

TCRP

REPORT 129

TRANSIT
COOPERATIVE
RESEARCH
PROGRAM

Local and Regional Funding Mechanisms for Public Transportation

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TCRP REPORT 129

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TRANSIT COOPERATIVE RESEARCH PROGRAM

The nation's growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems. Current systems, some of which are old and in need of upgrading, must expand service area, increase service frequency, and improve efficiency to serve these demands. Research is necessary to solve operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the transit industry. The Transit Cooperative Research Program (TCRP) serves as one of the principal means by which the transit industry can develop innovative near-term solutions to meet demands placed on it.

The need for TCRP was originally identified in *TRB Special Report 213—Research for Public Transit: New Directions*, published in 1987 and based on a study sponsored by the Urban Mass Transportation Administration—now the Federal Transit Administration (FTA). A report by the American Public Transportation Association (APTA), *Transportation 2000*, also recognized the need for local, problem-solving research. TCRP, modeled after the longstanding and successful National Cooperative Highway Research Program, undertakes research and other technical activities in response to the needs of transit service providers. The scope of TCRP includes a variety of transit research fields including planning, service configuration, equipment, facilities, operations, human resources, maintenance, policy, and administrative practices.

TCRP was established under FTA sponsorship in July 1992. Proposed by the U.S. Department of Transportation, TCRP was authorized as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). On May 13, 1992, a memorandum agreement outlining TCRP operating procedures was executed by the three cooperating organizations: FTA, the National Academies, acting through the Transportation Research Board (TRB); and the Transit Development Corporation, Inc. (TDC), a nonprofit educational and research organization established by APTA. TDC is responsible for forming the independent governing board, designated as the TCRP Oversight and Project Selection (TOPS) Committee.

Research problem statements for TCRP are solicited periodically but may be submitted to TRB by anyone at any time. It is the responsibility of the TOPS Committee to formulate the research program by identifying the highest priority projects. As part of the evaluation, the TOPS Committee defines funding levels and expected products.

Once selected, each project is assigned to an expert panel, appointed by the Transportation Research Board. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, TCRP project panels serve voluntarily without compensation.

Because research cannot have the desired impact if products fail to reach the intended audience, special emphasis is placed on disseminating TCRP results to the intended end users of the research: transit agencies, service providers, and suppliers. TRB provides a series of research reports, syntheses of transit practice, and other supporting material developed by TCRP research. APTA will arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by urban and rural transit industry practitioners.

The TCRP provides a forum where transit agencies can cooperatively address common operational problems. The TCRP results support and complement other ongoing transit research and training programs.

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FOREWORD

By Dianne S. Schwager

Staff Officer

Transportation Research Board

TCRP Report 129: Local and Regional Funding Mechanisms for Public Transportation and the Local and Regional Funding Database, which is posted on the TRB website at http://trb.org/news/blurp_detail.asp?id=9599, will be of interest to public transportation systems, local and regional governments, and others interested in funding for public transportation services. The Local and Regional Funding Database is intended to serve as an interactive repository of information gathered from transit systems about their local and regional funding mechanisms. This database can be updated in the future as additional information becomes available.

The report and the database provide an extensive list of funding sources that are in use or have the prospect of being used at the local and regional level to support public transportation. The research identified and defined six major categories of local and regional funding for public transportation, including the following: (1) traditional tax- and fee-based funding sources; (2) common business, activity, and related funding sources; (3) revenue streams from projects; (4) new “user” or “market-based” funding sources; (5) financing mechanisms; and (6) fare policy and strategy. The report focuses on the first two categories.

In addition to identifying and describing local and regional funding sources for public transportation, *TCRP Report 129* includes the following:

- Guidance on evaluating local and regional funding mechanisms, including guidance on the advantages and disadvantages of various sources, criteria that should be considered in selecting local or regional funding sources, and consideration of key contextual issues that are important in establishing a practical base of understanding to support local and regional funding alternatives;
- A list of steps—emerging from the experiences of transit systems around the country that have successfully sought and enacted new or increased sources of funding—that should be taken by transit systems trying to enact new local and regional transit funding mechanisms;
- A very brief description of the Local and Regional Funding Database and how to use it (for a more in-depth description of how to use the database, please refer to the Local and Regional Funding Database User Manual); and
- A brief description of international experiences with local and regional funding for public transportation.

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S U M M A R Y

Local and Regional Funding Mechanisms for Public Transportation

S.1 Purpose and Approach

The purpose of TCRP Project H-34 was to compile a comprehensive list of funding sources that are in use or have the prospect of being used at the local and regional level to support public transportation.

The results of the project are intended to serve as an updateable, interactive resource on local and regional funding sources for public transportation as well as a guide to the evaluation and enactment of new or expanded funding from local or regional sources.

The project was carried out in two phases. The first phase focused on examining the literature on local and regional transit funding sources and developing a typology to describe the fullest range of possible sources. To ensure as comprehensive a list of funding sources as possible, the second phase of the project involved interviews with over 60 local and regional transit agency managers and others with knowledge of local and regional transit funding sources and successful initiatives. Appendix A contains the interview guide and data elements that were sought in the interviews.

S.2 A Typology of Local and Regional Funding Sources for Public Transportation

Table S.1 presents five major categories of local and regional transit funding. Each category is described briefly in Section 3.0 of this report. The five categories are the following:

- **Traditional tax- and fee-based transit funding sources.** These include all traditional forms of broad-based tax- and fee-based and related revenue-raising mechanisms that have been available or used for transit capital investment or to support transit operations since transit began to be transformed from a private business into a public service in the 1960s. These “traditional” sources include those for which there is generally a direct and broadly accepted logic for making expenditures on transportation, including transit.
- **Common business, activity, and related funding sources.** This category of funding sources includes broad-based but somewhat less widely employed taxing and revenue-raising mechanisms that are used to support transit in various settings. The use of these revenue-raising mechanisms represents, in part, a recognition that funding public transportation is a broad responsibility and that meeting this responsibility requires contributions of funds from sources whose yield is significant and whose participation is politically acceptable.
- **Revenue streams from projects.** This category includes various arrangements that can be used to capture revenue primarily from the income streams of private business and related development activities benefiting from proximity to specific transit facilities and services. These include

Table S.1. Local and regional public transportation funding framework.

Traditional Tax- and Fee-Based Transit Funding Sources
<ul style="list-style-type: none"> • General Revenues • Sales Taxes (variable base of goods and services, motor fuels) • Property Taxes (real property, includes vehicles) • Contract or Purchase-of-Service Revenues (by human service agencies, school/universities, private organizations, etc.) • Lease Revenues • Vehicle Fees (title, registration, tags, inspection) • Advertising Revenues • Concessions revenues
Common Business, Activity, and Related Funding Sources
<ul style="list-style-type: none"> • Employer/Payroll Taxes • Car Rental Fees • Vehicle Lease Fees • Parking Fees • Realty Transfer Taxes/Mortgage Recording Fees • Corporate Franchise Taxes • Room/Occupancy Taxes • Business License Fees • Utility Fees/Taxes • Income Taxes • Donations • Other Business Taxes
Revenue Streams from Projects (Transportation and Others)
<ul style="list-style-type: none"> • Transit-Oriented Development/Joint Development • Value Capture/Beneficiary Charges • Special Assessment Districts • Community Improvement Districts/Community Facilities Districts • Impact Fees • Tax-Increment Financing Districts • Right-of-Way Leasing
New “User” or “Market-Based” Funding Sources
<ul style="list-style-type: none"> • Tolling (fixed, variable, and dynamic; bridge and roadway) • Congestion Pricing • Emissions Fees • VMT Fees
Financing Mechanisms^a
<ul style="list-style-type: none"> • General Obligation (GO) Bonds • Private Activity Bonds (PABs) • Tax Credit Bonds • Grant Anticipation Notes (GANs) • Grant Anticipation Revenue Vehicles (GARVEEs) • Revenue Anticipation Notes (RANs) • Certificates of Participation (COPs) • State Infrastructure Bank (SIB) loans

^a While some financing mechanisms may be authorized and applied statewide, they typically require some commitment of future revenues by local borrowers as well as other local commitments to satisfy borrowing requirements and debt servicing.

various forms of “joint development,” “value capture,” and “benefit assessment,” as well as newly emerging “public-private partnerships” (“PPP” arrangements), all of which are described extensively in the literature and summarized in this report.

- **New “user” or “market-based” funding sources.** Expanded tolling, congestion pricing, emission fees, and vehicle miles of travel (VMT) fees applied at the local and/or regional level have become the subject of greatly expanded research and analysis; however, implementation has been limited and revenue flows to transit rare, with the possible exception of “toll credits” used as a local match based on state authority.
- **Financing mechanisms.** These refer to the growing variety of long-term “debt” instruments that are being issued increasingly to support major local and regional transit projects and programs. Financing mechanisms most often commit future streams of revenue from many of the types of sources noted in the categories described above for current investment. Financing mechanisms may more accurately be described as “project delivery mechanisms” than as pure “sources” of funds. Nonetheless, financing mechanisms are included here because of their wide-ranging use and their dependence on more traditional sources to underwrite debt.

TCRP Project H-34 is focused on the use of various forms of tax, fee, and related revenue raised broadly from local and regional residents and businesses. Therefore, the interview process used in the project and the report itself are focused on the first two categories described above: “traditional tax- and fee-based transit funding sources” and “common business, activity, and related funding sources.” Each of the three other major categories of local and regional funding: “revenue streams from projects,” “new ‘user’ or ‘market-based’ sources,” and “financing mechanisms” has been a long-standing major independent topic of TCRP and related research activity. Therefore, these categories have not been the direct subject of inquiry in the interviews for this project. Instead, the extensive literature on each has been used to briefly document the characteristics of these transit funding methods. Readers are encouraged to use the references noted throughout this report to explore these latter three funding categories in more detail.

In addition, there are several local and regional funding sources that are used by some jurisdictions to support public transportation, but are not currently used widely. These are noted and described in Section 3.7, and their basic characteristics are noted in Tables 4.2 and 4.3.

The database that accompanies this report (the Local and Regional Funding Database, available at http://trb.org/news/blurb_detail.asp?id=9599) provides additional detail about the use of local and regional funding mechanisms in the first two categories (Traditional Tax- and Fee-Based Transit Funding Sources and Common Business, Activity, and Related Funding Sources) by the transit agencies that were interviewed for the project.

5.3 Overview of Current Local and Regional Public Transportation Funding

The National Transit Database (NTD) provides a broad profile of what types of local and regional sources of funds are being used by systems of different sizes and by different types of agencies for both capital and operating expenditures. According to the NTD, nearly \$26 billion was made available for transit from local and regional sources in 2005, including nearly \$6 billion for capital improvements and \$20 billion for operations. With respect to individual local and regional sources, 2005 NTD data show the following:

- **Fares and other earned income** accounted for about 51 percent of revenue, and virtually all of these funds are used for operations.
- **Local dedicated sources** accounted for nearly 18 percent of revenue and came from the following:
 - Sales taxes (57.5 percent),
 - Property taxes (5.8 percent),

- Gas taxes (3.8 percent),
- Income taxes (2.0 percent),
- Tolls (2.0 percent), and
- “Other” (28.8 percent).
- **Directly generated taxes** accounted for approximately 16 percent of revenue and came from the following:
 - Sales taxes (45.5 percent),
 - Property taxes (7.0 percent),
 - Tolls (5.0 percent),
 - Gas taxes (0.2 percent), and
 - “Other” (42.1 percent).
- **Local general funds** accounted for about 10 percent of revenues.
- **Other local sources** accounted for about 5 percent of revenues.

S.4 Local and Regional Public Transportation Funding by System Size

U.S. transit investment and use is heavily concentrated in larger transit systems. The 50 largest systems accounted for 83 percent of trips in 2005, 79 percent of total operating expenditures, and 89 percent of total capital investment. Of the \$26 billion in local and regional revenues budgeted in 2005 by urbanized area systems, nearly 84 percent was budgeted within areas served by the 50 largest systems. NTD data indicate the following:

- Sales taxes serve as a major revenue source among systems of all sizes,
- Local general funds play a large role in systems serving areas with populations under a million,
- Fares and earned income are the largest sources of operating support drawn from local areas,
- Fares and earned income are predominantly used to support operations,
- Other directly generated dedicated funds are most prominent in the largest systems, and
- Property taxes for transit use are concentrated among smaller systems.

S.5 Local and Regional Public Transportation Funding by Type of Agency

Independent transit authorities and municipal or county governments differ in the latitude and authority they have in seeking increased revenues. Key distinctions in the use of local and regional funding between these two basic organizational structures include the following:

- Sales tax revenues are important to both types of agencies and are more often used (by both types of agencies) in support of capital programs than operating expenses. Nonetheless, sales tax revenues are particularly a feature of larger independent authorities’ capital funding schemes.
- Sales tax or directly generated revenue sources provide over 70 percent of capital investment by independent authorities.
- Independent authorities generally are empowered to tap larger proportions of directly generated revenue.
- Fares and earned income (concessions, advertising, lease revenues, etc.) are a significant source of operating support regardless of agency type.
- Municipal and county government systems have a somewhat greater balance across sources than independent authorities have.
- The use of property taxes is concentrated among municipal and county systems.

S.6 Criteria in Selecting and Evaluating Funding Sources

Each of the sources mentioned and described in this report has potential applicability in a variety of settings. Whether a particular source is of potential use in a particular locale depends on a variety of factors, many of which are contextual and unique to individual locales. Contextual factors requiring review in the search for new funding sources are discussed more thoroughly in Section 4.0. These factors include the following:

- Local and state governance traditions and philosophies of taxation and spending,
- The types of transit agencies and services to be funded,
- The elements for which funding is being sought (e.g., ongoing agency *programs* or individual *projects*),
- The type of source that is desired and that is appropriate (e.g., *pay-as-you-go funding* or *debt financing* [bonding]), and
- Local and regional perspectives on the role of public transportation in the community now and in the future.

A good understanding of these contextual factors is an important prerequisite in the search for enhanced transit funding. Once contextual factors are understood, all stakeholders must come to a similar understanding of the general advantages and disadvantages of alternative funding sources as well as an understanding of how the alternatives satisfy a set of widely used criteria. Among the most important of these criteria are the following:

- **Revenue yield** adequacy and stability,
- **Cost efficiency** in the application of sources,
- **Equity** in the application of the alternatives across demographic and income groups as well as regional jurisdictions,
- **Economic efficiency** in balancing who pays with who benefits from investments,
- **Political and popular acceptability**, and
- **Technical feasibility**.

Among these criteria, **revenue yield** is a principal consideration. An enormous amount of effort is required to enact and sustain funding for any public service. When these efforts are undertaken, sponsors should be certain that the resulting flow of funds will be adequate to meet funding requirements, be reliable, and be predictable. Section 4.0 of this report also addresses the advantages, disadvantages, and performance of various funding sources against these criteria.

S.7 Steps in Enacting New Funding Sources for Public Transportation

There have been wide-ranging, successful efforts in recent years to raise funding for public transportation at the local and regional levels as the current and future importance of public transportation options have become more widely recognized. From these experiences, some of which are highlighted in Section 3.0, it is clear that *raising funding for public transportation must be viewed as a “campaign”* in all senses of the word. Virtually all of the successful public transportation funding campaigns have used the series of steps listed below:

1. Developing a **consensus on the scope of current and future transportation and transit needs** and on the importance of actions to address them;

2. Developing a **specific program** of investments for which additional funding is needed, providing a clear and credible demonstration of the benefits expected, and detailing a campaign plan for pursuing enactment of new funding sources;
3. Identifying the **roles, responsibilities, and procedures for carrying out the campaign plan** and implementing the proposed improvements;
4. Describing in detail the **proposed revenue sources** to be enacted and the rationales for selection and use;
5. Determining **who must act officially and unofficially** at the state, regional, and local level, through what processes, and on what timetables and further determine what their particular familiarity and interest is in advancing (or denying) a transit funding campaign;
6. Designing, raising resources for, and carrying out a **comprehensive public education and advocacy campaign** through multiple media, communications, and involvement strategies;
7. Developing **broad-based community leadership** and demonstrable sustained support for the initiative; and
8. Laying out a **reasonable timetable**, work program, and management scheme for action.

To undertake these steps, particularly in pursuit of large, longer-term funding commitments, it has proven to be necessary to consult with, if not engage formally, an individual or firm experienced in directing public advocacy campaigns. Such expertise can be essential in framing stakeholder interests through polling and other public opinion processes, exploring varied political perspectives, understanding the precise and often arcane procedures for establishing the legal authority to raise and invest public funds, and in shaping and delivering messages that will both resonate with essential constituencies and counteract contrary opinions where necessary.

SECTION 1.0

Introduction

1.1 Project Description

TCRP Project H-34, “Local and Regional Funding Mechanisms for Public Transportation,” is intended to provide a comprehensive list of local and regional funding sources for public transportation through a review of current literature and data and through interviews with representatives of a broad-based sample of transit agencies throughout the United States.

1.2 Project Purpose

The purpose of TCRP Project H-34 is to compile a comprehensive list of funding sources that are in use or have the prospect of being used at the local and regional level to support public transportation. The project has attempted to move beyond a simple listing of sources by providing information about following:

- Key characteristics of sources;
- The ways that sources are being used;
- The frequency of sources’ use in differing locales and regions, in various types of agencies, and in support of differing service characteristics;
- Issues and circumstances in source selection and use;
- Advantages and disadvantages associated with each type of source; and
- Strategies and steps to be considered in pursuing implementation of new local and regional transit funding sources.

The results of the project are intended to serve as an updateable, interactive resource on local and regional transit funding sources as well as a guide to the evaluation and enactment of new or expanded funding at the local or regional level.

1.3 Approach

The project was carried out in two phases. In the first phase, the research team conducted a literature review of local and regional transit funding sources. From the literature review, a framework was developed to guide collection of information on local and regional funding sources and uses.

In the second phase, the research team conducted over 60 interviews with local and regional transit agency managers and others with knowledge of local and regional transit funding sources and successful initiatives. Appendix A lists the transit agencies and others that were interviewed or contacted to ensure as comprehensive a list of funding sources as possible. Appendix B contains the interview guide that was used in the system interviews.

1.4 Organization of the Report

This report provides a summary of project findings in two forms. The report is intended to serve not only as a compendium of local and regional transit funding sources and characteristics but also as a guide to the evaluation and enactment of local and regional transit funding sources. Accompanying the report is a searchable database, the Local and Regional Funding Database, which provides users with additional detail on local and regional funding at individual transit systems.

The organization of this report is the following:

Section 2.0 provides a summary of overall, nationwide transit funding and a discussion of definitional issues in distinguishing local, regional, and state funding sources.

Section 3.0 describes local and regional transit funding mechanisms in use or currently available in the United States, Canada, and Europe. This section presents a typology that differentiates various funding sources—taxes/fees versus project revenues versus other revenue

streams—in order to provide a useful and consistent way of understanding transit funding alternatives and their usefulness at the local and regional level.

Section 4.0 provides additional guidance for evaluating local and regional transit funding mechanisms, including guidance on the advantages and disadvantages of various sources, provision of criteria that should be considered in selecting local or regional funding sources, and consideration of key contextual issues that are important in establishing a practical base of understanding to support local and regional funding alternatives.

Section 5.0 highlights the steps that should be taken by transit systems trying to enact new local and regional transit funding mechanisms. These steps are based on the experiences of transit systems around the country that have successfully sought and enacted new or increased sources of funding.

Section 6.0 provides a very brief description of the Local and Regional Funding Database and how to use it (for a more

in-depth description of how to use the database, please refer to the Local and Regional Funding Database User Manual, available at http://trb.org/news/blurbs_detail.asp?id=9599).

Appendix A lists the transit systems and agencies interviewed as part of the project.

Appendix B includes the interview guide used with the systems contacted.

Appendix C provides observations about the scope and content of the National Transit Database (NTD) and its usefulness and limitations as a resource in a transit system's pursuit of local and regional sources of funding.

Appendix D briefly describes international experiences with local and regional transit funding.

Appendix E provides selected bibliographic material on local and regional transit funding.

Appendix F provides a list of local funding measures supporting transit in whole or in part that were passed in the period 2000 to 2006.

SECTION 2.0

Overview of Local and Regional Public Transportation Funding

2.1 Profile of Overall Public Transportation Funding

The current intergovernmental partnership in transit funding is summarized in Table 2.1. For urbanized areas with populations over 200,000, local sources (including regional sources) account for the largest single share of total transit investment—33 percent. If the combination of fares (25 percent), local revenues (33 percent), and “other” sources (9 percent) are viewed together as complementary or interrelated means of gathering local resources in support of transit, over two-thirds of all investment (67 percent) is derived locally, including 60 percent of capital investment and nearly 69 percent of operating expenses.

Over the last decade or so, several trends indicate why consideration of new sources of local and regional funding for public transportation is of mounting importance:

- Investment in public transportation from all sources has nearly doubled in nominal dollars, indicating a continued interest in meeting transit system needs, according to the American Public Transportation Association 2006 “Public Transportation Fact Book.”
- Despite these increases, both public transportation industry and U.S. DOT estimates confirm a substantial and growing shortfall. The level of transit investment is not keeping pace with the investment needed to maintain transit equipment and facilities in acceptable condition, sustain current levels of performance, and expand systems and services to serve growing travel demand. The additional transit investment required from all sources exceeds \$10 billion annually from all sources.
- Despite consistent success in enacting new local funding for transit in recent years, resistance to increasing taxes and public spending persists.
- State and federal assistance, as well as funds raised locally and regionally for transit, have provided a fairly constant

share of total transit investment, with a slight trend upward in state support.

- On the local level, over time, there has been a modest shift away from local government general fund assistance toward (1) “directly generated” funds (i.e., fares and revenues from taxing authority authorized to transit agencies as independent local and regional political entities) and (2) various forms of earned income from transportation and nontransportation activities such as lease revenues or joint development income.

2.2 Defining Local and Regional Funding Sources for Public Transportation

The definition of a local or regional source is not always clear. For instance, as a matter of administrative convenience, states may collect sales and other taxes authorized and levied in a particular local jurisdiction and return the full revenues to the source jurisdiction for budgeting and expenditure. Are such revenues a state or a local revenue source? Local human service agencies may purchase transit services for local clients on a contractual basis using funds received from state or federal programs. Are these funds a state, local, or federal revenue source?

This study defines local or regional revenues as those revenues *one step removed* from use by the transit agency, e.g., where local general funds are used to support transit, researchers did not attempt to examine the individual taxes that contributed to local general fund revenues. This definition of local and regional revenues is meant to maintain the focus of this study on the actions required by local decision-makers and advocates to increase revenues from local governments, residents, businesses, and organizations. For the purposes of the project, **local and regional transit revenue sources are those that are raised from local and/or regional residents/organizations only and made available**

Table 2.1. U.S. public transportation funding profile for urbanized areas with population over 200,000 (2005).

	Operating Expenses \$ Billion (%)	Capital Investment \$ Billion (%)	Total \$ Billion (%)
Federal	2.2 (8)	2.4 (25)	4.6 (12)
State	6.7 (23)	1.5 (16)	8.2 (21)
Local/Regional ^a	8.4 (29)	4.4 (46)	12.8 (33)
Other	2.1 (7)	1.3 (14)	3.4 (9)
Fares and Earned Income	9.7 (33)	0 ^b	9.7 (25)
Total	29.1	9.6	38.7
Total (Less Federal and State)	20.2	5.7	25.9

Source: National Transit Database, 2005. Available at www.ntdprogram.gov/ntdprogram.

^a NTD data incorporate most “regional” sources as “local.”

^b Less than \$20 million.

for local/regional transit use, regardless of how funds are collected, administered, or (re)allocated.

The following points provide a further elaboration on this definition and its application:

- **Taxes or fees specifically authorized and collected within the locality or region**, processed (with or without an administrative fee) by state or other agents, and *fully* allocated back to the originating jurisdiction(s) for transit are considered “local and/or regional,” as is the case in the use of many local option sales and motor vehicle taxes and fees.
- **Revenues earned by transit agencies from transportation services or other business activities** that are the initiatives of the transit agency itself, regardless of the scope or source of authority, are considered “local and/or regional” sources, e.g., parking fees, revenues from advertising, property or right-of-way leases, concessions, and fund-raisers.¹
- **Revenues from the purchase of service by units of government and other public or private organizations**, regardless of where their own revenues originate, are considered “local/regional” for the purposes of this project. These revenues come most frequently from payments for the purchase of transit service by businesses, school districts, universities, and human service organizations under vary-

ing formal and informal agreements covering varying periods of time.

- **Local general revenues and funds made available to transit systems from local or regional “enterprise funds,”** regardless of their source, are considered “local and/or regional.” This includes funds mostly raised locally from sources over which local officials have budgetary control and authority to appropriate and allocate funds within the locality or the region.
- **Revenues from private- or public-sector partners** that generally reflect negotiated project-oriented economic interests are considered “local and/or regional.” These typically include revenues from joint development, assessment districts, public-private partnerships (PPP), and other value-capture mechanisms.
- **Revenues that flow from financing mechanisms** that typically involve capturing the value of future streams of local or regional dedicated revenues for current use under various conditions and requirements are considered “local and/or regional.”

2.3 Profile of Local and Regional Public Transportation Funding Sources—2005

Although a great deal is known about local and regional funding for transit, the information has been largely anecdotal. There are two major exceptions: (1) information from NTD, managed by FTA, and (2) information from the Center for Transportation Excellence (CFTE) on the results of state and local transportation and transit funding referenda and ballot measures around the country. In addition, a number of

¹ Although passenger fares may fit this definition, they are not included in this research. While important policy and political tradeoffs exist between what riders are expected to pay versus the costs to be borne by all local citizens, fare policy and strategy in the industry are addressed in great detail as a separate topic of research and analysis. The current effort focuses, therefore, on non-fare local and regional sources of revenue for public transportation.

recent analyses have been conducted that provide further detail on local and regional funding for transit.

The material that follows provides a profile of what types of local and regional sources of funding are being used by transit systems in urbanized areas with populations over 200,000 and by different types of agencies for both capital and operating expenditures based on 2005 NTD data. Table 2.2 summarizes aggregate sources of local and regional funding for capital investment, operating expenses, and totals in 2005, i.e., Table 2.2 is Table 2.1 data, less federal and state funds.

Features of interest from Table 2.2 include the following:

- Nearly \$26 billion was made available for transit from local and regional sources in 2005, including nearly \$6 billion for capital improvements and \$20 billion for operations;
- **Fares and other earned income** accounted for about 51 percent of revenue, virtually all revenue used for operations;
- **Local dedicated taxes** accounted for about 18 percent of revenue, including revenues from:
 - Sales taxes (57.5 percent),
 - Property taxes (5.8 percent),
 - Gas taxes (3.8 percent),

- Income taxes (2.0 percent),
- Tolls (2.0 percent), and
- “Other” (28.8 percent);
- **Directly generated taxes** accounted for about 16 percent of revenue:
 - Sales taxes (45.5 percent),
 - Property taxes (7.0 percent),
 - Tolls (5.0 percent),
 - Gas taxes (0.2 percent), and
 - “Other” (42.1 percent);
- **Local general funds** accounted for approximately 10 percent of revenue; and
- **Other local sources** accounted for about 5 percent of revenue.

From 1995 to 2005, total revenues from local and regional sources rose 15 percent in inflation-adjusted terms. The largest shifts among sources involved substantial increases in the proportion of funding from dedicated sources, both directly generated sources and local sources, and a corresponding decline in the proportion from local general funds and other local sources. Most of this shift resulted from increases in

Table 2.2. Local and regional public transportation funding sources for urbanized areas with population over 200,000 (2005).

Source	Total \$ Million	Percent	Capital Investment \$ Million	Percent	Operating Expenses \$ Million	Percent
Fares and Other Earned Income	13,109	50.6	1,284	22.5	11,825	58.5
Dir. Gen. Ded. Taxes	4,227	16.3	1,819	31.9	2,408	11.9
Sales taxes	1,926	45.5	330	18.1	1,596	66.3
Property taxes	297	7.0	27	1.5	270	13.3
Tolls	213	5.0	0		213	11.2
Gas taxes	10	0.2	1	0.1	9	8.8
Other	1,781	42.1	1,460	80.4	321	0.4
Local Ded. Taxes	4,598	17.7	1,116	19.6	3,482	17.2
Sales taxes	2,646	57.5	618	55.4	2,028	58.2
Property taxes	268	5.8	66	5.9	202	5.8
Gas taxes	174	3.8	18	1.6	156	4.5
Tolls	92	2.0	0	0	92	2.6
Income taxes	91	2.0	22	2.0	69	2.0
Other	1,326	28.8	392	35.1	934	26.8
Local General Funds	2,688	10.4	315	5.5	2,373	11.7
Other Local	1,265	4.9	1,165	20.4	100	0.5
Total \$ Billion	25.9		5.7		20.2	

Source: National Transit Database, 2005. www.ntdprogram.gov/ntdprogram.

Table 2.3. Sources of local funding for public transportation capital investment and operating expenses by system size (population of area served).

Local Funding Source	Percentage of Capital Investment			Percentage of Operating Expenses		
	> 1.0 Million	200,000–1.0 Million	50,000–200,000	>1.0 Million	200,000–1.0 Million	50,000–200,000
Fares and Earned Income	— ^a	—	—	58.2	30.2	37.8
Sales Taxes	35.5	38.9	51.1	18.8	25.8	28.3
Other Directly Generated Dedicated Funds	33.7	—	—	—	—	—
Local General Funds	—	42.5	32.7	11.1	26.9	21.3
Other Local Dedicated Funds^b	18.4	—	—	—	—	—
Local Property Taxes	—	—	9.7	—	—	—
Other Local Sources	^c	8.2	^c	^c	^c	^c

Source: National Transit Database, 2005. www.ntdprogram.gov/ntdprogram.

^a Dashes indicate a very minor contribution.

^b The high percentage of revenues available in larger systems from “Other Local Dedicated Funds” includes \$1.4 billion from 10 systems of which \$1.2 is reported from the New York City Transit Authority (NYCTA), i.e., budgets and expenditures in the New York region can overwhelm or mask patterns in the remaining large urbanized areas.

^c Majority or all of the remaining revenues.

directly generated, dedicated sales tax revenues, i.e., agencies empowered to directly levy sales taxes on a local or regional basis.

Local and Regional Public Transportation Funding by System Size

Overall, transit investment and use are heavily concentrated in the nation’s larger transit systems. NTD data indicate that the top 50 systems accounted for 83 percent of trips in 2005, 79 percent of total operating expenditures, and 89 percent of total capital investment. Of the nearly \$26 billion in local and regional revenues expended in 2005 by urbanized area systems, nearly 84 percent was expended within areas served by the 50 largest systems. Table 2.2 indicates the sources of the largest shares of local funding for capital and operations.

Table 2.3 elaborates on and reinforces several points made earlier:

- Sales taxes serve as a major revenue source among systems of all sizes;
- Local general funds play a large role in systems serving areas under 1.0 million;
- Fares and earned income are the largest source of operating support drawn from local areas;

- Fares and earned income are predominantly used to support operations;
- Other directly generated dedicated funds are most prominent in the largest systems; and
- Property taxes for transit are concentrated among smaller systems.

According to 2005 NTD data, the importance of local funding sources is relatively consistent across areas of all population sizes, accounting for approximately 20 to 25 percent of revenues for both capital and operations. Systems in areas with a population over 1.0 million have a lower dependence on federal sources (under 20 percent) than systems in areas with a population of 50,000 to 200,000 (33 percent); however, systems in areas with a population over 1.0 million have a higher dependence on fares and earned revenue (25 percent versus less than 10 percent).²

The most noteworthy change in local and regional funding flows from 1995 to 2005 is the growth in the percentage of revenues from sales taxes across area size. This change also reflects the rise of local and regional sales taxes.

² National Transit Database, 2005. www.ntdprogram.gov/ntdprogram.

Table 2.4. Sources of local public transportation funding for capital investment and operating expenses by agency type (2005).

Local Funding Source	Percentage of Capital Investment		Percentage of Operating Expenses	
	Independent	Municipal/County	Independent	Municipal/County
Fares and Earned Income	– ^a	–	58.6	32.9
Sales Taxes (directly generated or locally dedicated)	36.0	43.6	19.8	18.9
Other Directly Generated Dedicated Funds	35.9	–	–	–
Local General Funds	6.6	13.0	8.9	34.4
Other Local Dedicated Funds^b	20.2	13.8	5.5	5.1
Local Property Taxes	–	16.1	–	–
Other Local Sources	c	c	c	c

Source: National Transit Database, 2005. www.ntdprogram.gov/ntdprogram.

^a Dashes indicate a very minor contribution.

^b See note to Table 2.3 on “Other Local Dedicated Funds” and the impact of data from the New York region.

^c Majority or all of the remaining revenues.

Local and Regional Public Transportation Funding by Type of Agency

As suggested earlier, independent transit authorities and services operated by municipal or county governments have different latitude and authority in seeking increased revenues. Likewise, independent authorities can be structured with widely varied authority as well. Table 2.4 summarizes the sources of local and regional transit funding for these two basic organizational structures.

Table 2.4 also elaborates on and reinforces several points made earlier:

- Sales tax revenues are important regardless of agency type, but they are particularly important for larger agencies and independent agencies, where sales taxes typically are used to support large-scale capital programs;
- Sales tax or directly generated revenue sources provide over 70 percent of capital investment by independent authorities;

- Independent authorities are more often empowered to tap larger proportions of directly generated revenue;
- Fares and earned income (concessions, advertising, lease revenues, etc.) are a significant source of operating support regardless of agency type, but they represent a larger share of operating expense in independent authorities, perhaps due to the political difficulty of raising fares in the smaller markets typical of municipal systems; and
- Property taxes are more often a source of revenue for municipal and county systems.

More detailed system-level NTD data suggest that municipal and county systems often use a more varied mix of sources than independent authorities.

Appendix C provides additional insights and observations about the NTD and its usefulness in informing local and regional officials and transit professionals about alternative local and regional sources of funds for public transportation.

SECTION 3.0

Current and Potential Sources of Local and Regional Funding for Public Transportation

3.1 Local and Regional Public Transportation Funding Typology and Definitions

While the NTD serves a very useful purpose in aggregating transit operating and financial data, it is somewhat less useful in informing users about the practical details surrounding local and regional funding and financing initiatives.³ From a broader literature review, a typology of local and regional transit funding sources has been developed and is presented in Table 3.1. The typology differentiates five major types of funding for the purposes of this project. The broad categories are described below, and brief descriptions of individual sources in Table 3.1 are provided in the sections that follow.

- **Traditional tax- and fee-based transit funding sources.** This category includes all traditional forms of broadly based, tax- and fee-based, and related revenue-raising mechanisms that have been available or used for transit capital investment or to support transit operations since transit began to be transformed from a private business into a public service in the 1960s. These “traditional” sources are those in which there is generally a direct and broadly accepted rationale for making expenditures on transportation, including public transportation. Section 3.2 describes these sources.
- **Common business, activity, and related funding sources.** This category includes broadly based tax- and revenue-raising mechanisms that are somewhat less widely used to support transit in various settings. The use of these revenue-raising mechanisms represents, in part, a recognition that funding public transportation is a responsibility that is shared broadly and that meeting this responsibility requires contributions of funds from sources whose yield is signifi-

cant and whose participation is acceptable in a political sense. Section 3.3 describes these sources.

- **Revenue streams from projects.** This category includes various arrangements that can be used to capture revenue primarily from the income streams of private business and related development activities benefiting from proximity to specific transit facilities and services. These include various forms of joint development, value capture, and benefit assessment, as well as newly emerging public-private partnerships (also called PPP arrangements)—all of which are described extensively in the literature and summarized below. Significant sources in the literature are provided for readers’ reference.
- **New “user” or “market-based” funding sources.** Expanded tolling, congestion pricing, emission fees, and VMT fees applied at the local and/or regional level have become the subject of greatly expanded research and analysis, although implementation has been limited and revenue flows to transit rare, with the exception of “toll credits” used as a local match based on state authority.⁴ References to this literature also are provided.
- **Financing mechanisms.** These are the growing variety of long-term “debt” instruments that are increasingly being issued to support major local and regional transit projects and programs. Financing mechanisms most often commit future streams of revenue from many of the types of

³The limitations of the NTD in this regard are discussed in more detail in Appendix C.

⁴In the glossary of terms for *Financing Freight Improvements*, toll credits are defined as follows: “Section 1044 of the Intermodal Surface Transportation Efficiency Act permitted states to apply the value of certain highway expenditures funded with toll revenues toward the required state match on current federal aid projects. States may only substitute toll credits for state match if they demonstrate that a state’s prior year highway spending equaled or exceeded the average of the previous three years’ expenditures.” (Buxbaum, J., I. N. Ortiz, and C. Keenan. *Financing Freight Improvements*. FHWA-HOP-06-108. Prepared by Cambridge Systematics, Inc. for FHWA, U.S. DOT, 2007. Glossary available online at <http://ops.fhwa.dot.gov/freight/publications/freightfinancing/sect5.htm>.)

Table 3.1. Potential local and regional public transportation revenue sources.

Traditional Tax- and Fee-Based Transit Funding Sources
<ul style="list-style-type: none"> • General Revenues • Sales Taxes (variable base of goods and services, motor fuels) • Property Taxes (real property, includes vehicles) • Contract or Purchase-of-Service Revenues (by human service agencies, school/universities, private organizations, etc.) • Lease Revenues • Vehicle Fees (title, registration, tags, and inspection) • Advertising Revenues • Concession Revenues
Common Business, Activity, and Related Funding Sources
<ul style="list-style-type: none"> • Employer/Payroll Taxes • Car Rental Fees • Vehicle Lease Taxes and Fees • Parking Fees • Realty Transfer Taxes/Mortgage Recording Fees • Corporate Franchise Taxes • Room/Occupancy Taxes • Business License Fees • Utility Fees/Taxes • Income Taxes • Donations • Other Business Taxes
Revenue Streams from Projects (Transportation and Others)
<ul style="list-style-type: none"> • Transit-Oriented Development/Joint Development • Value Capture and Beneficiary Charges • Special Assessment Districts • Community Improvement Districts/Community Facilities Districts • Impact Fees • Tax-Increment Financing Districts • Right-of-Way Leasing
New “User” or “Market-Based” Funding Sources
<ul style="list-style-type: none"> • Tolling • Congestion Pricing • Emissions Fees • VMT Fees
Financing Mechanisms^a
<ul style="list-style-type: none"> • General Obligation (GO) Bonds • Private Activity Bonds (PABs) • Tax Credit Bonds • Grant Anticipation Notes (GANs) • Grant Anticipation Revenue Vehicles (GARVEEs) • Revenue Anticipation Notes (RANs) • Certificates of Participation (COPs) • State Infrastructure Bank (SIB) Loans

^a While some financing mechanisms may be authorized and applied statewide, they typically require some commitment of future revenues by local borrowers as well as other local commitments to satisfy borrowing requirements and debt servicing.

sources noted in the categories described above for current investment. These financing mechanisms may be more accurately described as “project delivery” mechanisms rather than as sources of additional revenue because the use of debt financing allows faster implementation and related cost savings.

Not all potential funding sources listed in Table 3.1 have been addressed in the same way in the material that follows. The focus of the current project is on the use of various forms of tax, fee, and related revenue raised broadly from local residents and businesses; therefore, individual agency experiences drawn from the interview process are focused on the traditional tax- and fee-based transit funding sources and common business, activity, and related funding sources listed in Table 3.1.

Detailed documentation on the varied experiences of individual agencies with the remaining major categories of local and regional funding: revenue streams from projects, new “user” or “market-based” funding sources, and financing mechanisms can be found in the literature referenced in Section 3.6. Readers are encouraged to use the references provided to learn about the use and application of these funding sources. For each of these broad categories of local and regional revenue, Section 3.3 provides key descriptions, selected examples of their use, and additional references, along with other issues associated with their enactment and application. Section 3.7 identifies additional local and regional revenue sources not currently in widespread use to support public transportation.

3.2 Traditional Local and Regional Tax- and Fee-Based Funding Sources for Public Transportation

The over 18,000 local units of government in the United States are overwhelmingly dependent on property tax revenues. According to the Tax Foundation, nearly 73 percent of total local tax collections come from property taxes.⁵ Support for public transportation derives from different sources, mostly likely to avoid competing with other basic public services such as health, education, police, and fire protection. Basic descriptions are provided below for the more traditional tax- and fee-based revenue sources used to support public transportation that are listed in Table 3.1.

⁵Sagoo, S. (ed.). *Facts & Figures on Government Finance*, 38th ed. Tax Foundation, Washington, DC, 2005. Available at www.taxfoundation.org/publications/show/147.html.

General Revenue

The terms “general revenues” and “general funds” refer to revenues combined from any number of local and regional sources, including those described below. General funds serve as a resource to support any and all public purposes. Frequently, general funds are committed to support public transportation on an annual or biennial basis in amounts that can vary from budget cycle to budget cycle depending on local budget priorities. The sometimes uneven flow of general funds to transit on annual or biennial budget cycles is contrasted with the more predictable and reliable flow of revenues from specific sources dedicated all, or in part, to transit from sources such as those listed below.

Sales Taxes

As noted previously, sales taxes are the most widely used source of dedicated local and regional funding for transit. Generally, sales taxes provide the greatest yield and stability as well as being among the most broadly acceptable sources of funding for public transportation. State funding for public transportation frequently relies on this source: all but five states have state sales taxes with rates ranging from 4 to 7.25 percent. At the local and regional level, additional sales taxes enacted for transit typically range from 0.25 to 1 percent. Some sales taxes are perpetual; others require re-enactment or extension through periodic popular votes. Sales taxes typically exempt various combinations of food, clothing, and prescription drugs or apply lower rates to selected goods and services.

“Use tax” is a term that describes the equivalent of a sales tax that is applied to items that may not typically be covered by sales taxes, including lease or rental transactions and items purchased outside the taxing jurisdiction.

“Excise taxes” also represent a type of sales tax, usually applied separately or in combination with sales taxes on specific goods or services. Excise taxes may be charged on an ad valorem basis as a percentage of the price, or as a fixed dollar amount per transaction. Examples are discussed below, including motor fuel taxes and a variety of “sin” taxes.

Property Taxes

Property taxes or ad valorem taxes on land and building value are generally the principal source of revenue for local governments and typically are unrestricted in their use. Portions of local property taxes are, however, also widely authorized for use by special districts and authorities, including transit authorities and school districts, and for other specific public functions like police and sanitation.

Revenues are generated by applying a tax or “mill rate” to the value of the property. So-called “fair market” values frequently are adjusted to determine the “assessed value” used as the basis for the mill rate. A mill is equivalent to 1/1,000 of a dollar. Although these taxes are assessed locally, states and localities act to control valuations or otherwise provide some type of property tax relief in the form of targeted exemptions, or “circuit-breakers,” limiting the percentage of income required to be paid via property taxes.

“Special assessments” and “local improvement levies” are also types of property tax that are applied in direct relation to a benefit received from their imposition and expenditure, typically on local public improvements, as discussed in the section “Value Capture and Beneficiary Charges.”

Contract or Purchase-of-Service Revenues

Transit systems often provide transportation services in addition to their regularly scheduled services for which revenues are received based on agreed-upon levels of service and rates. Municipal government, individual businesses and industries, health and social service agencies, and educational institutions may purchase transit services. The revenues received may or may not cover “fully allocated costs,” or fully allocated costs plus an added amount. The rates charged may be calculated and applied on a per-hour basis, a per-vehicle basis, or per-trip basis. New charter bus regulations issued by the FTA in May 2008 may serve as a constraint on contract or purchase-of-service arrangements.

Examples of Service and Revenue Arrangements with Colleges and Universities

The availability of transit service has become an important element of student life and university economics across the country in recent years. Many colleges and universities have provided independent bus services for students, faculty, and workers and have invested heavily in surface and structured parking facilities. Over time, these costs have escalated, combined with growing enrollments, increased congestion, and related environmental effects.

Many colleges and universities have turned to local public transit agencies to operate services of direct importance to their special communities. The result is a growing revenue source and expanded relevance in the community. Examples include the following^a:

- The Greensboro Transit Authority (North Carolina) serves 130,000 student passengers on their Higher Education Area Transit (HEAT) services that are specially operated to meet the needs of seven area educational institutions, each of which supports the program financially.
- The University of California at Riverside funds a U-Pass service in partnership with the Riverside Transit Agency as well as a free trolley shuttle for students who live off-campus.
- At Iowa State University in Ames, students are charged \$52.50 each semester and the University contributes half the cost of CyRide in Ames. Eighteen percent of the remaining funding is provided by the city and the balance from other sources.
- Capital Area Transportation Authority (CATA), the transit system serving Lansing, Michigan, operates a bus service for Michigan State University at an annual cost of \$2 million. With a student ID, students pay 50 cents a ride; without the ID the cost is \$1.00. The balance of the cost of service is derived from housing and parking fees.
- HomeRide, a private firm in Blacksburg, Virginia, provides a regional link among four colleges and universities, as well as a link to outside destinations on weekends and holidays, under a joint contract with the schools.

These are just a sampling of the arrangements that are being pursued to gain ridership and revenue for transit agencies while relieving travel congestion and budget constraints for colleges and universities.

^aThe examples are taken from “Transit Finds Increasing Connections with Universities,” *Passenger Transport*, Vol. 65, No. 46, November 19, 2007, p. 8.

Lease Revenues

Transit systems often generate income through leasing (at market rates) portions of physical facilities, typically terminal, station, transfer, or parking facilities. Transit agencies with rail or other fixed rights-of-way also can lease these to private interests, like telecommunications companies (typically for fiber-optic networks), and sometimes negotiate for free use for the agency for command and control. Leases can be annual, with rate adjustments, or multiyear.

Vehicle Fees

A variety of fees are charged to vehicle owners and operators by state governments. These fees are based on vehicle value, weight, and/or age. The fees are charged for issuance of titles, licenses, registration, and/or inspection. The authority to collect vehicle fees is sometimes provided to local governments in the form of a local option. Revenues from these fees are typically dedicated to covering the cost of administering these activities, to enforcement, to transportation generally, or to general revenues. It is very seldom that revenues from vehicle fees are dedicated directly to public transportation.

Advertising

Most transit agencies solicit and accept advertising on their vehicles, facilities (such as stations and shelters), and materials (such as tickets, schedules, and maps). Advertising serves as a source of earned income and provides a means to establish broader community partnerships as well as a means to capture and maintain interest and support for transit and other public services. Print and electronic media are in use, as are “sponsorship” programs that fund particular vehicles, services, or events. The majority of transit agencies contract advertising programs and their management to private media and advertising companies, although many advertising programs are managed by in-house staff in medium and smaller systems. Revenues from advertising flow directly or indirectly to the operating agencies from single or multiyear advertising contracts and agreements as well as from time-limited and event-based arrangements. Limitations are often placed on advertising content as well as on the types of organizations from which advertising is accepted. Revenue from advertising is typically modest, from 0.1 percent to over 3.0 percent of operating revenue. In dollar terms, however, advertising revenues are producing \$500 million for transit agencies annually, ranging from

thousands of dollars to millions of dollars a year, depending on system size.⁶

Concessions

Larger transit agencies with significant space in terminal and station facilities may enter into concession agreements (an income-generating strategy similar to leasing) with a variety of commercial and retail enterprises. These enterprises include newsstands, food stands, ATMs, gift shops, vending machine operations, music stores, florists, photo-processing stores, shoe repair and sales shops, and so forth. Concession agreements are typically multiyear and are bid on competitively, with payments received as revenue or in the form of direct contributions to capital improvements. As a measure of the potential for concessions as a source of revenue, the New York Metropolitan Transit Authority (MTA) estimates that the minimum threshold to support a single store is 5,000 passengers a day.⁷ Market analyses in settings outside New York may yield a different threshold.

3.3 Common Business, Activity, and Related Funding Sources for Public Transportation

A wide range of additional local and regional revenue sources are being used to support public transportation, although their use may not be as widespread as the traditional sources noted above.

Employer/Payroll Taxes

Employer taxes enacted to support transit are typically imposed directly on the employer for the amount of gross payroll paid for services performed within the transit district. Employer taxes are usually administered by the state revenue agency on behalf of the transit agencies or jurisdictions authorized to raise and expend the revenue and typically are collected quarterly. Authorizing legislation along with asso-

⁶Schaller, B. *TCRP Synthesis 51: Transit Advertising Sales Agreements*. Transportation Research Board of the National Academies, Washington, DC, 2004. Silverberg, B. R. *TCRP Synthesis 32: Transit Advertising Revenue: Traditional and New Sources and Structures*. Transportation Research Board, National Research Council, Washington, DC, 1998. “Practical Measures to Increase Transit Industry Advertising Revenues.” *Research in Progress* (database), Transportation Research Board of the National Academies. Available at <http://rip.trb.org/browse/dproject.asp?n=11725>.

⁷Price Waterhouse, LLP; Multisystems, Inc.; and Mundle & Associates, Inc. *TCRP Report 31: Funding Strategies for Public Transportation, Volumes 1 and 2*. Transportation Research Board, National Research Council, Washington, DC, 1998.

ciated regulations and guidelines define the specific types of wages and payments to which the tax is applied as well as the organizations that may be declared exempt from the tax, such as federal agencies, school districts, and tax-exempt organizations.

Rental Car Fees

Rental car taxes are paid by the consumer on the rental of a passenger car for a specified period of time, e.g., rentals lasting less than 30 days. Rental companies typically report and remit the tax to state revenue departments along with applicable retail sales tax receipts. Rental car revenues may be reallocated back to authorized local governments or agencies with funds often dedicated to specific projects or purposes, including public transportation. Rates typically range from 1 to 2 percent.⁸ In 2007, Allegheny County in Pennsylvania (Pittsburgh) enacted a \$2 rental car fee to support Port Authority Transit Services.

Vehicle Lease Taxes and Fees

When vehicles are leased or purchased, there are taxes and fees applied to the transactions. Fees can differ by dealer, leasing company, and the state in which the lease occurs. Lease taxes typically take the form of a sales tax on the amount of the monthly lease payment, but there are variations from state to state and region to region.⁹

Parking Fees

Parking fees are established to achieve multiple goals. These include revenue generation; traffic management; shifts in mode choice; and balance in accommodating residents', shoppers', and employees' access needs. Parking fee structures and revenue use are almost always a local matter, managed either by local jurisdictions or, in the case of some locales, a separate parking authority. Revenues typically go to parking and vehicle enforcement, roads, and general funds. Transit agencies also receive parking revenues from surface lots and structured parking facilities that they own. In the case of larger systems, operation of parking is often contracted out to a parking management firm. Parking demand is thought to be largely "inelastic" with respect to price, providing an opportunity to increase revenues directly through price increases. Fees typically are

charged on a per-space and duration basis and sometimes through areawide surcharges.¹⁰

In addition to revenues associated with parking facilities owned and/or managed by transit systems, municipally owned parking facilities have become a source of transit revenue in some regions. Some examples are the following:

- **San Francisco.** Parking revenues from city-managed, on-street parking spaces and garages, as well as parking fines, currently help support Muni operations. In 2007, U.S. DOT awarded the San Francisco Municipal Transportation Agency (SFMTA) \$18.4 million to implement a new parking management program known as SFpark. Beginning in summer 2008, SFMTA launched pilot projects to test new strategies and technology to manage the city's parking supply more efficiently. According to Proposition A, approved by San Francisco voters in fall 2007, 80 percent of city parking revenues—including potential new revenues generated under SFpark—must be used to support transportation programs, including Muni operations.
- **Chicago.** In 2008, U.S. DOT awarded Chicago \$153.1 million, a portion of which will be used to implement parking surcharges to fund transit through two initiatives:
 - "Peak Period Pricing," which would apply parking surcharges to peak period users of on-street metered parking and loading zones and to off-street parking facilities in the central business district; and
 - Establishment of a fee system to help manage on-street loading zones downtown.

Realty Transfer Taxes/Mortgage Recording Fees

A "real estate transfer tax" is a tax levied on the sale of certain classes of property—residential, commercial, or industrial—that increases with the size of the property being sold or transferred. Sometimes sellers (who have typically seen the value of their homes rise over the years) foot the bill. Other times, the cost is imposed on buyers—who, it is argued, are making an investment in the future of a community.

"Tax rates and dispositions vary from state to state: some states have no real estate transfer tax enabling legislation; some direct the revenues to the state general fund (although collection remains a county responsibility); and still others give local governments the authority to collect and keep tax revenues" for such programs as land conservation, parks and open space,

⁸ Atkinson, C. "On the Front Lines of the Tax Battle: Industry Partners Rally to the Cause." *Auto Rental News*, September/October 2006. www.autorentalnews.com/t_inside.cfm?action=article_pick&storyID=987.

⁹ "The Guide to Leasing." "Lease Fees and Taxes." Available at www.leaseguide.com/lease09.htm.

¹⁰ Vaca, E. and Kuzmyak, J. R. *TCRP Report 95: Traveler Response to Transportation System Changes—Chapter 13: Parking Pricing and Fees*. Transportation Research Board of the National Academies, Washington, DC, 2006.

and less frequently, public transportation.¹¹ Rates are highly variable across types of property and property value, ranging from 1/100th of a cent to 2 percent.¹²

Corporate Franchise Taxes

A franchise tax is a tax levied on the profit and taxable assets of a business or firm.¹³ Franchise taxes impose a tax on corporations for doing business, employing capital, owning or leasing property, or maintaining an office. Franchise tax is

a tax that corporations pay in advance for doing business within the state. Franchise tax is based on the 'par value of the corporation's outstanding shares and surplus.' This is defined as the 'total assets or the par value of issued and outstanding capital stock, whichever is greater.'¹⁴

Franchise taxes often are targeted to specific industries and economic activities. A corporate franchise tax on transportation and transmissions companies, or a "long lines tax," is one of several taxes supporting transit services in the 12-county New York MTA region.¹⁵

A franchise tax on oil companies applied in Pennsylvania imposes a cents-per-gallon tax on all taxable liquid fuels.¹⁶ Revenues are deposited in various restricted and unrestricted state funds.

Room or Occupancy Taxes

Sometimes called a hotel-motel tax, room or occupancy taxes are consumer taxes on the cost of lodging at hotels, motels, rooming houses, private campgrounds, RV parks, and similar facilities. They are frequently limited to a specified consecutive period of days. Rates may vary depending on the size of the facility and/or by location. Revenues may be collected by the state and, where dedicated for local use, reallocated to the levying municipalities and counties. Alternatively, revenues

¹¹ Hopper, K. *Local Parks, Local Financing—Volume 1: Increasing Public Investment in Parks and Open Space*. The Trust for Public Land, San Francisco, CA, 1998. Available at http://www.tpl.org/tier3_cdl.cfm?content_item_id=1048&folder_id=825.

¹² National Conference of State Legislatures. "Real Estate Transfer Taxes." Available at <http://www.ncsl.org/programs/fiscal/realxfertax.htm>.

¹³ business franchise tax. BusinessDictionary.com. WebFinance, Inc. Available at <http://www.businessdictionary.com/definition/business-franchise-tax.html>.

¹⁴ Missouri Department of Revenue at <http://dor.mo.gov/tax/business/franchise/>.

¹⁵ City of New York Independent Budget Office. "A Review of the Metropolitan Transportation Authority's Financial Outlook and Options for Closing the Gaps." New York, NY, June 1, 2007.

¹⁶ Pennsylvania Department of Revenue. "Liquid Fuels and Fuels Taxes" (online article). 2005. Available at www.rev421.state.pa.us/revenue/cwp/view.asp?A=11&Q=48877.

may be collected by local jurisdictions where state authority is provided. Often these revenues are used for promotion of tourism or construction and operation of tourism-related facilities, as in counties throughout the state of Washington and in Allegheny County, Pennsylvania.¹⁷

Utility Fees

Utility fees can encompass taxes on a wide range of public services and businesses, including telephone, sewer and water, electricity, gas, and garbage utilities. Revenues are typically provided to a jurisdiction's general fund as well as to public works facilities. In Pullman, Washington, utilities are paid monthly by subscribers (households and businesses). The prior month's fees are paid in turn to the city every month, i.e., there is a month's lag in city receipt of the fees. The tax is levied in lieu of a business and occupation tax and a sales tax. Rates vary by utility from 0.10 percent to 5 percent.¹⁸

Donations

Support for public transportation may also be available through donations from various types of philanthropic, charitable, service organizations like the United Way, as well as for-profit businesses. Typically, donations are directed toward a particular service, subarea, or client group.

3.4 Current Examples of Traditional or Common Local and Regional Funding Sources

Table 3.2 lists the local and regional revenue sources currently in use among over 60 public transportation systems that were interviewed for this project.¹⁹ The database that accompanies this report contains additional information that relates the characteristics of each transit agency to the characteristics of each funding source used by that agency.

Table 3.2 reinforces much of what was revealed in aggregate data from the NTD, particularly the dominance of sales taxes as the local and regional transit funding source of choice across the country. In addition, Table 3.2 reveals a number of other

¹⁷ http://dor.wa.gov/content/findtaxesandrates/othertaxes/tax_hotelmotel.aspx. Allegheny County Pennsylvania, "Hotel Occupancy Tax" (online article). Available at www.alleghenycounty.us/treasure/hotel.aspx.

¹⁸ Price Waterhouse, LLP. "Dedicated Local Taxes." *TCRP Report 31: Funding Strategies for Public Transportation—Volume 2: Casebook*. Transportation Research Board, National Research Council, Washington, D.C. 1998. Available at http://onlinepubs.trb.org/Onlinepubs/tcrp/tcrp_rpt_31-2-a.pdf.

¹⁹ The list of transit systems interviewed for the projects is provided in Appendix C.

Table 3.2. Local and regional funding sources for public transportation.

Funding Source	Selected Applications			
	Major Metro > 1.0 Million	Large Metro 200,000–1.0 Million	Small Urban 50,000–200,000	Rural < 50,000
Traditional Taxes and Fees				
General Revenues	Chicago, IL (Pace) Miami-Dade County, FL Orlando, FL San Francisco, CA (MUNI) Virginia Beach/Hampton Roads, VA Washington, DC (PRTC)	Allentown, PA Gulfport-Biloxi, MS Lubbock, TX Oklahoma City, OK	Durant, OK Jefferson City, MO Licking County, OH Waterloo, IA	Baldwin County, AL Eureka Springs, AR Ft. Morgan, CO Paducah, KY Sturgis, SD
Sales Taxes	Chicago, IL (RTA) Denver, CO Harris County/Houston, TX Las Vegas, NV Miami-Dade County, FL New York, NY (MTA) San Francisco, CA (BART) San Francisco, CA (MUNI) St. Louis, MO (City) St. Louis, MO (St. Clair County, IL) Seattle/King County, WA Seattle, WA (Sound Transit) Tampa, FL Washington, DC (NVTA)	Austin, TX Corpus Christi, TX Dayton, OH Reno, NV Salt Lake City, UT Spokane, WA	Athens-Clark County, GA Durant, OK Jefferson City, MO St. Clair County, MO St. Joseph, MO	Park City, UT
Property Taxes	Las Vegas, NV Minneapolis/St. Paul, MN (Metro Transit) San Francisco, CA (BART) Tampa, FL	Ann Arbor, MI Flint, MI Grand Rapids, MI Lansing, MI Minneapolis/St. Paul, MN (Minnesota Valley Transit)	Athens, Clark County, GA Lafayette, IN Licking County, OH Van Buren County, MI	Hanover, NH Harper County, KS Hood River, OR Marshalltown, IA Ontonagon, MI Ottawa County, OH Van Buren, MI White River Junction, VT
Contract/ Purchase-of-Service Revenues	Chicago, IL (Pace, Metra) Denver, CO (RTD) Orlando, FL	Austin, TX Allentown, PA Ann Arbor, MI Corpus Christi, TX	Annapolis, MD Athens-Clark County, GA Durant, OK	Eureka Springs, AR Ft. Morgan, CO Hanover, NH

(continued on next page)

Table 3.2. (Continued).

Funding Source	Selected Applications			
	Major Metro > 1.0 Million	Large Metro 200,000–1.0 Million	Small Urban 50,000–200,000	Rural < 50,000
	San Francisco, CA (MUNI) Tampa, FL Virginia Beach/ Hampton Roads, VA	Dayton, OH Flint, MI Grand Rapids, MI Oklahoma, City, OK Lansing, MI Louisville, KY Lubbock, TX Syracuse, NY	Jefferson City, MO Lafayette, IN Licking County, OH Pullman, WA Waterloo, IA	Hood River, OR Ontonagon, MI Ottawa County, OH Paducah, KY Park City, UT Sturgis, SD White River Junction, VT
Lease Revenues	Chicago, IL (CTA) Denver, CO Minneapolis/St. Paul, MN (Metro Transit) Orlando, FL San Francisco, CA (BART)	Lansing, MI Grand Rapids, MI		
Vehicle Fees (title, registration, tags, and inspection)	San Francisco, CA (BART) Seattle, WA (Sound Transit) Washington, DC (NVTA)			White River Junction, VT
Advertising Revenues	Chicago, IL (CTA, Metra) Denver, CO Las Vegas, NV Minneapolis/St. Paul, MN (Minnesota Valley Transit) Orlando, FL Portland, OR San Francisco, CA (BART) San Francisco, CA (MUNI) Virginia Beach/ Hampton Roads, VA	Corpus Christi, TX Dayton, OH Flint, MI Grand Rapids, MI Lubbock, TX Salt Lake City, UT Spokane, WA Syracuse, NY	Lafayette, IN	Baldwin County, AL Park City, UT Ontonagon, MI
Concession Revenues	Chicago, IL (CTA) New York, NY (MTA) San Francisco, CA (BART)			Eureka Springs, AR
Common Business, Activity, and Related Sources				
Employer/ Payroll Taxes	Portland, OR	Louisville, KY		Hood River, OR
Car Rental Fees	Seattle, WA (Sound Transit) Washington, DC (NVTA)			Eureka Springs, AR

Table 3.2. (Continued).

Funding Source	Selected Applications			
	Major Metro > 1.0 Million	Large Metro 200,000–1.0 Million	Small Urban 50,000–200,000	Rural < 50,000
Vehicle Lease Fees				
Parking Fees at Transit Facilities	Chicago, IL (CTA, Metra) Denver, CO	Grand Rapids, MI	Annapolis, MD	Eureka Springs, AR
Parking Fees at Municipal Facilities	San Francisco, CA (BART) San Francisco, CA (MUNI)			
Mortgage Recording Taxes	New York, NY (MTA)	Syracuse, NY		
Realty Transfer Taxes	Washington, DC (NVTA) Chicago, IL (CTA-2008)			
Corporate Franchise Taxes (oil, transportation, transmission)	New York, NY (MTA)			
Room/Occupancy Taxes				Park City, UT
Business License Fees		Louisville, KY		Park City, UT
Utility Fees/Taxes			St. Joseph, MO Pullman, WA	
Income Taxes – Business		Louisville, KY (<i>corporate profits</i>)		
Cigarette Taxes	Portland, OR (State)			
Donations	Lynx-Orlando, FL	Grand Rapids, MI (<i>foundation grants</i>) Lubbock, TX Salt Lake City, UT	Licking County, OH	Park City, UT Ft. Morgan, CO Hanover, NH Sturgis, SD White River Junction, VT
Other Business Taxes	St. Louis, MO	Grand Rapids, MI (<i>pollution fines</i>)		Ottawa County, OH (<i>Sr. Service Levy</i>) Park City, UT (<i>resort tax</i>)

Note: Entries are from interview results as well as other sources, e.g., U.S. GAO, *Mass Transit Issues Related to Providing Dedicated Funding for the Washington Metropolitan Area Transit Authority*, GAO-06-516. GAO, Washington, D.C., May 2006.

features about local and regional transit funding from around the country:

- General revenues, property tax revenues, and contract revenues all play a role in funding transit across areas of all sizes;
- Lease revenues are found predominantly in larger metropolitan areas, where extensive transit systems have terminal and station facilities capable of supporting auxiliary businesses;
- Relatively little direct use is made of various motor vehicle-related taxes and fees in supporting transit, a situation that reflects the still dominant view that revenues from personal vehicle use should be directed exclusively to roadway improvements for those who drive, especially given the growing gap between roadway needs and available revenues; and
- The use of broadly based taxes and fees (versus narrower “user” fees) to support public transit locally is firmly established, perhaps reflecting a recognition that transit availability and benefits are linked to pursuit of broader community goals and objectives.

A Snapshot of Recent Public Transportation Funding Initiatives in Major Metropolitan Areas

In recent years, there have been increasing efforts at both the state and local level to enact new funding for transit and transportation, generally. CFTE has tracked referenda and initiatives all over the country in the past several years and regularly reports results on its website, www.cfte.org. The CFTE report, *Transportation Finance at the Ballot Box*, reports that of 202 transportation funding measures in 33 states from 2000 through 2005, more than 130 were successful.²⁰ In 2006, a total of 47 transportation-related ballot measures were presented to voters, 30 of which were included in the November 2006 elections. Twenty-nine of the 47 ballot measures were approved in 2006. Figure 3.1 shows states that had ballot measures for transportation in the years 2000 to 2006, based on the analysis by CFTE. During this same period, 2000 through 2006, specific funding measures supporting transit in whole or in part were passed in 87 locales (see Appendix F for a listing of locales).²¹

²⁰ Ballot measures are generally of two types: initiatives and referenda. Initiatives are authorized by 24 states and require a citizen-led petition process. Referenda are proposals referred to voters by locally or regionally elected or appointed bodies for approval and are the most commonly used ballot measure. See Center for Transportation Excellence, *Transportation Finance at the Ballot Box: Voters Support Increased Investment and Choice*, Washington, D.C. 2006. Available at www.cfte.org/CFTE%20Election%20Trends%20Report.pdf.

²¹ Center for Transportation Excellence. “Past Elections” (online document). Available at www.cfte.org/success/pastelections.asp.

These experiences at the ballot box confirm continued strong reliance at the local and regional level on sales tax revenues and, to a lesser degree, property taxes to support local and regional investments in transit. Among the observations that are most significant from the 2006 ballot elections are these:

- Over 30 ballot initiatives raising funds for transportation, including transit, were voted on in 2006 with a 71-percent approval rating, including several in California that required a two-thirds (“supermajority”) popular vote, based on 1986 state law.
- Of 23 local or county initiatives passed:
 - Ten featured sales taxes for terms of up to 30 years ranging in size from 0.10 to 0.50 percent;
 - Eleven featured property tax increases ranging in size from 0.33 mills to 0.75 mills, with all but one of these occurring in Michigan; and
 - One featured a tax on commercial parking, an employer tax, and a property tax increase.

In recent years, funding initiatives in major metropolitan areas with substantial transit systems, services, and plans have reinforced the continuing reliance on local and regional sales taxes as major revenue sources, particularly for capital-intensive programs, as noted in the examples described below.²²

San Diego, California. San Diego County has sustained one of the most successful programs for local and regional transit and multimodal transportation revenue-raising in the country.

In 1987, under the leadership of the former Metropolitan Transit Development Board (MTDB), county voters enacted TransNet, a 20-year, one-half-cent sales tax yielding \$3.3 billion to support specific amounts and projects for transit expansion, highway expansion, and local street and roadway improvements. In 2003, long-range transit planning, programming, and funding decisions were consolidated within the San Diego Association of Governments (SANDAG), the region’s metropolitan planning organization (MPO), to streamline decision-making in committing revenues to transportation improvements. Faced with continued rapid growth and the expiration in 2008 of the original TransNet measure, in November 2004, county voters approved a 40-year extension of the one-half-cent TransNet sales tax, which will generate \$14 billion. Enactment occurred with over a 67-percent positive vote, meeting the statutorily required two-thirds minimum for enactment of new tax measures. TransNet revenues will be

²² The vignettes come from reporting and summaries of various years’ ballot initiatives available in large part from the individual year summaries found at the Center for Transportation Excellence, “Past Elections” (online document), www.cfte.org/success/pastelections.asp.

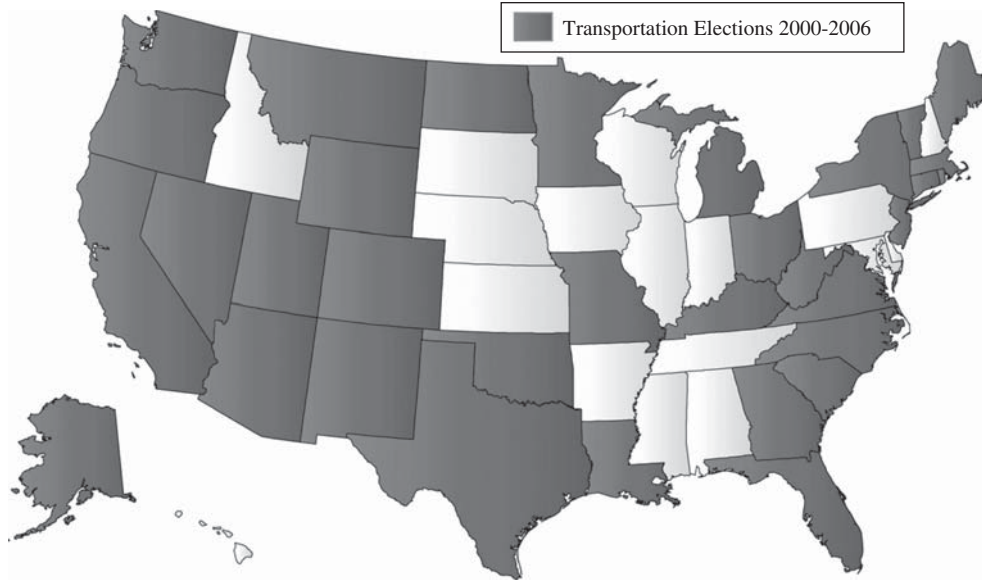


Figure 3.1. States with transportation ballot measures (2000–2006).

split into thirds: one-third for transit, one-third for highways, and one-third for local streets and roads, with specific amounts dedicated to bicycle and pedestrian improvements.

Denver, Colorado. Denver, Colorado, also has a highly successful and cost-effective regional, multimodal, public transportation system in development. To support continued transit expansion in the region, citizens in November 2004 approved by a 58-to-42 margin, the new 12-year, \$4.7-billion FasTracks program developed by the Denver Regional Transportation District (RTD), including a 0.4-cent increase in RTD’s existing 6-cent regional sales tax. The sales tax increase will be used, in part, to support bonding to leverage the full investment needed to carry out the FasTracks program.

The FasTracks program will support 119 miles of new light rail and commuter rail, 18 miles of Bus Rapid Transit (BRT), 21,000 additional parking spaces at rail and bus stations, and expanded bus service in areas of the region.

Phoenix, Arizona. In November 2004, voters in the Phoenix region passed Proposition 400, extending the Maricopa County one-half-cent dedicated sales tax for transit over 20 years. Revenues will be used to support creation of a multimodal transit network through \$16 billion to be invested in a 27.7-mile expansion of light rail, new and enhanced service on 30 bus routes, creation of 10 new routes, service enhancements on 26 existing express bus routes, introduction of 14 new BRT routes, and a tripling of paratransit service in the region.

Even though there is a clear and continuing pattern in the nature of local and regional transit funding, there are increasing examples of unique and effective approaches that may be instructive to areas and decision makers looking to enhance

local and regional support of transit. Las Vegas, Nevada, provides an example.

Las Vegas, Nevada. The Regional Transportation Commission of Southern Nevada (RTC) is a unique organization that serves as the region’s MPO—guiding long-range planning, the region’s highway agency, and the region’s major transit operating agency. Since a voter initiative in 1991, the RTC has had available to support overall regional transportation improvements revenues from the following: (1) a county gas tax dedicated to street and highway improvements collected by the state and returned to the county, (2) a room tax (dedicated to improvements in the “resort corridor”), (3) a development tax on both residential and commercial property (dedicated to Beltway construction), (4) a motor vehicle “privilege tax” (also dedicated to construction of the Las Vegas Beltway), (5) a jet fuel tax (dedicated to airport-related improvements), and (6) a 0.25-percent sales and use tax dedicated to public transit development.

In 2002, Las Vegas citizens approved a second initiative that extended the 1991 0.25-percent sales tax dedicated to transit and added an additional 0.25-percent sales tax, half of which also is dedicated to transit. In addition, the 2002 vote expanded the types of projects eligible for funding from the sales tax. Part of the new funding will be used to support bonds and related debt service to speed up major regional projects.

In addition to these sources, transit is supported by revenues coming to the RTC from county general funds. Finally, nearly 6 percent of the overall RTC transportation capital program is supported by developer funding negotiated for particular projects.

New York, New York. The scope, scale, and long history of public transportation in New York has given rise to a unique mix of funding to support the multimodal transit services provided under the aegis of New York State’s Metropolitan Transportation Authority (MTA). These sources have been noted in Table 3.2, but are hardly “traditional” in their use across the industry.

Like most transit systems today, the MTA is facing an increasingly severe revenue gap. A recent analysis by the Independent Budget Office (IBO) of the City of New York noted (but did not recommend) these revenue-raising options:

- **Fares and Tolls.** With a \$2 full cash fare and a 16.7-percent volume discount, the MTA currently funds over half its operating expenses from fares, a percentage that is significantly higher than most large systems. In addition, tolls from its seven bridges and two tunnels provide the MTA with over \$700 million annually for transit operations and debt service on bonds used for capital projects. Increases averaging 36 percent would be required in the combination of fares and tolls to fill the projected gap.
- **Dedicated Taxes and Subsidies.** The MTA receives revenues from four categories of dedicated taxes and subsidies plus interest:
 - Four state taxes are imposed in the 12-county MTA region, including the Petroleum Business Tax, a 0.375-percent sales tax, a corporate franchise tax on transportation and transmission companies (Long Lines Tax), and a corporate surcharge that is applied on top of the corporate franchise tax.
 - A group of petroleum business taxes and fees deposited into a Statewide Dedicated Funds Pool, 34 percent of which is for the benefit of the MTA.
 - Two separate mortgage recording fees applied to borrowers and to lenders of 0.3 and 0.025 percent, respectively.
 - A two-tiered “Urban Tax” composed of a real property transfer tax and a mortgage recording tax on commercial property transactions.

The conclusion reached by the IBO did not involve specific recommendations for specific revenue sources. Rather, the IBO suggested what may be the bottom line revenue strategy for most transit agencies in the future, “it is likely that remedying the problem will require a mix of actions and sources that will spread the burden across a broad range of the region’s businesses and residents.”²³

²³ City of New York Independent Budget Office. “A Review of the Metropolitan Transportation Authority’s Financial Outlook and Options for Closing the Gaps.” New York, NY, June 1, 2007.

Local and Regional Public Transportation Funding Among Small Urban and Rural Systems

Prior to 2006, the NTD did not require reporting from small urban and rural transit systems. Enactment of SAFETEA-LU in August 2006 changed this by requiring simplified reporting by these smaller systems. Future NTD reporting will, therefore, provide data containing funding information for small urban and rural systems.

Concurrently with this project, TCRP Project F-12 examined employee compensation levels among small urban and rural transit systems and provided a timely opportunity to inquire about local sources of funding through an already planned survey. The TCRP Project F-12 survey was useful to TCRP Project H-34 in two ways: (1) it provided a broad set of responses on the types of local funding sources in use among small urban and rural systems today, and (2) it provided a list of potential interview candidates that helped ensure that the widest possible range of experiences and potential sources were captured from current practice.

Responses to the TCRP Project F-12 survey were received from 383 systems in 45 states. Findings indicate the following:

- 53 percent use contract revenue from public or nonprofit agencies,
- 18 percent use contract revenues from private agencies or organizations,
- 10 percent use property tax revenues,
- 9 percent use local sales tax revenues,
- Only five systems use parking or other vehicle fees and only one system uses employer taxes, and
- 32 percent use “other” forms of revenue.

Of the transit systems indicating they have “other” sources, examples cited included the following:

- Thirty-one systems indicated that they receive grants from local, county, and state programs;
- Fifteen cited donations/fund-raisers, including 12 that cited United Way contributions;
- Sixteen cited cash fares;
- Twelve cited United Way contributions;
- Eight cited advertising revenues;
- Seven cited Medicaid funding;
- Five cited university fees;
- Four cited programs on aging;
- One cited car rental fees; and
- One cited resort/business taxes and local property tax millage.

While the TCRP Project F-12 results are sure to reflect some of the confusion about how revenue sources are defined that is noted in Section 2.2, the results provide a good base of information where none had been compiled previously. The results illustrate the generally heavy reliance of smaller transit systems on a wider variety of sources than large transit agencies rely on and the reliance of smaller transit systems on a range of contract revenues and “other” sources specifically, which may or may not be purely “local” or “regional” in nature.

Examples of Local and Regional Public Transportation Funding from Abroad

As part of this project, a brief review was done of local and regional transit funding mechanisms outside the United States. The relevance of Canadian and European experiences with local funding is limited, however, because of the substantial differences in government structures, processes, legal frameworks, and philosophical traditions in revenue raising and budgeting. Appendix D contains brief descriptions of local and regional revenue sources used for transit in eight major metropolitan regions of the world. Virtually all of the regions described have extensive and relatively mature transit systems that have major financial challenges; furthermore, virtually all are located and operated around multiple transit modes and services, including fixed guideway systems.

More importantly, the major sources of revenue at the local and regional level for these transit systems and U.S. transit systems are generally the same. The major sources of revenue for Canadian and European transit systems include the following:

- Property taxes (Rome, Vancouver);
- Gas taxes (Toronto, Montreal, Vancouver);
- Motor vehicle fees (Montreal);
- Regional payroll taxes (Paris);
- Contract service fees (Montreal);
- Parking taxes (sales) (Vancouver);
- Income taxes (Barcelona, Madrid);
- Value-added tax (Barcelona, Madrid);
- Congestion fees (London);
- Various business taxes (Madrid); and
- Hydroelectricity tax (Vancouver).

3.5 Other Categories of Local and Regional Public Transportation Funding

There are numerous potential revenue sources available to support public transportation other than the traditional taxes and fees highlighted above. The framework used here distinguishes three additional broad categories of funding sources that may be used locally and regionally:

- Revenue streams from individual projects,
- New “user” or “market-based” sources, and
- Financing mechanisms.

The sections that follow provide material excerpted from key literature sources in which each of these broad topics has been covered extensively in recent years. The material includes the following:

- Definitions to provide a clearer understanding of the respective revenue sources and their characteristics;
- Brief vignettes from the literature describing how varied sources have been applied in specific circumstances and locales that can serve as a point of contact for readers who want to explore specific applications more thoroughly; and
- The most significant sources and references on each of these categories of funding.

3.6 Revenue Streams from Projects

This category of revenue sources reflects a wide range of efforts by local jurisdictions, transit agencies, and private-sector partners to fund transit investments by either capturing the value to business and industry of proximity to specific transit facilities and services, or by estimating the costs imposed on local government by traffic from new development and directing some portion of development fees to mitigate these costs through transit investment.

These funding mechanisms are used largely in relation to specific projects or facilities or within relatively small, defined geographic areas where the dollar value of enhanced access (or the public costs of accommodating increased traffic) can be estimated accurately and justifiably allocated to surrounding property. Primary examples include the following (discussed below):

- Transit-oriented development (TOD)/joint development,
- Value capture and beneficiary charges, and
- Impact fees or “exactions.”

Transit-Oriented Development (TOD)/Joint Development²⁴

Numerous definitions of TOD and joint development have been put forward in recent years. *TCRP Research Results Digest 52: Transit-Oriented Development and Joint Development*

²⁴ Much of the following discussion is taken from the following: Cervero, R., C. Ferrell, and S. Murphy, *TCRP Research Results Digest 52: Transit Oriented Development and Joint Development in the United States: A Literature Review*, Transportation Research Board, National Research Council, Washington, DC, October 2002, p. 6.

in the United States: A Literature Review identified common elements in the various definitions of TOD:

- Mixed-use development,
- Development that is close to and well-served by nearby transit,
- Development that is conducive to transit riding,
- Compactness,
- Pedestrian- and cycle-friendly environs,
- Public and civic spaces near stations, and
- Stations as community hubs.

It is in the pursuit of joint development, however, that significant opportunities arise to provide a new funding stream for public transit derived from the value to private businesses, developers, and real estate owners of proximity to transit services and the expected or planned mix of uses typically associated with TOD. These revenue streams typically come in two forms. Research has shown that nearly two-thirds of joint development projects involve significant cost-sharing, one quarter involve new revenue generation to directly support transit services and facilities, and 40 percent of joint development projects involve some degree of both.

There is considerable documentation of specific joint development activities and programs around the country. Some of these activities and programs include the following:

- Washington Metropolitan Area Transit Authority (WMATA) has collected among the largest amounts of revenue—over \$10 million annually—and off-set the largest share of costs through joint development activities, with over 52 projects undertaken over 20 years.²⁵
- Miami-Dade County adopted a joint development ordinance in 1978, a full 6 years before its Metrorail system opened. In 1982, Miami-Dade Transit entered into its first joint development agreement at its Dadeland South station. Since that time, 21 joint development projects have been initiated or completed.²⁶
- In 2004, it was reported that developers invested more than \$4 billion in 30 projects around Los Angeles Metro Rail stations—including projects in downtown Los Angeles, Chinatown, Long Beach, North Hollywood, Lincoln Heights, Hollywood, and Pasadena and mixed-use projects around Metro Gold Line stations between downtown Los

Angeles and Pasadena and within the transit mall loop on the Blue Line.²⁷

Value Capture and Beneficiary Charges

Value capture and beneficiary charges refer to circumstances in which the provision of a public service or facilities such as public transportation increases the market value of surrounding real estate, and measures are enacted to capture some or all of that increase to defray public expense. Various mechanisms are used to capture either the current or future value created by public investment.²⁸

Impact Fees or “Exactions”

Development brings with it a sizeable demand for new public facilities and services, including added transportation capacity. In urban settings particularly, it is increasingly important to satisfy the need for additional transportation capacity through multimodal strategies and investments, including additional public transportation services. Impact fees are frequently levied against new development to provide the revenues to meet the public facility demands of new development. The use of impact fee revenue to support transit investment and operations, however, is not yet widespread.

Impact fees are typically one-time “charges on new development to pay for the construction or expansion of off-site capital improvements that are necessitated by and benefit the new development.”²⁹ Impact fees are most effective in rapidly growing areas where development markets are strong. Since 1987, 26 states have passed impact-fee-enabling acts. Most of these states are located in the western United States, the Great Lakes region, and on the Atlantic coast.

Unfortunately, many of these acts are as prohibitive as they are permissive. According to recent national surveys, about 60 percent of all cities with over 25,000 residents and almost 40 percent of all metropolitan counties use some form of impact fees. In California and Florida, 90 percent of cities and 83 percent of counties use impact fees. Impact fees have continued to increase significantly in popularity and use. It is now

²⁵ Cervero R. et al. *TCRP Report 102: Transit-Oriented Development in the United States: Experiences, Challenges, and Prospects*. Transportation Research Board of the National Academies, Washington, DC, 2004.

²⁶ Miami-Dade County, “Joint Development Program.” Available at <http://www.miamidade.gov/transit/joint1.asp>. Cervero R. et al. *TCRP Report 102: Transit-Oriented Development in the United States: Experiences, Challenges, and Prospects*. Transportation Research Board of the National Academies, Washington, DC, 2004.

²⁷ “Los Angeles MTA Showcases Transit-Oriented Development Projects at Rail-Volution.” *Progressive Railroading.com*, September 20, 2004. Available at <http://www.progressiverailroading.com/news/article.asp?id=11618>.

²⁸ Smith, J. J. and T. A. Gihring. *Financing Transit Systems through Value Capture: An Annotated Bibliography*. Victoria Transport Policy Institute, Victoria, BC, Canada, November 2006. Available at <http://www.vpti.org/smith.pdf>.

²⁹ See the category titled “General” under “Frequently Asked Questions” at [ImpactFees.com](http://www.impactfees.com/faq/general.php#). Available at <http://www.impactfees.com/faq/general.php#>.

San Francisco Transit Impact Development Fee (TIDF)^{a,b}

Significant new downtown development in San Francisco led the San Francisco Board of Supervisors to enact the TIDF ordinance in April 1981. Because “exactions” like the TIDF have been the subject of protracted legal battles, care is needed in assembling a proposal. The San Francisco TIDF was developed with the following elements carefully researched and constructed:

- A justification;
- A clear delineation of the area in which the fee is to be applied;
- A fair and defensible methodology for assessing the fee;
- A description of how the services supported by the fee will benefit those paying the fee; and
- Mechanics for administering the fee, e.g. timing, method, enforcement, etc.

The one-time fee, recalculated annually but set at a maximum of \$5 per square foot, is applied only to office building development in a particular area on the basis of the premise that it is additional new peak period work trips that would stress the existing system and disadvantage existing riders the most; the impacts of other uses and users are considered incidental. Payment is due upon 50-percent building occupancy, and funds accruing are shifted to Muni’s operating revenue fund annually. As a one-time fee, the TIDF does not generate a consistent flow of funds for transit. Overall, annual amounts are small—\$10 million/year—and variable year to year.

^aPrice Waterhouse, LLP; Multisystems, Inc.; and Mundle & Associates, Inc. *TCRP Report 31: Funding Strategies for Public Transportation, Volumes 1 and 2*. Transportation Research Board, National Research Council, Washington, DC 1998.

^bSPUR Transportation Committee. *Planning for Growth: A Proposal to Expand San Francisco’s Transit Impact Development Fee*. San Francisco Planning and Urban Research Association, San Francisco, CA, June 20, 2001.

Legal Aspects in Establishing Project- or Area-Specific Revenues^a

Local enactment of the types of revenue-raising mechanisms described above (transit-oriented development (TOD)/joint development, value capture and beneficiary charges, and impact fees or “exactions”) are based on either the general “police power” of local governments to protect the health, safety, and welfare of communities or on specific enabling legislation enacted at the state level on behalf of individual jurisdictions or classes of jurisdictions. The basis for raising revenues in these ways lies in the principle that development is a “privilege” for which developers can be made to pay. One advantage of raising revenues in these ways is that it can be done outside general tax limitations and restrictions. Successful enactment of these mechanisms generally requires that several legal tests be met, however:

- The improvements to be funded must be clearly related to the protection of public health, safety, or welfare;

(continued on next page)

- The fee or exaction amount must be reasonably proportionate to the impacts of the activity being undertaken, based on factual analysis;
- The assessments must be equitably applied across like classes of projects/development; and
- Revenues must be used to mitigate the impacts created.

In considering alternative means to capture revenues from projects or area-specific activities, state-enabling legislation and case law should be examined with the help of legal and financial experts.

^aNicholas, J., et al. *Impact Fees in Florida: Their Evolution, Methodology, Current Issues and Comparisons with Other States*. White Paper prepared for the Florida City and County Managers Association, September 19, 2005.

much more common for communities to recover full facility costs than to discount them and charge less than full value. Finally, in recent years, it appears that there has been a greater use of creative methodologies (such as residential fees that vary by unit size).³⁰

Most recent surveys indicate that impact fees currently are not a common source of funding, specifically for public transportation, largely because the fees are charged to specific new developments while transit services are traditionally operated and supported on an areawide or jurisdiction-wide basis.³¹

Right-of-Way Leasing

Linear rights-of-way owned and maintained by transit agencies providing fixed guideway services have the potential to serve a number of emerging private business needs. Development of cable and fiber-optic networks, in particular, can benefit from joint use of transit rights-of-way through lease arrangements, providing the transit agency with a new source of revenue on the local and regional level. In addition, there is the possibility that the network provided for private-sector use and services marketed to the public can be utilized by the transit agency at a reduced cost for operational communications.

The Bi-State Development Agency (BSDA) in St. Louis, Missouri, the operator of the region's Metrolink rail transit service, entered into a partnership with WorldCom in 1991 for joint use of its right-of-way. The agreement provides BSDA with access to the network for operational purposes at a minimal cost and provides for projected lease payments from WorldCom on a linear foot basis over a 25-year period.

³⁰ Ibid.

³¹ Duncan Associates. "National Impact Fee Survey: 2007." Austin, TX, August 2007. Available at <http://www.impactfees.com/2006survey.pdf>.

New "User" or "Market-Based" Sources

Increasing emphasis is being placed on a variety of revenue sources with yields that are intended to vary based on market forces. These include the following:

- Expanded road and bridge tolling,
- Congestion pricing,
- Emission fees, and
- VMT fees.

Tolling

For 2005, FHWA estimated that there were 5,353 miles of tolled highways in the United States, split approximately 60/40 between rural and urban settings. Tolling has become a subject of widespread interest around the country as the concept of managed lanes and the theory and practice of pricing has expanded into the metropolitan transportation arena and technologies have emerged that allow for variable or "dynamic" pricing as traffic conditions change. In the process, tolling has become a two-pronged strategy to **raise new revenues** to support and expand highway infrastructure and to **influence more efficient traffic flow** under congested conditions. The notion of public-private partnerships in toll facility development and pricing has become a focus of attention as well within the broader rubric of "Public-Private Partnerships (PPP) in transportation. Under the FHWA *Value Pricing Pilot Program*, pilot projects implemented to date include variable pricing of toll facilities in New York, New Jersey, and Florida as well as High-Occupancy/Toll (HOT) lanes in Texas and California."³² In addition, FHWA data currently identify

³² Federal Highway Administration. *Toll Facilities in the United States: Bridges—Roads—Tunnels—Ferries*. FHWA-PL-05-018. U.S. DOT, Washington, DC, June 2005.

168 toll or related projects in 27 states, including 50 that are open, 25 that are under construction, and 90 in various stages of planning.³³

In 2004, San Francisco Bay Area voters approved Regional Measure 2. The measure raised the toll on state-owned toll bridges in the San Francisco Bay Area to fund congestion relief projects, including new ferry service across the Bay, BART infrastructure, construction of the new Transbay Terminal, more express buses, and planning for better transit connections. In addition to capital investments, the plan includes operating funds for commuter rail, express and enhanced bus service, and ferry service, in the recognition that covering operating costs for regional transit is a critical element in improving service.

Typically, however, the use of revenues from highway, bridge, and tunnel tolls is carefully circumscribed through legal commitments that restrict the use of revenues to the facilities on which the tolls are collected and/or the programs directed by the independent, state-empowered authorities authorized to collect the tolls and administer the facilities. While newer, emerging proposals for toll facilities and pricing often include provision for, or special accommodation of, transit and other shared-ride vehicles, there are few examples of toll revenues being used to support public transportation in the broader regional sense. Noteworthy exceptions include the following:

- **New York State's MTA.** Bridge and tunnel toll revenues collected by MTA Bridges and Tunnels, a subsidiary of MTA, are used to support elements of the MTA transit system;
- **Virginia I-95/I-395 HOT Lanes.** Although it is not yet finalized, a master agreement between a private consortium and the Virginia Department of Transportation anticipates nearly \$400 million to be invested in transit on the I-95/I-395 corridor south of Washington, D.C. Details of the transit improvements are being developed in parallel with negotiation of the master HOT lane agreement.³⁴
- **Maryland HOT Lanes.** The Maryland Department of Transportation is proposing multimodal improvements, including accommodation of both rail and bus services, in its HOT lanes proposal for I-495, the state's portion of the beltway around Washington, D.C.

³³ Federal Highway Administration. U.S. Department of Transportation. "Public Private Partnerships" (online document). Available at www.fhwa.dot.gov/PPP/toll_survey.htm. Perez, B. and Lockwood, S. *Current Toll Road Activity in the U.S.: A Survey and Analysis*. Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. August 2006. Available at http://www.fhwa.dot.gov/PPP/pdf/toll_survey_0906.pdf.

³⁴ "Financially Constrained Long-Range Plan for 2030 Project Description Form." Draft. Metropolitan Washington Council of Governments, Washington, DC, March 15, 2007, p.3.

- **I-15 (San Diego, California).** The I-15 FasTrak Express Lanes are a two-lane reversible facility operated over 8 miles in the median of I-15 in San Diego County. Two-person carpools, vanpools, buses, and motorcycles use the facility for free. According to SANDAG, the project produces \$2.0 million in revenue a year and is currently self-supporting, providing \$750,000 annually for operating costs and \$60,000 for enforcement, with the balance of revenues going to support transit in the corridor as required by state law.³⁵

Congestion Pricing

Congestion pricing is a specific variant of tolling or pricing road, bridge, or tunnel use that is based on varying the cost to users depending on the volume of traffic and/or level of congestion being experienced and the performance goals for the route or area in question. The objective is generally to set prices higher in peak hours or to set prices dynamically through electronic means to ensure high speed and/or free flow along specific routes. A variation involves charging vehicles for access to and/or through particular areas of a community to ensure that the local street system can function efficiently throughout the day.

London, U.K. London instituted its congestion fee program in 2003, charging vehicles for weekday access to the central area between 7:00 a.m. and 6:30 p.m. Revenues are being used to improve transit services on a broad scale.³⁶

New York, New York. *PlaNYC*, a long-term sustainability plan developed by New York City Mayor Bloomberg, included a proposal similar to London's, including charges for vehicles entering Manhattan south of 86th Street between 6:00 a.m. and 6:00 p.m. Revenues would have been used to fund significant transit improvements as well as street maintenance; however, the New York State legislature failed to approve the plan.³⁷

Other cities worldwide that have instituted similar congestion pricing schemes are Singapore; Bergen, Oslo, and Trondheim in Norway; and Stockholm, Sweden.

Emissions Fees

Converging concerns about congestion, energy consumption, and air quality have heightened interest in charging emis-

³⁵ SANDAG. *FasTrak Value Pricing® Fact Sheet*. San Diego, CA, May 2007. Available at www.sandag.org/uploads/publicationid/publicationid_831_4185.pdf.

³⁶ Littman, T. *London Congestion Pricing: Implications for Other Cities*. Vancouver Transport Policy Institute, Victoria, BC, January 10, 2006, p. 6.

³⁷ *PlaNYC*, Office of the Mayor, New York City, May 2007. <http://www.nyc.gov/html/planyc2030/html/home/home.shtml>.

sion fees based on the amount of key “criteria pollutants” (hydrocarbons [HC], carbon monoxide [CO], and nitrogen oxide [NO_x]) released by individual vehicles. This effort can be thought of as part of a larger approach—charging “carbon fees”—that would be potentially applied to all business and industry, not just motor vehicles.³⁸ Like congestion fees and other roadway pricing schemes, emission fees represent an approach to achieving air quality goals, energy independence goals, and congestion goals rooted in the application of economic incentives and disincentives.

No applications of emissions fees have been attempted to date in the United States. To be implemented, emissions fees would certainly require federal and state authorization as well as application on a broader level than the local and regional level to be effective.

VMT Fees

The concept of basing fees on VMT is getting much greater attention as concern mounts over the inadequacy of federal and state motor fuel tax revenues as a continuing funding source for highway and transit investment. While a VMT fee also represents a direct way to reduce congestion through reduced vehicle use, opponents suggest that VMT fees are less directly effective in addressing other urgent problems—such as vehicle emissions, energy use, and air quality—because VMT fees don’t directly address the wide variability that exists in vehicle performance due to vehicle age, make, and model.³⁹

Beginning in 2007, six states—California, Idaho, Iowa, Maryland, North Carolina, and Texas—embarked on a 2-year study of mechanisms and approaches to replacing fuel taxes with mileage fees under a \$16.5-million federal project.⁴⁰ In addition, the U.S. Chamber of Commerce has endorsed adoption, in the long term, of a two-tiered system of vehicle-mileage fees, including a state VMT fee as well as a local-option VMT fee to help ease metropolitan congestion.⁴¹

Ahead of the new federal initiative, Oregon has implemented a pilot project in the Portland region to demonstrate how a

³⁸ Goldberg, L. *Early Action Measures: Carbon Fee Phase-In*. California Tax Reform Association, May 7, 2007. Available at <http://www.caltaxreform.org/?p=42>.

³⁹ Cambridge Systematics, Inc. examined how to couple VMT and emissions charges through an emission-indexed VMT fee for California’s South Coast Air Quality Management District in this study: Stanley, R. G., Sevigny, M., and Reno, A. T. “Positive Feedback Approach to Mobile Source Emissions Reduction in the South Coast Region” (Based on Final Report for the South Coast Air Quality Management District, under Contract AB2766/COO13). Presented at the 69th Annual Western Economic Association International Conference, Vancouver, B.C., 1994.

⁴⁰ Kuhl, J. “Road User Charge Study.” Public Policy Center, University of Iowa, Iowa City, 2007. Available at <http://www.ppc.uiowa.edu/dnn4/transportationpolicyresearch/roaduserchargestudy/tabid/65/default.aspx>.

⁴¹ Cambridge Systematics, Inc. *Future Highway and Public Transportation Financing*. National Chamber Foundation, Washington, D.C., 2005.

VMT concept might be implemented.⁴² Volunteers are using hybrid odometer/GPS technology on 280 vehicles as part of the Road User Fee Pilot Program to measure distance and assess costs at the pump. To gauge the impacts of the approach, three groups of participants are being evaluated: a group paying the regular motor fuels tax, a group paying a small VMT fee (1.2 cents per mile) for off-peak travel, and a third group paying 10 cents per mile in congested areas.⁴³ Model legislation for consideration by the state legislature is expected from the pilot program by 2009. The Oregon experience is being expanded through similar field demonstrations in Austin, Texas; Baltimore, Maryland; Boise, Idaho; Eastern Iowa; the Research Triangle Area of North Carolina; and in San Diego, California.⁴⁴

Financing Mechanisms⁴⁵

The current body of literature on “financing” and “innovative finance” is also extensive, and the use of debt mechanisms to support transit investment is broadening as innovative financing mechanisms evolve. For the purposes of this study, the term “financing” refers to any of a variety of borrowing or debt mechanisms (bonds or other types of debt instruments) to support current or planned spending on public projects. Repayment to bond purchasers typically is guaranteed from general funds or specific designated sources of future revenue. In essence, financing mechanisms move future streams of revenue forward to provide a source of capital for use in carrying out current projects on more expeditious timetables. From that standpoint, they may more accurately be considered project delivery rather than strict revenue-raising mechanisms.

The interest earned on municipal bonds or other debt issued by units of government is generally not taxable (tax-exempt) at either the federal level or in the jurisdiction in which the bond or debt is issued, making municipal bonds or debt issued by units of government an attractive conservative investment for individuals as well as institutions.

Transit systems of varying sizes and locations have benefited from debt financing. Nonetheless, the majority of debt financing is done by the nation’s major transit systems, where capital investment needs as well as resources for repayment are largest.

⁴² Oregon Department of Transportation. *Road User Fee Pilot Program*. Oregon Administrative Rules, Division 80. Available at http://arcweb.sos.state.or.us/rules/OARS_700/OAR_731/731_080.html.

⁴³ Texas Senate Research Center. “Research Spotlight: Oregon’s Road User Fee Pilot Program.” Austin, TX, April 2006.

⁴⁴ Public Policy Center. *Project Overview: National Evaluation of a Mileage-Based Road User Charge*. University of Iowa, Iowa City, November 1, 2007. Available at ppc.uiowa.edu/dnn4/Default.aspx?tabid=65.

⁴⁵ Much of the information in this section is summarized from the following: TransTech Management, Inc. and PA Consulting, Inc., *TCRP Report 89: Financing Capital Investment: A Primer for the Transit Practitioner*, Transportation Research Board of the National Academies, Washington, DC, 2003.

A half dozen or so of the largest systems routinely undertake debt financing (or refinancing) with issuances typically ranging from \$100 to \$500 million. In addition, it is typical for systems planning or implementing “new start” fixed guideway projects to fund them partially by issuing debt, typically backed by a specific stream of revenues from a specific tax or source, the most popular being local or regional sales taxes. In contrast, many medium and smaller bus-only transit systems find that their capital needs can be met adequately by a combination of federal and state grants (without the added complexity of issuing debt).

The major types of debt or “financing” mechanisms that have been used for transit improvements are described briefly below, along with additional sources of information.

General Obligation (GO) Bonds

GO bonds are issued by municipalities, counties, states, and special districts serving public purposes (“municipal bonds” whether literally issued by municipalities or not). They are generally long term and are repaid along with tax-exempt interest from general revenues of the issuing jurisdiction. GO bonds are secured by the “full faith and credit” of the issuing jurisdiction rather than through the dedication of a specific tax or revenue source, a commitment that mandates repayment of the debt with interest regardless of the source of funds. Proceeds from GO bonds can be used to match federal grant funds.

Because repayment is made from general revenues of the issuing jurisdiction, states and municipalities generally operate under legislated bond caps and debt ceilings and/or rely on specific authorizations that limit the amount of GO debt outstanding at any one time or the amount of new debt to be allowed. One effect of the caps is to sharpen the competition for GO bond funding between transit and competing public programs and projects such as schools. As a result, there has been limited use of GO bonds for transit improvements. Among the systems that have used GO bond financing are TriMet in Portland; Metro Transit, serving the Minneapolis-St. Paul region; and BART in San Francisco.

Private Activity Bonds (PABs)

PABs are a special category of borrowing that may also be tax exempt if certain conditions are met. PABs involve the private sector in projects or activities that serve specific public purposes where project implementation and management skills may provide advantages for the public sector. The use of PABs is subject to strict limitations in federal law, however, including the following:

- A total dollar limit per state and per capita on the amount that can be issued,

- A limit of 10 percent on the proceeds that may be used by private parties, and
- A limit of 10 percent on the debt service that may be backed by private resources.

Tax Credit Bonds

“Tax-credit bonds allow bondholders to receive a credit against their Federal income tax liability instead of cash interest. . . . The range of potential issuers of tax-credit bonds spans both governmental and nongovernmental entities. State and local governments are candidates to use tax-credit bonds. Indeed, the only such bonds authorized to date . . . allowed state and local governments to issue up to \$400 million bonds each year from 1998 through 2003 to finance school renovation and construction projects that met a set of qualifying criteria.”⁴⁶ Although no use has been made of credit bonds at the local or state level for transit, the approach may gain relevance in the 2009 reauthorization cycle of federal highway and transit programs, given the mounting investment needs. In all prior proposals to authorize tax credit bonds, however, their effect has been to provide a federal subsidy to entities outside the purview of the federal budget, a notion that is not universally embraced.

Short-Term Borrowing Mechanisms

There are several alternative shorter term borrowing mechanisms that serve the same purpose as longer term bonds, i.e., to advance future streams of revenue for current use. Sometimes referred to as “limited recourse non-system revenue bonds,” these typically rely for repayment on specific taxes or streams of revenue.

Grant Anticipation Notes (GANs). GANs are a variety of debt whose purpose is to pledge funds from future federal or state grants in exchange for immediately available funds offered by the note purchasers. Recently, GAN funding arrangements have been covering a wider range of timeframes. GANs provide a potentially useful advantage in that they typically do not count against a jurisdiction’s local debt limitations. Approximately one-third of the BART San Francisco Airport Link was supported by \$500 million in GANs. Rail transit improvements in New Jersey, St. Louis, Salt Lake, and Dallas have also been supported by GANs.

⁴⁶ Much of the information provided below is summarized from the following: TransTech Management, Inc. and PA Consulting, Inc., *TCRP Report 89: Financing Capital Investment: A Primer for the Transit Practitioner*, Transportation Research Board of the National Academies, Washington, DC, 2003.

Grant Anticipation Revenue Vehicles (GARVEEs). GARVEEs are like GANs, but they have been largely restricted to use in financing highway improvements, generally in conjunction with advance construction to enable using federal-aid funds for future debt service payments. Fourteen states have issued GARVEE bonds, and authority to use GARVEEs has been established in nine more.⁴⁷

Revenue Anticipation Notes (RANs). Flows of funds other than grant monies may be available to be borrowed against, depending on their strength, yield, and reliability. Although not in widespread use, a transit agency's earned income is available to be bonded against, including farebox revenues. New York's MTA; Los Angeles MTA; WMATA in Washington, D.C.; and Las Vegas all have issued RANs.

Certificates of Participation (COPs)

Acquiring the use of capital equipment through leasing instead of outright, large capital purchases represents a capital budgeting and programming action that lies within agencies' traditional administrative authority, providing transit agencies a way of avoiding long-term debt as well as the associated need for voter approval. COPs are tax-free securities that represent the right to purchase a future stream of revenue made up of lease payments for capital equipment. COPs have been used by local government agencies for a variety of projects, generally with mid-level time horizons (10 to 12 years). For transit systems, COPs are most often used for the acquisition of rolling stock—buses, subway cars, locomotives, and so forth. COPs have proven useful to large and small transit agencies for many years.

The size of COP issues can vary widely, and they have supported leasing of a few buses (e.g., Los Angeles' \$1.6 million lease of six buses in 1991) as well as leasing of hundreds of buses. The Sacramento Regional Transit District participated in a COPs transaction valued at \$32 million in 1992 for the acquisition of 75 buses. The City of Culver City, California, participated in the sale of \$10 million in COPs to support part of the cost of a municipal transportation maintenance and administration facility for the city-owned bus lines.⁴⁸

⁴⁷AASHTO. "Grant Anticipation Revenue Vehicles (GARVEEs)." *Innovative Finance for Surface Transportation.org* (website). Available at http://www.innovativefinance.org/topics/finance_mechanisms/bonding/bonds_garvees.asp.

⁴⁸Collins, M. A. *TCRP Legal Research Digest 13: Report on Innovative Financing Techniques for Transit Agencies*. Transportation Research Board, National Research Council, Washington, DC, 1999. TransTech Management, Inc. and PA Consulting, Inc. *TCRP Report 89: Financing Capital Investment: A Primer for the Transit Practitioner*. Transportation Research Board of the National Academies, Washington, DC, 2003.

State Infrastructure Bank (SIB) Loans

SAFETEA-LU contains a provision authorizing every state to set up a state infrastructure bank (SIB) that can manage a revolving loan fund, provide credit enhancements, or issue bonds capitalized with seed money from federal and state sources. The use of SIB loans is included here because it represents a means by which local transit agencies can exercise added leverage in attracting and using the full range of local and regional funding sources available. As of 2005, 33 states had SIBs in operation. In the aggregate, these states have entered into 457 loan agreements totaling over \$5.0 million and have disbursed \$3.7 million.⁴⁹

3.7 Public Transportation Funding Mechanisms Not in Widespread Use

Because of varying philosophies of governance and taxation across state and local governments, arriving at an acceptable mix of revenues to support public transportation has often resulted in combinations of unique revenue sources suited to the political and budgetary landscape of individual areas and jurisdictions. Among these combinations are some of the traditional or common sources described above for which there may be established authority but little willingness on the part of local and/or regional jurisdictions to put them to use and other potential revenue sources that are only infrequently used to support public transit.

Traditional Sources Authorized but Not Used—"Latent Sources"

There are several instances in which traditional (and non-traditional) funding sources have been authorized for local and regional use through state legislative action, but have not been enacted at the local level. State department of transportation transit program managers and state transit association leaders were asked for examples of these "latent sources." Examples from Florida, Iowa, Missouri, New Hampshire, New Mexico, Oregon, Virginia, and Washington are discussed below.

Florida

"Charter County" transit systems (those that came into existence before 1984) are authorized to enact a 1-cent sales tax or "transit system surtax." To date, only Miami-Dade County has

⁴⁹Federal Highway Administration, U.S. Department of Transportation. "SIB Highlights." *FHWA's Innovative Finance Quarterly*, Vol. 11, No. 1, Fall 2005. Available at www.fhwa.dot.gov/innovativefinance/ifq1101.htm#sib_highlights.

done so, with proceeds available for all transportation, including transit.

Consolidated local governments and small counties are authorized to enact a local option gas tax. Not all eligible jurisdictions have chosen to do so.

Iowa

All municipal transit systems are authorized to enact a property tax of 95 cents per \$1,000 valuation for transit through a vote of city councils. Twenty of the 38 municipalities in Iowa make use of this authority, but none does so to the maximum authorized level.

Missouri

“First Class Counties” have the authority within their broader enabling legislation to enact up to a 1-percent sales tax for any transportation purpose. The one county transit agency formed under this authority has not chosen to enact the 1-percent sales tax as a result of the county board’s unwillingness to do so.

State law also enables creation of transportation development districts and transportation corporations, both of which have taxing authority, and both of which can provide for transit service delivery. No such organizations have yet been created.

New Hampshire

State law authorizes a local surcharge of up to \$5 on vehicle registration fees. This surcharge was originally intended to support transit improvements. Subsequent changes broadened its use to all transportation projects. This category still includes transit, but use of this surcharge has been limited.

New Mexico

State law enables regional transit districts (RTDs) with more than two member jurisdictions to enact a 0.50-percent regional sales tax. Although four RTDs have been created under this provision, none has enacted the tax.

Oregon

The state of Oregon authorizes a number of local or regional taxes for supporting transit systems and services, including employer payroll taxes. Among those taxes authorized, however, neither business license fees nor income taxes have been approved locally.

Virginia

Recent state enactment of a series of regional “self-help” transportation taxes has led to different strategies in the state’s two largest metropolitan regions—the metro Washington, D.C., region (including Northern Virginia) and the Hampton Roads region. The authorized regional taxes include a real estate transfer tax, a 2-percent car rental tax, a 2-percent hotel-motel tax, a \$10 safety inspection fee, a 1-percent initial registration fee, a 5-percent auto repair sales tax, and a \$10 vehicle registration fee. In Northern Virginia, all taxes have been enacted locally and will be used for a combination of transit and road projects. In Hampton Roads, the revenues will be used only for road improvements, at least initially.

Washington

A recent analysis suggests that significant revenues from authorized funding sources in the state of Washington are not being used, largely because of popular resistance to taxing at the local level. The analysis cited nearly \$300 million in unused sales tax authority and nearly \$50 million in commercial parking and employee taxes.⁵⁰

Tax and Funding Sources Not Widely Used

There are numerous tax and fee mechanisms in existence that traditionally have not been in widespread use as funding sources for public transit investment or have been used only infrequently. Some of these are reserved for and used at the state level as a matter of the primary role of states in the federal system, i.e., where general or specific state legislation or constitutional provisions are required to empower local governments to act. Other tax and fee mechanisms have been used infrequently at the local level with grants of special state authority.

A number of these sources are described briefly below. Some may represent potential targets for new local and regional fundraising for transit. In other cases, however, enactment of these tax or fee mechanisms on a local or regional level would not make sense.

Motor Fuel Taxes

Motor fuel taxes are a type of sales tax or excise tax applied by all states to gasoline, diesel fuel, and gasohol at varying rates. State gasoline tax rates range from 4 to 36 cents per gallon on top of the 18.4-cent per gallon federal gas tax. Although it has

⁵⁰ Richard, J. “Revenue Sources for Transportation Financing.” PowerPoint presentation. Available at [http://www.discovery.org/scripts/viewDB/files/DB-download.php?id=218#256,1,Revenues Sources for Transportation Financing](http://www.discovery.org/scripts/viewDB/files/DB-download.php?id=218#256,1,Revenues%20Sources%20for%20Transportation%20Financing).

not been a common source of transit revenue, a number of states have authorized local option gasoline taxes, including the following: Alabama (1 to 3 cents); Alaska, Florida, and Hawaii (8.8 to 18.0 cents); Illinois (5 cents in Chicago, 6 cents in Cook County); Mississippi and Nevada (4 to 9 cents); Oregon (1 to 3 cents); South Dakota (1 cent); Tennessee (1 cent); and Virginia and Washington (2 cents).⁵¹ In over 30 states, state constitutional provisions or state statutes preclude the direct use of state motor fuel tax revenues for purposes other than funding highways.⁵²

Income Taxes (Personal and Corporate)

State and federal income taxes, both personal and corporate, are well-known major revenue sources. Local income taxes are far less common. Rare examples are the three county-level, local option income taxes collected in some Indiana counties and used predominantly for property tax relief. In Lafayette, Indiana, these taxes are used for transit as well.⁵³

A related revenue source is the business and occupation (B&O) tax. The B&O tax is a gross receipts tax assessed on the value of products, gross proceeds of sale, or gross income of the business. In Washington, one of seven states with no personal income tax, the B&O tax is calculated on *gross* income from business activities. Rates vary by business classification.⁵⁴

“Sin” Taxes

A number of taxing mechanisms, grouped under the heading of “sin” taxes, have existed at the state level for hundreds of years, including cigarette taxes; liquor, beer, and wine taxes; gambling taxes; and lottery proceeds. These are typically state-level taxing mechanisms, often with local analogs, that are used to support health and education programs and general spending, but are rarely used for transit investment. Exceptions include the use of state cigarette tax revenues to support Portland’s MAX light rail transit system, the dedication of state lottery proceeds to transit services for elderly persons in Pennsylvania, and the use of a Casino Revenue Fund to support paratransit in New Jersey.

⁵¹ Federation of Tax Administrators. “Motor Fuel Excise Tax Rates: January 1, 2008.” Available at www.taxadmin.org/fta/rate/motor_fl.html.

⁵² Sundeen, M. and J. B. Reed. *Surface Transportation Funding Options for States*. National Conference of State Legislatures, Washington, DC, May 2006.

⁵³ Purdue University, Department of Agricultural Economics, Cooperative Extension Service. *Hot Topic: CAGIT, COIT, EDIT, Whatzit? Indiana’s Local Income Taxes* (Online article). Available at http://www.agecon.purdue.edu/crd/Localgov/Topics/Hot_Topics/HotTopic_LocalIncomeTaxes.htm.

⁵⁴ Other states include Alaska, Florida, Nevada, South Dakota, Texas, and Wyoming according to GovSpot, “Which states have no personal income tax?” (online article), <http://www.govspot.com/know/incometax.htm>. Washington Department of Revenue, “Business & occupation tax,” <http://dor.wa.gov/content/FindTaxesandRates/BandOTax/default.aspx#whatis>.

“Sin” taxes can provide considerable revenue along with providing a disincentive to engaging in behavior that is considered undesirable by many.

Cigarette Taxes. State excise taxes are charged on cigarettes in all 50 states at an average rate of \$1.11 per pack and ranging from 17 cents in Missouri to \$2.59 in New Jersey. In addition to state taxes, more than 460 local jurisdictions nationwide also tax cigarettes, bringing in over \$500 million annually.⁵⁵ States with the largest number of localities with cigarette taxes include Alabama (240 cities and 46 counties), Missouri (120 cities and 2 counties), and Virginia (50 cities and 2 counties). Typically, cigarette tax revenues go to state and local general funds as part of deficit reduction efforts, with significant amounts frequently supporting health care, education, and smoking prevention programs for children and adults. In addition to regular taxes on cigarettes, the 1998 multistate tobacco settlement is projected to yield \$246 billion in settlements to states over the first 25 years.⁵⁶ TriMet in Portland, Oregon, is one of the few transit systems reporting revenues from state cigarette taxes, having reserved \$844,000 in 2007.

Liquor, Beer, and Wine Taxes. State excise taxes as well as sales taxes are imposed on liquor in various forms nationwide, generally based on some combination of alcohol content, price, and/or volume.⁵⁷ It is less common for local taxes to be applied.

For distilled spirits, state and local excise and sales taxes account for 21 percent of the cost consumers pay per bottle.⁵⁸ State liquor tax rates in 2007 ranged from \$1.50 to \$12.80 per gallon, nationwide.⁵⁹ While local liquor taxes are not as widespread, there are instances of liquor taxes being applied in designated subareas of communities, e.g., special liquor taxes in the downtown area of Minneapolis, Minnesota.⁶⁰ For beer, the combination of state and federal excise and sales taxes accounts

⁵⁵ Boon, A. *Top Combined State-Local Cigarette Tax Rates*. Campaign for Tobacco-Free Kids, Washington, DC, August 1, 2008. Available at <http://tobaccofreekids.org/research/factsheets/pdf/0267.pdf>.

⁵⁶ Campaign for Tobacco-Free Kids. “A Broken Promise to Our Children: The 1998 Tobacco Settlement Nine Years Later” 2007. Available at www.tobaccofreekids.org/reports/settlements/2008/fullreport.pdf.

⁵⁷ National Institute on Alcohol Abuse and Alcoholism. Alcohol Policy Information System. “Discontinued APIS Policy Topics.” Available at http://www.alcoholpolicy.niaaa.nih.gov/index.asp?Type=B_BASIC&SEC={AB8BE556-BD09-4D82-AF6E-79FAEDC07329}.

⁵⁸ “Tax bites.” Americans for Tax Reform website. <http://www.atr.org/special/taxbites/liquor.html> (Accessed: Sept. 22, 2008).

⁵⁹ Federation of Tax Administrators. “State Liquor Excise Tax Rates” (online document). Available at <http://www.taxadmin.org/fta/rate/liquor.html>.

⁶⁰ “Special Local Taxes: Minneapolis, Rochester, St. Cloud, St. Paul.” Sales Tax Fact Sheet 164S. Minnesota Department of Revenue. Available at http://www.taxes.state.mn.us/sales/publications/fact_sheets_by_name/content/BAT_1100112.pdf.

for 20 percent of the consumer cost.⁶¹ State tax rates in 2007 ranged from 2 cents to \$1.00 per gallon.⁶² In 2007, Allegheny County in Pennsylvania enacted a 10-percent tax on poured-alcoholic-drink revenues; this tax will support Port Authority Transit.⁶³ For wine, state tax rates in 2007 ranged from 11 cents to \$2.50 per gallon.⁶⁴

There is little evidence of liquor taxes serving as a direct source of funding for public transportation.

Lotteries and Gambling. Lotteries are established in 42 states, the District of Columbia, and the Virgin Islands. Typically, a significant portion of state lottery revenues are used to support state education programs and systems, although they frequently are used to support general fund expenditures.⁶⁵ Several states use substantial portions of lottery proceeds to directly support public transportation. Pennsylvania dedicates lottery revenues to a Free Transit Program for persons over 65 years old traveling in off-peak hours as well as providing over \$60 million to cover 85 percent of door-to-door, shared-ride trip costs for seniors. In New Jersey, 8 percent of casino gross revenues, roughly \$30 million per month in 2007, is paid into the Casino Revenue Fund, a portion of which supports a Senior Citizens and Disabled Residents Transportation Assistance Program.⁶⁶

Road Utility Fees

The National Conference of State Legislatures describes the possible addition to utility bills of an “access charge” against properties that are accessed by the state trunk highway system, measured and sized in any of several ways, including trip generation rates, amount of parking, number of employees, front footage, or a flat fee.⁶⁷

Airport Passenger Facility Charges

In 1990, the federal government authorized local and regional airport authorities (or other public agencies respon-

sible for commercial airport ownership and operations) to collect fees on a sliding scale for each “enplaned passenger.” *ACRP Synthesis 1* reported that over \$2.2 billion is raised from passenger facility charges (PFCs) each year and used directly to fund FAA-approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition. These funds can also be used as leverage for debt to make such improvements. Because of overall levels of traffic congestion, “land-side” access to airports has become a major challenge, and increasing consideration is being given to using airport revenues in coordination with revenues from other agencies to support transit access to airports. Examples of these kinds of arrangements include the following:

- The Metropolitan Airports Commission in the Twin Cities provided \$87 million to the Hiawatha Light Rail project that links to the Minneapolis–St. Paul International Airport;
- The Port of Portland, Oregon, is a partner in the Airport MAX light rail extension to Portland’s airport; and
- PFCs were used to support development of the Warwick, Rhode Island, Intermodal Station.⁶⁸

Battery Tax

The National Conference of State Legislatures reports that some states charge an excise tax on the sale of batteries; however, those revenues are used to support battery disposal programs. Instituting local option battery taxes to support transit projects might be possible, but it would likely be a poor revenue generator.⁶⁹

Special Districts as Funding Sources

Pressures to limit traditional local and regional taxation have given rise to the use of various special districts within which revenues can be raised to support necessary public services and facility improvements in the designated areas. California enacted the Mello-Roos Community Facilities Act in 1982, Arizona passed the Arizona Community Facilities District Act in 1988, and Florida has similar legislation on the books. The districts typically are created by local units of government in advance of development and include the authority to issue various types of bonds that are serviced by charges

⁶¹ Americans for Tax Reform. “Tax bites.” Available at <http://www.atr.org/special/taxbites/beer.html> (Accessed: Sept. 22, 2008).

⁶² Federation of Tax Administrators. “State Liquor Excise Tax Rates” (online document). Available at <http://www.taxadmin.org/fta/rate/liquor.html>.

⁶³ *Pittsburgh Post-Gazette*. “Drink Tax Would Have Significant Impact, Study Finds.” November 29, 2007. Available at www.post-gazette.com/pg/07333/837829-100.stm.

⁶⁴ Federation of Tax Administrators. “State Liquor Excise Tax Rates” (online document). Available at <http://www.taxadmin.org/fta/rate/liquor.html>.

⁶⁵ www.usa.gov/Topics/Lottery_Results.shtml and www.naspl.org

⁶⁶ “CCC Announces March Casino Revenue.” Press release. New Jersey Casino Control Commission, Atlantic City, NJ, April 10, 2006. Available at <http://www.nj.gov/casinos/home/news/pdf/2007marchrevenue.pdf>.

⁶⁷ Sundeen, M. and J. B. Reed. *Surface Transportation Funding Options for States*. National Conference of State Legislatures, Washington, DC, May 2006, p. 33.

⁶⁸ Nichol, C. *ACRP Synthesis 1: Innovative Finance and Alternative Sources of Revenue for Airports*. Transportation Research Board of the National Academies, Washington, DC, 2007, pp. 8–9.

⁶⁹ Sundeen, M. and J. B. Reed. *Surface Transportation Funding Options for States*. National Conference of State Legislatures, Washington, DC, May 2006, p. 32.

to property calculated through formulas that incorporate a variety of factors.⁷⁰

Transportation Development Districts

Transportation Development Districts (TDDs) are a more specific form of community improvement or community facilities district intended to provide a means of raising funds for transportation improvements, typically through the use of bonding authority supported by tax increment procedures or dedicated sales taxes. State-enabling legislation authorizing formation of TDDs typically allows investment in transit facilities, but has been focused predominantly on highway and parking improvements. TDDs are established at the local level subject to processes and procedures established in state-enabling legislation. State departments of transportation play a large role in project planning, development, funding, and prioritization for improvements on the state highway system; local jurisdictions maintain control of projects on the local street and highway network. TDDs have been established in urban communities (areas with population over 50,000) and small urban communities (areas with population under 50,000). Mercer County, New Jersey, and communities in Missouri and Kansas have used this technique to support varied transportation investments.⁷¹

⁷⁰ California Tax Data. "What is Mello-Roos" (online fact sheet). Available at www.mello-roos.com/pdf/mrpdf.pdf. Froelich, C. "Comparison of Improvement Districts and Community Facilities Districts." Development Planning and Financing Group, Inc. Phoenix, AZ, November 2, 2004. Available at http://www.dpfg.com/news/view_news.php?newsID=25. "Arizona Community Facilities District Act Overview." Development Planning and Financing Group, Inc., Phoenix, AZ, September 6, 2004. Available at http://www.dpfg.com/news/view_news.php?newsID=17.

⁷¹ "Frequently Asked Questions—Transportation Development Districts (applies to 'on state system' projects)." Missouri Department of Transportation website, October 2004. Available at <http://www.modot.org/services/community/documents/tdd.pdf>.

Special Assessment Districts. Revenue from special assessment districts represents "remuneration that a governmental unit may demand from property owners to fund a public project which creates a 'benefit' in properties lying within a special geographic area known as a 'special assessment district.'" ⁷² State laws for the establishment of special assessment districts vary from state to state. While special assessment districts are in widespread use, there is little evidence of resulting revenues playing a major role in support of transit services.

Tax-Increment Financing Districts. Tax-increment financing districts (TIFs) are a form of special district with the same purpose as special assessment districts; TIFs, however, are focused on capturing the added increment of a future stream of revenues from taxes that will rise as the value of the property increases in response to markets and public investments of one type or another. Typically, the "tax increment" is used to repay bonds dedicated to fund the public improvements that led to the increase in value and tax returns. The City of Cedar Rapids, Iowa, used a TIF to help finance a ground transportation center that includes an intermodal terminal, a 500-space parking garage, a 15-story private office building, a 96-unit elderly and handicapped housing project, and other amenities.

Tax-increment financing has detractors, however, who take issue with the diversion of added increments of tax revenue from community-wide programs and needs to site-specific improvements associated with new development. Detractors further dislike the use of site-specific revenues to advantage project sponsors and projects often located in affluent areas where there may be less need to spur economic development.

⁷² *Dosedel vs. City of Ham Lake*, Minn. App., 44 N.W.2d 751, 755.

SECTION 4.0

Guidance in Considering New Local and Regional Funding Sources for Public Transportation

The process of identifying, evaluating, and enacting new local and regional funding sources for public transportation follows a generalizable path and sequence of steps that has many variations from one locale to another. However, success in enacting new funding sources for transit requires an understanding of the following:

- The general taxing and revenue-raising process and legislative procedures at the local and regional level,
- Contextual issues in local and regional funding for public transportation,
- Basic advantages and disadvantages of local and regional funding mechanisms, and
- Criteria in evaluating potential local and regional funding sources

Each of these aspects is discussed briefly in the sections that follow.

4.1 General Process for Taxing and Revenue-Raising and Mechanics at the Local and Regional Level

The authority to tax for public purposes is contained in the U.S. Constitution. The Tenth Amendment to the Constitution provides that all powers not explicitly granted to the federal government (or explicitly shared with the states) are retained by the states. “The states, however, retain the right to impose any type of tax except those taxes that are clearly forbidden by the United States Constitution and their own state constitutions.”⁷³ Municipalities, counties (including parishes or boroughs), and special-purpose districts and authorities, in turn, are creations of state governments, and it is through the leg-

islative actions of state governments that local and regional taxing authority is established for local and regional entities. Raising revenue at the local and regional level often times requires a popular vote locally in support of specific revenue-raising measures and expenditures as well as state-enabling legislation.

4.2 Contextual Issues in Local and Regional Funding for Public Transportation

Not all potential sources of local and regional revenue used for or available for transit will be equally well suited or acceptable in all circumstances. The relevance and acceptability of various funding mechanisms at the local and regional level depends to varying degrees on a number of contextual factors, the most significant of which are discussed briefly below.

Governance Traditions and Philosophies of Taxation and Spending

A wide variety of traditions, philosophies, and legal frameworks have evolved at the state and local level governing how public funds can be raised and for what purposes they can be spent. According to the National League of Cities, “to speak about cities or other forms of local government in the United States is to speak about fifty different legal and political situations.”⁷⁴

A simple comparison serves to illustrate how these traditions and philosophies might influence consideration of new local or regional funding mechanisms in a particular locality. In the state of Texas, the tradition and underlying philosophy guiding the provision of public transit is that local governments,

⁷³ United States Department of the Treasury. “Fact Sheets—Taxes: State and Local Taxes.” Available at http://www.treasury.gov/education/fact_sheets/taxes/state-local.shtml.

⁷⁴ “City Charters.” National League of Cities website. Available at http://www.nlc.org/about_cities/cities_101/151.aspx.

cities, and counties should bear the responsibility for raising the funds needed to build and operate transit systems and services. As a result, the state provides little direct funding for public transportation, with the exception of very modest amounts for small urban and rural services. The state, however, has provided legislative authority to local officials and residents to organize regionally and to design, build, and operate transit services. The state has also provided them with the authority to raise necessary revenues through local option sales taxes, conditioned on local popular approval. Under this tradition, new and expanding public transit systems and services are being developed and operated effectively in the state's major metropolitan regions.

In contrast, in Connecticut, a large number of independent transit districts have been established under state-enabling legislation organized to serve the needs of one or more Connecticut towns. Funding for capital investment and operation of locally designed and managed transit services is provided from federal and state sources. The districts and local towns historically have contributed minimal financial support to their systems. In some cases, districts and towns have resisted being given the authority to enact local funding mechanisms and/or have chosen not to use local revenue-raising authority for public transportation where it does exist.

The examples of Texas and Connecticut represent opposite ends of the spectrum in terms of local and regional transit funding and financing traditions and experiences. While each tradition/experience represents a legitimate posture or philosophy for taxing and spending in support of public transportation, each involves different political dynamics and legislative procedures, and these affect the sources to be targeted and the amounts of revenue that may be captured. Most experiences with local and region transit funding across the United States fall somewhere between the experiences/traditions of Texas and Connecticut, with significant funding coming from both state and local sources. Knowledge and understanding of these overarching revenue-raising and spending traditions and philosophies are essential to fashioning a workable and effective strategy for enhancing local and regional transit funding mechanisms either by conforming to them or by attempting to alter them.

Types of Public Transportation Agencies

Transit operating agencies are organized in several basic ways. Agencies are managed under particular statutory and regulatory provisions as well as through administrative procedures that vary from state to state and locale to locale. The two most frequent organizational models are the following:

- **Independent authorities.** Independent authorities are authorized and enabled by state legislation to perform spe-

cific duties and provide specific services, often with authority to raise and dedicate for their sole use the revenues from specific revenue-raising mechanisms in member jurisdictions in their respective service areas.

- **Municipal transit systems.** Municipal transit systems are operated as part of general purpose municipal or county governments, often drawing on general revenues of the jurisdiction, along with other sources, both dedicated and not dedicated, to support transit services.

In addition, there are several transit systems that are owned and operated by the states they serve, including the New Jersey Transit Corporation (NJ Transit), the Delaware Transit Corporation (DART First State), and the Rhode Island Public Transit Authority (RIPTA). Decision-making dynamics and funding mechanisms used to support transit in state-owned and -operated systems are different from those in independent regional authorities or municipally operated systems.

It is critical to note as well that there is significant variation among urban regions with respect to (1) the number of political jurisdictions included; (2) the geographic extent of the region being served; (3) the number of operating agencies providing service and sharing (or competing for) resources; (4) the nature of the travel markets to be served; and (5) the types of improvements for which funding is being sought—expansion versus maintenance and reinvestment.

Table 4.1 shows the distribution of transit agencies by type, other than state agencies, based on 2005 reporting to the NTD, which contains financial and operating data from all systems receiving federal assistance in urbanized areas (areas with population greater than 50,000). Of the nearly 500 systems reporting their organization type:

- Municipal systems are somewhat more prevalent (57 percent) than independent authorities (43 percent), and
- The municipal model is far more prevalent in smaller urbanized areas where nearly 7 in 10 systems are municipal in character.

It is generally assumed that independent authorities' ability to draw on or raise revenues locally or regionally to support transit services is significantly different than the ability of municipal systems to raise revenues. Municipal systems may be somewhat more restricted in the funding sources available to them and may have limited ability to independently seek funding sources outside of the broader municipal budgeting process. There may be a potential advantage, however, in the ability of municipal systems to better control costs through such mechanisms as municipal pooled or contract purchases of vehicles and fuel, lower insurance costs through municipal purchases, or more favorable borrowing rates under municipal debt issuance processes and ratings.

Table 4.1. Distribution of public transportation agencies by type and size of population area (2005).

Agency Type	Population Area			Total
	> 1.0 Million	200,000–1.0 Million	<200,000	
Independent Authority	78	68	62	208
%	49	54	31	43
Municipal System	80	59	139	278
%	51	46	69	57
Total	158	127	201	486

Source: 2005 National Transit Database. www.ntdprogram.gov/ntdprogram.

For all the reasons cited above, it is evident that no single approach is suited to all areas seeking increases in local or regional transit funding.

Funding Projects versus Programs

There are obvious differences between the funding alternatives that are best suited to support individual public transportation projects, which may require large infusions of capital funds over specific timeframes, and the funding alternatives that are best suited to support ongoing programs, which require sustained levels of reliable and predictable support over long periods of time. Although it will seldom be the case that increases in one type of funding are needed without increases in the other, the funding sources from which transit project and program funds are drawn can vary significantly. A frequent strategy is for agencies to use some type of debt financing, e.g., bonds secured by a dedicated local or regional revenue stream, to ensure that major capital projects can proceed on time and on budget. This strategy requires authority to incur debt as well as access to a revenue stream to support annual financing costs as well as retirement of the debt. These conditions may be somewhat more difficult to satisfy within a municipal organizational framework since capacity to issue debt and revenue streams to support debt are competed for by a variety of municipal services and operating units and are subject to overall borrowing and debt management limitations imposed on the municipality.

Funding versus Financing

Another way to view the difference between project and program funding is to recognize the distinction between “funding” and “financing.” “Funding” generally implies a “pay-as-you-go” process, in which a continuing revenue stream is drawn on for current ongoing expenditures and which allows limited, if any, ability to spend beyond that revenue stream.

“Financing” typically involves some form of debt, the advantage of which lies in allowing future streams of revenue to be available in the present to meet needs in a more timely and predictable way. Debt financing allows systems to meet current needs from future revenues. The “cost” includes the attendant borrowing costs and the potentially diminished availability of those revenues in the future. As noted above, the ability and authority to “finance” transit investments, i.e., to incur debt, is not uniformly available across all agencies or types of agencies. Issuing debt to support municipal systems may be influenced heavily by state and/or local fiscal tradition and philosophy as well as by public needs for services that may compete for available funding.

Current and Future Role of Transit in a Community

There are persistent and differing views on the role of transit in various community and regional settings. The most limiting, but still common, view is the notion of public transit as a service intended largely **to support the needs of transportation disadvantaged individuals** in the community—the young; the old; those with disabling physical, mental, or emotional conditions; and low-income individuals or households. The broader human service and support needs of this client base are served by a large number of local, state, and federal programs. These programs have increasingly become sources of revenue for transit agencies through locally negotiated purchase-of-service agreements with Medicaid; aging, mental health/mental rehabilitation, and job training social service agencies; and other local social service agencies. Funding and financing arrangements focused on serving transportation-disadvantaged citizens have become a focus of a federal coordination initiative, United We Ride; a new federal program, New Freedom; and a new federal transit and human service “coordination” planning requirement.

At the other extreme, in terms of perceptions of the role of transit in a community, are those areas where transit is

considered an integral element of a multimodal network that is essential **to maintain and enhance mobility, forestall increases in congestion now and in the future, and support local and regional economic growth and vitality.** The stronger this notion is in the community, the more positive local community and/or political leaders may be with respect to consideration of new and innovative sources of revenue to support transit enhancement and expansion. In either case, understanding, developing, and advocating a clear, shared vision of the role of transit now and in the future is critical to the successful pursuit of the most appropriate and effective local and regional revenues needed to make the vision a reality.

4.3 Basic Advantages and Disadvantages of Local and Regional Funding Sources

Funding sources used to support public transportation have a wide range of characteristics. These characteristics—along with local, regional, and state taxing, funding, and budgetary policies and philosophies—determine the usefulness of a particular source in a specific area or region. However, in determining what sources may be appropriate in a given setting, it is important to understand and assess the basic *advantages* and *disadvantages* of particular sources.

Table 4.2 highlights generally perceived advantages and disadvantages of specific funding sources regardless of differences in local policies and philosophies. Because of their widespread use as state, regional, and/or local revenue sources, the general advantages and disadvantages of motor fuel taxes and “sin” taxes have been included in Table 4.2.

4.4 Criteria for Evaluating Potential Local and Regional Funding Sources

Potential transportation funding sources are typically evaluated across several basic dimensions using the criteria described below:

- **Revenue yield**, adequacy, and stability;
- **Cost efficiency**, including administrative cost to agencies, compliance costs to taxpayers, and evasion levels;
- **Equity** with regard to cost burden and benefits accrued across income groups, different vehicle classes, and jurisdictions;
- **Economic efficiency**, with particular emphasis on efficiency in pricing;
- **Political and popular acceptability**; and
- **Technical feasibility.**

Each dimension is described in somewhat greater detail below, based on recent work done by Cambridge Systematics, Inc., for NCHRP Project 24(49), “Future Financing Options to Meet Highway and Transit Needs,” and published as *NCHRP Web-Only Document 102*.⁷⁵

Revenue Yield

Revenue yield is the single most important criterion in pursuing revenue sources for public transportation. Revenue yield measures whether the funding source can provide a significant level of revenue given the expenditures required. Revenue yield should be both adequate and stable. “Adequacy” refers to present and future revenue in comparison with needs for current and projected expenditures. In addition to being adequate, resources under evaluation should be highly predictable in generating revenue. “Stability” refers to whether there are uncertain revenue fluctuations that can impact an agency’s ability to manage resources. Enactment of taxes and fees for any public investment is difficult at best. If the effort is to be made, it should be focused directly on achieving adequate, predictable, and reliable revenue yields.

Cost Efficiency

Cost efficiency refers to maximizing benefits in relation to use of resources. Related considerations include “administrative cost” considerations in collecting the tax or fee; “compliance costs” passed on to taxpayers; and the potential for, and scale of, evasion and enforcement.

Equity

Equity generally refers to the fairness of the tax burden among different economic groups. Theoretically, a tax burden should be commensurate with one’s ability to pay or with the benefits received. User taxes, such as ones used to fund transportation, are somewhat less likely to have issues of equity with regard to income level. Equity concerns about the fairness of relative user fee payments by various types of vehicles have been a major source of debate and conflict in highway taxation. A specific highway-industry set of “highway cost allocation” procedures for attributing highway costs among vehicle types has grown up around the issue of equity in highway user fees.

⁷⁵ Cambridge Systematics, Inc., Mercator Advisors, LLC, Pisarski, A. E., and Wachs, M. *NCHRP Web-Only Document 102: Future Financing Options to Meet Highway and Transit Needs*. Transportation Research Board of the National Academies, Washington, D.C., December 2006.

Table 4.2. General advantages and disadvantages of traditional local and regional public transportation funding sources.

Traditional Mechanisms	Advantages	Disadvantages
General Revenues	<p>Transit has benefits that are spread broadly across community and across users and non-users.</p> <p>Typically requires no legislative action.</p>	<p>Subject to annual appropriation/budgeting process.</p> <p>Used to fund other local public services, which may have priority over transit.</p>
Sales Taxes General sales taxes	<p>Broad tax base; generally produces high revenue yields for a low marginal tax rate.</p> <p>Keeps pace with inflation.</p> <p>If already in place, very low cost for adjusting rates.</p> <p>Moderately equitable in that individuals of comparable means pay roughly the same amount of tax.</p> <p>All transportation system users pay, including commuters/visitors.</p> <p>Transit is linked to economic health.</p>	<p>Revenues variable with changes in the economy, negative as well as positive.</p> <p>Considered somewhat regressive; burden is higher on poorer households although benefits of transit may be greater.</p> <p>Possible complications in the geographic limits of taxation and services delivered (users can be from outside the taxing jurisdiction).</p> <p>Must have state legislative authority in place for local enactment.</p> <p>Typically require voter approval for local enactment.</p>
Motor-vehicle-related sales taxes	<p>Strong historic growth in yield from increases in ownership and use.</p> <p>More progressive than general sales taxes.</p>	<p>Significant potential for decline with economic downturns.</p> <p>Often difficult to divert from general funds.</p> <p>Revenues may decline in future with shifts away from petroleum-based vehicles.</p>
Property Taxes	<p>All households and businesses must pay.</p> <p>Generally a broad tax base.</p> <p>Revenues are generally not impacted dramatically with changes in the economy.</p> <p>Indexed for inflation (but only in property values).</p> <p>Relevant to and allowed for transit investment as a basic public service.</p> <p>Ease of administration and low evasion.</p> <p>Low compliance cost.</p>	<p>Variable political and public acceptability.</p> <p>Moderately regressive; e.g., some households could be property-rich but income-poor (e.g., retirees).</p> <p>Revenue growth may be limited by tax limitation statutes in some areas.</p> <p>Susceptible to potential yield swings from periodic speculation and housing cycles.</p>
Contract/Purchase-of-Service Revenues	<p>Allows pricing to be tailored to service levels and their contingencies.</p> <p>Terms typically reviewed/revised on a regular schedule.</p>	<p>Negotiated rates may or may not cover fully allocated costs.</p>

(continued on next page)

Table 4.2. (Continued).

Traditional Mechanisms	Advantages	Disadvantages
Lease Revenue	<p>Maximizes return/revenue to assets.</p> <p>Periodically responsible for response to markets.</p> <p>Integrates transit with other community interests.</p>	<p>Marginal opportunity/yield except to largest systems.</p> <p>Requires market and lease transaction capacity.</p>
<p>Vehicle Fees (Title, registration, tags, and inspection)</p> <p>Variable fees</p>	<p>Revenues are generally not impacted by changes in the economy.</p> <p>Allow for revenue collection from varied vehicle classes, differential value (i.e., a form of personal property tax) or vehicles using alternative fuels, etc., without establishing new collection mechanisms.</p> <p>Already in place; little added administrative cost for revenue increases.</p> <p>Revenues adjust to inflation.</p> <p>Ad valorem fees are more progressive.</p>	<p>Flat fees are regressive. Potential for inequities among vehicle classes.</p> <p>Not indexed for inflation.</p> <p>Limited base; Only households that own vehicles pay.</p> <p>Relation to transit is often not acknowledged, e.g., drivers may benefit from transit improvements that reduce congestion.</p> <p>Typically require legislative action to change or increase rates, structure.</p>
Advertising Revenues	<p>Increasing range of techniques and technologies available to expand reach, impact.</p> <p>Can be brokered through private agents.</p>	Low yield.
Concession Revenues	<p>Revenue can be optimized by charging a premium based on location.</p> <p>Can be adjusted to reflect market conditions.</p>	Low yield, not traditionally a major revenue generating tool.
Common Business, Activity, and Related Sources		
Employer/Payroll Taxes	<p>Ensures that commuters and businesses contribute to and support transit.</p> <p>Ease of compliance and administration.</p> <p>Responsive to inflation.</p>	<p>Commuters have no say within the local government that imposes the tax.</p> <p>May provide incentive for businesses to locate outside the taxing jurisdiction.</p>
Car Rental Fees	<p>Easy to gain public support; most residents not subject to the tax.</p> <p>Revenues may be impacted by economic changes.</p> <p>Responsive to inflation if fee placed on value.</p>	<p>People paying the tax have no say within the local government imposing the tax.</p> <p>Narrow tax base.</p>
Vehicle Lease Fees	<p>Responsive to inflation if fee placed on value.</p> <p>Assures collection with regard to leased vehicles.</p>	<p>Narrow tax base.</p> <p>If not ad valorem taxes, not responsive to inflation.</p> <p>Only households that lease vehicles pay.</p>

Table 4.2. (Continued).

Traditional Mechanisms	Advantages	Disadvantages
Parking Fees	Ensures that commuters contribute/support transit services that benefit them. Highly progressive.	Narrow tax base.
Realty Transfer Taxes/Mortgage Recording Taxes	New property owners pay a share of transit costs provided in the area. Highly related to economic activity. Responsive to inflation.	Narrow tax base. Considered moderately regressive. Susceptible to potential yield swings from periodic speculation and housing cycles.
Corporate Franchise Taxes Oil company franchise taxes Long line taxes <i>(Franchise tax on transportation/transmission)</i>	Ensures that employers contribute/support transit services that benefit them. Progressive in comparison to other options. More public acceptability since the tax is imposed on petroleum companies Same attributes as for motor fuel tax based on value Related to economic activity.	May provide incentive for businesses to locate outside the taxing jurisdiction. Taxes usually passed on to customers Disadvantages similar to those for motor fuel taxes based on value. Likely small yield.
Room/Occupancy Taxes	Politically attractive; only visitors pay the tax. Generally based on value; inflation sensitive.	People paying tax have no direct say in the local government that imposes the tax.
Business License Fees	Assures that businesses bare a portion of transit costs.	Low yield unless set at very high rates. May induce businesses to locate elsewhere.
Utility Taxes/Fees	All households pay. Has proven to be a useful alternative funding source in areas where scale of the economy and sales taxes may not provide a broad tax base to support transit	Revenues from some utilities are impacted by energy conservation policies.
Income Taxes Individual and corporate	All households pay (except those with very low incomes). Progressive, directly related to income status. Broad tax base. Indexed for inflation.	Revenues may be affected during economic recession due to potential increases in unemployment. May be difficult to capture nonresident revenues.
Donations	No governmental actions necessary.	Not a stable revenue source. Extremely low yields.

(continued on next page)

Table 4.2. (Continued).

Traditional Mechanisms	Advantages	Disadvantages
Other Business Taxes Impact fees/beneficiary charges	Direct relationship to transit and ease of access; new development pays for needed transportation improvements to support increased demand. Higher revenue yield in high-growth areas.	Low public acceptability; subject to legal challenges.
Motor Fuel Taxes	Ease of collection/administration. Low compliance cost and low evasion. Directly related to transportation system usage. Can be multimodal in dedicated use. Steady growth rate over time. No decline in fuel sales expected over two decades. Lend themselves to indexing to avoid declines due to inflation effects.	Have been shown to be inadequate by themselves to meet future needs. Moderately regressive, although low-income buy less gasoline. Yield negatively impacted by continued focus on per gallon taxes, future improvements in fuel efficiency, introduction of alternative fuels. Geographic issue; fuel can easily be purchased outside taxing jurisdictions. Use for transit sometimes considered a “diversion” when benefits of transit to overall travel are not acknowledged. Revenues are constitutionally or statutorily dedicated to highways in many states.
Fixed rate	Same as above.	Same as above. Without indexing, real yield declines over time.
Adjustable rate	Same as for fixed rate. Responds to fuel price changes. Responsive to inflation.	Same for all types.
Sales Tax on Fuels	Same as for fixed rate. Responds to fuel price changes. Responsive to inflation.	Same for all types.
“Sin” Taxes Cigarette taxes Alcohol taxes Lottery revenues/gambling taxes	Fees collected from those who voluntarily engage in gambling. Visitors as well as locals contribute.	Narrow tax base. Lottery fees are strongly regressive. Gambling may cause social and personal problems.

Sources:

Cambridge Systematics, Inc., Mercator Advisors, Pisarski, A. E., and Wachs, M., *NCHRP Web-Only Document 102: Future Financing Options to Meet Highway and Transit Needs*. Transportation Research Board of the National Academies, Washington, DC, December 2006.

Goldman, T., Corbett, S., and Wachs, M., *Local Option Transportation Taxes in the United States, (Part One: Issues and Trends)*. UCB-ITS-RR-2001-3. Institute of Transportation Studies, University of California, Berkeley, CA, March 2001, pp. 21–24.

Price Waterhouse LLP, Multisystems, Inc., and Muncle & Associates, Inc. *TCRP Report 31: Funding Strategies for Public Transportation—Volume 2: Casebook*. Transportation Research Board, National Research Council, Washington, DC, 1998.

Economic Efficiency

Economic efficiency in transportation is intended to reflect whether the marginal cost to all travelers and society as a whole of an additional trip taken is captured in the price paid by the trip maker. The concept is most familiar in congestion pricing, sometimes referred to as “value pricing.” The underlying issue in this research project is to what degree potential additional revenue sources enhance this balance or economic efficiency.

Political and Popular Acceptability

Political and popular acceptability is on the one hand a combination of all the other criteria and, on the other hand, a stand-alone factor in the decision process to employ new revenue schemes. Generally, a revenue source is acceptable when it is politically palatable on the key, or most salient, criteria. This implies that the revenue source is adequate, fair, simple, effective, efficient, and easy to administer. While meeting the most important criteria is a necessary step, it may not be sufficient to obtain political acceptability, i.e., garner sufficient popular or legislative support to be implemented. The nature of the action required to implement new sources is also a key factor in political and popular acceptability, e.g., pursuing legislative action or passage of a binding public referenda at the state or local level is frequently more challenging politically than achieving changes in regulatory, administrative, or budgetary practices.

Technical Feasibility

Technical feasibility reflects how advancements, including geographic information systems (GIS), global positioning systems (GPS), and electronic transfer mechanisms, may reduce the cost of administration and compliance in a broad array of areas, including taxation generally and transportation-related taxation and revenue handling, specifically. These technologies enable a more simple, straightforward, and accurate allocation of costs, but they can also pose difficulties for traditional methods of funding.

4.5 Performance of Tax and Fee Mechanisms

The extent to which alternative tax and fee mechanisms satisfy the criteria described above will vary from one jurisdiction to another. Broad qualitative observations can be made, however, about the degree to which each of the potential sources of local or regional funding satisfies the criteria. These general observations are presented in Table 4.3, in which **H** indicates strong performance, **M** indicates modest performance, **L** indicates marginal performance, and **V** indicates variable performance. As before, both motor fuel taxes and “sin” taxes have been included in Table 4.3 because of the widespread use of these taxes as state, regional, and/or local revenue sources, although not typically for public transportation.

Table 4.3. Performance of alternative local and regional public transportation funding sources.

Source	Revenue Yield	Cost-Efficiency	Equity	Economic Efficiency	Political, Popular Acceptance	Technical Feasibility
	<i>Adequacy, Stability</i>	<i>Administrative, Compliance Cost Evasion</i>				
Traditional Revenue Sources						
General Revenues	H	H	L	M	M	H
Sales Taxes	H	H	L	M	M	H
Property Taxes	H	H	L	M	M	H
Contract/ Purchase-of- Service Revenue	L	L	L	L	H	H
Lease Revenue	L	L	L	L	H	H
Vehicle Fees	H	H	M	M	L	H
Advertising Revenues	L	L	L	L	H	H
Concession Revenues	L	L	L	L	H	H
Common Business, Activity, and Related Sources						
Employer/ Payroll Taxes	H	H	M	H	L	H
Car Rental Fees	M	H	L	M	M	H
Vehicle Lease Fees	M	H	L	M	M	H
Parking Fees	M	H	L	M	L	H
Realty Transfer Taxes/Mortgage Recording Fees	M	H	L	L	M	H
Corporate Franchise Taxes						
Oil	H	H	M	M	M	H
Long lines taxes	M	H	L	M	M	H
Room/ Occupancy Taxes	L	M	L	L	H	H
Business License Fees	L	M	M	M	L	M
Utility Taxes/Fees	M	H	L	L	L	H
Income Taxes	H	H	H	L	L	H
Donations	L	L	L	L	H	H
Revenue Streams from Projects						
Joint Development	L	L	L	L	H	H
Value Capture	L	L	L	L	M	H
Beneficiary Charges	L	L	M	L	M	H
Special Assessment Districts	L	L	M	L	M	H

Table 4.3. (Continued).

Source	Revenue Yield	Cost-Efficiency	Equity	Economic Efficiency	Political, Popular Acceptance	Technical Feasibility
	<i>Adequacy, Stability</i>	<i>Administrative, Compliance Cost Evasion</i>				
Community Facility Districts/TDDs	L	L	L	L	M	H
Impact Fees	M	M	M	M	M	H
Tax Increment Financing	M	L	L	L	M	H
ROW Leases	L	H	L	L	H	H
Airport Passenger Facility Charges	M	H	L	L	M	H
“User” or “Market-Based” Sources						
Tolling	V	H	L	M	L	H
Congestion Pricing	V	M	L	H	L	H
Emission Fees	V	V	L	H	L	L
VMT fees	V	V	L	H	L	M
Financing Mechanisms						
GO Bonds	H ^a	H	L	L	H	H
PABs	H ^a	H	L	L	L	H
Tax Credit Bonds	M ^a	H	L	L	L	H
GANs	H ^a	H	L	L	M	H
GARVEEs	H ^a	H	L	L	M	H
RANs	H ^a	H	L	L	M	H
COPs	M ^a	H	L	L	M	H
SIB Loans	H ^a	H	L	L	M	H
Other, Less-Frequently Used Taxes and Fees						
Motor Fuel Taxes	H	H	M	M	L	H
“Sin Taxes” (Cigarettes, alcohol, and gambling)	M	H	L	L	M	H
Battery Taxes	L	L	L	L	L	M
Road Utility Fees (Access charges)	M	M	L	L	L	M
Airport Passenger Facility Charges	M	M	L	L	M	H

Key:

- H Strong Performance
M Modest Performance
L Marginal Performance
V Variable

^aNet revenues may be negative but projects are delivered more quickly.

SECTION 5.0

Enacting New Funding Mechanisms for Public Transportation

5.1 Steps for Successful Implementation of New or Enhanced Funding Mechanisms

Over the past decade or so, important lessons have emerged from around the country on the steps that are necessary to successfully propose and enact new or enhanced funding mechanisms for public transportation. Legislative initiatives and popular referenda require the same basic steps to succeed in implementing new or enhanced revenue sources. These steps are the following:

- **Develop a consensus on the scope of current and future transit needs and on the importance of actions to address them.**

Public transportation needs and funding should not be separated. The perception of a need is the most powerful motivator for funding decisions. The expression of needs must include not only a clear statement of the benefits of the investment, but also a statement of the various costs of not making the investment. In order to trigger broad-based support for new funding for transit investment, a consensus must be established that transportation problems exist that, if unaddressed, will have broad and unacceptable consequences for citizens, business, and industry.

Typically, a wide-ranging dialogue is needed on the scope and nature of the transportation challenges and on the consequences of not acting, i.e., a coordinated effort is needed, as described in the later steps, to educate various stakeholders and community leaders through a comprehensive public education campaign that draws on complete and credible information and analysis.

- **Develop a specific plan and program of investments for which additional funding is needed and demonstrate the benefits that are expected from the proposed investments.**

For a plan or program of investments to be funded, legislators, community leaders, and voters must be confident in the specific investments proposed, the benefits expected, and the rationales for each element. Experience has shown that, until recently, legislators and/or voters have been reluctant to support new funding initiatives unless they include the following:

- Mixes of improvement types, e.g., highway, transit, and non-motorized improvements;⁷⁶
 - Specific improvements and projects;
 - Balance (however “balance” is defined locally, e.g., resources directed to local as well as regional priorities and problems) in the location of improvements;
 - Clear rationales, including the expected benefits as well as the consequences of failing to act; and
 - Sound arguments and documentation to deflect issues that critics may raise over the proposed investment program and/or funding strategy.
- **Identify clearly established roles, responsibilities, and procedures for executing the funding and investment strategy and implementing the proposed improvements.**

Intergovernmental roles and relationships must be clearly spelled out with regard to how investment decisions are to be made, who and what organization(s) are responsible for execution of the program, and how agencies and organizations are to partner for the program to succeed. There must be no ambiguity, and the legislators and community leaders and citizens must have trust in the agencies and processes to be used in committing the new resources.

In addition, actions must be taken—legislative, regulatory, and administrative—to ensure that the respective agencies and organizations have adequate authority to collect, expend, and encumber revenues; incur debt; contract;

⁷⁶ More recently, legislators and voters have enacted, or are poised to enact, substantial independent transit-specific funding initiatives, including measures in Seattle, San Francisco, and Denver.

and undertake other activities necessary to fully execute the program. State legislative actions may be necessary as well as legislative actions by local jurisdictions. Memorandums of Understanding (MOUs) and other formal mechanisms may be necessary to ensure that clear lines of authority and effective procedures are in place to budget, obligate, and oversee the expenditure of new funds.

- **Describe the funding sources in detail and provide the rationales for their use.**

There may be several funding sources for consideration in increasing transit investment. Selecting the most appropriate source(s) requires a thorough evaluation of the alternatives across a number of key criteria (as previously noted) and an understanding among stakeholders, citizens, and community and political leaders of the rationales for pursuing particular sources.

- **Design and carry out a public education and advocacy plan and campaign.⁷⁷**

The act of raising new funds for transportation investment (or any other worthy public purpose) involves the equivalent of a political “campaign” since it is likely that formal public approval will be required at some point, either through referenda or through the legislative or administrative actions of elected officials.

As with any campaign, both sustained leadership and adequate funding are needed. Typically, campaigns rely on regular polling to test public response while problems, plans, rationales, and funding alternatives are presented and discussed. In addition, a full range of communications strategies and products are needed to ensure that the public education process is comprehensive and continuous.

In successful cases of regional transportation funding initiatives in Houston, San Diego, St. Louis, and Seattle, public education and advocacy efforts have shared several characteristics that should be considered in any effort to raise new transit or transportation revenues. Among the most important of these characteristics are the following:

- Sustained involvement of effective leaders, with an emphasis on participation by influential individuals and community leaders from outside the ranks of elected officials;
- Sustained support from key elected officials at all levels;
- Formal involvement of stakeholders and citizens representing the broadest array of interests and organizations;
- Creation of formal coalitions or organizations to coordinate, direct, and channel resources and advocacy activities;

- Financial support from nongovernmental sources in amounts of several hundreds of thousands of dollars to underwrite a sustained, multiyear campaign;
- Participation of experienced public relations and legal professionals to advise and conduct elements of the campaign;
- Extensive and continuous monitoring of public opinion to help shape the investment program, identify the sources of funds, and build the institutional structure to be used;
- Preparation to both understand and rebut arguments from opponents; and
- Preparation of a wide range of activities and products for use in presenting issues and proposals to the public, including both electronic and print media strategies, a range of public education materials, and spokespersons and materials needed to make regular presentations to the public and various interest groups.

- **Develop sustained leadership and demonstrable, sustained support.**

Every campaign requires enlightened, sustained, and active leadership from individuals and organizations that are recognized as community leaders. Typically, this means that champions for the initiative must be recruited from business, industry, and politics. It also means, as mentioned above, constant, up-to-date understanding of popular sentiment around the issues involved and the proposals being considered and advocated.

Leadership plays a key role in arriving at final funding proposals and investment plans, advocating those proposals actively in the community, and responding to criticisms that are inevitably raised when new public revenue-raising initiatives or specific projects are proposed.

- **Lay out a clear and reasonable timetable.**

Transportation funding initiatives typically take many months to plan, detail, promote, and enact. A typical timetable may involve 2 years or more, depending on the scope of the issues involved, the knowledge of community leaders and the electorate, “friction” in the political arena over public service priorities and revenue raising, and the potential for bipartisan consensus building and decision making.

It also is not uncommon for a new transit or transportation funding initiative to fail on the first attempt to garner public approval. While the percentage of transportation funding initiatives approved in recent years has risen, there are always examples of initiatives turned down at the polls largely because one or more of the steps noted above was not carried out effectively.

Researchers at the Institute of Transportation Studies at the University of California at Berkeley sharpened the focus

⁷⁷The Center for Transportation Excellence provides useful information on advocacy strategies and techniques at <http://www.ctfe.org>.

further on essential steps in enacting new local and regional revenues for transportation in their 2005 report *Local Transportation Sales Taxes: California's Experiment in Transportation Finance*. In the study, they concluded the following:

The four most important factors in the popularity of LTST's [Local Transportation Sales Taxes] . . . are . . . specific lists of transportation projects, control of the revenues by the counties in which the tax is collected, finite lives [fixed term for revenue-raising authority and collection], and direct approval by the voters.⁷⁸

5.2 Arguments for Increased Funding for Public Transportation

In recent years, greater attention has been paid to the rationales used to support initiatives aimed at expanding the funding for public transportation. The heightened attention is, to a large degree, emerging from the realization that (1) local, state, and federal governments have a wide range of shared goals and (2) increased investment and use of public transportation yields benefits that serve these goals.

In planning and carrying out steps to enact new local and regional revenue sources for transit, it is crucial to understand and promote these benefits, recognizing that the importance of each will vary from community to community.

There is considerable documentation of the benefits of public transportation at all levels. Both APTA and CFTE, among other organizations, have exhaustive informational materials and research on the benefits of transit that can be used to fashion effective arguments for increasing support for transit funding initiatives.

These arguments are best crafted around individual communities' specific circumstances, needs, and goals. They must, however, appeal to a variety of stakeholders, including households, business and industry, and government agen-

cies and programs. Public transportation benefits include the following:⁷⁹

- **Increased energy efficiency** through reduced motor fuel consumption and reduced dependence on foreign oil;
- **Enhanced environment** through reductions in motor vehicle emissions—including carbon monoxide, carbon dioxide, volatile organic compounds (the precursors of smog), nitrogen oxide, and particulate matter—and reduced consumption of open space;
- **Reduced growth in traffic congestion** from ever-increasing VMT;
- **Increased freedom and personal mobility** through increased transportation choices for all travel markets: choice riders, commuters, and those who may be transportation disadvantaged;
- **Increased access to opportunity**, including improved access to jobs, to essential social and human services, to employment, to education, and to training opportunities as well as to shopping and personal business;
- **Increased economic stimulus**, including job creation, business sales, profitability and competitiveness; rising land and property values; and neighborhood revitalization; all of which yield increased revenues to every layer of government—local, state, and federal;
- **Increased safety and security** through reductions in motor vehicle incidents and accidents and enhanced options in response to human-made or natural disasters; and
- **Increased personal health and well-being** through greater emphasis on and opportunity for walking and nonmotorized trip making amid more efficient development patterns.

The arguments and resources materials highlighted above are being combined with observations on the advantages and disadvantages of specific funding sources (noted in Section 4.0) by transit systems and advocates around the country and tailored in support of virtually all new local funding initiatives.

⁷⁸ Crabbe, A., et al. *Local Transportation Sales Taxes: California's Experiment in Transportation Finance—Detailed Research Findings*. University of California Transportation Center, Berkeley, CA, 2002, p. 34.

⁷⁹ Sources for this material on transit benefits are <http://www.apta.com> and <http://www.cfte.org>.

SECTION 6.0

Local and Regional Funding Database and Its Use

The database accompanying this report (available at http://trb.org/news/blurb_detail.asp?id=9599) provides additional background information on the local and regional funding sources in use by the public transportation systems interviewed for this research. Below is a brief synopsis of the data elements contained in the database. A more in-depth user manual developed for each user is also available on the TRB website at http://trb.org/news/blurb_detail.asp?id=9599.

For each public transportation system, information on several factors was captured in a database, including the following:

- Urban or rural character of the service area or region;
- Transit agency organizational structure, e.g., municipal/county unit, regional authority, or for-profit/non-profit;
- Special characteristics of the transit market, e.g., tourist destination, college/university community, or social service center;
- 2000 urbanized/urban/rural population;
- Types of transit services operated, e.g., bus, demand response, or light/heavy/commuter rail;
- Peak bus fleet size;
- Annual revenue vehicle miles and hours operated;
- Annual ridership;
- Annual operating and capital expenses;
- Farebox recovery ratio; and
- Recent major service improvements.

For each funding source noted by a system, additional information was compiled on the following:

- Type and nature of the funding source;
- Number and type of jurisdictions using the funding source;
- Base, rate, and annual yield of the funding source;
- Extent of dedication to transit;
- Use for capital investment and/or operating expenses;
- Political or policy basis for the tax/fee, e.g., statutory (local and/or state) or administrative action;

- Length of time the tax/fee is authorized;
- Date of first enactment and latest increase/extension;
- Availability of debt or bonding authority, applicable limits, and sources committed to service debt; and
- Reasons for enacting the tax/fee and perceived advantages and disadvantages.

6.1 Access to the Resource Information

The information contained in the database can be accessed as follows:

- First, the database provides a series of standardized reports that cross tabulate information on local and regional funding sources with characteristics of the individual transit agencies. These include reports on individual **funding sources** sorted by population, fleet size, organizational type, and mode as well as reports that provide an aggregated listing of **systems** organized by each funding source type and its related rate and yield.
- Alternatively, interested users are also invited to do their own queries of the material based on their ability to work within the database system (MS Access).

6.2 Updating Local and Regional Public Transportation Funding Resource Material

Local and regional transit funding initiatives are being undertaken on a continuing basis around the country. As the interviews for this project suggest, there are sources that are widely used throughout the industry by systems of varying size, particularly sales taxes and property taxes. The explanation for heavy reliance on these sources is that they are broad-based sources; they yield the largest and most predictable revenue streams; and they generally have proven to be broadly acceptable to the public and elected officials.

Nonetheless, a wide variety of other funding sources are being explored and enacted in an equally wide variety of contexts and circumstances. In the face of increasing interest in expanded transit services and the continuing rise in service costs, the search for new or enlarged funding sources will undoubtedly continue. To keep the information presented here and on the accompanying database current, there are several strategies that might be employed, including the following:

- **Capturing information from existing reporting on new funding initiatives.** With limited effort, the annual work and online reporting of CFTE on new state and local transit funding initiatives and/or referenda could be tracked, and new information could be added to the current interview data. In some cases, follow-up inquiries might be necessary to establish the full range of information desired. Simply adding this information to Table 3.2 of this report, which shows the systems using specific sources in various population groups, would be a valuable enhancement.
- **Regular surveying of state DOT transit managers and state transit association directors.** Both of these groups of people proved invaluable to this research in identifying new or unique sources of local and regional funding around the country. These people will likely be aware of most of the future local and regional funding initiatives as well. These two groups, through AASHTO and APTA, might be polled or surveyed on a regular basis to identify new local and regional sources that are under consideration or have been enacted. At the very least, these activities could serve as a starting point for expanding current information on a regular basis.
- **Collaboration with local public interest organizations.** The transit industry's interest in local and regional transit funding sources is shared by a number of other major national public interest organizations representing local governments and officials, including the following:

- The National League of Cities (NLC),
- The U.S. Conference of Mayors (USCM),
- The National Association of Counties (NACo), and
- The Association of Metropolitan Planning Organizations (AMPO).

In addition, other national organizations are likely to have interest in this topic and/or information on funding sources, e.g., the American Public Works Association (APWA), the Municipal Finance Officers Association (MFOA), the International City/County Management Association (ICMA), as well as a host of state-based organizations.

The possibility of collaboration among these groups to figure out how to share available information and the most appropriate ways to do this sharing should be explored.

- **Case studies through TCRP synthesis projects.** Historical detail on why specific funding sources were pursued and how is quickly lost with turnover in staff as well as policy-makers. It may be important, therefore, to periodically frame inquiries into and analyses of the “whys” and “hows” of selected local and regional funding initiatives. This inquiry and analysis could be accomplished through a series of structured case studies that seek to document circumstances and processes involved in securing local and regional funding in greater than usual detail. These case studies could be the subject of periodic TCRP syntheses, as is presently done in the synthesis series with a number of key topics.

Now that TRB has provided the initial information through this project's research, it is logical that responsibility for maintaining up-to-date information should fall to the transit industry. A model for this might be the procedure that evolved for assembly and updating of comprehensive information on the structure, content, and scope of state transit funding programs. This procedure began with TCRP's support of the initial data development, guided jointly by APTA and AASHTO; long-term data updating and assembly has been carried out in 2-year cycles by the U.S. DOT's Bureau of Transportation Statistics (BTS).

APPENDIX A

Public Transportation Systems Interviewed

Table A.1, Table A.2, and Table A.3 list the systems with which interviews were completed for TCRP Project H-34. The list of candidate systems was compiled based on the following:

- The research team's knowledge of varied local and regional funding arrangements,
- Recommendations from the TCRP Project H-34 Panel,
- Recommendations made by APTA State Affairs Committee members, including both state department of transportation transit program managers and state transit association managers,
- Recommendations from members of AASHTO's Standing Committee on Public Transportation (SCOPT), and
- Recommendations from state department of transportation MTAP representatives.

Interviews were completed with over 60 systems in 27 states covering every major region of the country as well as other systems and community organizations useful in assessing local and regional funding alternatives.

Table A.1. Interviews completed with rural and small urban systems.

	Rural and Small Urban Systems	State	Rural or Small Urban
1	Baldwin Rural Area Transit System	Alabama	Rural
	Eureka Springs Transit	Arkansas	Rural
	Fort Smith Transit	Arkansas	Small Urban
	Special Transit	Colorado	Small Urban/Rural
5	County Express	Colorado	Small Urban/Rural
	Unified Government Athens-Clark County	Georgia	Small Urban/Rural
	Greater Lafayette Public Transportation Corp.	Indiana	
	Iowa Northland Regional COG	Iowa	Rural
	Marshalltown Municipal Transit	Iowa	Small Urban
10	Harper County Public Transportation Services	Kansas	Rural
	Paducah Area Transit System	Kentucky	Small Urban
	Annapolis Transit	Maryland	Small Urban
	Van Buren Public Transit	Michigan	Rural
	Ontonagon County Public Transit	Michigan	Small Urban
15	St. Joseph Transit	Missouri	Small Urban
	Jefferson City Transit	Missouri	Small Urban
	Ottawa County Transportation Agency	Ohio	Rural
	Licking County Transportation Services	Ohio	Small Urban
	Big Five Community Services, Inc.	Oklahoma	Rural
20	Columbia Area Transit, Hood River County	Oregon	Rural
	Arrow Public Transit	South Dakota	Rural
	Advance Transit	Vermont	Rural
	Park City Transit	Utah	Rural
	Pullman Transit	Washington	Rural

Table A.2. Interviews completed with urbanized area systems (200,000 to 1,000,000 population).

	Urbanized Area Systems (200,000 to 1,000,000 population)	State
1	Transit Authority of River City (TARC), Louisville	Kentucky
	Mass Transportation Authority (MTA), Flint	Michigan
	Capital Area Transportation Authority (CATA), Lansing	Michigan
	Interurban Transportation Partnership (The Rapid), Grand Rapids	Michigan
5	Coast Transit Authority-Biloxi-Gulfport	Mississippi
	Capital Area Transportation Authority (CDTA), Albany	New York
	Central New York Regional Transportation Authority (CENTRO), Syracuse	New York
	Greater Dayton Regional Transit Authority	Ohio
	Central Oklahoma Transportation and Parking Authority, Oklahoma City	Oklahoma
10	Lehigh and Northampton Transportation Authority (LANTA), Allentown	Pennsylvania
	Chattanooga Area Regional Transit Authority	Tennessee
	Capital Metro, Austin	Texas
	Corpus Christi Regional Transportation Authority	Texas
	CitiBus, Lubbock	Texas
15	UTA Transit Authority (UTA), Salt Lake City	Utah
	Hampton Roads Transportation District Commission	Virginia
	Spokane Transit Authority	Washington

Table A.3. Interviews completed with urbanized area systems in areas with population over 1,000,000.

	Urbanized Area Systems in Areas with Population over 1,000,000	State
1	Bay Area Rapid Transit Authority (BART), San Francisco	California
	San Francisco Municipal Transportation Agency (MUNI), San Francisco	California
	Denver Regional Transportation District	Colorado
	Central Florida Regional Transportation Authority, Orlando	Florida
5	Miami Dade Transit, Miami	Florida
	Hillsborough Area Regional Transit Authority (HART), Tampa	Florida
	Regional Transportation Authority (RTA), Chicago	Illinois
	Chicago Transit Authority	Illinois
	Chicago Region - PACE	Illinois
10	Chicago Region - Metra	Illinois
	Metro Transit, Minneapolis-St. Paul	Minnesota
	SouthWest Transit Commission	Minnesota
	Bi-State Development Agency (Metro), St. Louis	Missouri
	St. Clair County Transit, Illinois	Missouri
15	Regional Transportation Commission of Southern Nevada (RTC), Las Vegas	Nevada
	New York Metropolitan Transportation Authority (MTA), New York	New York
	Tri-County Metropolitan Transportation District of Oregon (TriMet), Portland	Oregon
	Metropolitan Transit Authority of Harris Co.	Texas
	Northern Virginia Transportation Authority	Virginia
20	Potomac-Rappahannock Transportation Commission	Virginia
	King County Metro, Seattle	Washington
	Sound Transit, Seattle	Washington

APPENDIX B

Transit Agency Interview Guide

Through the interview process, attempts were made to gather the following information elements for inclusion in the database that accompanies this report. Agency “Profile” data were extracted from the then current National Transit Database (2006) for systems reporting from Urbanized Areas. Profile data for systems serving Small Urban and Rural areas were requested during interviews and are generally current as of the date of the interviews (2007).

Funding source data were gathered during the interviews and generally are current as of the date of the interviews (2007).

Profile Information

1. Agency name
2. UZA name or city
3. Interviewee name
4. Interview date
5. 2000 population
6. System size, operating characteristics, and trends
 - Modes (NTD definitions)
 - Fleet size (bus peak requirement)
 - Annual revenue vehicle-miles
 - Annual revenue vehicle-hours
 - Annual ridership
 - Annual operating budget

- Annual capital budget
- Recent major service improvement initiatives

Local and Regional Funding Source Information

7. Specific local/regional funding sources/revenue streams in use?
8. Dedicated to transit or shared for other uses?
9. For each source noted, attempts were made to compile the following information:
 - Why was source selected (key factors; was there analysis of alternatives? Documentation?)
 - Rate (in the case of taxes)
 - Base (who, what is taxed; what geographic area; exemptions, if any)
 - Yield (how much money does this source yield annually for transit)
 - Use of revenues
 - Capital
 - Operations
 - Other uses
 - Latest date enacted
 - Term of the tax (*years effective without reauthorization*)
 - Type of authorization/enactment (*state statute; local legislation; popular referenda, etc.*)
 - Pros/cons; advantages/disadvantages of the source
 - Key issues in enactment, use

APPENDIX C

Observations from the National Transit Database

Each year through the NTD, FTA collects operating and financial data, including the sources of funds used for operating and capital expenditures for systems serving both urbanized areas. Over 600 agencies in 450 urbanized areas over 50,000 population report annually. In addition, reporting is now required from rural systems receiving federal funds in FY 2006. NTD data and guidance for reporting can be found at <http://www.ntdprogram.gov/ntdprogram/>.

NTD funding information is reported in four major categories:

- Directly generated funds;
- Local government sources;
- State government sources; and
- Federal government sources.

Transit systems are required to report the original source of all funding even when the funding is passed through another agency. For example, FTA Section 5307 funding that is administered and distributed by state departments of transportation to small urbanized areas are to be reported as federal funds.

The category of **directly generated funds** is perhaps the most unclear of the categories reported and is meant to capture funds obtained from nongovernmental sources, including:

- **Revenues earned by the transit system as a business entity providing passenger service.** These revenues typically are earned directly as the result of providing passenger service, e.g., fare revenues, or as auxiliary revenues that are earned by activities closely related providing passenger service, e.g., bus advertising, station concessions, and parking fees at stations;
- **Revenues earned by the transit system *not* closely related to providing passenger service.** These funds are categorized as nontransportation revenues and, in many cases, are revenues that could be earned by business entities not involved in providing passenger service. Examples include invest-

ment income, incidental rental revenues earned from unused equipment and land, donations, grants received from private foundations, and development fees; and

- **Taxes, tolls, and fees that are imposed by transit agencies that are independent political entities.** Some transit systems are organized as independent political subdivisions with their own taxation authority. They can earn funds from taxes, tolls and fees that they are specifically authorized to enact to generate revenue to support transit programs and projects. These are funds dedicated to transit at their source; they can only be used for transit. Other transit systems are a part of local or state government, as noted in an earlier section. The revenues to the transit systems raised through the taxing authority of the grantor governmental units are reported as local or state funds.

Within the directly generated category are the following sources:

- Revenues earned by the transit system as a business unit;
- Dedicated taxes—sales, property, income, gasoline, other;
- Bridge, tunnel, and highway tolls;
- High occupancy/toll lane tolls; and
- Other dedicated funds.

In 2002, NTD started collecting information on tax rates for the dedicated tax sources. This requirement was dropped 2 years later because of reporting problems. Currently, no information is reported to the NTD on tax rates.

At a very general level, funding data in the NTD provide a reasonable picture of the mix of local funding sources. However, the reporting categories are broad and do not provide information on key characteristics or implementation details such as the tax base, rates, yield or fluctuations, or stability under varied economic conditions. Also, the publicly available NTD data do not provide information on mechanisms that fall into the “Other Dedicated Funds” category that might be new or innovative.

Experience also suggests there are interpretation errors and definitional confusion among local NTD reporters that lead to some incorrect reporting on funding information. Three problems have been observed:

- **Reporting of federal or state funding as local government funding from the general revenues.** This can occur, for example, when a transit system receives funding from the city’s human services department and believes that the funding came from the city’s general fund. If the transit system had checked the source of funding with the human services department, it may have found out that the funding came from a state or federal grant, a distinction that is of less consequence for this study;
- **Reporting of dedicated local funding as local government funding from the general revenue fund.** Like the problem noted above, this can occur when the transit system makes, but does not confirm, an assumption about the source of funding. The reporting of dedicated parking fees as a general revenue fund source is an example of this problem; and
- There is evidence that often times sources entered as “other” should have more properly been reported under the more specific funding categories, i.e., there remains some vagueness for reporters in the funding source definitions, while at the same time routine computer checks of data in “other” NTD categories are not effective.

Like other NTD reporting issues, it is unknown how widespread these problems are. Experience suggests that they are not common and probably will not affect aggregate findings from NTD analysis for this project.

However, this same experience suggests that it would be difficult to revise the NTD reporting system to collect more comprehensive information on local funding sources. It appears that inaccurate reporting of funds received from local governments will always be a problem. The transit systems have limited resources and do not have the incentives to properly research the sources of local funding. The NTD program also has limited resources and can only provide a general consistency review of the funding data reported.

Finally, access to and use of the NTD data are sometimes difficult. The data are presented in Excel spreadsheets and do not always follow the order of the data items used in the data forms. Also, sometimes, the explanation of uncommon or unique sources of funds is not provided because it is difficult to share responses in a public database.

Given these weaknesses, the NTD does not inform potential users fully on the characteristics, advantages, and disadvantages of alternative local or regional funding strategies, nor can it help guide informed consideration of specific sources. However, with these caveats, the 2005 NTD data provide a snapshot of what general sources of funding are in place at the local and regional level.

For overall **capital investment**, over two-thirds of local and regional funds for public transportation came from “other” sources. The NTD did not provide information on what these sources were except that they might include vehicle licensing and registration fees, communications access fees, surcharges and taxes, lottery and casino proceeds, and the sale of property and assets. The majority of these funds—\$1.2 billion—was reported by the New York MTA, however, and only nine other systems reported revenues in this category.

For overall **operating support**, after fares and earned income (55.4 percent), over two-thirds of the remaining local and regional revenues are from sales taxes (43.3 percent) and local general revenues (28.4 percent). “Other” sources (16.2 percent)—property taxes (5.6 percent), tolls, gas taxes, and income taxes—provide the balance (6.7 percent).

The large proportion of funds entered in the NTD as “other” sources provides another indication of the limited usefulness of the NTD as a tool in advancing consideration of new sources on the local or regional level.

Among the major features emerging from the national aggregate numbers are the following:

- The revenue mix for transit capital investment and for operations is distinctly different.
- Local capital investment is predominantly from “other” sources and sales tax revenues; and
- Transit operations are supported largely from fares, sales taxes, and local general fund revenues.

APPENDIX D

International Experiences with Local and Regional Public Transportation Funding

Outside the United States, long-standing philosophies of governance, intergovernmental roles, taxing philosophies, and traditions in public service delivery vary dramatically, making it difficult to draw lessons directly from comparisons of local and regional funding techniques. A concurrent study being conducted at the Massachusetts Institute of Technology (MIT) has noted, however, in the European Union a growing effort to “devolve” financial responsibility for public transportation to the regional and local level, reducing what has been substantial historic reliance on central governments for transit funding and finance.⁸⁰

The MIT study focused more on shifting intergovernmental roles, relationships, and authority (both operating and financial) than on specific sources of funding. Unfortunately, it defines and characterizes local and regional funding sources in a way that will be not be particularly useful to the TCRP H-34 project, e.g.:

- **Small discrete revenue streams**, including such things as bridge and tunnel tolls, parking taxes and fees, and congestion charges;
- **Mandated fare recovery ratios** (the rationale for which is to constrain demand for public funding);
- **Funding contracts**, largely between “sponsoring governments” and service providers, i.e., purchased services;
- **Formulas or revenue sharing** that, for the most part, refer to redistribution of taxes collected at the federal level and allocated to regions, and from regions to municipalities; and
- **Direct special taxes for public transportation** either levied by the authority or levied for exclusive use on transit services.

⁸⁰Antos, J., *Financial Devolution in Transport: How Do Others Do It, and Does It Work?*, Case Studies from Western Europe and North America, draft paper, Massachusetts Institute of Technology, Cambridge, Massachusetts, Undated.

Some information on specific transit funding sources at the local level has been identified from the MIT work, and supplemented by more current information obtained by team members:

- **Paris**—Syndicat des Transports d’Ile-de-France (STIF):
 - STIF is an umbrella “organizer” of public transportation in the Paris region, setting fares and guiding financial management for the Régie Autonome des Transports Parisiens (RATP), the major multimodal regional operating agency, Société Nationale des Chemins de Fer (SNCF), the national intercity rail operator, with branded commuter service in the region, and OPTILE, a suburban bus association;
 - A **regional payroll tax** accounts for roughly 50 percent of all STIF non-fare revenues and is dedicated to transit (Le Versement de Transport, or VT). The VT was created by national legislation in 1971 to provide transit funding across France; its maximum rate is set by the national government and it is collected from all firms with more than nine employees in municipalities over 10,000. In the future, the rate cap authority may be devolved to the Paris region, the Région-Ile-de-France. The VT currently provides 36 percent of all revenue for transit in the country; and
 - **Other “subsidies”** (unspecified) are provided by the national government (11 percent), municipalities (*departments*) (9 percent), Region-Isle-de-France (6 percent), and other sources (3 percent). As increased autonomy is developed by the national government to the regional level, ad-hoc funding by the national government for capital projects (e.g., LRT in particular) has been eliminated.
- **Barcelona**—Autoritat del Transport Metropolita (ATM):
 - The ATM is a regional consortium of 164 municipalities that provide transit serving the Region of Catalonia surrounding Barcelona and is responsible for coordinating operating and financial plans for the region. In the inner

- suburbs, a similar entity, Entitat Metropolitana del Transport (EMT) owns and runs bus and rail service; and
- Regional revenues come mostly from a value-added tax, or **VAT**, and **personal income tax**; local subsidies (sources not specified) account for 38 percent of revenues in the region and the proportion has been increasing in recent years.
- **Madrid**—Consortio Regional de Transportes de Madrid (CRTM):
 - CRTM is a voluntary consortium of 174 regional municipalities responsible for coordinating operating and financial plans for the region; it also owns the region’s major bus and rail providers as separate entities;
 - Local and regional nonfare revenues account for 50 percent of all revenues and are provided by the Region of Madrid (71 percent), the City Council of Madrid (17 percent), and from allocations of national personal income, VAT and business taxes; and
 - Local sources include unspecified personal income taxes, sales-type taxes, motor vehicle fees, and property taxes.
 - **Rome**—Agenzia per la Mobilità de Comune di Roma (ATAC):
 - ATAC contracts for all surface services and will soon contract for subsurface services as well;
 - ATAC’s revenues come from fares (28 percent), unspecified subsidies from the City of Rome (61 percent) and other nonfare revenues, including advertising (10 percent). A large share of the funding from Rome comes from “regional transfers” within the Region of Lazio and from City local real estate (property) taxes; and
 - ATAC also has authority to impose parking fees and congestion pricing.
 - **Toronto**—Greater Toronto Transit Authority (GTTA):
 - Since the elimination in the mid to late 1990s of provincial subsidies for transit, transit in the Toronto area has relied primarily on local property taxes;
 - However, since 2004, interest in transit has grown substantially at the provincial, and even federal level (this for the first time);
 - For example, in 2004, a Can\$1 billion joint federal/provincial Canada Strategic Infrastructure Fund (CSIF) was enacted to support specific capital projects over 5 years with contributions split in thirds among the federal, provincial, and city governments;
 - Also in 2004, a portion of the provincial **gas tax**, Can1.5 cent per liter, was earmarked for transit; and
 - A new agency, entitled the Greater Toronto Transportation Authority (GTTA) also was created by the province in 2006 to coordinate planning and possibly funding, in the Toronto-Hamilton region, beginning with the implementation of a unified smart card fare-card system. This organization is just in the process of creating its organizational structure.
- **Montreal**—Agence Métropolitaine de Transport (ATM):
 - The ATM was established in 1995 by provincial legislation with responsibility for planning, coordination, integration, and promotion of transit services, and efficiency on the region’s road network;
 - Local funding sources include a **gas tax** of Can1.5 cents per liter, a Can\$30 annual **automobile license fee**, and revenues from municipalities’ **purchase of commuter rail service**; and
 - In addition, the province contributes the equivalent of 100 percent of the debt service on the commuter rail system.
 - **Vancouver**—Greater Vancouver Transportation Authority (GVTA/TransLink):
 - GVTA was created in 1998 with responsibility for integration of the region’s road system, transit services, transportation demand management program (TDM), and air quality programs;
 - GVTA local and regional funding comes from a Can \$11.5 cent per liter **fuel tax**, a dedicated **property tax**, a **tax on hydro electricity**, a **sales tax on commercial parking**, and **tolls**; and⁸¹
 - GVTA has authority for a “**commuter tax**” as well, and has undertaken a **public–private partnership** agreement to support a new rapid transit line.
 - **London**—Transport for London (TfL): In 2003, London instituted a **congestion charging** scheme to control traffic demand in central London. The current charge is 8 pounds per vehicle per day and the scheme currently is raising 260 million pounds in revenues per year. These funds primarily have been to improve London bus services.

⁸¹ After being in force in 2006 and 2007, the British Columbia government rescinded the parking tax on business parking spaces due to persistent objections of the business community.

APPENDIX E

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APPENDIX F

Local Funding Measures Supporting Transit (2000–2006)

<i>Alaska</i>
Anchorage (bonding authority, 2005)
<i>Arizona</i>
Glendale (sales tax, 2001)
Phoenix (sales tax, 2000, 2004)
Tucson (sales tax, 2006)
<i>California</i>
Alameda County (sales tax, 2000; property tax, 2002)
Contra Costa County (property tax, 2000; sales tax, 2004)
Fresno County (sales tax, 2006)
Marin County (sales tax, 2004)
Orange County (sales tax, 2006)
Riverside County (sales tax, 2002)
Sacramento County (sales tax, 2004)
San Diego County (sales tax, 2004)
Santa Clara County (sales tax, 2000)
San Francisco (sales tax, 2003; bonding authority, 2004)
San Joaquin County (sales tax, 2006)
San Mateo County (sales tax, 2004, 2006)
Sonoma County (sales tax, 2004, 2006)
Tulare County (sales and use tax, 2006)
<i>Colorado</i>
Aspen County (sales tax, 2000, 2004)
Carbondale County (sales tax, 2000)
Denver (sales tax, 2004)
El Paso County (sales tax, 2004)
Glenwood County (sales tax, 2000)
Pitkin County (sales tax, 2000)
<i>Florida</i>
Miami-Dade County (sales tax, 2002)
<i>Georgia</i>
Clayton County (business license fees, 2000)
<i>Kentucky</i>
Lexington (property tax, 2003)

Massachusetts

Oak Bluffs (general fund, 2005)

Michigan

Bedford Twp (sales tax, 2000)

Benzie County (property tax, 2006)

Charlevoix County (property tax, 2004)

Flint (property tax 2004, 2005)

Gogebic County (property tax, 2004)

Grand Rapids (property tax 2000, 2003)

Holland/Holland Twp (property tax, 2006)

Kalamazoo (property tax, 2004, 2006)

Kalkaska County (property tax, 2006)

Lake County (property tax, 2004)

Lansing (property tax, 2000, 2004)

Luddington (property tax, 2004)

Macomb County (property tax, 2006)

Manistee County (property tax, 2006)

Marquette County (property tax, 2004)

Midland County (property tax, 2004)

Oakland County (property tax, 2006)

Port Huron (property tax, 2000)

Scotville (property tax, 2004)

Shiawassee County (property tax, 2004)

Tuscola County (property tax, 2006)

Wexford County (property tax, 2006)

Missouri

Branson (sales tax, 2004)

Clay County (property tax, 2003)

Kansas City (sales tax, 2003, 2006)

Montana

Flathead County (property tax, 2004)

Nevada

Las Vegas (sales tax, 2000)

North Carolina

Greensboro (bonding authority, 2000)

North Dakota

Bismarck

Ohio

Canton (sales tax, 2006)

Franklin County (sales tax, 2006)

Kent (sales tax, 2001)

Toledo (property tax, 2000)

<i>South Carolina</i>
Charleston (sales tax, 2005)
<i>Texas</i>
Austin (bonding authority, 2000)
Dallas (bonding authority, 2000)
Grapevine (sales tax, 2006)
Houston (bonding authority, 2003)
San Antonio (sales tax, 2004)
<i>Utah</i>
Salt Lake City (sales tax, 2000)
Salt Lake County (sales tax, 2006)
Summit County (sales tax, 2003)
Utah County (sales tax, 2006)
<i>Vermont</i>
Barre County (general fund, 2006)
<i>Virginia</i>
Arlington County (bonding authority, 2004)
Fairfax County (bonding authority, 2004)
<i>West Virginia</i>
Parkersburg (property tax, 2004)
Youngstown (property tax, 2005)
<i>Washington</i>
Benton County (sales tax, 2002)
Everett (sales tax, 2004)
Finley (sales tax, 2005)
Franklin County (sales tax, 2002)
King County (sales tax, 2006)
Seattle (sales tax, 2000; motor vehicle excise tax, 2002; property, parking, and employer taxes, 2006)
Selah County (sales tax, 2006)
Snohomish County (sales tax, 2001)
Spokane (sales tax, 2002; property tax, 2004)
Tacoma (sales tax, 2002)

Abbreviations and acronyms used without definitions in TRB publications:

AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI-NA	Airports Council International-North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	Air Transport Association
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation