13. **Extensive Stakeholder Participation in Development of Initiative –** It is important to get agreement from relevant groups that the initiative is acceptable before going forward with the campaign.
14. **Congressional or Presidential Election –** Supporters of a transit ballot measure are more likely to vote in a general election (congressional or presidential), as opposed to an off-year "special" election.
15. **Consultant with Initiative Experience –** Transit tax increase campaigns are complex and require the judgment of an experienced professional.
16. **Use of Media –** The presence of media to advertise to targeted audiences and general audiences creates general awareness and enables the campaign to publicize its overall message.
17. **Unorganized, Poorly Funded Opposition –** When the opposition to the tax measure is disorganized and has little funding available for advertising is not effective.

The June 2011 study, *Revisiting Factors Associated with the Success of Ballot Initiatives with a Substantial Rail Transit Component,* replicating the 2001 study, evaluated eight case studies[32] to identify which of the 17 community-level factors were moderately to strongly associated with electoral success and failure of transit tax initiatives. The study found that the initiatives most likely to succeed were those that by plan or fortune managed to embrace the key factors highlighted in bold in the list above and summarized below:

- Consensus among the business, elected and environmental communities, and accompanying depth of financial support is very important;
- Without a well-funded campaign making use of effective multimedia tools, it is very difficult to pass an initiative; and
- Utilizing experienced campaign consultants is also essential.

The study further indicates that although these key factors seem necessary for the success of a transit ballot initiative, they are not sufficient to assure success. In addition, it is difficult to say whether the absence of any of these factors will likely doom a ballot initiative. However, the study concludes that the importance of a high-profile support from both political leadership and business communities (i.e., broad consensus among community leaders) may be the most likely key factor in assuring the success of a transit ballot initiative.

[32] Case studies analyzed: Maricopa, Arizona (success); Seattle (failure); Charlotte, Mecklenburg County (success); City and County of Honolulu (success); Los Angeles County (success); Kansas City, Missouri (failure); St. Louis County (failure), and Santa Clara County (success).

National Cooperative Highway Research Program

The National Cooperative Highway Research Program (NCHRP) report *NCHRP 20-24 (62) – Making the Case for Transportation Investment and Revenue* (2009), evaluated 11 case studies across the nation where significant transportation funding was sought. Based on the successes and failures from those case studies, the NCHRP report presents 10 steps recommended to follow before asking voters for additional funding for a transportation program. These are summarized below:

1. Determine the transportation program needs;
2. Determine the costs, priorities, and benefits of the program;
3. Design the case for the public, political leaders, and the media;
4. Address the program's weaknesses;
5. Find a champion;
6. Secure support from the governor;
7. Analyze the program's acceptance with the public, political leaders, and the media;
8. Know your opposition;
9. Determine your resources; and
10. Create a winning strategy.

Based on the case studies experiences, the report also summarizes the essential elements necessary for success, the "must-have" components for a winning strategy, as well as key lessons learned from factors that can undermine success. These are summarized in Table A.7.

Table A.7 Challenges, Key Strategies, and Implementation/Performance of Successful Transit Ballot Initiatives

Essential Elements for Success	Winning Strategy Components	Lessons Learned – Undermine Success
Documented and Validated Transportation Need	Request Amount	Premature Announcement
Agency Credibility with Public and Decision-Makers:	Revenue Mix	Inconsistent Message
– Stewardship	Use of Funds	Reliance Solely upon Technical Arguments
– Demonstrated Delivery	Equity (geographic and social)	Lack of Positive Coordination with Stakeholders
– Leadership	Project Specificity	
	Stakeholder Coalition	
	Captivating Message	

Source: *NCHRP 20-24 (62) – Making the Case for Transportation Investment and Revenue* (2009).

Note: Case Studies reviewed: *California*, *Maricopa County*, *Maryland*, *Minnesota*, *New York City*, *Ohio*, *Texas*, *Utah*, *Virginia*, *Washington State*, *and Federal*.

Smart Growth America

Smart Growth America (SGA) is a national organization leading coalitions to bring smart growth practices, like transit-oriented development and transit investments, to more communities nationwide. SGA published *Transit Campaign Planning: A strategy template for organizers* in October 2011 in order to facilitate the decision-making process of those organizing a transit funding campaign. The template indicates there are seven key actions organizers need to perform before launching a transit funding campaign:

1. Conduct a situation analysis, including external and internal factors to consider;
2. Establish specific and measurable goals and objectives to prioritize resources use;
3. Target decision-makers, primarily those who make the decision to approve or reject the funding proposal;
4. Design strategies that define the campaign's primary approaches based on primary goal and target decision-makers;
5. Outline tactics, activities and implementation plans to put the strategies into action;
6. Structure and operate the campaign to ensure high-impact implementation; and
7. Establish and closely manage the campaign budget, including in-kind resources.

The goal of this template is to assist transit funding campaign's organizers in the creation of a more focused, more strategic, and ultimately more successful campaign.

Case Studies

A total of six transit agencies were interviewed about their experience as they pursued initiatives to increase existing funding or develop new funding sources, particularly during the economic downturn. In addition to ballot initiatives to fund transit, revenue bills can be introduced and enacted through state legislatures to increase existing local funding sources or introduce new local funding mechanisms to cover transit operations and capital expenses. Three transit agencies interviewed introduced new funding sources via direct legislative action during the most recent recession. Case studies from some of these interviews are presented below, including information on:

- Need for increased funding,
- Type of funding pursued,
- Ballot development process,

- Campaign "champions"
- Public support/political acceptance
- Challenges/lessons learned, and
- Keys to success.

Roaring Fork Valley, Colorado: Sales Tax Increase

RFTA went to the voters in November 2008 requesting a 0.4 percent sales tax and $44.55 million in bonding authority to build and operate a new Bus Rapid Transit (BRT) line. The increase in sales tax revenue was expected to provide funding for $62.5 million in capital improvements and increase operating revenues by about $37 million between 2009 and 2017. Six municipalities (Aspen, Snowmass Village, Basalt, Carbondale, Glenwood Springs, and New Castle) and two counties (Eagle and Pitkin) are in RFTA's jurisdiction. The sales tax increase and bonding issuance were combined in one question on the November 2008 ballot, which was approved with 54.6 percent of the votes.

Need for Increased Funding. The Roaring Fork Valley, between Glenwood Springs and Aspen, CO, is very linear and confining both geographically and environmentally. Its ski resorts bring many visitors to the area, as well as workers who commute throughout the corridor. Existing transit service through the valley is at or near capacity during peak times of the year, prompting the transit agency to look for other revenues to meet the demand.

Type of Funding Pursued. Through the State of Colorado, RFTA had authority, with voter approval, to levy either a sales tax of up to 1 percent or a user benefit tax of 2 percent on lodging. Because of community opposition to the user benefit tax, as well as the greater yield potential of the sales tax, the transit agency chose to pursue a sales tax.

Ballot Development Process. The decision to pursue funding for this project was the culmination of seven years of planning for a BRT line. Nicknamed "VelociRFTA," the route would travel along the State Highway 82 corridor between Glenwood Springs and Aspen, a total of about 40 miles. The notion of BRT in the area originated in 2001, and an initial study was completed in 2003 that estimated the project to be $120 million in capital costs. In 2006, RFTA set a goal to implement BRT by 2017.

Revenue estimates for a sales tax in the region indicated that even if RFTA "maxed out" its authorized taxing ability, it would not be able to cover all the costs of the original plan. The transit agency then shifted to an effort to figure out what they could do over 10-15 years within the potential revenue yield.

From this, RFTA began a two-track planning program. First, it decided to seek Federal funding, and began planning for a capital project in the $60 million plus range. Not wanting to have to completely rely on the Federal process, it also began plans for a separate, smaller investment – a $44 million capital project. A

scoping study that began in 2007 was completed in March 2008. This led to the pursuit of the sales tax referendum, two parallel capital planning efforts, and an application process for Federal transit capital funding. The decision to bring forth the referendum was made in March 2008, the ballot question was finalized by June 2008, and the vote was held during the November 2008 elections. The ballot measure passed with a total of 54.56 percent in favor; a margin of about 1,770 votes out of 19,400 ballots cast.

Champion. Once the ballot question was finalized in June 2008, members of the RFTA Board formed a campaign committee to build support. The champions included RFTA's Board members and employees. The campaign committee was made up of 10 active members, and raised $20,000 for the effort.

The primary campaign strategy was public outreach. The campaign committee created newspaper advertisements, wrote letters to the editor and to stakeholders, held meetings with service groups, and provided presentations to member jurisdictions in the valley.

Public Support/Political Acceptance. All of the RFTA board members are elected officials. Because of this, they had excellent communication across their jurisdictions and were able to build support within their communities. The campaign worked with each member jurisdiction to give presentations to the public on the BRT service and its benefits.

One group in the area took the lead in opposing the ballot measure. The campaign knew and expected this opposition, and built a strategy to blunt their message through an information campaign that thoroughly described all of the benefits of the project.

Challenges/Lessons Learned

- **Lack of Experience –** As the first major capital project RFTA had undertaken, it handled the process with little experience. The lack of experience and the complicated nature of the project – six jurisdictions over 40 miles – RFTA underestimated the amount of time it would take to get through the project development and community land use development process. The transit agency also noted that any project, like theirs, with a long timeframe experiences political changeovers at the local, agency board, state, and Federal levels. This political fact of life introduces uncertainty in addition to the time required for the Federal grant process to play out. Constant and continuous outreach to stakeholders was required over the entire extended timeframe.

Keys to Success. Two factors that the transit agency thinks were important in the success of the ballot measure turned out to be outside of its control.

- **Winter Storm** – The first was that the winter of 2007-2008 was an "epic" snow year. The months of January through April 2008 in particular had snowfalls far above average, benefitting the area's ski resorts and other winter tourism

attractions. This led to very high ridership through these months – setting records for RFTA during this time.

- **High Fuel Prices** – As the season turned to summer, fuel prices climbed to over $4.00 per gallon. This further boosted ridership on RFTA services, to the point of straining capacity. On very long routes, many trips were standing-room only on the buses – an uncomfortable situation for riders.

RFTA used these two factors to make the case that the transit system was at or over capacity, and so the region needed a more convenient, attractive, fast, and comfortable service to carry its increased passenger load.

Kalamazoo County and City, Michigan: Property Tax Increase

In May 2009, a countywide three-year, 0.4 mill levy was approved by Kalamazoo County voters to pay for demand response services and limited fixed bus routes outside the city of Kalamazoo. Kalamazoo County voters approved the measure with 63 percent in favor and 37 percent against the measure. In November 2009, voters within the city of Kalamazoo approved the second part of a two-part plan to increase funding for Metro Transit, a 0.6 mill request to generate approximately $1 million annually over three years to fund fixed route services operating within city limits. Currently, city residents pay a combined 1 mill.

Need for Increased Funding. The Kalamazoo County Transportation Authority (KCTA) and the Kalamazoo's Transit Authority Board (TAB) pursued an increase of the property tax millage to maintain the existing fixed-route bus services and demand response service at the same levels. The increased millage was not to expand services.

Type of Funding Pursued. Property tax is the only type of public funding available locally to fund transit services in Michigan. According to Metro Transit staff, "counties and cities are very limited on what they can do or go after. They [the transit agencies] are very limited in Michigan." The city millage has repeatedly received local support since it was established in 1986.

Champion. Metro Transit could be considered the main champion. Other champions were:

- **Government Officials** – KCTA and the Kalamazoo Transit Authority Board, which are appointed officials, were big supporters;
- **Advocacy Groups –** Friends of Transit, a support group for seniors and disabled; and
- **Community Leaders –** Chamber of Commerce.

Ballot Development Process. KCTA was created in 2006 to consolidate the public transportation services in the Kalamazoo County. The intention was, and still is today, to transfer the daily operations of Metro Transit from the city to the authority. In 2008, KCTA initiated a ballot process asking for a single millage rate of 0.63 mills for all residents in the County to pay for all transit services,

which was defeated in the November election. KCTA, the City of Kalamazoo, and the Kalamazoo TAB concluded that a two-tiered millage was necessary if an adequate, sustainable local share was to be secured.

As a result, in 2009 KCTA decided to pursue a 0.4 mill levy countywide for demand response service and fixed route transit services outside the City of Kalamazoo. The City of Kalamazoo, in turn, sought a 0.6 mill levy in the City to cover local share for the fixed route service within the City. In May 2009, the countywide three-year, 0.4 mill levy was approved by county voters and in November 2009 voters within the city of Kalamazoo approved the 0.6 mill request.

Public Support/Political Acceptance. A year before placing the question on the ballot, information was exchanged between KCTA, the TAB, and the agency leadership. KCTA held numerous public awareness sessions with various stakeholder groups throughout the County to inform residents of the benefits of public transit in the community. They also provided public education without advocating for the millage and visited different government jurisdictions with performance reports and statistics on how the funds were to be spent. A campaign committee, separate from KCTA, actually ran the millage campaign.

Challenges. The countywide 0.63 mill was defeated in 2008 because residents outside the city limits were not willing to pay for fixed-route services provided within the city boundaries. Michigan statutes, PA 196, had to be amended just for Kalamazoo County to provide countywide authority to levy more than one millage rate within its boundaries. The amendment allowed two Kalamazoo authorities (i.e., KCTA and TAB) to administer the bus system so that rural and urban residents could pay different tax rates but still have countywide transit.

Keys to Success. Besides customizing the millage, other key factors were:

- **Credibility –** Show voters what they would obtain for their money;
- **Public Outreach –** Extensive and continuous outreach to the public; and
- **Transparency** throughout the process.

St. Louis County, Missouri: Sales Tax Increase

The St. Louis County Council placed a half-cent sales tax on the ballot in April 2010 to provide more funding for Metro, the regional public transportation agency. The initiative required a simple majority vote for passage. A similar half-cent sales tax ballot had failed in November 2008. The 2010 ballot initiative to increase the sales tax rate was approved by 63 percent of the voters on April 6, 2010.

Need for Increased Funding. Due to the failure of the November 2008 ballot initiative to increase the sales tax, Metro Transit faced severe service cuts (30 percent), due to significant revenues losses from its existing sales tax. As a result, the decision was made to approach the voters again for an increase in funding to sustain existing operations.

Type of Funding Pursued. Historically, the region seems to prefer sales tax funding to other revenue raising mechanisms. The Metro Transit received funds from an existing sales tax, making it easier to increase the rate rather than pursue a different funding source. Metro Transit does not have any independent taxing authority; rather, it receives its sales tax revenues through the governments of the city and counties in its service area.

Champion. Several people were crucial in the campaign to increase the funding for Metro Transit. Two key elected officials, in particular, were essential to the campaign:

- The St. Louis County Executive played a key role to put the measure back on the ballot in 2010. The County Executive was an advocate for transit, and consulted many people before being willing to lead the request to place the measure back on the ballot, which he had supported in 2008. He consulted with labor, businesses, and customers, as well as Metro Transit staff who outlined the agency's declining financial projections.
- A former mayor of Chesterfield was also an important champion. As a former suburban mayor, and a Republican, he was able to advance effective discussions when talking to other mayors across St. Louis County.

Reaching out to the other mayors was a success, as over 50 mayors out of 91 in the County publicly supported the ballot measure. The outreach also resulted in the Archbishop of St. Louis sending a letter of support to every Catholic parishioner in the County.

Ballot Development Process. The development of the ballot initiative originated in 2003 and 2004 when the Metro Transit began to raise awareness about future budget problems to elected stakeholders. By 2008, Metro Transit began to cut service to address growing budget gaps. A ballot measure asking for an increase in the transit sales tax was placed on the ballot for the November 2008 election – an effort that failed by 48 percent to 52 percent by 15,000 votes. Because of the failure, the transit agency implemented service cuts of 30 percent – one of the largest cuts in the country. These cuts spurred a reaction in the community, and a push was made to put the measure on the ballot again.

The campaign for the effort was made up of volunteers; no Metro staff was involved. The campaign had two major components:

- **Educational Campaign –** The educational campaign's funding totaled $300,000. It was headed up by Transit Alliance and aided by Citizens for Modern Transit. These advocacy groups supported print and television ads, as well as speaking engagements throughout the community.
- **Political Campaign –** The political campaign funds totaled $800,000. It consisted primarily of targeted commercials and other advertisements. Its slogan was "*Everyone may not ride it, but all of us need it*." This slogan was meant to reflect the fact that even though you may not use transit, every day you are relying on people who rely on Metro – grocery store clerks, hospital

staff, hairstylists, and more. This helped show everyone how they benefited from increased funding for the transit agency. The political campaign also relied on testimonials from transit riders for its advertisements.

Because other sales taxes were already being collected for Metro Transit in the region, there were very few additional costs of implementation, and the timeframe was short: the referendum passed in April 2010, revenue collections began in July, and they started receiving its first money from the tax in September of the same year.

Challenges. One of the challenges with the campaign was its timing. It was a municipal election, which took place in April. Since this is outside of the traditional regular November election cycle, turnout tends to be lower. Attempting the ballot measure at that time was contrary to conventional wisdom, since strong opponents have a lower threshold to defeat a ballot measure.

Another challenge was that Metro Transit and its employees could not legally use any agency resources for the campaign. Therefore, Metro employees could not campaign during work hours, or use work e-mail accounts or phones for the effort. Since the transit agency is in the best position to advocate for itself, this restriction presented another hurdle in the process.

Public Support/Political Acceptance. The campaign was able to garner public support and political acceptance from a strong engagement of stakeholders in the region. It engaged elected officials, gaining the support of over 50 mayors in the county. Supporters included public figures from sports, health care, and education. Testimonials from frequent transit riders allowed for the campaign to present the user's perspective of the benefits.

Keys to Success. Metro Transit believes that there were three keys to success in this effort:

- **Support of the County Executive of St. Louis County** to place the referendum back on the ballot was crucial.
- **Support of recognizable public figures, who made public statements in favor of the initiative,** including elected officials and professional athletes in the area, as well as figures from the healthcare and education communities.
- **Provision of good transit service** by Metro Transit and demonstrating good use of existing resources.

Ohio Valley Region, West Virginia: Property Tax Increase

The Ohio Valley Regional Transit Authority (OVRTA) serving the Ohio Valley region is primarily funded by an excess property tax levied in the municipalities it serves. This excess property tax is in addition to the property tax levied by the state and its counties, and is available to municipalities to fund public transportation.

In 2010, four transit initiatives went to the ballot in the Ohio Valley Region: two renewals of the current excess property tax levies in two communities (Wheeling

and Bethlehem, West Virginia) currently served by OVRTA, and two proposed excess property tax levies to expand OVRTA service into two new communities in the region (Glen Dale and Moundsville). To pass a new excess property tax levy, West Virginia law requires a supermajority of over 60 percent of the votes plus the levy ought to be renewed at least every five years, but OVRTA prefers to renew it every three years to have some flexibility in responding to changing financial conditions instead of being locked into a levy for a longer period of time.

On November 2, 2010, the initiatives supporting the continuation of the property tax levy for existing services exceeded the 60 percent threshold with 76 percent of Wheeling residents and 74 percent of Bethlehem residents voting in favor. On the other hand, the initiatives to expand service into new communities did not pass. On May 11, 2010, Glen Dale residents failed to approve the property tax levy with 50.2 percent of the votes against it and 49.8 percent in favor. On November 2, 2010, the Moundsville measure also failed to pass, falling short of the necessary 60 percent of votes cast by three percentage points.

Need for Increased Funding. The desire to extend OVRTA services into two communities was the driver for seeking approval to impose an excess property tax levy in Glen Dale and Moundsville. The additional property tax revenue, if approved, would have covered OVRTA's expenses for the new service to these two communities. The other two ballot initiatives pursued in 2010 were a renewal of the property tax levy that supports current OVRTA service since its creation in the communities of Wheeling and Bethlehem.

Type of Funding Pursued. Excess property taxes are the only authorized tax source available to municipalities by state legislation to fund transit services and other public services in West Virginia. Excess property taxes are levied by the municipalities, which have taxing authority, and the excess property tax revenue is then allocated to OVRTA. Local support for the past renewals of the excess property levies already in place indicate Ohio Valley residents with bus transit service currently available strongly approve of the use of property taxes to cover transit expenses. Therefore, no other funding source other than renewing the property taxes already in place or imposing one on new communities was considered.

Champion and Public Support/Political Acceptance. The support for OVRTA services is strong in the four communities it currently serves with over 70 percent approval in the most recent renewal of their property tax levies. Across the region, support for OVRTA is growing. The 2010 new excess tax levy referendums failed to get 60 percent only by a small margin, indicating support for OVRTA is higher than expected but not yet a supermajority.

Ballot Development Process. Given the frequency of renewal for excess property taxes (every three years), OVRTA process is well defined. At least a year before the expiration of the excess property taxes, OVRTA prepares for the renewal referendum. OVRTA prefers including the ballot measure to renew or impose new property taxes with a primary or general election instead of calling

for a special election that is more expensive. Several weeks before the election, OVRTA runs an outreach campaign, which includes posting signs, and advertising on radio, TV, and newspapers.

Challenges. There was no support from the elected officials in Glen Dale and Moundsville. Therefore, OVRTA was not able to fully promote the benefits of extending their services into those areas and therefore, the ballot measure was defeated.

Keys to Success. OVRTA service is seen as a "safety net" and a necessary service for senior citizens and riders who need to access to social services in downtown Wheeling, WV and surrounding communities. The communities OVRTA serves see the benefit of having transit services available and historically have continued to support the agency.

Hillsborough County, Florida: Sales Tax Increase

On November 2, 2010, Hillsborough County's held a referendum on the enactment of a dedicated one percent sales tax to fund projects contained in the Hillsborough Area Regional Transit Authority (HART) Rapid Transit Investment Plan (RTIP). The ballot initiative, described below, was unsuccessful.

Need for Increased Funding. The RTIP and sales tax referendum were intended to address unmet transit needs, enhance existing transit service, extend service to new areas, and introduce new transit service types as well as expand service on existing routes with more frequency, later hours, and more weekend transit service. HART wanted to add a new revenue source to its funding portfolio to support new and expanded transit service and provide dedicated funds to its capital investment program, particularly a specific multimodal project list contained in the RTIP, at a time when local funding sources for HART were shrinking. The Plan called for Bus Rapid Transit and light rail investments in highly productive transit corridors, circulators in activity centers that connect bus and rail service to specific destinations, and other effective mobility options in suburban areas to improve express and flexible services.

Type of Funding Pursued. HART, as an independent special transit district, is authorized to levy an ad valorem tax, which is currently its main funding source but is used mostly to cover operations not capital investments. HART evaluated the following funding options before deciding which type of funding to pursue for its Rapid Transit Investment Plan:

- **Gas Tax –** One of the options considered was to increase gas tax revenues. Hillsborough County has the capacity to levy up to five cents per gallon of the 1 to 5 Cent Local Option Fuel Tax available to all counties in Florida to cover capital transportation expenditures only. Given HART does not have the authority to levy this tax; it required a majority plus one vote of the Hillsborough Board of County Commissioners or a countywide referendum. Approval for an increase in the local gas tax was unlikely from the County

Commissioners as high gasoline prices in the region during that period were unpopular.

- **Ad Valorem Tax –** Another option considered was to expand the ad valorem taxing district to the whole county creating a new special taxing district beyond HART's district. This would also have required a countywide referendum and Hillsborough County would have been the entity in charge of collecting the tax. This local ad valorem tax would have also been for capital projects only. Given ad valorem tax revenues were starting to decline at the time of this discussion, the yield expected from a countywide property tax was not enough to cover the proposed transit capital program.
- **Public Service Tax –** A 10 percent surcharge on public utilities was also proposed, which would have generated around $70 million.
- **Sales Tax –** Hillsborough County is authorized to levy the Charter County Transportation System Surtax (CCTSS), a local option sales tax up to one percent, to fund transit operations and capital investments. Because the Hillsborough County's CCTSS one-percent sales surtax was estimated to generate the most revenue from among the other funding alternatives considered, it was selected as the recommended funding source for the referendum.

The referendum proposed to dedicate 75 percent of the revenues for the approved transit project list (RTIP) and 25 percent for the planning, development and maintenance of various nontransit transportation projects throughout the county, including roadways, intersections, and other supporting projects. The RTIP and one-cent sales tax was included in the November 2, 2010 ballot but was defeated by Hillsborough voters by a 58 percent to 42 percent margin.

Champion. The Mayor of the City of Tampa was a champion of the one-percent sales tax initiative to fund the HART RTIP, along with several County Commissioners, the business community, the local Chambers of Commerce, and the Hillsborough MPO. Given the city of Tampa is the main city of Hillsborough County and it would have greatly benefitted from HART's service expansions, the then mayor strongly advocated for improved transit in the city and the region, favoring the multimodal RTIP, including its light rail system plan.

The business community was also a key supporter during the marketing campaign, which was called "Moving Hillsborough Forward."[33] They were very active promoting it and pursuing public support for the one-cent sales tax.

Ballot Development Process. The process to develop the campaign to raise the sales tax in Hillsborough County to fund a multimodal project list is summarized below:

[33] http://www.tampabayontrack.org/communities/hillsborough.aspx#MHF_Archive. Accessed 03/20/2012.

- **Transportation Task Force –** A Transportation Task Force created by the Hillsborough Board of County Commissioners on December 2006[34] provided recommendations on ways to improve transportation in Hillsborough County which were included in the County's 2007-2013 Capital Improvements Program. A year later (December 2007), the Task Force was tasked to provide mid- and long-term transportation recommendations that would provide for greater economic development and redevelopment opportunities and ensure sustainable growth to improve transportation in the County. The Task Force included members from the public and private sector, including public officials, business and community stakeholders, county, city, MPO, and HART staff.[35]
- **Project List –** During 2008, the Task Force developed a project list which included rail, bus expansion, road and intersection improvements, as well as other projects.
- **Public Meetings –** The Task Force hosted public meetings, along with Hillsborough County and cities, the Hillsborough MPO, HART, and the Tampa Bay Area Regional Transportation Authority (TBARTA), in May and June 2009 to discuss the components of the transportation plan and the funding options to fund the project list in Hillsborough County.
- **Approval of Final Project List –** The Task Force approved its final set of recommendations in October 2009, including the proposed one-cent sales tax. In November 2009 Board of County Commission (BoCC) approved the recommendations, and voted to start drafting the ballot language for a vote in November 2010.
- **Additional Public Meetings –** Six additional meetings were held in February 2010 to seek public input on the list of proposed transit and nontransit projects that would be funded by the proposed future one-cent sales tax. As a result of those meetings, changes were made to the RTIP or proposed list of projects that would be funded by the tax.
- **Inclusion in Ballot –** In May 2010, the BoCC approved the placement of the measure on the 2010 general election ballot. Finally, the proposed sales tax was included for approval by Hillsborough County voters in the November 2, 2010 ballot.

The effort to pursue the new funding source took approximately three years, from December 2007 to November 2010. It was the Task Force's responsibility to develop and oversee the initiative along with the Hillsborough MPO, HART, TBARTA and business and community stakeholders. The business community

[34] http://www.hillsboroughcounty.org/transtaskforce/. Accessed 03/20/2012.

[35] http://www.hillsboroughcounty.org/transtaskforce/about/memberships.cfm. Accessed 03/20/2012.

took the initiative to promote the campaign. HART participated in all the public meetings explaining the development of the proposed multimodal project list, particularly the transit investments proposed, but by law it could not promote a sales tax levy. That responsibility was assigned to the business partners and the Task Force.

Public Support/Political Acceptance. Public support in the cities of Tampa and Temple Terrace, the two main cities where HART already provides service, was high. Referendum results in those two cities indicated the referendum would have passed if only the votes from Tampa and Temple Terrace were counted. Voters from unincorporated Hillsborough County, which is not well served by HART, defeated the referendum.

An antitax and antirail advocate group[36] was very vocal against the sales tax referendum that would have funded light rail as a new transit mode for HART.

Challenges. HART staff identified three main challenges or lessons learned that were faced carrying out the "Moving Hillsborough Forward" campaign to pass the referendum:

- **Condition of the Economy –** The campaign was developed just when the most recent economic recession started in 2008, affecting Hillsborough County, Florida, and the United States in general was deteriorating as the campaign was being developed. By November 2010, the unemployment rate in the Tampa Bay region was at its peak. The timing to ask Hillsborough County residents to increase their sales tax was not opportune and proved to be one of the biggest challenges to pass the initiative.
- **Degree of Project Specificity –** The Alternatives Analysis (AA) for the transit corridors considering light rail was being completed when the referendum initiative was being developed. Many specific details for the project were still in development. This created some confusion with the public and may have affected their understanding of the transit investments proposed.
- **Voters Confusion –** During the time of the campaign, the proposed Florida High-Speed Rail (HRS) system to connect Tampa with Orlando garnered significant attention, including the visit of President Obama to Tampa to announce the Federal funds available to construct the HSR line, which the Governor of Florida later rejected. Many voters confused the HSR line with the light rail system included in HART RTIP project list. In addition, TBARTA, the regional transportation authority that covers not only Hillsborough but the other six counties of the Tampa Bay region, was developing its Master Plan, which also included a list of unfunded transportation projects but for the much larger region. Voters were confused as to what project list the proposed one-cent sales tax would fund.

[36] http://notaxfortracks.com/Default.aspx. Accessed 03/20/2012.

Durham County, North Carolina: Sales Tax Increase

In 2009, House Bill 148 was approved by the North Carolina General Assembly. It allowed Wake, Durham and Orange counties to enact a half-percent local sales tax to fund transit investments upon voters' approval. The law requires the Board of Commissioners of each county and the MPOs to approve a transit plan before the referendum.

On November 2011 voters in the Durham County approved the half-cent sales tax to help launch commuter trains by 2018, a light rail system by 2025, and bus service improvements. However, Durham County could not collect tax revenues until Wake County or Orange County voters approved similar measures. Public hearings for Wake and Orange County plans were conducted in early 2012. Orange County residents voted and approved a half-percent local sales tax in the November 2012 election. Wake Commissioners are evaluating whether to place the sales tax on the ballot.

Need for Increased Funding. A 25-year Bus and Rail Investment Plan designed to provide greater public transportation options for residents and employers in Wake, Durham and Orange Counties proposes to build commuter trains by 2018, a light rail system by 2025 and expand and improve bus service in the tri-county region. The regional and local transit providers need additional revenues to implement these transit investments.

Type of Funding Pursued. According to Triangle Transit staff, the sales tax was identified as the preferred funding source because 1) it was already authorized by House Bill 148; 2) there was local support; and 3) the expected yield for a one-half cent sales tax in Durham County was estimated to generate about $18 million annually. This revenue is expected to increase with population and economic growth.

Champion. The Mayor of Durham was a champion of the public transportation sales tax along with local public interest groups such as the Durham-Orange Friends of Transit, business-oriented groups, such as the Durham Chamber of Commerce and Downtown Durham Inc, an organization that supports downtown revitalization.

Triangle Transit acted as a facilitator to make sure voters had the correct and most appropriate information on the transit investments and the transit funding campaign. Triangle Transit reached out to Charlotte, Denver, Salt Lake City, and major systems in Texas to learn from their experiences.

Ballot Development Process. Many steps were involved before putting the question on the ballot. HB 148 required the Board of Commissioners of each county and the MPOs to approve a transit plan before the referendum. To meet this requirement, Triangle Transit staff worked with Durham County, the Durham-Chapel Hill-Carrboro (DCHC) MPO and other regional transportation staff to develop a detailed 25-year Bus and Rail Investment Plan designed to provide greater transportation options for residents and employers. The plan

highlights the short- and long-term improvements that could be implemented once the new funds are available. Public outreach activities, including one-on-one approaches with stakeholders and decision-makers, were designed and carried out. Extensive public engagement occurred over the approximately 18 months that was required to put the plan together, including 19 public workshops that attracted over 1,100 participants, who provided comments on the plan.[37] The Durham Board of County Commissioners (BOCC) approved the Plan in June 2011 and called for the referendum on the one-half cent sales tax in November 2011.

Public Support. Local and regional polls that took place during the year showed public support in Durham County for the transit sales tax. The ballot measure passed 60 percent to 40 percent on November 8, 2011. Marketing campaigns, advocacy groups, and extensive meetings with citizens and local elected officials were key to its success.

Challenges. No real challenges were noted by Triangle Transit staff. There was support from the mayor, local and regional officials, and business leaders. The measure passed in its first attempt. Marketing the campaign with limited funding was perhaps the only perceived challenge.

Keys to Success. Support from a variety of stakeholders, including the Mayor of the city of Durham, local and regional officials, and business leaders, along with extensive public outreach and engagement, and the development of a financial and transit system plan were essential to the success of the ballot measure. .

New York, New York: Payroll Tax and Other Fee Increases

In May 2009, the Governor of New York signed legislation introducing a new payroll mobility tax of 0.34 percent within the 12-county MTA Metropolitan Commuter Transportation District (MCTD). The legislation (known as "A.8180/Silver") also directed revenues from a series of new taxes and fees collected in the MCTD to the MTA Aid Trust Fund. These included:

- A tax of 50 cents per taxicab ride on every ride that originates in New York City and terminates in the MCTD;
- A supplemental annual motor vehicle registration fee of $25;
- A supplemental tax of 5 percent on passenger car rentals; and
- A supplemental annual driver license fee of $2.

Need for Increased Funding. The NYMTA was facing a budget shortfall of $1.2 billion in 2009 as real estate-based taxes and other dedicated tax revenues

[37] The Durham County Bus and Rail Investment Plan, 2011. DCHC MPO web site, http://www.dchcmpo.org/index.php?option=com_content&task=view&id=83&Itemid=35.

quickly eroded as a result of the economic recession. New funding sources and approaches to funding were then evaluated by an independent MTA Financing Commission appointed by the Governor of New York to address NYMTA funding issues.

Type of Funding Pursued. The MTA Financing Commission recommended state legislation to authorize the imposition of a payroll mobility tax in the 12 counties comprising the MTCD of one-third of wages paid on all employers in the region, including self-employed. This option was considered the fairest feasible way to spread the burden of financing NYMTA capital needs to the businesses and organizations that most directly benefit from it. In addition to the payroll mobility tax, the final funding bill consisted of adding a new taxicab ride tax, increasing vehicle registration and driver license fees, and increasing auto rental tax by five percent. These additional fees and taxes were added when the recommendation to allow tolling on the free East and Harlem River Bridges was removed from the bill.

Champion. The former chief of NYMTA is considered the champion of the funding plan and served as the Chair of the MTA Financing Commission charged by the Governor of New York to identify recommendations on alternative funding sources for the transit agency. Although his recommendation for tolling the free East and Harlem River Bridges was not included in the final legislative package, he is considered the person who started the consultative process that resulted in the state legislature approving a new set of taxes for the NYMTA.

Legislative Action Development Process. The NYMTA was proposing increasing revenues generated by fares and tolls by 32 percent, beginning June 1, 2009 to fill the budget gap in 2009. These increases were thought, however, to have put too heavy a burden on many users of the transit system. To mitigate the proposed fare increase and anticipated service reductions, the Governor's MMTA Financing Commission recommended alternative funding sources as well as other measures.[38] In the process, the payroll mobility tax was retained but the proposal to add tolls on the East and Harlem River Bridges was dropped. Therefore, legislators had to develop new funding mechanisms other than tolls that would generate additional revenues needed to close the NYMTA budget gap.

[38] The recommendations also included a series of reforms intended to bring more accountability and transparency to MTA like annual audits, administrative and operational efficiencies, and consolidated the MTA Chairperson and CEO positions. A regular cycle of predictable fare and toll increases were also included in the recommendations.

In May 7, 2009, the New York State Assembly Ways and Means Committee announced the passage of the legislation for new funding expected to raise about $1.8 billion for NYMTA.

Public/Political Support. The New York State Legislature approved the bill despite disapproval from some legislators who considered the payroll tax a burden to businesses not well serviced by the NYMTA. The Mayor of New York was supportive of the final funding plan as were other elected officials, NYMTA Board members and business, civic, labor, transit and environment public interest groups such as the Living Cities for the Environmental Defense Fund and the Empire State Transportation Alliance.

Challenges. The main challenges faced by decision-makers and NYMTA included:

- **Critics –** Suburban representatives, cab-drivers' groups such as the Taxi Workers Alliance, and advocacy journalists criticized the transit funding bill. They implied the taxes did not directly benefit them although they were imposed on them. Critics also pointed out how the new taxes and fees punished the New Yorkers who did not own a car and get around via mass transit, taxis, and livery service.
- **Equity/Fairness –** A bigger challenge was the issue of the geographical equity of the taxes imposed. Many elected officials from the outlier counties of the MCTD argued that the further out they are from New York City, the fewer services they receive from the NYMTA.
- **Litigation –** The imposition of the payroll mobility tax to all business employers in the MCTD, including self-employed and public and private schools was the subject of several administrative claims and law suits by taxpayers. This issue resulted in the Governor of New York making significant changes to the payroll mobility tax in December 2011, (the "December Act") two years after it was first imposed. The PMT was eliminated or reduced for certain taxpayers, including public and private schools, small employers and self-employed with income below a legislated threshold. As a result, the estimated revenues from the payroll mobility tax for 2011 were reduced and the State agreed to include replacement funds from its General Revenues to offset the estimated reduction in PMT revenues.

Keys to Success.

- **Consensus among Political, Business, and Community Leaders –** The elected officials, particularly legislators, business leaders, and community groups agreed additional financing needed to be passed in order to increase NYMTA funding and mitigate excessive fare increase and service cuts.
- **Historic Role of Transit in the Region –** The extensive transit system of the New York City metropolitan area and the mobility it provides to the commuters in the 12-county district is a critical element of the economy in the region. Faced with the magnitude of the proposed fare increase and service

cuts that would have been implemented without approval of the additional funds, the economy of the region would had been further impacted. In addition, the economic benefits of the investments in the NYMTA capital program, which would had been delayed without the additional funds, represent a significant number of employment and economic activity in the region.

Checklist

A more comprehensive checklist that can be used as a quick reference to the key steps to take when developing an initiative to increase existing or add new funding sources is provided below (Figure A.1). This checklist is based on the lessons learned obtained from the interviews with transit agencies' staff and the CFTE, MTI, NCHRP, and SGA reports reviewed as part of the study and summarized above. Note that some key steps or actions are not necessary for all types of funding initiatives, and the list must be tailored for each specific initiative.

Figure A.1 Checklist

- Conduct situation analysis:
  - Analyze changes in demographics/economic conditions;
  - Evaluate reasons past initiatives failed;
  - Understand the current transportation planning process;
  - Assess external factors (politics, economy, environment, etc.); and
  - Assess internal environment (resources available).
- Determine the transit need:
  - Document and validate the transit need; and
  - Involve the public early in the process.
- Design the case for the public, political leaders, and media:
  - Conduct an independent analysis (ad hoc) to make the case.
- Develop a program of transit projects/priorities:
  - Conduct a solid technical analysis (project specificity);
  - Determine the costs of the transit projects/priorities; and
  - Determine the benefits of the transit projects/priorities.
- Justify the need for additional revenues:
  - Present financial reports/performance measures; and
  - Explain scenarios without additional funding.
- Determine the type of revenue pursued (revenue mix):
  - Consider its yield and what is available by law.
- Decide scope of initiative:
  - Ensure geographic and social equity;
  - Decide if multimodal or transit only; and
  - Determine amount to be requested.
- Decide timing of initiative:
  - Consider if general election or special election.
- Decide if initiative or referendum.
- Develop ballot/bill language:
  - Investigate legal authority of funding mechanism.
- Certify the ballot measure by the proper election officials.
- Address the transit program/initiative weaknesses:
  - Improve transit agency's perception/reputation.
- Find a champion.
- Target decision-makers:
  - Target the voting public (maximize "yes" votes);
  - Target the elected officials (legislators, governor, mayor, commissioners, etc.); and
  - Target influential groups (Chamber of Commerce, citizen groups, etc.).

- Build a stakeholder coalition:
  - Obtain the support of the business community;
  - Obtain the sponsorship of key elected officials; and
  - Obtain the support from environmental and transit advocacy groups.
- Craft campaign message (slogan).
- Know your opposition (likely arguments):
  - Respond to critics ASAP with benefits of program (facts).
- Determine available resources:
  - Consider the use of transit agency resources;
  - Identify staff and volunteer needs; and
  - Identify consultants.
- Create a campaign budget and funding needs.
- Identify fundraising opportunities.
- Plan campaign calendar.
- Create a winning strategy and tactics (who will vote and why).
- Create a marketing campaign:
  - Craft a captivating message/theme;
  - Schedule speakers and forums/community meetings;
  - Seek earned media opportunities; and
  - Develop Internet/social media strategy.
- Plan a Get out the Vote Campaign.
- Track how constituents/legislators voted:
  - Identify why voters/legislators approve or did not approve initiative;
  - Assess if opposition was a key factor to failure; and
  - Determine what needs to be changed next time.
- Maintain a web site to inform on the progress of initiative:

Create a Citizens Oversight Committee.

- Seek earned media opportunities to covey post approval messages.

Sources: Cambridge Systematics interviews of transit agencies; Center for Transportation Excellence (CTE) Building Communities Through Public Transportation – A Guide for Successful Transit Initiatives (2005) and Transportation Finance at the Ballot Box – Voters Support Increased Investment and Choice (2006); Mineta Transportation Institute (MTI) Factors Influencing Voting Results of Local Transportation Funding Initiatives with a Substantial Rail Transit Component: Case Studies of Ballot of Eleven Communities (2001) and Revisiting Factors Associated with the Success of Ballot Initiatives with a Substantial Rail Transit Component (2011); National Cooperative Highway Research Program NCHRP 20-24 (62) – Making the Case for Transportation Investment and Revenue (2009); and Smart Growth America (SGA) Transit Campaign Planning: A strategy template for organizers (2011).

A.5 CONCLUSIONS

Assessment of Funding Sources for Public Transportation

The TCRP Report 129 published in 2007 provides a comprehensive list of current and potential dedicated and non-dedicated local and regional funding sources for public transportation. The literature review conducted for this study, has not unearthed any new, innovative funding and financing alternatives at any significant breadth of scale since the publication of TCRP Report 129. The literature reviewed shows how transit agencies are willing to be creative and maximize current avenues of revenues like in advertising with corporate sponsorships and naming rights, given their reduction in local and regional funding as well as from the state and Federal levels. This assessment also found how partnering with other public agencies to leverage resources and with the private sector to mutually benefit from the transit investments and services is more crucial now when traditional transit revenues are being reduced. Unfortunately, the literature review did not provide much information on the variable impacts of the recession on local and regional funding sources for public transportation. The study centers its assessment of alternative local and regional funding mechanisms on the experience of the selected transit agencies that were interviewed.

Impacts of the Recession and Economic Cycles on Local Transit Funding

It is clear that the recession has had significant impacts on transit agency budgets across the nation in recent years. Most transit agencies around the country have encountered shortfalls resulting from both increases in costs and declines in most revenue sources. The concurrent credit crisis hurt many agencies further, and reduced the ability of others to borrow during this time. This has led to large fare increases, significant service reductions – or both – at a majority of surveyed transit agencies. As a result, public transportation agencies are facing their most difficult times as costs increase and revenue sources decline.

Funding Sources and Financial Planning Used by Other Publicly Supported Services

Public services other than public transportation are also continually looking for additional revenue sources to fund their capital projects and sustain their operations. The recent economic crisis has highlighted the need to diversify income and have forced local governments to use nontraditional mechanisms that involve private companies and organizations to address the financial crisis. These mechanisms include: the naming rights, corporate sponsorship, advertising, and exclusive rights.

Fiscal constraints have also stressed the need to develop long-term financial plans to assess the sustainability of services in the future. The long-term

perspective allows agencies to identify current and future needs in terms of revenues, costs, and resources. A variety of mechanisms have been employed by public agencies to estimate future revenues and expenses. Despite the availability of advanced quantitative techniques, the most common method to project revenues and expenses remains to be, because of its relative simplicity, statistical analysis of historical trends. On the expenditure side, it was also found that many agencies have adopted the principles of asset management to predict infrastructure consumption and renewal needs and consider infrastructure requirements to meet future community service expectations. The expenditure requirements are incorporated into long-term financial plans.

Initiatives to Increase Transit Funding

Based on the lessons learned from the case studies included in the CFTE, MTI, NCHRP and SGA reports reviewed, several factors were identified to be key to the success of ballot initiatives to increase transit funding. These key factors are:

- Assess and identify the public transportation needs, interests and concerns of the community;
- Make sure the benefits and impacts of the initiative are distributed equitably;
- Indentify a champion who strongly believes in transit and in the need for additional funds;
- Obtain the support from key elected officials and the business community;
- Implement an effective marketing and outreach campaign;
- Anticipate the opposition and respond with facts about the benefits of transit and the initiative; and
- Present a convincing case for the need for additional funds by demonstrating the transit agency manages effectively its system.

A.6 REFERENCES

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B. Transit Agency Selection and Interview Process

The scope of work proposed up to 20 transit agencies for inclusion in the analysis. The approach used to select the transit agencies draws heavily on the work done in the prior TCRP Report 129 – *Local and Regional Funding Mechanisms for Public Transportation* and from recent APTA surveys. Results from APTA surveys conducted in 2009, 2010, and 2011 provide information on which transit agencies were most impacted by the recession, how their local and state funding revenues were impacted and which transit agencies had to reduce service, increase fares, and/or supplement their existing operating budgets with reserve funds or transferred capital funds. Transit agencies that reported recent ballot initiatives or implemented new and/or expanded their funding sources for transit investments were analyzed.

Transit Agency Selection Criteria

As part of TCRP Report 129, CS compiled information on funding sources from 60 different transit agencies. These sources of data enabled the development of a list of candidates from which the set of transit agencies were targeted to further conduct a detailed analysis of their local funding sources and how these were affected during the recent recession. Specific focus was given to transit agencies that had major shortfalls since 2008 and those whose funding remained fairly stable so as to be able to draw contrasts. A comprehensive database was built by initially combining the TCRP Report 129 and APTA databases.

The first step consisted in dividing the transit agencies in three groups.

1. Transit agencies previously studied in TCRP Report 129 and that provided information to the APTA surveys were identified. Most transit agencies in this group serve large urban areas.
2. Transit agencies that provided information to the APTA surveys but that were not included in TCRP Report 129. This list allowed the study team to identify transit agencies that provide service to small urban and rural areas.
3. Transit agencies studied in TCRP Report 129 but not included in the APTA surveys.

The next step consisted in identifying other criteria that would help in the selection of the 20 transit agencies to be interview.

The criteria for analysis included:

- **Effects of recession on funding sources –** Using the results from the three APTA surveys, the CS team identified transit agencies that reported

decreases in local and regional operating funding. NTD data from 2007 to 2009 were gathered to examine the trends in local funding (in aggregate, not by individual funding source). Transit agencies that experienced a decline in their local operating funding and those who's funding remained the same or increased were identified. The objective was to understand the stability of funding sources and portfolios, and recognize those that have performed poorly during the economic recession.

- **Types of local/regional funding sources –** A variety of local/regional funding sources should be represented in the selected transit agencies. Funding sources used by transit agencies were identified using data from NTD, from TCRP Report 129, and from publicly available financial documents. The types of major funding sources identified included:

Economic growth and unemployment levels – The average annual economic growth for the metropolitan areas from 2008 to 2010 was measured from statistics developed by the Bureau of Economic Analysis (BEA). For rural transit agencies the measure of GDP is at the state level. Growth or decline in GDP levels were categorized in five levels as shown in Table B.1. Unemployment data from Bureau of Labor Statistics (BLS) were collected for 2008 through 2010 as another measure of the economic condition of the regions served by the selected transit agencies.

Table B.1 GDP Ranges

Change in GDP	Ranges
Level 1	2.5% to 6%
Level 2	0.5% to 2.5%
Level 3	-0.2% to 0.5%
Level 4	-1.0% to -0.2%
Level 5	-3.6% to -1.0%

- **Actions to address decline in local/regional funding –** While the transit agency screening did not specifically include this as a criterion, data from the APTA survey on actions taken by transit agencies to address funding shortfalls were reviewed. This information was used on the pre-interview assessment to ensure an understanding of the issues faced by the selected transit agencies, and incorporate this knowledge into the interviews.
- **Recent ballot measures for additional local/regional funding for transit –** Another key source of information was the Center for Transportation Excellence (CFTE) information on ballot referenda initiatives. CFTE tracks the progress of such initiatives across the country and has conducted research and analysis on the factors influencing success or failure of ballot initiatives. This information was used to examine the locations and transit

agencies that have undertaken such initiatives since 2008 and either succeeded or failed. The information was compiled into a database, and after making the general selection of potential transit agencies to interview, this information was utilized to identify those transit agencies targeted as part of the interview process.

Type of area (urban by size, rural) – The area type was consistent with TCRP 129, as shown in Table B.2. Urban areas were divided in three (small, large, or major).

Table B.2 Urban and Rural Area Criteria

Service Area Type	Criteria
Rural	<50k
Small Urban	50k-200k
Large Urban	200k-1M
Major Urban	>1M

Other key factors in the transit agency selection process included:

- **Dedicated and non-dedicated sources.** Some anecdotal experience suggests that transit agencies with non-dedicated funding sources appear to have performed better compared to transit agencies with dedicated funding sources. The research assessed the experience of transit agencies with dedicated and non-dedicated sources, and look into whether a specific revenue source performed in either form. For example, a property tax can be a dedicated source of revenue for a transit agency, or can be a non-dedicated source and allocated as part of the annual appropriations process.
- **Transit agency-generated revenue sources (e.g., advertising) versus tax revenues (e.g., taxes and fees).** Transit agencies have more control on the revenue generation of these sources (e.g., increasing fees and fares), but tax revenue yield is outside the agency's control and potentially more susceptible to changes in economic conditions.

List of Transit Agencies Selected

The final list of transit agencies selected (Table B.3) represents experience with a wide range of dedicated funding sources. The goal was to include at least two transit agencies per funding source. Transit agencies without dedicated funding sources were also included to assess how transit agencies with non-dedicated funding have responded during the recessionary period.

Transit agencies were grouped by size, determined primarily by ridership levels in 2010 combined with service levels (vehicle miles of service), instead of using population (as a measure of size for urban and rural areas), and applying professional judgment as appropriate. For example, the population for the

Hartford MSA is about 1.2 million, meeting the criteria for a large urban area, but the Greater Hartford Transit District provides demand response/ADA services, with an estimated annual ridership (2010) of 300,000 and less than 3 million revenue vehicle-miles, thus it has been classified as a small transit agency. The ranges for ridership and service levels were based on professional judgment and the investigative team knowledge of the transit agencies.

- Large Transit Agency:
  - Ridership: over 100 million; and/or
  - Revenue Vehicle-Miles: over 50 million.
- Midsize Transit Agency:
  - Ridership: between 2 million and 100 million; and/or
  - Revenue Vehicle-Miles: between 5 million and 50 million.
- Small/Rural Transit Agency:
  - Ridership: less than 2 million; and
  - Revenue Vehicle-Miles: less than 5 million.

Table B.3 List of Transit Agencies

Transit Agency	Annual ridership (Millions)	Fleet Size	Annual Vehicle Revenue Miles (Thousands)	Annual Vehicle Revenue Hours (Thousands)	Total Operating Funds Expended (Millions)	Total Capital Funds Expended (Millions)	Percent of Local Operating Funds	Percent of Local Capital Funds	Local Funding Sources[a]	Effect of Recession on Local Funding Sources
Bay Area Regional Transit (BART)	108.3	668	63,237.5	1,780.2	$463.1	$356.8	91%	58%	• Sales Tax • Property Tax • Local Agreements • Bridge Toll • Ancillary	Affected
Chicago Transit Authority (CTA)	516.9	3,253	121,854.9	9,435.7	$1,161.9	$200.8	65%	74%	• Sales Tax • Real Estate Transfer Fee • Ancillary	Affected
New York Metropolitan Transit Agency (NYMTA)	3,492.9	15,746	600,414.6	42,473.9	$7,731.7	$3,962.1	64%	65%	• Tolls • Sales Tax • Franchise Surcharge • Payroll Mobility Tax • Mortgage Recording Tax • Vehicle Tax • Driver's License Fee • Car Rental Tax • Taxi Tax • Local Subsidies	Affected
Denver Regional Transit District (RTD)	97.4	1,434	55,861.4	3,818.0	$441.7	$712.6	83%	77%	• Sales Tax • Ancillary	Affected

Transit Agency	Annual ridership (Millions)	Fleet Size	Annual Vehicle Revenue Miles (Thousands)	Annual Vehicle Revenue Hours (Thousands)	Total Operating Funds Expended (Millions)	Total Capital Funds Expended (Millions)	Percent of Local Operating Funds	Percent of Local Capital Funds	Local Funding Sources[a]	Effect of Recession on Local Funding Sources
TriMet (OR)	104.3	1,071	37,152.8	2,873.4	$385.0	$75.5	79%	54%	• Employer Payroll Tax • Self Employment Tax • Property Tax • Ancillary	Affected
Washington Metropolitan Area Transit Authority (WMATA)	418.1	3,704	128,074.3	8,369.3	$1,442.9	$444.0	80%	23%	• Ancillary (Business Revenues/Parking Fees/Other) • State/Local Funding Agreement	Affected
Greater Lafayette Public Transportation/CityBus (IN)	4.9	71	1,655.4	150.1	$9.8	$3.7	41%	7%	• Property Tax • Service Contract • Income Tax	Stable
Hillsborough Area Regional Transit (HART)	13.3	289	9,384.3	701.7	$65.3	$17.1	77%	0%	• Property Tax (Ad Valorem) • Impact Fees • Local Contributions (including TIF) • Endowment • Special Assessment • Ancillary	Affected
Hampton Roads Transit (HRT)	15.8	454	14,681.4	1,019.6	$72.4	$112.1	52%	21%	• Local Funding Agreements • Ancillary	Stable
Kalamazoo Metro Transit (MI)	2.7	84	2,546.7	178.9	$12.3	$1,933.6	49%	0%	• Property Tax • Ancillary	Affected

Transit Agency	Annual ridership (Millions)	Fleet Size	Annual Vehicle Revenue Miles (Thousands)	Annual Vehicle Revenue Hours (Thousands)	Total Operating Funds Expended (Millions)	Total Capital Funds Expended (Millions)	Percent of Local Operating Funds	Percent of Local Capital Funds	Local Funding Sources[a]	Effect of Recession on Local Funding Sources
Metro St. Louis	40.6	543	26,508.9	1,692.4	$193.9	$22.7	78%	30%	• Sales Tax • Service Agreement • Ancillary	Affected
Metro Transit Madison (WI)	13.9	321	6,578.1	490.2	$47.5	$8.7	51%	2%	• General Fund (Property Tax) • Ancillary	Affected
Potomac and Rappahannock Transit (PRTC)	3.2	131	2,965.2	155.7	$24.0	$6.1	66%	16%	• Motor Fuel Tax • Ancillary	Affected
Triangle Transit (NC)	1.5	163	3,756.0	142.3	$13.9	$4.0	66%	8%	• Vehicle Registration Fees • Car Rental Tax • Local Grants	Affected
Corvallis Transit System (OR)	0.7	13	373.9	26.9	$2.3	$1.0	59%	0%	• General Funds (up to 2010) • Utility Fee (Transit Operations Fee) • Service Contract • Ancillary	Affected
Greater Hartford Transit District (GHTD)	0.6	143	2,955.9	248.2	$13.7	$4.3	17%	0%	• General Funds	Stable
Northern Arizona Intergovernmental Public Transit (NAIPTA)	1.1	25	738.9	55.6	$4.8	$1.6	79%	18%	• Sales Tax • Ancillary	Affected
Ohio Valley Regional Transit Authority (OVRTA)	0.4	23	723.6	57.7	$3.4	$1.7	64%	2%	• Property Tax	Affected

Transit Agency	Annual ridership (Millions)	Fleet Size	Annual Vehicle Revenue Miles (Thousands)	Annual Vehicle Revenue Hours (Thousands)	Total Operating Funds Expended (Millions)	Total Capital Funds Expended (Millions)	Percent of Local Operating Funds	Percent of Local Capital Funds	Local Funding Sources[a]	Effect of Recession on Local Funding Sources
Park City Transit (UT)	1.9		1,075.4	70.3	$5.5	$4.6	76%	10%	• Sales Tax • Resort Tax • Nightly Rental Property Fee • Business License Fee • Ancillary • County Contribution • Real Estate Transfer Fees	Affected
Pullman Transit (WA)[b]	1.4	24	406.2	31.9	$3.2	$2.3	80%	24%	• Utility Tax • Service Contract	Stable
RoadRUNNER Transit (NM)	0.7	36	696.1	56.1	$3.7	$0.8	63%	18%	• General Funds • Motor Fuel Tax • Service Contract • Ancillary	Stable

Sources: National Transit Database, 2010.

[a] All transit agencies collect fare revenues, except for Corvallis Transit System and Pullman Transit.

[b] Pullman Statistics are for 2009.

Interview and Data Analysis Process

The research team developed interview guides. The interviews were conducted between December 2011 and March 2012.

The research team gathered local/regional funding data through the interviews, and as needed data from other public documents, such as Annual Budgets, Annual Report, and Consolidated Annual Financial Reports. These were used to provide a more complete picture of the funding sources and the transit agencies financial background. NTD data was used as needed to fill funding data gaps, and for service and ridership statistics.

The research team prepared summaries of the interview findings and compiled all statistics into a spreadsheet to allow for comparison and analysis of funding sources across transit agencies.

C. Interview Guides

TCRP J-11, Task 14: Assessment of Alternative Local and Regional Funding Mechanisms
Interview Guide for Affected Agencies

Introduction

Cambridge Systematics is conducting a study sponsored by the Transit Cooperative Research Program (TCRP) and the American Public Transit Association (APTA), Assessment of Alternative Local and Regional Funding Mechanisms, that is examining the funding strategies of a variety of public transportation agencies to examine different approaches and understand how various factors affect funding alternatives and strategies. As part of this analysis, the CS team will evaluate the impacts of the recent economic recession to existing local and regional funding sources, in an effort to assess the adequacy and stability of existing funding sources. We are interested in learning about the trends (e.g., decline) on the agency's local funding sources since 2007. Of key interest is to gain an understanding of the volatility/ stability and adequacy of these funding sources.

Interview Guide

Profile Information

Instructions to Interviewers: determine if any of this information is missing from the database developed for this TCRP study. Review this information prior to the interview to gain understanding of the current funding structure at the agency. The timeframe of analysis will be 2007 through 2010/11 (last year of data available).

General Information

1. Agency name
2. UZA name or city
3. Interviewee name
4. Interview date
5. What is the governance structure of the agency:
    a. Independent authority;
    b. Department within the county/local government
    c. Other

6. Part of TCRP 129?

7. Part of APTA survey?

8. NTD data available?

Agency/System Characteristics

	Available (Y/N)	Source/Year
1. Population		
2. Modes operated		
3. Fleet size		
4. Annual revenue vehicle-miles		
5. Annual revenue vehicle-hours		
6. Annual ridership		
7. Annual operating costs		
8. Annual capital budget		
9. Metropolitan Gross Domestic Product (GDP)/ Gross State Product (GSP)		
10. Unemployment rate		
11. Percent of local funding for operations		
12. Percent of local funding for capital		

Funding Sources and Impact of Recession on Sources

1. What are the main local/regional funding sources for (AGENCY)? What are the rates/yield by source?

    a. General fund

    b. Sales tax

    c. Property tax

    d. Gasoline tax

    e. Employer/Payroll/Income tax

    f. Utility Taxes

    g. Vehicle fees

    h. Car rental fees

    i. Parking fees

    j. Tolls

    k. Mortgage/Realty transfer tax

l. Value capture (impact fees; tax increment financing; assessment districts)

m. Hotel tax

n. Ancillary revenues (advertising, leases, concessions, other)

o. Passenger Fares

2. Identify what funding sources are agency-generated versus taxes/fees that are outside the agency's control.

3. Specify/identify what funding sources are dedicated (e.g., local option taxes) versus non-dedicated (e.g., general fund allocations).

4. What was the impact of recent economic recession on local/regional funding?

   a. Decline

   b. Increase

   c. Stable

5. For passenger fares, if revenues increased, was it due to a fare increase or due to ridership growth?

Source	Rate	Yield	Agency Generated? (Y/N)	Dedicated (Y/N)	Impact of Recession (Decline, Increase, Stable)
General Fund					
Sales Tax					
Property Tax					
Gasoline Tax					
Employer/Payroll/ Income Tax					
Utility Tax					
Vehicle Fees					
Car Rental Fees					
Parking Fees					
Tolls					
Mortgage/Realty Transfer Tax					
Value Capture					
Hotel Tax					
Ancillary Revenues					
Passenger fares					

Part I: Existing Local/Regional Funding Sources and the Impact of the Economic Recession

For agencies reporting decline in local/regional funding:

1. Confirm the types of funding sources (see list under Profile Information).

2. Which funding sources faced the deepest declines?

3. Which of your funding sources seem to remain fairly stable amidst of the economic recession? (If any).

4. How much (in percentage) has local funding (by source) decline since 2007 through 2010/11? Is data available by year?

	2008 % chg	2009 % chg	2010 % chg	2011 % chg
Local source #1				
Local source #2				
…				

5. What is the percentage reduction to the agency's operating budget?

	2008 % chg	2009 % chg	2010 % chg	2011 % chg
Budget reduction				

6. Would you say that the recent economic recession impacted your funding sources:

    a. Immediately

    b. In a lag

7. How has the recent economic recession impacted (AGENCY)? How does it compare to previous business cycles and economic downturns?

8. What strategies were used to address the shortfall? E.g.,

    a. Fare increases

    b. Implement increase of existing funding sources or new funding sources

    c. Administrative actions (e.g., layoffs, furloughs, hiring freeze, salary freeze/reductions, early retirement plans)

    d. Service changes (e.g., service reductions, route elimination)

        i. Request statistics such as vehicle revenue-miles, vehicle revenue-hours

e. Other

9. Are there other outside factors that have influenced the stability (or lack thereof) of your agency's funding sources?

    a. Political climate

    b. Regional mode share (heavy transit use/dependence)

    c. Socioeconomic characteristics (income levels, education, transit dependence, median population age)

    d. Other

10. Is your agency examining increasing existing funding yield or introducing new and more balanced funding sources?

    a. If the response is yes, and the increase to or new funding source is already in place, go to Part II.

    b. If the response is yes, and the proposal is in planning stages or is expected to go to voters/decision makers in the short term, go to Question #11.

    c. If the response is no, go to Question #20.

11. Is your agency pursuing a ballot initiative or a change in legislation associated with increasing existing or implementing new funding sources?

12. What are the biggest obstacles to increasing/implementing new funding sources?

13. What is the timeframe and cost of implementing and administering new funding sources?

14. Did your agency consider a variety of approaches? Which ones?

15. Which funding options were evaluated and rejected? Why?

16. What factors most influenced your approach?

17. Is your approach still in development?

18. What types of information from other transit agencies would be most useful to you regarding efforts to implement increases to existing and/or new funding sources?

19. What type of projects/programs that are being considered to be funded with the new/increased revenue source(s)?

    a. Operations only

b. Capital (new/expansion/state of good repair) only

c. Both operations and capital

d. Single project or program

e. Multimodal or single mode

20. Only for those responding NO to Question #10: Would you consider increasing existing funding sources or implementing new funding sources in the future?

    a. If yes, what type of funding sources would you consider? Please go over questions #11 through 19, and probe on each of the topics addressed by these questions.

    b. If no, why?

21. [While cost is not the main focus of the study, this is aimed to get at whether are there other factors, beyond funding decrease, affecting the financial stability of the agencies being interviewed]. Has some of your budget gap been related not only to the decline of funding, but also significant growth in your operating expenditures? What are some of the factors affecting the increase in operating costs (if any)?

    a. Labor

    b. Pensions

    c. Health care

    d. Paratransit services

    e. Other

TCRP J-11, Task 14: Assessment of Alternative Local and Regional Funding Mechanisms
Interview Guide for Stable Agencies

Introduction

Cambridge Systematics is conducting a study sponsored by the Transit Cooperative Research Program (TCRP) and the American Public Transit Association (APTA), Assessment of Alternative Local and Regional Funding Mechanisms, that is examining the funding strategies of a variety of public transportation agencies to examine different approaches and understand how various factors affect funding alternatives and strategies. As part of this analysis, the CS team will evaluate the impacts of the recent economic recession to existing local and regional funding sources, in an effort to assess the adequacy and stability of existing funding sources. We are interested in learning about the trends (e.g., decline) on the agency's local funding sources since 2007. Of key interest is to gain an understanding of the volatility/ stability and adequacy of these funding sources.

Interview Guide

Profile Information

Instructions to Interviewers: determine if any of this information is missing from the database developed for this TCRP study. Review this information prior to the interview to gain understanding of the current funding structure at the agency. The timeframe of analysis will be 2007 through 2010/11 (last year of data available).

General Information

1. Agency name
2. UZA name or city
3. Interviewee name
4. Interview date
5. What is the governance structure of the agency:
    a. Independent authority;
    b. Department within the county/local government
    c. Other

6. Part of TCRP 129?

7. Part of APTA survey?

8. NTD data available?

Agency/System Characteristics

	Available (Y/N)	Source/Year
1. Population		
2. Modes operated		
3. Fleet size		
4. Annual revenue vehicle-miles		
5. Annual revenue vehicle-hours		
6. Annual ridership		
7. Annual operating costs		
8. Annual capital budget		
9. Metropolitan Gross Domestic Product (GDP)/ Gross State Product (GSP)		
10. Unemployment rate		
11. Percent of local funding for operations		
12. Percent of local funding for capital		

Funding Sources and Impact of Recession on Sources

1. What are the main local/regional funding sources for (AGENCY)? What are the rates/yield by source?

    a. General fund

    b. Sales tax

    c. Property tax

    d. Gasoline tax

    e. Employer/Payroll/Income tax

    f. Utility Taxes

    g. Vehicle fees

    h. Car rental fees

    i. Parking fees

    j. Tolls

    k. Mortgage/Realty transfer tax

l. Value capture (impact fees; tax increment financing; assessment districts)

m. Hotel tax

n. Ancillary revenues (advertising, leases, concessions, other)

o. Passenger Fares

2. Identify what funding sources are agency-generated versus taxes/fees that are outside the agency's control.

3. Specify/identify what funding sources are dedicated (e.g., local option taxes) versus non-dedicated (e.g., general fund allocations).

4. What was the impact of recent economic recession on local/regional funding?

   a. Decline

   b. Increase

   c. Stable

5. For passenger fares, if revenues increased, was it due to a fare increase or due to ridership growth?

Source	Rate	Yield	Agency Generated? (Y/N)	Dedicated (Y/N)	Impact of Recession (Decline, Increase, Stable)
General Fund					
Sales Tax					
Property Tax					
Gasoline Tax					
Employer/Payroll/ Income Tax					
Utility Tax					
Vehicle Fees					
Car Rental Fees					
Parking Fees					
Tolls					
Mortgage/Realty Transfer Tax					
Value Capture					
Hotel Tax					
Ancillary Revenues					
Passenger fares					

Part I: Existing Local/Regional Funding Sources and the Impact of the Economic Recession

For agencies that reported remaining stable or experienced increases in local sources:

1. Confirm the types of funding sources (see list under Profile Information).

2. What factors do you attribute to the stability of your agency's funding sources amidst of the recent economic recession?

3. Do you anticipate a lag on the effects of the recession on your funding sources? Why?

4. Have your agency done any of these actions below:

    a. Fare increases

    b. Implement increase of existing funding sources or new funding sources

    c. Reduce or increase workforce.

        i. If reducing workforce, have you implemented any of the following administrative actions: layoffs, furloughs, hiring freeze, salary freeze/reductions, early retirement plans?

    d. Service changes: increases or reductions?

        i. Request statistics such as vehicle revenue-miles, vehicle revenue-hours.

5. If you remain stable or saw increases in your funding sources, was it due to enacting increases to existing revenue sources or implementing new funding sources during this period?

    a. If the response is yes, go to Part II.

    b. If the response is no, go to the next question.

6. How does the current trends in local funding sources compare to previous business cycles and economic downturns?

7. What types of information from other transit agencies would be most useful to you regarding efforts to implement increases to existing and/or new funding sources?

8. [While cost is not the main focus of the study, this is aimed to get at whether are there other factors, beyond funding decrease, affecting the financial stability of the agencies being interviewed]. Notwithstanding the fact that your funding sources have increased or remained stable, has your agency experienced significant growth

in your operating expenditures? What are some of the factors affecting the increase in operating costs (if any)?

a. Labor

b. Pensions

c. Health care

d. Paratransit services

e. Other

TCRP J-11, Task 14: Assessment of Alternative Local and Regional Funding Mechanisms
Interview Guide for Task 4

Introduction

Cambridge Systematics is conducting a study sponsored by the Transit Cooperative Research Program (TCRP) and the American Public Transit Association (APTA), Assessment of Alternative Local and Regional Funding Mechanisms, that is examining the funding strategies of a variety of public transportation agencies to examine different approaches and understand how various factors affect funding alternatives and strategies.

Task 4 of this study will also explore what strategies have transit agencies used to approve expanded or new revenue sources. We will schedule a separate interview for this part of the research. Your agency has also been selected because it has recently expanded existing or implemented new funding sources (or have tried unsuccessfully).

Interview Guide

Part II: Initiatives to Increase Funding from Existing Sources or to Introduce New Sources of Revenue

1. What was the nature of the need for increased funding?
    a. Replace a declining funding source
    b. Add a new source to the agency's funding portfolio
    c. Support new/expanded services
    d. Provide funding for specific project or a program of capital investments
    e. Provide additional funding for operations
    f. Other?
2. Why was this type of funding pursued?
    a. Expected yield
    b. Stability of the source
    c. Available to agency by legislation

   d. Local support

   e. Other

3. How were the timeframe and costs of implementation and administration of new funding sources considered?

4. How was the decision made?

5. Who was the champion?

   a. Agency

   b. Government officials

   c. Local/state decision makers (e.g., legislators)

   d. Advocacy groups

   e. Community leaders

   f. Other

6. Why was this person/group chosen as the champion? What this person/group brought to the table?

7. How were allies developed?

   a. Marketing campaign/public outreach

   b. One-on-one approach to stakeholders and decision makers

   c. Other

8. What were the challenges?

   a. Difficulty to finding a champion, or changes in leadership throughout the process

   b. Lack of support from local/state government officials

   c. Lack of support from public

   d. Lack of funding to develop extensive marketing campaign and conduct public outreach

9. How long did the effort take?

   a. Months (how many)

b. Years (how many)

10. How much resources were involved?

    a. Labor/people

    b. Funding

11. How were public support and political acceptance achieved?

12. Was a process/plan developed to pursue the increased/new source of funding? What were the steps in this process?

    a. Identifying needs and uses for funding

    b. Developing a program of projects/priorities for the agency and the communities served

    c. Estimating the yield of proposed funding sources

    d. Creating a citizen or stakeholders group to provide oversight to program implementation

    e. Other

13. What were the keys to success or failure?

14. What types of information from other transit agencies would have been most useful to you before going through this process?

    a. Resources to help develop marketing/public outreach program

    b. Information on potential funding sources and how those are used in other transit agency

    c. How to engage decision makers in the process

    d. How to develop a sound program that will likely gain public support

    e. Other

D. Local and Regional Economic Conditions

Data from the U.S. Census, the Bureau of Labor Statistics (BLS), and the Bureau of Economic Analysis (BEA) were compiled to gather general socioeconomic characteristics of the metropolitan statistical areas (MSA)[39], counties, or cities/ towns served by the transit agencies interviewed.

An analysis of personal income, unemployment, employment, and Gross Domestic Product (GDP at local, regional or state levels) data was conducted for the years 2006 (prerecession) through 2010 (most recent year of available data). Data trends were compared to the U.S. average to understand how the transit service areas were impacted by the recession. These trends were also associated with the growth trends from the regional and local funding sources used by these transit agencies. Table D.1 is a list of the agency name abbreviations used throughout this section. Table D.1 also summarizes the demographic information, organized by the transit agency size.

Table D.2 through Table D.2 show GDP, personal income, employment and unemployment trends for the transit agencies and the U.S. Symbols of "+" or "-" are used in the table to represent annual growth or decline, respectively, in GDP, personal income and employment occurred. A decline is also identified by shaded cells in the table. For unemployment, the "X" represents unemployment rates above the U.S. average.

[39] A metropolitan statistical area (MSA) is defined as a large population center, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan areas comprise one or more entire counties, except in New England, where cities and towns are the basic geographic units. The Office of Management and Budget (OMB) defines metropolitan areas for purposes of collecting, tabulating, and publishing Federal data.

Table D.1 Demographic Information – Transit Agency Size

Transit Agencies	Abbreviation
San Francisco Bay Area Rapid Transit District (California)	BART
Chicago Transit Authority (Illinois)	CTA
Corvallis Transit System (Oregon)	CTS
Greater Hartford Transit District (Connecticut)	GHTD
Greater Lafayette Public Transportation (Indiana)	GLPT
Hillsborough Area Regional Transit Authority (Florida)	HART
Hampton Roads Transit (Virginia)	HRT
Kalamazoo Metro Transit (Michigan)	KMT
Metro St. Louis (Missouri)	MSL
Madison Metro Transit (Wisconsin)	MTW
Northern Arizona Intergovernmental Public Transit (Arizona)	NAIPTA
New York Metropolitan Transit Authority (New York)	NYMTA
Ohio Valley Regional Transit Authority (West Virginia)	OVRTA
Park City Transit (Utah)	PCT
Potomac and Rappahannock Transit (Virginia)	PRTC
Pullman Transit (Washington)	PTW
RoadRUNNER Transit (New Mexico)	RRT
Denver Regional Transportation District (Colorado)	RTD
Portland TriMet (Oregon)	TriMet
Triangle Transit Authority (North Carolina)	TTA
Washington Metropolitan Area Transit Authority (District of Columbia)	WMATA

Table D.2 Socioeconomic Characteristics

Transit Agency	Region	Total Population[a]	Population 65 Years and Older[a]	Minority Population[a]	Population Below Poverty[b]	Total Households (HH)[b]	Percent HH with No Vehicle	Median Household Income
Large Agency (Ridership over 100 million and/or Revenue Vehicle-Miles over 50 million)								
BART	San Francisco-Oakland-Fremont, CA MSA	4,335,391	12.6%	57.6%	9.3%	1,594,554	12.2%	$75,707
CTA	Cook County	5,194,675	11.9%	56.1%	13.9%	1,936,481	17.1%	$53,942
NYMTA	New York-Northern New Jersey-Long Island, NY-NJ-PA	18,897,109	13.1%	51.1%	12.5%	6,809,482	30.5%	$63,915
Regional Transportation District (Denver, CO)	Denver, CO MSA	2,543,482	10.0%	34.2%	11.0%	978,799	6.5%	$60,137
Portland TriMet	Clackamas, Washington, Multnomah Counties	1,641,036	11.1%	25.8%	11.5%	638,193	9.3%	$86,912
WMATA	Washington-Arlington-Alexandria, D.C.-VA-MD-WV MSA	5,582,170	10.0%	51.4%	6.8%	2,014,467	9.9%	$85,660
Midsize Agency (Ridership between 2 million to 100 million and/or Revenue Vehicle-Miles between 5 million and 50 million)								
Greater Lafayette Public Transportation	Lafayette, IN MSA	201,789	10.4%	17.6%	17.8%	75,684	6.4%	$43,446
HART	Hillsborough County	1,229,226	11.8%	46.3%	13.1%	462,447	6.6%	$49,536
Hampton Roads Transit	Virginia Beach, Norfolk, Newport News, VA MSA	1,671,683	11.6%	42.8%	9.6%	620,833	6.4%	$57,605
Kalamazoo Metro Transit	Kalamazoo-Portage MSA	326,589	12.6%	19.4%	17.0%	128,552	6.8%	$44,723
Metro St. Louis	St. Louis, MO-IL MSA	2,812,896	13.3%	24.9%	11.5%	1,106,719	7.6%	$53,227
Metro Transit (Madison, WI)	Madison, WI MSA	568,593	10.9%	16.3%	14.4%	229,033	7.1%	$59,650

Transit Agency	Region	Total Population[a]	Population 65 Years and Older[a]	Minority Population[a]	Population Below Poverty[b]	Total Households (HH)[b]	Percent HH with No Vehicle	Median Household Income
Potomac and Rappanahock Transit (VA)	Prince William, Stafford, Spotsylvania Counties	653,360	7.5%	43.2%	4.8%	206,071	3.0%	$88,591
Triangle Transit	Wake-Orange-Durham Counties	1,634,847	9.7%	39.1%	11.3%	602,895	5.6%	$57,062
Small or Rural Agency (Ridership less than 2 million and Revenue Vehicle-Miles less than 5 million)								
Corvallis Transit System (OR)	Corvallis, OR	85,579	12.0%	16.4%	19.8%	33,471	8.4%	$48,012
Greater Hartford Transit District	Hartford, West Hartford, East Hartford, CT MSA	1,212,381	14.3%	28.4%	9.4%	469,052	8.6%	$66,155
Northern Arizona Intergovernmental Public Transit	Flagstaff, AZ MSA	134,421	8.9%	44.8%	16.7%	45,478	5.4%	$49,510
Ohio Valley Regional Transit Authority[4]	Wheeling, WV-OH	147,950	17.9%	5.8%	15.7%	61,851	9.5%	$37,739
Park City Transit (UT)	Park City, UT	7,558	8.6%	28.2%	8.6%	3,404	6.9%	$61,912
Pullman Transit (WA)	Pullman, WA MSA	44,776	9.5%	17.9%	27.7%	15,717	6.8%	$36,368
RoadRUNNER Transit (NM)	City of Las Cruces, NM	97,618	13.6%	62.5%	19.4%	36,477	6.4%	$38,391
USA	Nation	308,745,538	13.0%	25.20%	13.8%	114,235,996	8.9%	$51,914

Source: U.S. Census Bureau.

[a] 2010 Census.

[b] 2006-2010 American Community Survey.

Table D.3 Gross Domestic Product Growth Trends for MSA/County/City Served by Transit Agency

Transit Agency	2007	2008	2009	2010
Large Transit Agency				
Bay Area Regional Transit (BART)	+	+	-	+
Chicago Transit Authority (CTA)	+	+	-	+
New York Metropolitan Transit Agency (NYMTA)	+	+	-	+
Denver Regional Transit District (RTD)	+	+	-	+
Tri-County Metropolitan Transportation District (TriMet)	+	+	-	+
Washington Metropolitan Area Transit Authority (WMATA)	+	+	+	+
Midsize Transit Agency				
Hillsborough Area Regional Transit (HART)	+	-	-	+
Hampton Roads Transit (HRT)	+	+	+	+
Metro St. Louis (MSL)	+	+	-	+
Greater Lafayette Public Transportation/CityBus (GLPT)	+	+	-	+
Kalamazoo Metro Transit (KMT)	+	+	+	+
Metro Transit Madison (MTW)	+	+	+	+
Potomac and Rappahannock Transit (PRTC)	+	+	+	+
Triangle Transit (TTA)	+	+	+	+
Small/Rural Transit Agency				
Greater Hartford Transit District (GHTD)	+	+	+	+
Corvallis Transit System (CTS)	+	+	-	+
Northern Arizona Intergovernmental Public Transit (NAIPTA)	+	-	-	+
Ohio Valley Regional Transit Authority (OVRTA)	+	+	+	+
Park City Transit (PCT)	+	+	-	+
Pullman Transit (PTW)	+	+	-	+
RoadRUNNER Transit (RRT)	+	+	+	+
USA	+	+	-	+

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Note: "-" represents years when GDP declined; "+" represents when GDP increased.

Table D.4 Personal Income Growth Trends for MSA/County/City Served by Transit Agency

Agency	2007	2008	2009	2010
Large Transit Agency				
BART	+	+	-	+
CTA	+	+	-	+
NYMTA	+	+	-	+
RTD	+	+	-	+
TriMet	+	+	-	+
WMATA	+	+	+	+
Midsize Transit Agency				
HART	+	+	-	+
HRT	+	+	-	+
MSL	+	+	-	+
GLPT	+	+	-	+
KMT	+	+	-	+
MTW	+	+	-	+
PRTC	+	+	+	+
TTA	+	+	-	+
Small/Rural Transit Agency				
GHTD	+	+	-	+
CTS	+	+	-	+
NAIPTA	+	+	+	+
OVRTA	+	+	-	+
PCT	+	+	-	+
PTW	+	+	-	+
RRT	+	+	+	+
USA	+	+	-	+

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

Note: "-" represents years when Personal Income declined; "+" represents when Personal Income increased.

Table D.5 Employment Trends for MSA/County/City Served by Transit Agency

Transit Agency	2007	2008	2009	2010	2011
Large Transit Agency					
BART	+	-	-	-	+
CTA	+	-	-	+	+
NYMTA	+	+	-	-	+
RTD	+	+	-	-	N/A[a]
TriMet	+	+	-	+	+
WMATA	+	+	-	+	+
Midsize Transit Agency					
HART	+	-	-	-	+
HRT	+	-	-	-	+
MSL	+	-	-	-	N/A
GLPT	+	+	-	-	+
KMT	+	-	-	-	+
MTW	+	+	-	+	N/A
PRTC	+	+	-	+	+
TTA	+	+	-	-	+
Small/Rural Transit Agency					
GHTD	+	+	-	-	+
CTS	+	+	-	+	+
NAIPTA	+	+	-	+	N/A
OVRTA	+	-	-	-	+
PCT	+	+	-	-	-
PTW	-	+	+	+	N/A
RRT	+	+	-	+	N/A
USA	+	-	-	-	+

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Note: "-" represents years when Employment declined; "+" represents when Employment increased.

[a] Not available.

Table D.6 Unemployment Rate Trends for MSA/County/City Served by Agency

	2007	2008	2009	2010
Large Transit Agency				
BART				X
CTA		X	X	X
NYMTA				
RTD				
TriMet	X	X	X	X
WMATA				
Midsize Transit Agency				
HART			X	X
HRT				
MSL	X	X	X	X
GLPT				X
KMT	X	X	X	X
MTW				
PRTC				
TTA				
Small/Rural Transit Agency				
GHTD		X		
CTS	X			
NAIPTA				
OVRTA	X	X		
PCT				
PTW				
RRT				

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Note: "X" represents years when Unemployment rate exceed the national average.

Large Transit Agencies

The transit agencies interviewed included six large transit agencies: BART, CTA, NYMTA, Denver RTD, TriMet, and WMATA. Comparing the socioeconomic data, in relation to the U.S. average:

- The percentage of aging population (over 65) is below or very close to the U.S. average.
- The percentage of minority population within the transit agencies' service areas exceeds the U.S. average in all these metropolitan areas, exceeding 50 percent in the regions served by BART, CTA, NYMTA, and WMATA.
- The percentage of households with no automobiles is higher than the U.S. average for five of the six large transit agencies interviewed, which seems reasonable, given the extensive transit services available to residents in these urban areas. The exception was RTD in Denver. NYMTA had the highest percentage of households with no vehicles, at over 30 percent.
- The average income is higher than the U.S. average for the metropolitan areas served by these large transit agencies, and the percentage of population below poverty is lower than the U.S. average, except for CTA (based on Cook County statistics only).

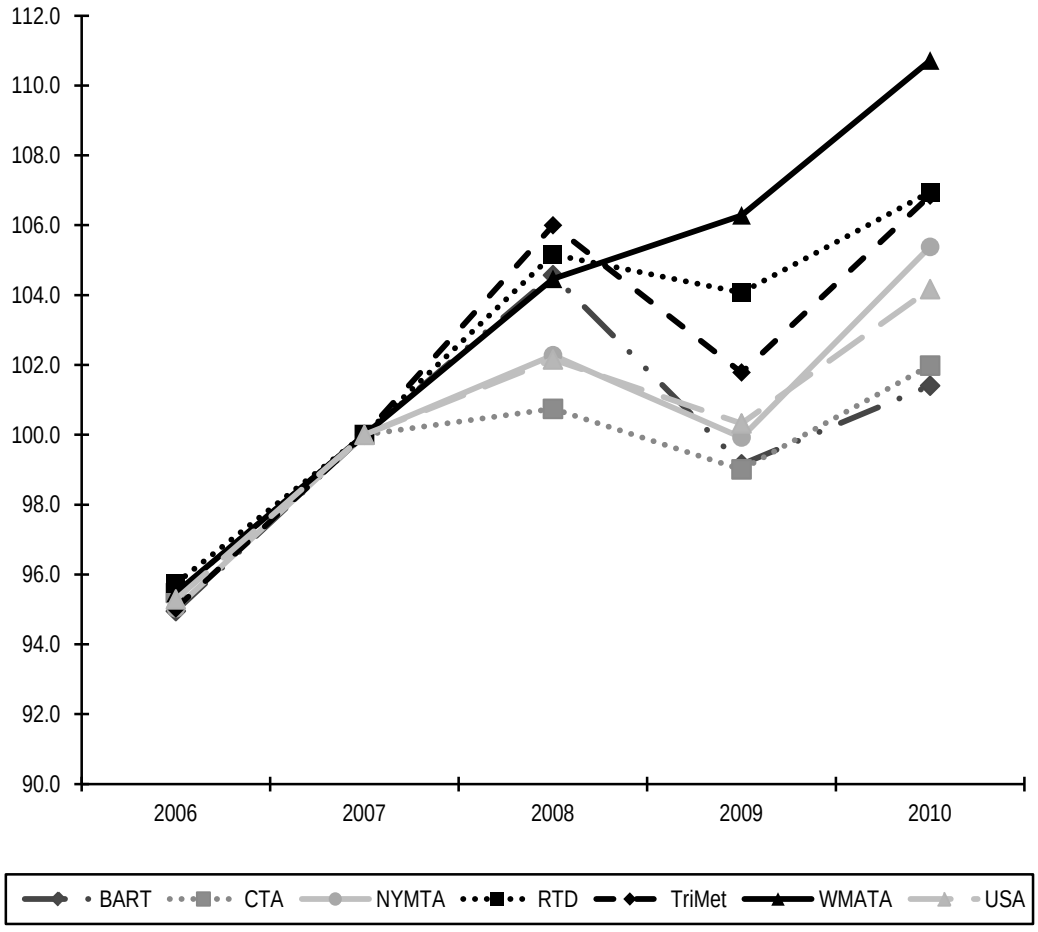
Figure D.1 through Figure D.4 show the economic indicators (GDP, Personal Income, Employment and Unemployment) for the large transit agencies from 2006 through 2010.

GDP

At the national level, GDP increased through 2008, and it declined in 2009. Data shows that GDP increased in 2010, signaling recovery. The GDP trends for the service areas of large transit agencies are similar to U.S. trends, with the exception of the GDP trends observed for the Washington, D.C. metropolitan region, where GDP increased throughout the analysis period.

The growth in GDP for the New York MSA trends very closely to the U.S. GDP growth. Growth trends for the Chicago MSA are below the U.S. average, and the GDP declined in the San Francisco MSA at a faster rate than the U.S. average in 2009.

Figure D.1 Gross Domestic Product (GDP) Trends for Metropolitan Statistical Areas for Large Transit Agencies
Indexed (2007=100)

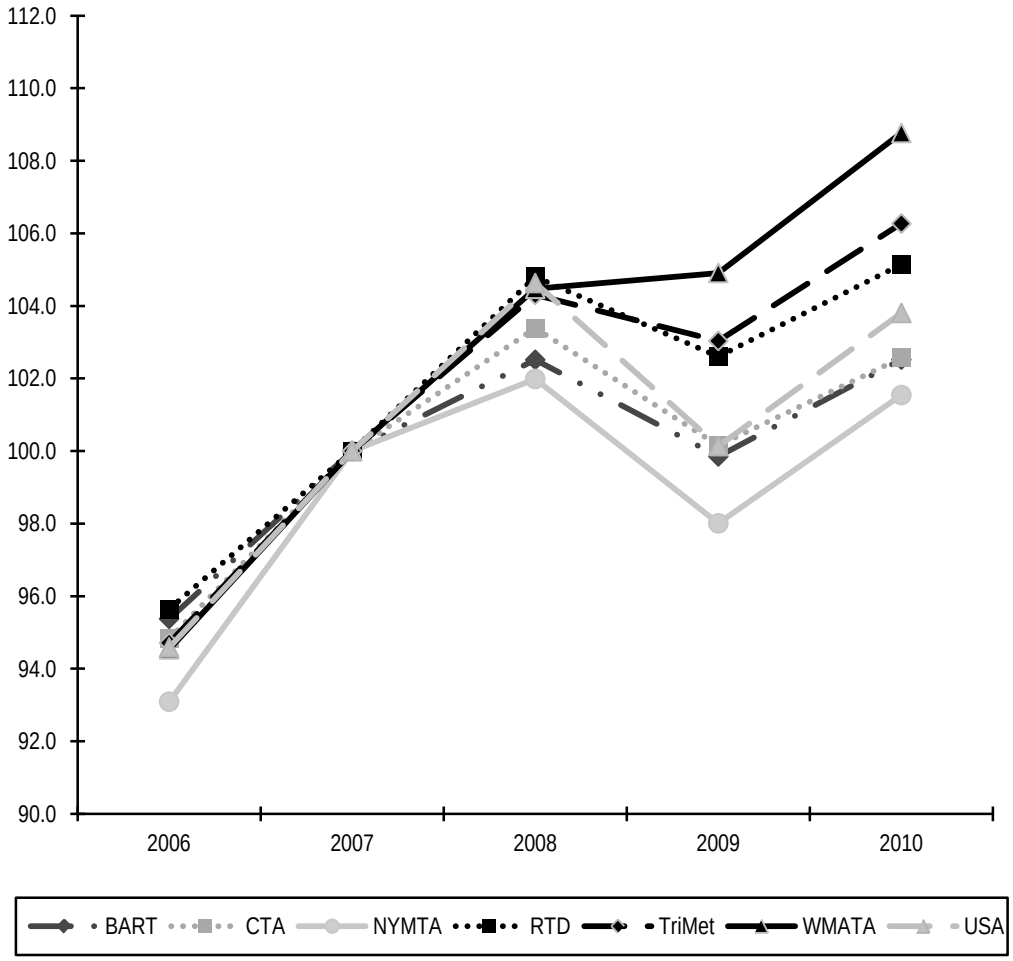


Source: Cambridge Systematics Analysis of Bureau of Economic Analysis data.

Personal Income

Similar to GDP, personal income declined in 2009, also in line when most of the largest job losses occurred, except in the D.C. metro area, where personal income growth was relatively flat between 2008 and 2009. The rate of decline in personal income in 2009 for this sample of large transit agencies is lower than the national average.

Figure D.2 Personal Income Trends for Metropolitan Statistical Areas for Large Transit Agencies
Indexed (2007=100)



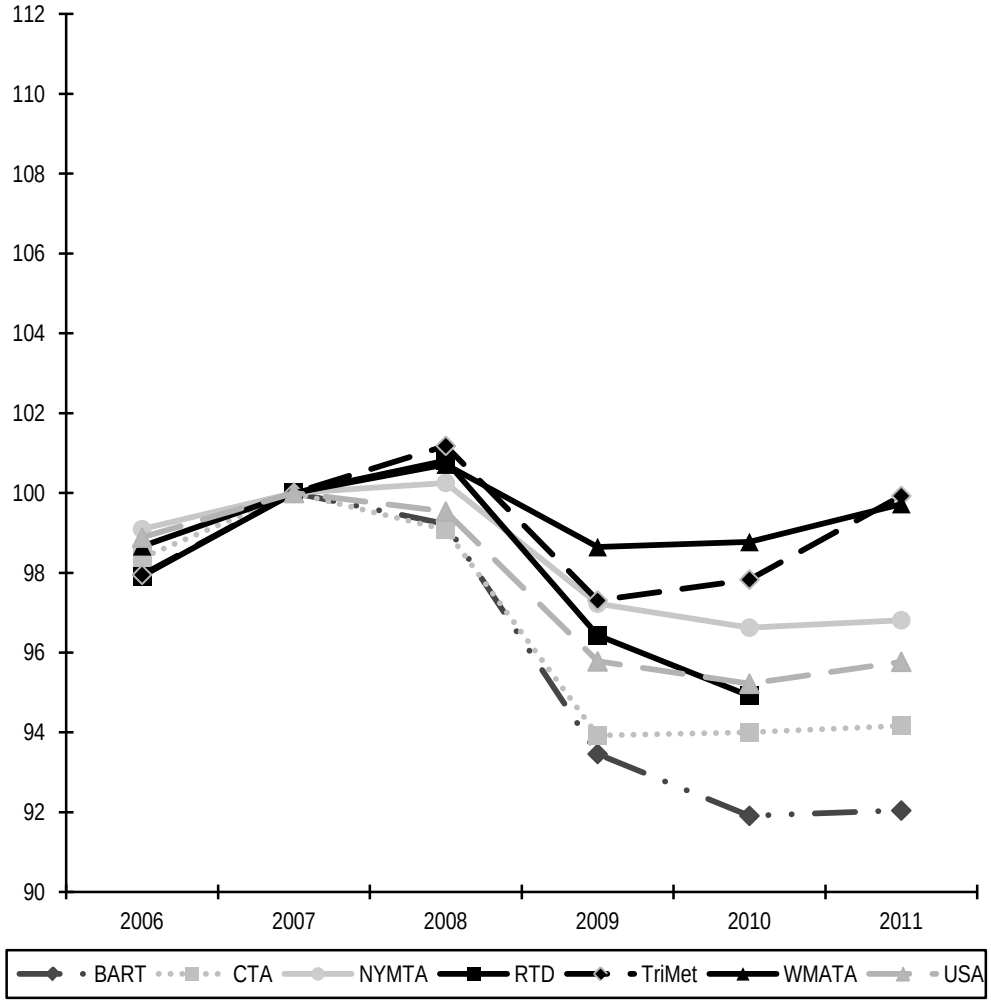
Source: Cambridge Systematics Analysis of Bureau of Economic Analysis data.

Employment/Unemployment

In the U.S., job losses began in 2008, and the trend continued through 2010, although the largest loss of employment occurred in 2009. Data shows employment growing very slowly (0.6 percent) in 2011. Similar trends have been observed in the metropolitan regions served by large transit agencies, although job losses were more significant in San Francisco and Chicago in comparison to other large cities and the United States in general. Based on these data, of the six metropolitan areas, Portland MSA's job market seems to be recovering at a stronger pace than both the U.S. average and the other large urban areas included in this analysis.

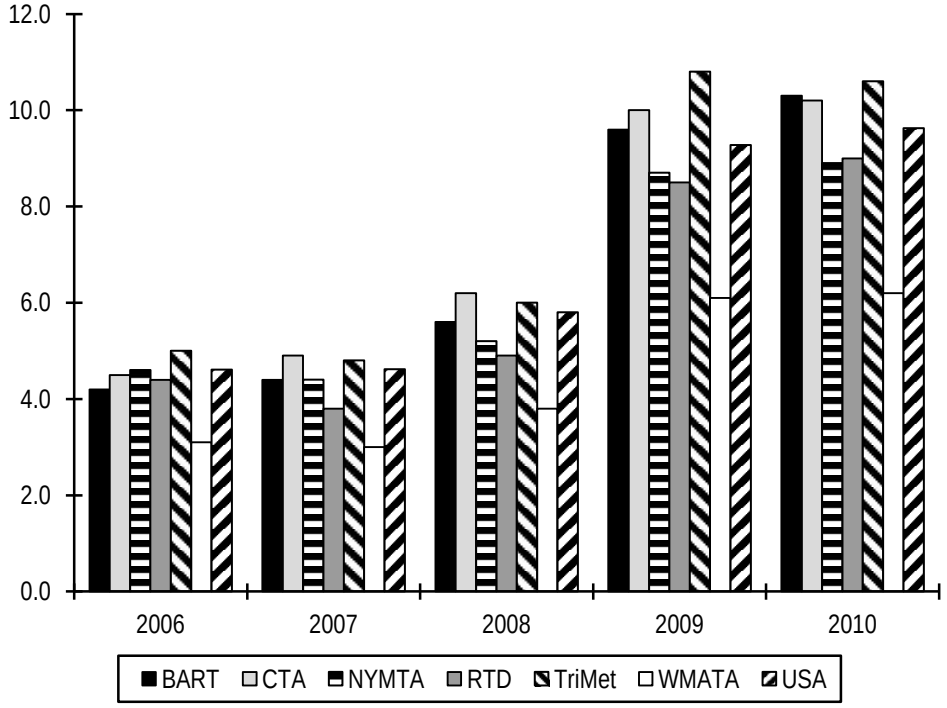
Based on data from 2006 through 2010, unemployment has been increasing at the national level since 2006, with the largest jump in 2009, when unemployment increased by 3.5 percentage points. It grew 0.3 percentage points in 2010. In 2011, unemployment fell below the 2009 peak. For the large transit agencies, unemployment rates have followed a similar trend in terms of growth. Unemployment rates were higher than the national average in Chicago, San Francisco, and Portland MSAs. In the Washington, D.C. MSA, the unemployment rate has been lower than the U.S. average, up to 3 percentage points lower in 2009.

Figure D.3 Employment Trends for Metropolitan Statistical Areas for Large Transit Agencies
Indexed (2007=100)



Source: Cambridge Systematics Analysis of Bureau of Labor Statistics data.

Figure D.4 Unemployment Rates for Metropolitan Statistical Areas for Large Transit Agencies



Source: Cambridge Systematics Analysis of Bureau of Labor Statistics data.

Midsize Transit Agencies

Eight transit agencies were considered midsize based on service levels and/or ridership: Greater Lafayette Public Transportation (IN), HART (Tampa, FL), Hampton Roads Transit (VA), Kalamazoo Metro Transit (MI), Metro St. Louis, Madison Metro Transit (WI), PRTC (VA), and Triangle Transit (Raleigh-Durham, NC). Comparing the socioeconomic data, in relation to the U.S. average:

- The percentage of aging population (over 65) is under the U.S. average for all midsize transit agencies (i.e., under 13 percent), except for the St. Louis metropolitan area, where it is slightly above, at 13.3 percent.
- The percentage of minority population within the transit agencies' service area is above the national average for the metropolitan areas and regions in states on east coast (i.e., Florida, Virginia, and North Carolina). In regions in the Midwest, the minority population is below the U.S. average.
- Vehicle ownership in these areas is higher than the U.S. average.
- Greater Lafayette had the highest share of population below the poverty level, followed by the Kalamazoo-Portage metropolitan area (Michigan) and Madison, Wisconsin. Average income was below the national average in

Greater Lafayette, Hillsborough County and the Kalamazoo-Portage metropolitan region. The PRTC region has a median household income well above the national average, at $88,600.

Figure D.5 through Figure D.7 show the economic indicators (GDP, Personal Income, Employment and Unemployment) for the midsize transit agencies from 2006 through 2010.

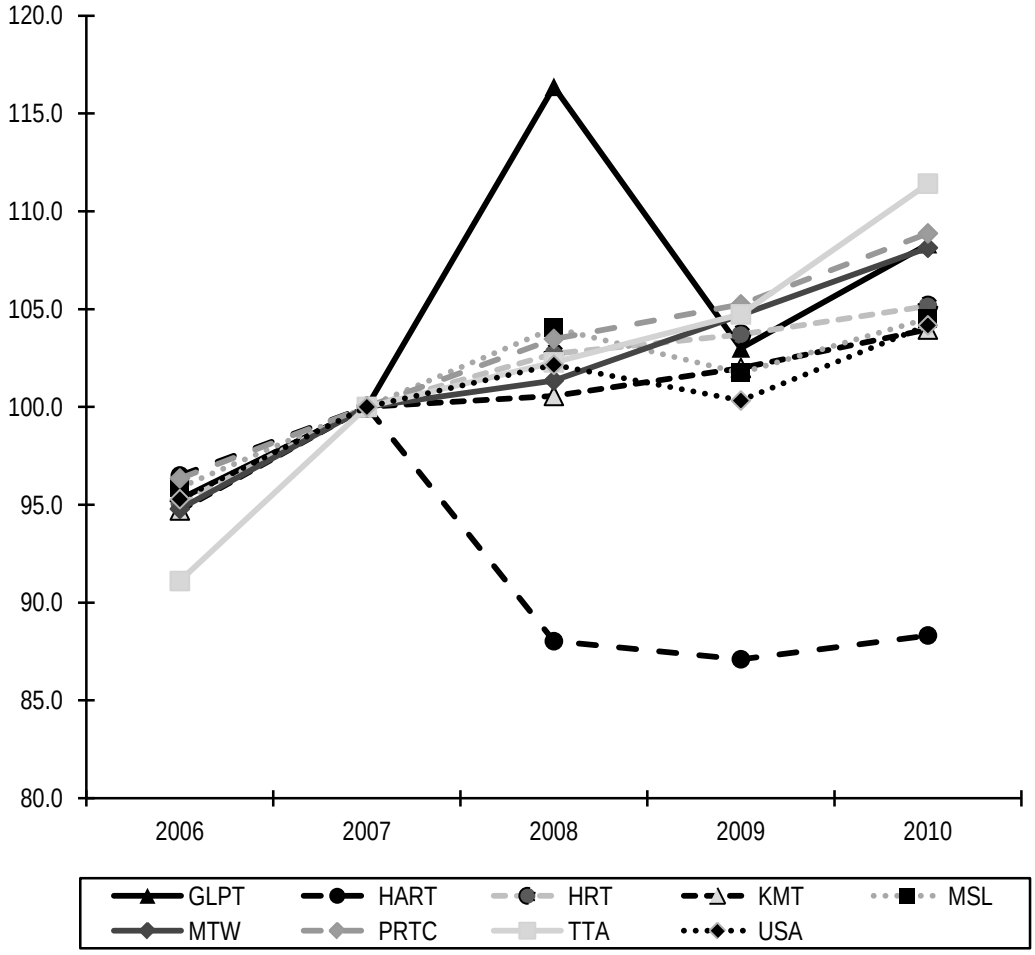
GDP

For GDP trends, the regions in five of the midsize transit agencies (from the study sample) have continued to experience GDP growth through 2010 (i.e., no decline in 2009 as was the case for the national average), although it may have slowed down compared to previous years.

- The St. Louis MSA has followed a similar trend to the United States, with a decline in GDP in 2009, and signs of recovery in 2010.
- The GDP in Hillsborough County started to decline in 2008, and this trend continued through 2009. Signs of recovery are observed in 2010, although the growth rate is lower (at 1.4 percent over 2009) compared to the U.S. average and most regions in this study. The housing crisis severely impacted the economic conditions in this area.

The Greater Lafayette region data shows a significant increase in 2008, followed by a steep decline in 2009, and growing strongly (over 5 percent) in 2010.

Figure D.5 Gross Domestic Product (GDP) Trends for Metropolitan Statistical Areas for Midsize Transit Agencies
Indexed (2007=100)

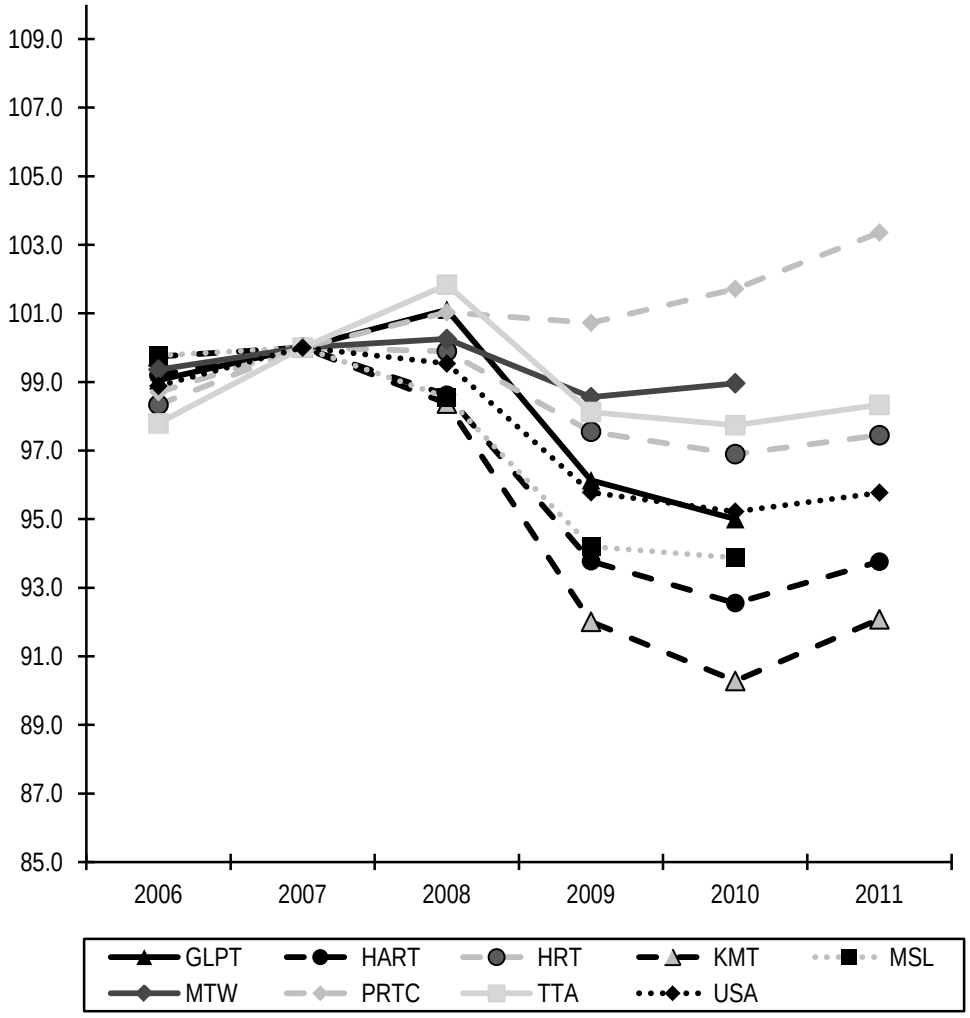


Source: Cambridge Systematics analysis of Bureau of Economic Analysis data.

Personal Income

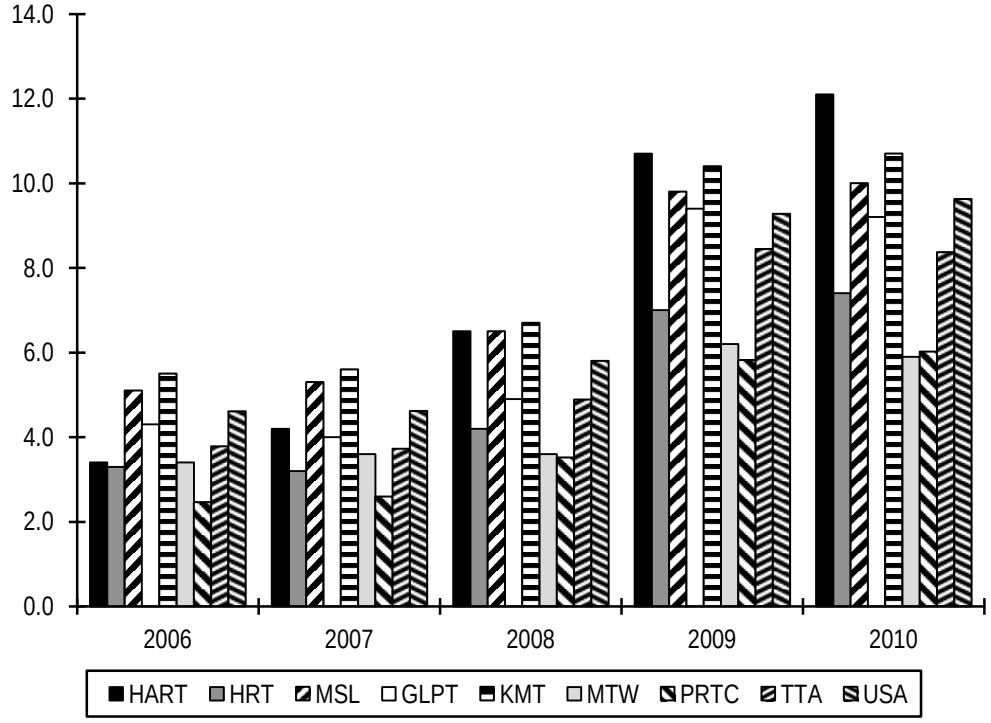
With the exception of the service area for PRTC (VA), personal income trends have been similar to the U.S., in terms of growth through 2008, decline in 2009, and then recovery in 2010. However, the rate at which personal income declined is lower than the U.S. average in the regions for all midsize transit agencies included in this analysis.

Figure D.6 Employment Trends for Metropolitan Statistical Areas for Midsize Transit Agencies
Indexed (2007=100)



Source: Cambridge Systematics Analysis of Bureau of Labor Statistics data.

Figure D.7 Unemployment Trends for Metropolitan Statistical Areas for Midsize Transit Agencies



Source: Cambridge Systematics Analysis of Bureau of Labor Statistics data.

Small and Rural Transit Agencies

Six transit agencies (in addition to OVRTA[40]) were classified as small or rural. The regions served by these transit agencies meet the criteria for small urban or rural areas, with the exception of Hartford, CT, with a population meeting the threshold of large urban, but service levels that fit the criteria for small agency. The transit agencies in this list include: Corvallis Transit (Oregon), Greater Hartford Transit District (Connecticut), Northern Arizona Intergovernmental Public Transit (NAIPTA), Ohio Valley Regional Transit Authority (West Virginia), Park City Transit (Utah), Pullman (Washington) and RoadRUNNER Transit (Las Cruces, New Mexico). Comparing the socioeconomic data, in relation to the U.S. average:

[40]The Ohio Valley Regional Transit Agency was not part of the original list of agencies to interview for Task 2, but was contacted as part of Task 4. As part of the interview process, data related for Task 2 was also compiled.

- The percentage of aging population (over 65) is above the U.S. average for three transit agencies – Greater Hartford in Connecticut, OVRTA in Wisconsin, and RoadRUNNER in New Mexico.
- The percentage of minority population within the transit agencies' service area is over the national average for Greater Hartford, NAIPTA, Park City Transit, and RoadRUNNER.
- Vehicles ownership is higher than the U.S. average only in the Ohio Valley/ Wheeling metropolitan region.
- Poverty is higher than the national average in Corvallis, NAIPTA, Ohio Valley, Pullman, and Las Cruces. Pullman has the lowest average income of all the regions (of all sizes) included in this study (less than $36,400).

Figure D.8 through Figure D.11 show the economic indicators (GDP, Personal Income, Employment and Unemployment) for the small/rural transit agencies from 2006 through 2010.

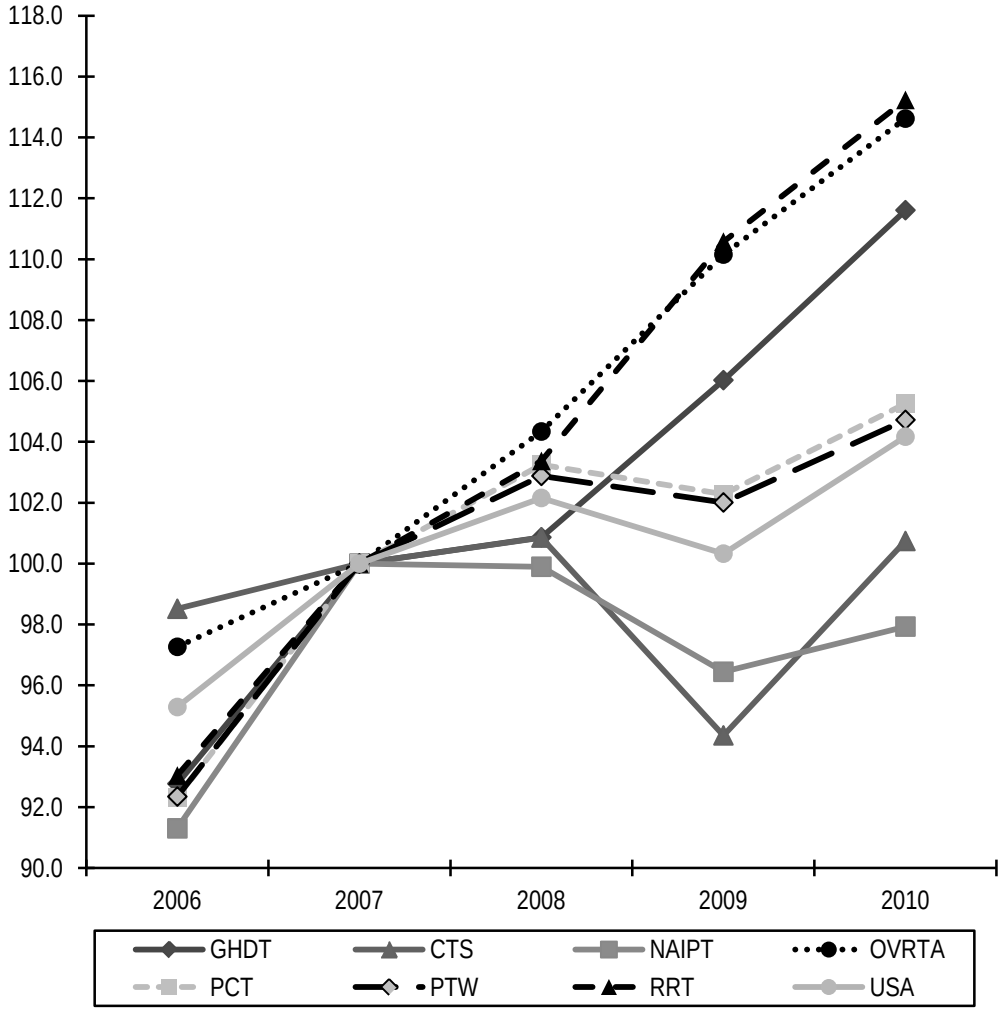
GDP

GDP trends vary among the small and rural transit agencies:

- GDP in Greater Hartford, Ohio Valley, and Las Cruces has increase over the 2006-2010 period.

Other regions have followed U.S. trends (with decline in GDP in 2009); however, Corvallis and Flagstaff experienced a higher rate of decline in GDP compared to the nation. Pullman and Park City tracked closer to U.S. trends.

Figure D.8 Gross Domestic Product (GDP) Trends for Small Transit Agencies
Indexed (2007=100)

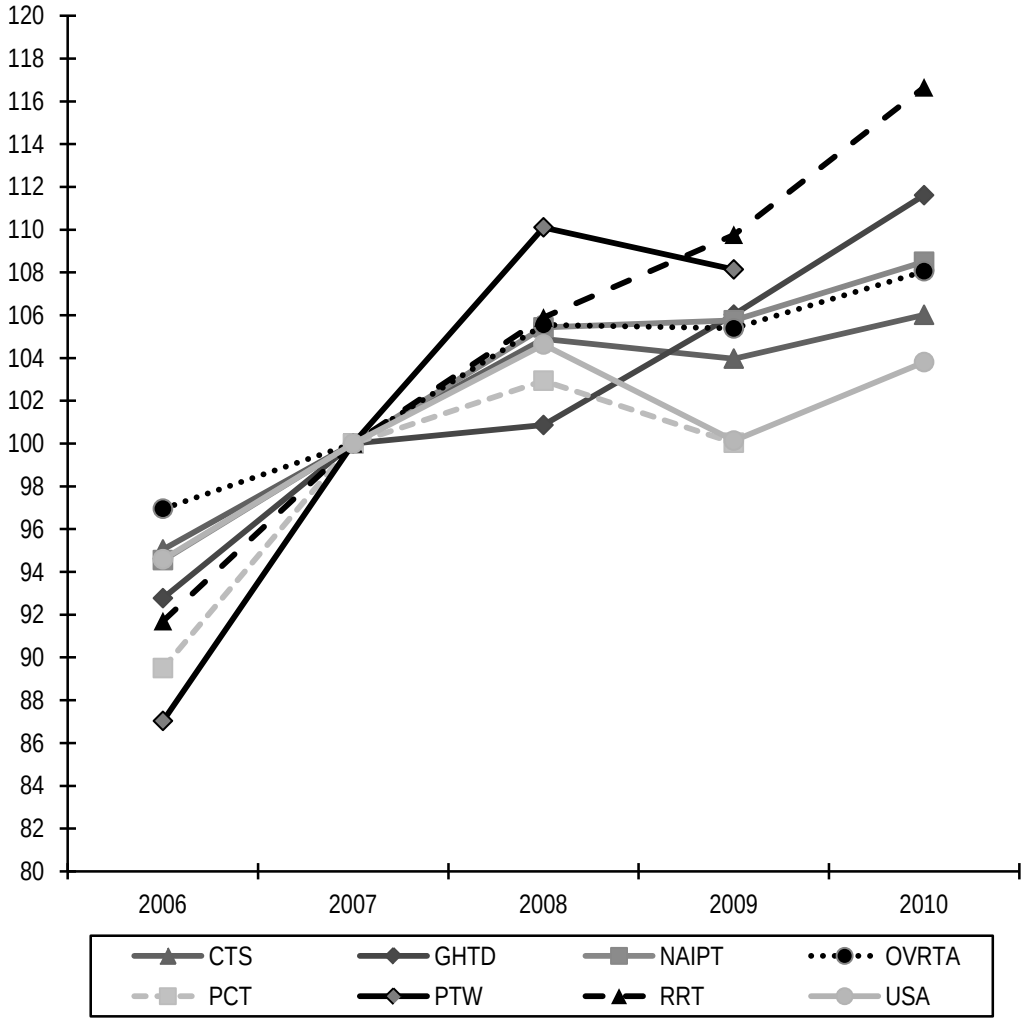


Source: Cambridge Systematics analysis of Bureau of Economic Analysis data.

Personal Income

Personal income has increased since 2006 in Flagstaff and Las Cruces, unlike the U.S. trend that showed a decline in 2009. Otherwise, the regions for other small and rural transit agencies have followed the U.S. trends, although generally above the U.S. average.

Figure D.9 Personal Income Trends for Small Transit Agencies
Indexed (2007=100)



Source: Cambridge Systematics analysis of Bureau of Economic Analysis data.

Employment/Unemployment

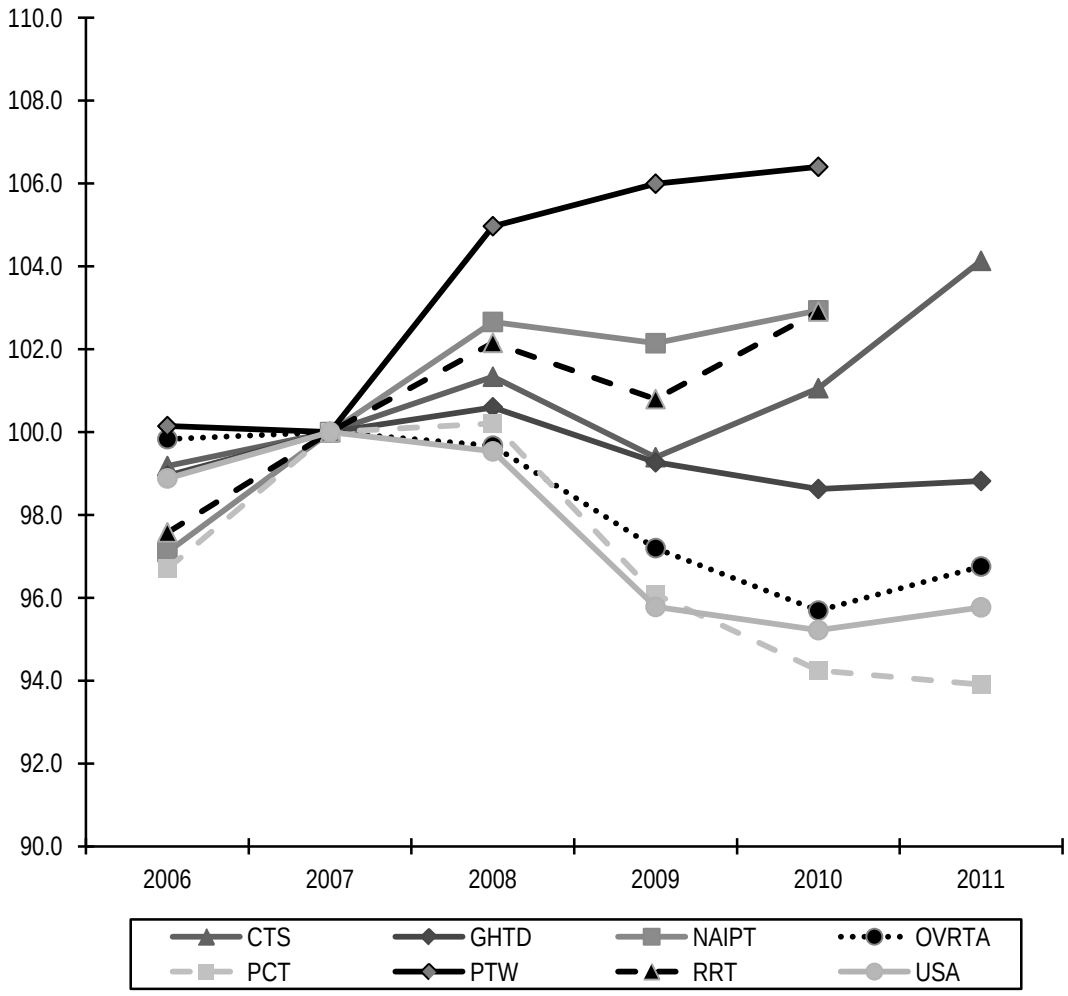
Job loss in areas served by small/rural transit agencies lagged as compared to the U.S. average and other regions that were analyzed for this study. Data on employment show most of the small and rural regions losing jobs in 2009, instead of 2008. These areas have also showed signs of recovery by 2010 at a rate of less than 2 percent growth.

- Greater Hartford and Park City are the exception, with job losses extending through 2010. Data for 2011 show employment in Greater Hartford remaining relatively flat (growth of 0.2 percent), whereas Park City had another year of job losses, albeit at a much slower rate than previous years (at -0.4 percent).

- Pullman (Washington) employment dropped slightly going into 2007 (0.1 percent), and then exhibited an upward trend in employment during the recessionary period, although growth has been relatively flat over the last couple of years. In 2008, employment grew by 5 percent, whereas U.S. employment dropped by 0.5 percent.

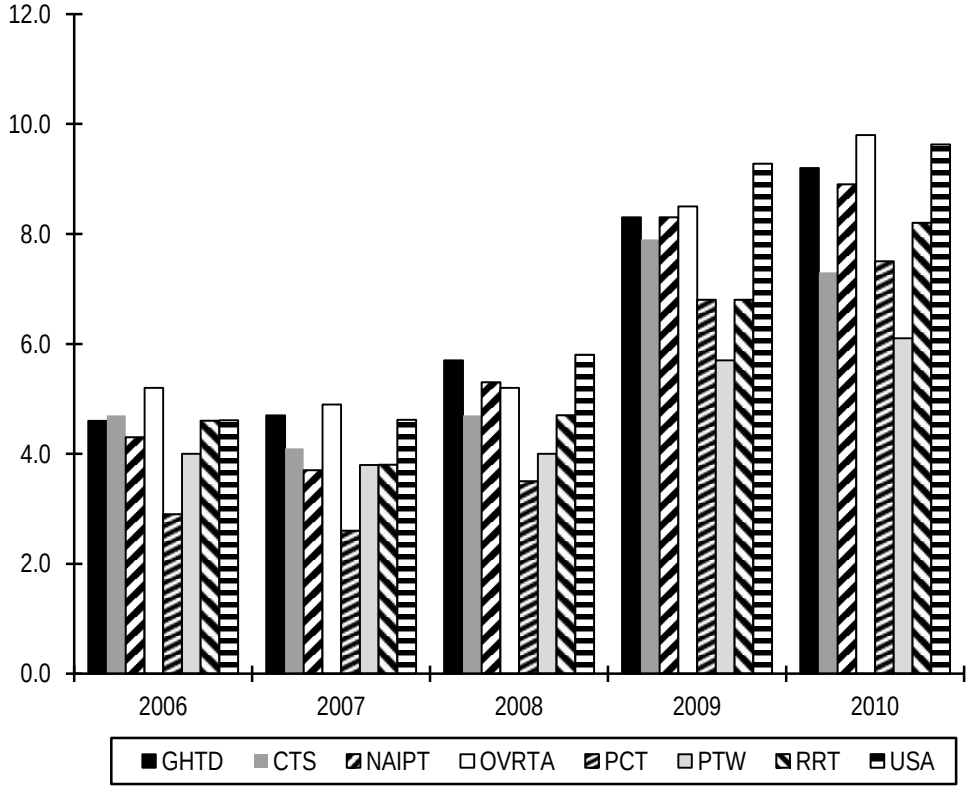
In general, unemployment rates for the small/rural transit agencies have been below the U.S. average, with the exception of Ohio Valley (WV), with unemployment rates exceeding the U.S. average in 2006, 2007, and again (albeit not for much) in 2010.

Figure D.10 Employment Trends for Small Transit Agencies
Indexed (2007=100)



Source: Cambridge Systematics Analysis of Bureau of Labor Statistics data.

Figure D.11 Unemployment Trends for Small Transit Agencies
Indexed (2007=100)



Source: Cambridge Systematics Analysis of Bureau of Labor Statistics data.