

Institute of Transportation Studies  
University of California at Berkeley

**Local Option Transportation Taxes in the United States  
(Part One: “Issues and Trends”)**

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## 1. Introduction

This study examines the extent to which states have devolved one of the most fundamental decisions in transportation policy—whether to use taxation powers to fund transportation improvements—to local and regional governments. The purpose of the study is to generate a baseline of knowledge on “local option transportation taxes” in all fifty states. We have examined the laws that states have used to authorize these taxes, the extent to which local areas have adopted them, and how the revenues are used and governed.

This is not a study of local transportation finance in general. Local governments use a wide range of revenue sources and mechanisms that were not considered in this research, including general revenues, dedicated tax streams passed down from the state governments, and tolls. We also did not systematically examine the local issuance of bonds, except where it was associated with an identifiable local tax.

What is a local option transportation tax? In the face of complex real-world taxation systems, we developed an imperfect but straightforward definition: *a tax that varies within a state, with revenues controlled at the local or regional level, and earmarked for transportation-related purposes*. This broad definition includes taxes regardless of how they were established, as long as they are not uniform statewide, and do not fund state programs.<sup>1</sup> There is wide diversity in how local option transportation taxes are constructed, implemented, and used around the country. Typically, however, these are time-limited taxes that are approved by the voters and earmarked for a specific set of projects.

Understanding the legal and political landscape for local option taxes is important if we wish to know what directions future transportation finance is likely to take. The share of transportation funds raised by local option taxes remains small, but has been growing. However, the significance of these revenues far outshines their scale. The decision to increase taxes for any purpose is always a difficult one, and is rarely done lightly. In transportation, it tends to occur when the public believes there is a pressing local need that cannot be met with existing resources. Local option taxes are often the levers by which communities ensure that major projects get built, and yet their adoption and implementation typically occurs outside the traditional metropolitan planning process.

### 1.1. Factors driving the adoption of local option transportation taxes

Local option transportation taxes have been adopted in one form or another in at least 46 states. Their growing popularity suggests that the public’s appetite for new transportation facilities and services continues to outpace the ability of state and federal governments to deliver them. These taxes have been propelled by a wide range of factors.

In many areas of public policy, devolution has led to a more substantial role for local governments than ever before. Yet few local governments have the freedom to set their own revenue and taxation policies: most must operate within narrow tax policy frameworks established by their states. Furthermore, voters in most states have enacted property tax rate limits or revenue rollbacks, or mandated voter approval for local tax increases (Mullins and Cox 1995; Mackey 1997). In general, local governments have responded to these fiscal pressures by seeking to exploit all politically and legally feasible revenue options and competing with other jurisdictions to expand their tax bases.

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<sup>1</sup> Section 1.4 examines in greater detail what this definition includes and excludes. Throughout this paper, we have generally used the term *local* to designate any area smaller than a state, including cities, counties, transit districts, and multi-county regions. When we wish to specify the smallest or lowest level of elected government, we have used the terms *city* or *municipality*.

Local option taxes are one avenue that state governments have created to relieve these pressures. There is wide diversity around the country in how local option taxes are constructed and implemented. One of the most common forms, particularly in western states, is a voter-approved, time-limited sales tax that is earmarked in advance for a specific list of projects.

Aside from property taxes, which have funded local transportation investments for over a century, nearly all of the taxes identified in this study were adopted in the past 35 years. In the 1970s, major metropolitan areas began to adopt permanent taxes to fund the operations of their transit systems. Among the first regions to adopt dedicated taxes to support transit operations and development systems were New York (mortgage recording tax in 1969), Portland (payroll tax in 1969), San Francisco (sales tax in 1969), Atlanta (sales tax in 1971), Cincinnati (payroll tax in 1973), Denver (sales tax in 1973), Seattle (sales tax in 1973), and Cleveland (sales tax in 1975). In a handful of regions (Boston, New York, San Francisco, and Northern Virginia), taxes were imposed directly by an act of the state legislature.

In the 1980s, a growing number of states began to authorize special voter-approved local option taxes. These were often sales taxes for targeted investments in infrastructure, capital facilities, or economic development plans. Some states limited the use of these taxes to specific types of projects, such as the construction of highways, rural road maintenance, or new rail systems. Others allowed them to fund a wider range of capital improvements, including schools and other public buildings, wastewater systems, sports and convention facilities. Most of these taxes are time-limited and intended to build only a few specific projects, although some are also permanent and more programmatic in nature. During this time, local option taxes began to proliferate in Arizona, California, Florida, Georgia, Illinois, Indiana, Michigan, Missouri, Nevada, Oklahoma, South Dakota, and Texas.

This pattern expanded in the 1990s, as the use of dedicated local taxes in transportation finance became even more widespread. Over the past ten years, at least 21 states either adopted new laws authorizing local option taxes, or saw a significant expansion in their use. In contrast, only a couple of states (Massachusetts and Rhode Island) appeared to experience a decline in their use. Local option transportation taxes are nearly completely absent in only four states (Delaware, Maine, New Hampshire, and New Jersey), but even those states have some laws on the books that permit their use.

Certain features of local option transportation taxes have helped make them palatable to both elected officials and the voting public:

- *Political cover.* By authorizing local tax increases—but making them subject to voter approval—state legislators can facilitate tax increases indirectly while avoiding blame (Foster 1997, p. 20).
- *Measurable results.* Because the taxes produce highly visible results that directly address voter concerns in a concrete way, local politicians are often eager to lend their support to local option transportation taxes, despite their general aversion to tax increases.
- *Earmarking.* The use of pre-specified project lists may help reassure voters that there will be minimal opportunities for politicians to make bad or wasteful decisions. In general, earmarking is a key strategy for ensuring public support for new taxes (Pérez and Snell 1995).
- *Speed and flexibility.* These taxes can also be used to fund locally favored projects (e.g. bike paths) that may be difficult to build with traditional grants-in-aid programs, which tend to be less flexible. In some cases, they may speed the construction of project by avoiding some of the delays or compromises that may result from the federally mandated metropolitan transportation planning process.

- *Incentives.* Some states (including California and Georgia) have provided financial inducements to encourage counties to adopt local option transportation taxes, such as providing matching funds or access to special funding pools.

## 1.2. Previous studies

With local governments taking greater initiative in funding transportation infrastructure and services, their methods of funding and decision-making deserve greater attention and understanding. However, few aspects of local transportation finance have been studied systematically. No study has attempted to develop a picture of the extent and character of local option transportation taxes nationwide. The last study addressing the role of local option taxes in transportation finance was written over a decade ago, and examined only six states (Pagano 1988). More recent studies have focused on the strategies that have led to voter approval of transportation tax referenda (Nelson and Colman 1991; Beale, Bishop, and Marley 1996; Haas *et al.* 2000).

Other studies have examined gasoline taxes (J. Brown *et al.* 1999); local assessment districts (Darche and Curry 1990; Transportation Research Board 1986); impact fees (Peters 1994); and user fee revenues (Navai 1998; Szeto and Wuestefeld 1996). While these are all important components of local transportation finance, a synthesis of the contributions of these and other local-source revenues to the larger financing picture is still needed.

The most comprehensive source available for data on local transportation finance is the Federal Highway Administration's annual *Highway Statistics* report. For each state, the report presents detailed data on highway-related revenues and expenditures, including detailed breakdowns of revenue sources at the federal, state, and local levels. In somewhat less detail, it also presents data on transit finance in each state. These transit data are less detailed than those published by the Federal Transit Administration, but more comprehensive, because they include services provided directly by state and local governments, not just the finances of individual transit agencies. While the federal data are particularly useful for identifying key trends (see Appendix A), their aggregate nature prevents their use to understand how these taxes are being used in individual cities and counties. For this reason, we chose to develop our estimates independently, using the federal data for comparative purposes only.

## 1.3. Research approach

The aim of this research effort was to determine the basic characteristics of local option transportation taxation in the United States. In each of the fifty states, our major research questions were:

- What local taxes have been authorized by the legislature? What rules govern their use?
- What areas have adopted these taxes? How much money do they generate? How are the funds used?
- What is the recent history of these taxes? Are they rising or falling in prevalence? What policy issues are being raised about their use?

This study was conducted over the course of one year. It began with an examination of existing sources of data on local transportation finance, including publications from the Federal Highway Administration, Federal Transit Administration, the U.S. Census Bureau, the Commerce Clearing House and the U.S. Advisory Commission on Intergovernmental Relations. These varied sources provided a useful foundation of knowledge from which we could develop state-specific research questions.

In the spring and summer, we sent information requests to state departments of transportation, state departments of revenue, associations of counties, and major transit agencies. We supplemented the data they provided with an independent examination of laws governing local option taxes and a search of state web pages for publications and data on local tax rates and revenues.

We also surveyed city and county governments in a dozen states (Arizona, Colorado, Florida, Georgia, Illinois, Missouri, Nevada, New York, Ohio, Pennsylvania, Texas, and Washington) to develop a more detailed picture of how various local option transportation taxes are actually implemented. These states were chosen to ensure inclusion of the largest and most internally diverse states, while also representing a broad mix of geographic locations, growth rates, and tax policy traditions.

To arrive at this list, we first chose the two largest states in each of four major geographic regions in the U.S. (New York and Pennsylvania in the Northeast, Illinois and Ohio in the Midwest, Florida and Texas in the South, and California and Washington in the West). To this list, we added Arizona, Colorado, Georgia, Missouri, and Nevada because these mid- and small-sized states have been particularly active in their use of local option transportation taxes. We decided not to include California because written surveys were unlikely to produce more detailed information than were available from state publications and individual county transportation authorities.

Finally, we asked experts in local transportation finance in each state to review the accuracy of our conclusions and to help fill in the remaining data gaps. We also invited the reviewers to provide additional background information on their states, including major issues and trends in transportation policy.

#### **1.4. What is a local option transportation tax?**

Potentially, any revenue source used by local governments can be earmarked for transportation purposes. Of primary interest in this study are local option taxes, policy packages pre-specified by state governments, which local areas may elect to adopt. These packages vary from state to state, but most include strict definitions of the types and levels of taxes that may be imposed, as well as rules concerning how the tax may be adopted (usually direct voter approval), and how the revenues may be spent.

Settling on a definition of a “local option transportation tax” was a difficult decision that requires some explanation here. The definition that we have chosen to use is: *a tax that varies within a state, with revenues controlled at the local or regional level, and earmarked for transportation-related purposes.*

This definition has some noteworthy characteristics. First, it excludes many revenue sources that appear to be “local” or “optional”:

- *Statewide “local” taxes.* The definition does not include any tax that is imposed at a uniform rate statewide, even if it is considered a local revenue source. We have excluded these taxes because our purpose is to study the devolution of taxation powers, not local transportation finance more generally. Thus, neither California’s statewide one-quarter percent sales tax for local transit services, nor Florida’s statewide 1¢ per gallon “county” and “municipal” fuel taxes, were included in our analysis. (Occasionally we specifically mention these taxes, to clarify that these taxes exist and were not overlooked).
- *Universally adopted “optional” taxes.* As did other studies on local option taxes (e.g. Mackey 1997), we have assumed that taxes approved at the same rate by all local governments in a state are not voluntary after all. A tax rate that is uniform signals a statewide need, regardless of the level of government that administers the tax. As a result, we have not included Virginia’s 1% local sales tax,

which was adopted individually by every one of the state's counties. (In some cases, we bent this rule: no county in Nevada has adopted a local gasoline tax smaller than 4¢ per gallon, but we included full amount of this tax in our analysis).

- *Non-tax revenue sources.* Not included in this study are intergovernmental transfers, general revenue bonds, tolls and other facility-specific user fees, and tax-increment financing.

Our definition includes any tax that varies by location and is earmarked for transportation purposes. This includes taxes earmarked at either the state or local levels:

- *State-earmarked taxes.* The easiest-to-identify revenue sources are those that have specific purposes attached to them by state legislation. Lists of areas that have adopted these taxes can be obtained from most state departments of finance.
- *Locally-earmarked taxes.* Some states designate less specific purposes (e.g. “capital improvements”), but require that local areas be more specific when the tax is adopted. In other states, local taxes do not need to be earmarked, but local governments may choose to earmark them anyway.<sup>2</sup> In both cases, we found that states tend not to have information on local earmarks. In the case of a sales tax, the state might have a list of tax rates, but no idea of what the taxes are for. In the case of a vehicle registration tax, many states seem not to know even what areas have adopted the taxes.
- *State-imposed taxes.* In a few states, taxes have been created directly by state legislation, without any independent action by local governments or local voters. Examples of this include the transit taxes in the Boston, New York City, San Francisco, and Washington (Virginia) metropolitan areas. While it may be argued that these taxes not “optional,” we have assumed that such taxes would not have been adopted without local political support.

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<sup>2</sup> Elsewhere (e.g. Alaska) earmarked local taxes are forbidden by state law, but certain revenue streams are set aside anyway for transportation purposes.



## 2. Key varieties of local option taxation

Around the nation, local governments have explored many different taxation possibilities to fund transportation improvements. This section will examine the major features of the various types of taxes, and how they are being used around the country.

Historically, different rationales have driven state and local investments in transportation, leading to distinct traditions of funding investments at these different levels of government. The traditional role of municipal governments in transportation finance has been the construction and maintenance of local streets. The primary function of these streets is the provision of access to private land, for private transportation purposes, as well as for the delivery of utilities and public services. Without this access, land becomes far less useful, and its value is significantly diminished. Thus, property taxes have long been considered a natural means for paying for local street improvements, because they recapture some of the wealth creation made possible by the government's actions.

States have traditionally had a different role in funding transportation investments. Their primary objective has been the provision of mobility to longer-distance, inter-city travelers. In this century, this has meant the construction of roads and highways. Tolls, gasoline taxes, and other user fees have long been the favored means of funding these projects, because they ensure that individuals pay in rough proportion to their use of these facilities.

Most other transportation investments lack such clearly defined roles. Today, many projects are designed to meet diverse and conflicting needs at the regional or metropolitan scale, including access to new land markets, mobility for commuters, environmental quality, safety, economic development, and socio-economic equity. The beneficiaries of these investments differ widely depending on the specific types of projects. Because of this diversity, no single revenue source is a "natural" fit for handling projects at this level. Around the country, different states have authorized many different types of taxes at many different geographic scales, in order to find an appropriate match between the burdens and benefits of local option transportation taxes.

Other forces have also shaped regional transportation finance and contributed to its distinct character, including fiscal competition among levels of government, legal restrictions on the uses of specific revenue sources, and requirements for voter approval of new taxes. As a result of these forces, transportation revenue options are chosen as much for their legally and political viability, as for their basic rationality and fairness.

### 2.1. Fuel taxes

#### *Characteristics*

For many reasons, taxes on motor fuels have been an attractive revenue source for transportation improvements. The gasoline tax is easily administered compared to many other taxes, and provides a relatively stable revenue stream. But most important, it is paid by automobile drivers—the users of the road system and thus the most direct beneficiaries of improvements to that system. Because of the close connection the gasoline tax provides between who pays the taxes and who benefits from them, it generally has been accepted as a fair and equitable means of funding our nation's road system for eighty years. Today, it remains the dominant transportation revenue source at the state and federal levels.

However, the gasoline tax has several other features that limit its usefulness as a local transportation revenue source. Because it is levied as pennies per volume of fuel sold, rather than a percentage of the fuel price, the revenues it generates will tend to lag over time, because the real value of each penny will

decline due to inflation. The increasing fuel efficiency of the vehicle fleet may also lead to less robust revenue growth.

An even more serious problem is the very limited revenue base of the gas tax. Because it taxes only one product, its tax rate must be set very high to generate the magnitude of revenues needed for major infrastructure investments. It is not much of a problem for large governments (e.g. states or the federal government) to enact taxes in excess of 15¢ per gallon, but over a small area (e.g. a county) such a high tax rate would lead drivers to purchase their fuel elsewhere.

### *Authority and Use*

The fifteen states that authorize local option motor fuel taxes are primarily located in the Midwest, West and South. In five of these states, no local governments have adopted gas taxes. Only in five other states (Alabama, Florida, Hawaii, Illinois and Nevada) do local gasoline taxes appear to make a major contribution statewide, but they are locally important in several other states as well.

**Table 1: Local Option Gasoline Taxes**

State	Allowable Uses	Voter Approval Required?	Areas imposing tax for transportation purposes	% of Pop. Taxed	Mean Per Capita Annual Revenues
Alabama	Roads, Other	No	23 of 67 counties, 60+ cities	> 56%	> \$ 14
Alaska	General Revenues	No	At least one borough	> 8%	\$ 5
California	Roads, Transit	Yes	None	-	-
Florida	Roads, Transit	No	All counties	100%	\$ 38
Hawaii	Roads, Transit	No	4 of 5 counties	100%	\$ 51
Illinois	Roads, Transit	Yes	4 of 102 counties, several cities	56%	\$ 19
Mississippi	Roads & Seawalls	No	3 of 82 counties	13%	\$ 17
Montana	Roads	Yes	None	-	-
Nevada	Roads	No	All counties and 1 independent city	100%	\$ 41
New Mexico	Any	Yes	None	-	-
Oregon	Roads	Yes	2 of 36 counties, 3 cities	32%	\$ 8
South Dakota	Roads	No	None	-	-
Tennessee	Transit	Yes	None	-	-
Virginia	Transit, Roads	No	2 regional commissions	27%	\$ 12
Washington	Roads	Yes	3 cities, 1 transit district	0.1%	\$ 67

While most states earmark local gasoline taxes for transportation projects, a few (Alabama, Alaska and New Mexico) also permit the revenues to be used for non-transportation related purposes. In the five states where fuel taxes have been adopted most widely, they are used primarily to maintain and improve county road systems. Typically, these taxes are open-ended in duration, and are not earmarked in advance for specific projects. Most local gasoline taxes have been adopted in states that do not require voter approval.

Here are some examples of how local gas tax revenues are being used around the country:

- In Alabama, specific counties have been authorized to levy local option gas taxes by special acts of the legislature. At present, roughly one third of all counties in Alabama have adopted a local option gas tax. Most of these counties use their revenues for road and street maintenance projects. In addition, over 300 cities have also adopted gas taxes, but only about 23% use revenues for roads.
- Florida relies upon local option gas taxes to an unusually high degree. Every county in the state has adopted at least one of the state’s various forms of local option gas tax, at rates ranging between 1¢ and 11¢ per gallon. The counties vary in how they use their gas tax revenues, with some dedicating them entirely to transit, and others investing in a mix of transit, roads, and streets.

- As in Florida, counties in Hawaii and Nevada have widely adopted relatively high local option gas taxes. In all three of these states, the near-universal adoption of high gas tax rates at the local level act as a substitute for higher taxes imposed at the state level. In Nevada, gas tax revenues must be used for highway or street maintenance or construction, but in Hawaii, revenues are used for transit and public safety operations as well.

**Figure 1: Map of Local Option Gasoline Taxes for Transportation**



- Nevada also allows local option taxes on aviation and jet fuel. Clark County, home to Las Vegas, has adopted a 3¢ per gallon jet fuel tax to fund airport access projects.
- The Tennessee state legislature recently provided cities and counties with the power to levy a 1¢/gallon gasoline tax to finance public transit services, subject to voter approval. To date, no cities or counties have adopted it.
- Virginia state law imposes a 2% excise tax on the sale of motor fuel in five counties and six independent cities in the Washington, D.C. suburbs. Tax revenues are generally allocated to debt service and operating expenses for public transit, as well funding some road improvements.

Overall, local option fuel taxes can be a sound and appropriate long-term revenue source for the maintenance, operation, and routine expansion of local transportation systems, particularly if they can be indexed for inflation. However, it is politically and economically difficult for local gasoline taxes to be adopted at high enough levels that they can generate sufficient revenue for major infrastructure investments. Perhaps for this reason, it is unusual to find cities or counties adopting time-limited, high-rate fuel taxes.

## 2.2. Vehicle taxes

### *Characteristics*

There are many different ways of taxing vehicles, each with its own rationale. In this study, we have broadly defined vehicle taxes to include flat annual vehicle registration fees; annual taxes based on vehicle value (or some proxy), weight, age, body type, or number of wheels; and other taxes on vehicle rentals and leases, parking, and sales. Another important user tax, weight-based fees on trucks, is an important revenue source for many state governments, but is not practical at the local level, since local governments do not have jurisdiction over the use of state and federal highways.

Many states have *ad valorem* vehicle taxes in which motor vehicles are taxed as personal property, just as personal real estate might be taxed. Many of these laws date from the early 1900s, when rampant tax evasion led state governments to shift collection of this tax into the vehicle registration process. Although most states have long since abandoned taxation of personal property, the tradition of taxing the value of vehicles as a general revenue source continues (Mackey and Rafool 1998).

These disparate taxes are not usually generally grouped together as a single category of taxation. Other studies (including FHWA's *Highway Statistics*) group *ad valorem* vehicle taxes together with property taxes because both their origins and the present application of their revenues is quite distinct from the tradition of user fees. However, in the course of this research we found that the line separating the two was fuzzier than expected. Some states do earmark *ad valorem* taxes for transportation purposes, and others use flat vehicle fees as a general revenue source. Still others use a hybrid between the two types of taxation. For this reason, we have grouped all taxes on vehicles together and treated them as taxes on users of the transportation system.

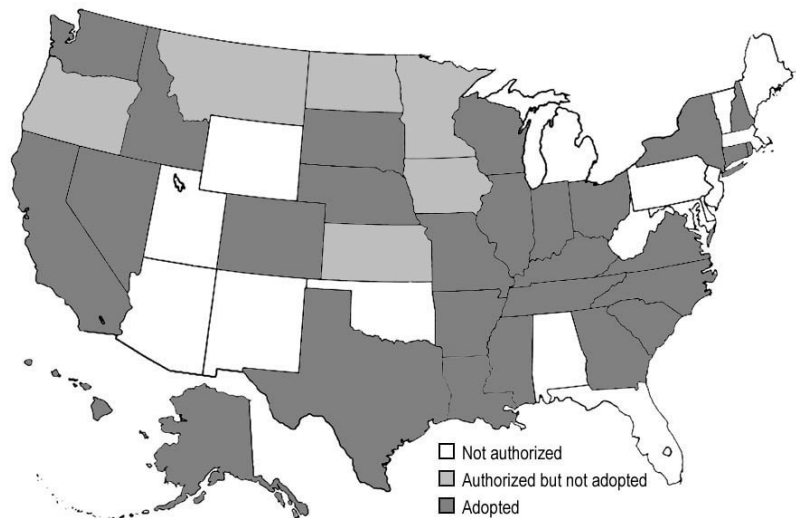
### *Authority and Use*

Thirty-three states authorize some type of annual vehicle license or registration tax. In many states, the implementation of vehicle taxes (including those imposed statewide) is delegated to the individual county governments. As a result of this, no centralized information is available on local tax rates and revenues, and we were not able to develop as detailed a picture as we could for some of the other taxes.

Local governments rely upon local option taxes for many different purposes, including general revenues, highway construction, public transit operations, air pollution control, and public safety programs. Here are some noteworthy findings from around the country:

- In most local option vehicle tax programs, the revenues are intermingled with other revenue streams in a county road fund or the budget of a transit agency. Like local option gasoline taxes, these taxes typically fund pay-as-you-go programs of routine maintenance and operations. However, in a few states these taxes do tend to be earmarked for specific projects. One of the largest examples such projects is a beltway currently being constructed around Las Vegas with the help of over \$22 million provided annually by a county vehicle registration tax.
- Several states have used vehicle taxes to fund innovative programs that address the intersection between transportation and environmental concerns. Counties and air quality management districts in California may use registration fees of up to \$5 per vehicle to fund projects that reduce air pollution from motor vehicles, such as scrapping highly polluting cars or subsidizing ridesharing programs. California and New Hampshire use vehicle registration fees to fund local disposal programs for abandoned motor vehicles. Texas authorizes a tax on vehicle engine capacity to fund transit programs, but this tax has not been adopted.
- Other states have funded programs that address public safety concerns. Several counties in Texas use registration fees of \$1.50 to fund crossing guards to ensure that children can walk to school safely. Thirteen counties and two multi-county districts in California use \$1 registration fees to fund emergency call-boxes and towing services on freeways. Still other counties have created earmarks

**Figure 2: Map of Local Option Vehicle Taxes for Transportation**



for programs that are not related to transportation. Kansas has dedicated vehicle taxes for schools and jails; Kentucky for economic development; and Missouri for county courts.

**Table 2: Local Option Vehicle License and Registration Taxes**

State	Allowable Uses	Tax Basis	Vote Required?	Areas imposing tax for transportation purposes	% of Pop. Taxed	Per Capita Ann. Revs
Alaska	Any (usually roads)	Age & class	Yes	3 cities and 8 boroughs	50%	\$ 2.70
Arkansas	Streets and Highways	Flat	Yes	?	?	?
California	Air Quality, Hwy Ops.	Flat	No	14 counties, 3 districts	86%	\$ 4.20
Colorado	Highways	Flat	No	1 highway authority	24%	\$ 7.50
Connecticut	General Revenues	Value	No	35 municipalities	14%	\$ 36.40
Georgia	General Revenues	Value	No	?	?	?
Hawaii	Highways	Weight	No	4 counties	100%	\$ 26.50
Idaho	Highways	Flat & weight	Yes	1 highway district	22%	\$ 10.70
Illinois	Roads	Flat	No	?	?	?
Indiana	Streets	Flat & Value	No	20 of 92 counties	35%	\$ 12.90
Iowa	Streets, Roads, Transit	Flat	Yes	None	-	-
Kansas	Streets	Flat	Yes	None	-	-
Kentucky	Gen. (can be earmarked)	Value	Yes	?	?	\$ 3.40
Louisiana	Highways	Value	No	?	?	?
Minnesota	Roads, General	Flat	Yes	None	-	-
Mississippi	Gen. (can be earmarked)	Value	No	Probably all	100%	\$ 8.50
Missouri	Streets	Flat, by class	No	3+ cities	> 38%	\$ 1.40
Montana	General Revenues	Value	No	None	-	-
Nebraska	Streets and roads	Wheels	Yes	4 cities	37%	\$ 17.30
Nevada	Roads, General	Value and age	Yes	1 county	67%	\$ 18.60
New Hampshire	Parking, Roads, Transit	Value	Yes	Probably all	100%	?
New York	Roads	Flat, by class	No	1+ county	> 7%	?
North Carolina	Transit	Flat	No	4 of 100 counties	18%	?
North Dakota	Highways	Flat	No	None	-	-
Ohio	Streets, Highways	Flat	Yes	59 counties, 51% of cities	86%	\$ 14.30
Oregon	Streets, Highways	Flat	Yes	None	-	-
Rhode Island	Gen. (can be earmarked)	Value	No	?	?	\$ 11.90
South Carolina	Roads	Flat	No	12 counties, 1 city	25%	\$ 11.80
South Dakota	Highways	Wheels	No	30 of 66 counties	62%	\$ 12.70
Tennessee	Any (can be earmarked)	Flat	No	23 of 95 counties	19%	\$ 10.40
Texas	Roads	Flat	No	234 of 254 counties	97%	\$ 8.20
Virginia	General Revenues	Flat, by weight	No	Nearly every county & city	99%	\$ 16.20
Washington	Roads, Transit	Flat and value	Yes	4 Cntys, 70 Cities, 2 TDs	50%	\$ 30.60
Wisconsin	Transportation	Flat	No	2 small cities	2%	\$ 6.80

- There has been a recent trend across the country away from *ad valorem* motor vehicle taxes. Rhode Island, Virginia, and Washington have all passed legislation recently that has either phased out or rolled back existing local motor vehicle taxes. In some states, such as Washington, the elimination of this motor vehicle excise tax has had a significant impact on local transportation finance. Several Washington counties are considering sales tax increases to generate revenue to fund public transit and to replace the revenues they had previously received from the state motor vehicle excise tax.
- Vehicle taxes are not limited to motor vehicles. The city of Colorado Springs charges a flat \$4 excise tax on all bicycle purchases to fund trails and other improvements.

### 2.3. Property taxes

#### *Characteristics*

Property (or *ad valorem*) taxes are the most important and universal local revenue source in the United States. Although they are also imposed by some state governments, their primary function is to fund services that are administered at the most local levels, such as schools and fire protection. They are particularly well-suited for financing local governments because they are based on immobile assets, such as land and buildings, and are therefore not easily evaded.

Because local governments administer land ownership records, it is relatively easy for them to administer the taxation of land as well. Property taxation is a generally a three-stage process. First, a tax assessor estimates the value of land and buildings in each parcel. This may be based on some periodic calculation of market value, or it may be frozen at a point in time. In the second step the assessor assigns an “assessed value” to the property, depending on the use of the land. Residential, commercial, agricultural, and industrial uses might all be assessed at different percentages of their market values. Finally, a taxation office (usually separate from the assessment office) sets a tax or “millage” rate by dividing the local government’s total budget for the upcoming year by the total assessed valuation for the area. An individual parcel of land may face separate millage rates for each governmental entity serving it, including city and county governments, fire districts, school districts, water districts, et cetera. A parcel’s property tax is the product of its assessed value and the sum of all applicable millage rates.<sup>3</sup>

Property taxes are broadly unpopular with taxpayers. There are many reasons for this: they seem high because they are paid in lump sums, instead of in small increments; they are used for services, such as schools, that are used by a limited segment of the population; their administration appears arbitrary; and the ultimate tax bills often bear no relation to household’s income or ability to pay (Hovey 1996). As a result of this unpopularity, “taxpayer revolts” in several states have forced rollbacks of property taxes or limits on their growth. In California, passage of Proposition 13 in 1978 was a major contributing factor in the emergence of local option sales taxes as a way of funding local transportation improvements.

There are two primary rationales for the use of property taxes in transportation finance. The first is based on the idea that accessibility is a primary determinant of land value. By establishing access to land, the creation and maintenance of street and road networks play a major role in giving that land value, and therefore taxation of that value is an appropriate way to finance those networks. This principle, which dates back to the industrial revolution, remains at work today in the financing of city street repairs and the paving of rural roads in many states.

The second rationale is that transportation services (including public transit operations and street maintenance) are basic public services that provide broad public benefits. An individual may not use the bus system, but may have a relative who does (like the school system), or may rely on it on rare occasions (like the fire department). Similarly, an individual may not drive on the city streets, but benefits from the delivery of mail or emergency services along them. As the primary revenue source for other public services, it makes sense to use property taxes for these transportation services as well.

In some cases, public improvements benefit a very small area, and only residents or businesses in that area are willing to endure higher property taxes to pay for them. An increasingly popular arrangement is for areas that don’t have their own governments (such as unincorporated parts of counties or neighborhoods within cities) to create special taxing districts to fund their desired improvements. These districts are typically created to perform a specific function (e.g., pave a particular stretch of road), and are dissolved upon completion of this task. Some such districts generate their revenue with uniform, area-wide taxes (usually property taxes or parcel taxes). Others allocate these costs according to indicators of which property owners are likely to benefit from the improvements, such as distance or road frontage.

### *Authority and Use*

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<sup>3</sup> These tax rates are typically expressed either as percentages (i.e., dollars of tax per \$100 dollars of assessed valuation) or as “mills” (i.e. dollars of tax per \$1,000 dollars of assessed valuation). A one-mill tax on a home assessed at \$1 million would result in a tax bill of \$1,000.

Property taxes proved extremely difficult to study, for two major reasons. First, they tend to be implemented at the most local levels of government, and few states have chosen to track local property tax rates, revenues, and uses. This was particularly true for special taxing districts. Some states possess many hundreds of improvement districts, but often no records exist on what types of improvements they were created to undertake.

A more fundamental reason why property taxes were difficult to study was that it proved impossible to find a workable standard for identifying which were “local option transportation taxes.” In ways that we did not anticipate when we set out to do this study, we found that property taxes defied the types of definitions that worked for other types of taxes. In many places, property taxes are set based on the total budget, with no separate mill rates reported for transportation purposes. In other places, localities report property taxes by purpose (e.g. 1.3098 mills for roads, 4.3351 mills for schools, etc.), but it is impossible to tell whether the transportation-related part of the tax is an “earmark,” or just a reflection of the road department’s budget in a given year.

Because of these difficulties, we report all of the information about property taxes that we could find, recognizing that not all of these are true earmarks. Local governments in all 50 states use property taxes to fund streets, so the tables below summarizes some of the purposes other than local streets being funded with these taxes. These tables exclude states for which very limited information was available.

In several of these states, dedicated property taxes for transportation are found everywhere. While this suggests that the tax represents a fundamental, non-optional responsibility of the local government, we included these states because local governments may still decide what tax rates to adopt.

**Table 3a: Selected States With Dedicated Property Taxes for Roads**

State	Vote Required?	Areas imposing tax	% of Population Taxed	Annual Per Capita Revenues
Alabama	No	All counties	100%	\$ 28.80
Arizona	Some	5 districts, 3 cities*	> 18%	\$ 15.30
Arkansas	Yes	All counties, 18 districts	100%	> \$ 18.50
Colorado	Some	Nearly all counties, 18 districts*	100%	\$ 25.90
Idaho	No	113 cities, 26 counties, 51 districts*	64%	\$ 63.20
Indiana	No	88 of 92 counties	85%	\$ 2.70
Iowa	Some	All counties	100%	\$ 38.60
Kansas	Yes	99 of 105 counties	84%	\$ 48.40
Michigan	Some	28 of 83 counties	56%	\$ 2.70
Minnesota	No	85 of 87 counties, 1 dist., most towns	100%	\$ 76.60
Nevada	No	1 county, 2 cities, 10 districts*	14%	\$ 82.60
North Dakota	Some	All counties	100%	\$ 32.00
Ohio	Some	5 counties, 568 townships, 52 cities	100%	\$ 10.10
Oregon	Some	19 counties, 16 cities	65%	\$ 16.70
Texas	Some	156 of 254 counties, 22 districts	38%	\$ 19.80
Washington	Some	All counties	100%	\$ 106.40
Wyoming	No	3 counties	10%	\$ 68.10

\* Includes some city taxes for streets

Some states employ highly differentiated systems of accounting for maintenance and improvement of different roadway classes:

- Texas has six separate road levies: separate rates for maintenance, operations and capital bond debt for each of three types of systems (farm-to-market, general road and bridge, and road utility districts).
- North Dakota has five taxes, based on whether roads and bridges are owned by the county or a township, and whether or not they are located in unincorporated areas.

- In Washington, cities have responsibility for roads within their borders, while counties have responsibility in unincorporated areas. As a result, county roads taxes are only imposed on property in unincorporated areas.

We found more than a dozen states had areas with dedicated property taxes for public transit operations. However, this figure is probably misleading. In most states, transit operations are primarily funded at the local level. In many other places, these services are funded with property taxes but built directly into the general levy.

**Table 3b: Selected States With Dedicated Property Taxes for Transit**

State	Vote Required?	Areas Imposing Tax	% of Population Taxed	Annual Per Capita Revenues
California	Yes	7 districts	21%	\$ 14.90
Florida	Yes	5 districts	23%	\$ 8.60
Georgia	No	3 districts	6%	\$ 15.20
Indiana	No	7 cities, 8 districts	29%	\$ 30.20
Iowa	Some	15 cities	32%	\$ 16.20
Kansas	Yes	2 cities	7%	\$ 17.30
Louisiana	Yes	1 parish	10%	\$ 8.30
Massachusetts	No	17 districts	92%	\$ 26.90
Michigan	Some	7 districts	56%	\$ 5.10
Minnesota	No	4 districts	54%	\$ 3.00
Nebraska	Some	1 RR safety dist., 1 transit dist.	37%	\$ 14.30
North Dakota	Some	4 cities	26%	\$ 3.40
Ohio	Some	6 districts	11%	\$ 8.50
Oregon	Some	7 districts	42%	\$ 14.10

## 2.4. Sales taxes

### *Characteristics*

An important result of the tax revolts of the 1970's has been an shift in local finance away from property taxes and toward sales taxes (Krmeneč 1991; Advisory Commission on Intergovernmental Relations 1989). This has been particularly true in transportation finance, where the sales tax has emerged as one of the most significant and politically feasible revenue options for metropolitan areas seeking to finance major new transportation infrastructure projects. The reason has been simple: taxpayers see sales taxes as fair, and don't mind voting to approve them.

An important characteristic of the sales tax is its broad base: the total amount of retail goods and services purchased within an area.<sup>4</sup> Despite some variation in this base from state to state (depending on whether or not food and services are included), it universally produces high revenues for a low marginal tax rate. In a metropolitan county, a sales tax of just one half of one percent can generate revenues of \$50-75 per capita, more than sufficient to fund new services or infrastructure. The sting of sales taxes is further reduced because they are paid continually, throughout the year, rather than in a single lump sum. However, despite its ability to generate revenue with minimal pain, the practice of basing a tax system on retail activity does pose risks. For example, revenues can dip sharply during an economic downturn, since retail sales fall off faster than incomes or gasoline consumption. In the longer term, sales tax revenues may face erosion as a higher share of sales is captured by catalog and internet sales.

Another strength of the sales tax is that it ensures "horizontal equity," because all individuals of comparable means pay roughly the same amount of tax. This contributes to a public perception of the sales tax as a "fair" tax, particularly suitable for financing transportation plans that invest in a mix of modes. When gasoline taxes are used to finance transportation infrastructure, transit riders, bicyclists,

<sup>4</sup> In this study, "sales taxes" include use, transactions, retail privilege, excise, gross receipts, and other similar taxes.



and others receiving a share of the tax revenues are perceived to get a “free ride” because they have not contributed tax dollars. Under a sales tax, all users of the transportation system contribute. If all transportation user groups do indeed benefit equally from the tax expenditures, then this may indeed be equitable. However, in many recent cases, investments in transit infrastructure have primarily served to benefit automobile commuters in congested corridors. In these situations, gasoline taxes may be more equitable and appropriate than sales taxes, since they preserve the critical link between the beneficiaries of the transportation system and the taxpayers that fund it.

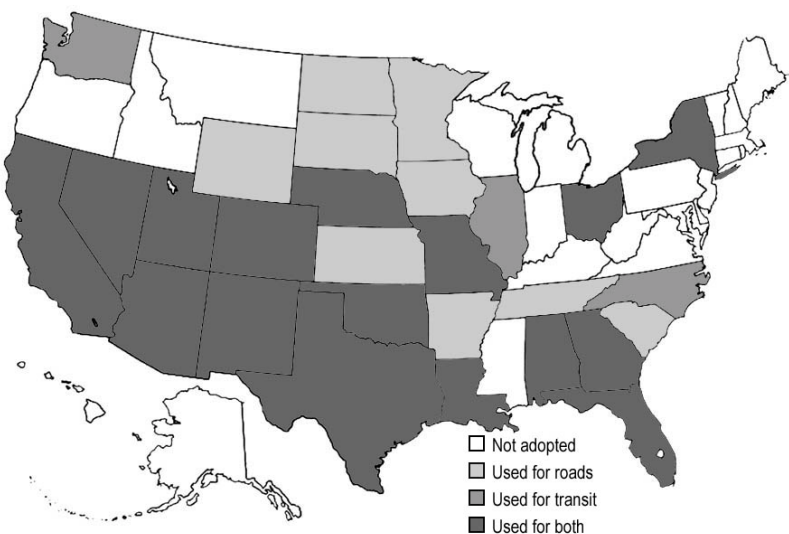
Another “fairness” argument raised by some conservative groups is that sales taxes are inherently equitable because expenditures are a better reflection of ability to pay than income or wealth. This viewpoint appears to be held by a large segment of the population: in annual surveys conducted between 1972 and 1991, when asked to identify the “least fair” tax, respondents consistently listed the federal income tax and local property tax ahead of the state sales tax (Advisory Commission on Intergovernmental Relations 1991). Other surveys have also found a preference for sales taxes over other equivalent revenue options (Field and DiCamillo 1994).

Yet despite being evenhanded in these particular ways, the sales tax is also strongly regressive. Because retail purchases rise more slowly than income, sales taxes tend to impact lower-income households disproportionately. While most taxes fit this pattern to some degree, sales and gasoline taxes are more strongly regressive than most other alternatives. This is particularly true in states where groceries and other non-discretionary purchases are not exempt from the tax, such as Georgia, Missouri, and other states in the Southeast in which local option sales taxes have been popular (Ettlinger *et al.* 1996).

Despite its regressivity, several other characteristics have made sales taxes attractive. In some areas, a high share of retail sales are made to non-residents of the taxing district. This is particularly true of major central cities (which have large commercial districts that attract shoppers from surrounding counties) and other significant tourist destinations. In areas where non-residents are causing significant transportation impacts, the sales tax becomes an attractive way of forcing them to share in the cost of needed improvements. In sparsely-populated resort areas, visitors often account for the vast majority of retail activity, so sales taxes become an even more attractive option.

These characteristics help explain the relative popularity of local sales taxes, and the dramatic increase in their contribution to public finance over the past two decades. Motor fuel taxes have a much smaller base, so they must be set much higher to produce the same revenues. A 1% sales tax tends to be less visible and therefore more palatable to voters than a 15-cent gasoline tax (which is roughly a 8-12% tax on gasoline sales, depending on prices), even if it costs the average person roughly the same total amount. And high gasoline taxes are easily evaded by long-distance commuters, who may choose to purchase fuel in the lowest-tax jurisdiction.

**Figure 3: Map of Local Option Sales Taxes for Transportation**



## Authority and Use

There are 33 states that have authorized local option sales taxes for transportation purposes (or for more general purposes that may include transportation). Unlike other local option taxes discussed in this report, sales taxes provide local governments with an opportunity to generate substantial tax revenues that are often earmarked for a particular transportation project. Although many local governments in various states simply use their sales tax revenues for general revenue purposes, it is quite common for local governments to earmark their sales tax revenues for transportation purposes.

States vary in the manner in which they delegate spending authority for local sales taxes. The most liberal approach is to set some ground rules for how the tax may be adopted, but not to require any specific earmark. In the states that have adopted this policy (e.g. New York, Ohio, Tennessee), some local governments have voluntarily chosen to adopt an earmark for transportation purposes. Other states (including Florida, Iowa, Louisiana, New Mexico, Oklahoma, and Texas) require that local sales tax revenues be earmarked, but otherwise give local governments broad leeway. Typically, the states will allow project categories to be named (e.g. “road improvements”) rather than specific projects. A more restrictive approach (used in Arizona, California, South Carolina, and Wyoming) is to require the development of project-specific, legally-binding expenditure plans before a tax is adopted. A couple of states (Alabama and Minnesota) have authorized sales taxes only on a case-by-case basis, generally specifying particular projects within the authorizing legislation. Finally, in a few cases (including the San Francisco and New York metropolitan areas), the state government has directly intervened and created a transportation sales tax on its own, without waiting for local approval.

**Table 4a: Local Option Sales Taxes for Transportation Capital Projects**

State	Vote Required?	Areas Imposing Tax	% of Population Taxed	Annual Per Capita Revenues
Alabama	No	Roads: 3 counties	3%	\$ 22.80
Alaska	No	None	-	-
Arizona	Yes	Roads: 4 counties, 3 cities	68%	\$ 77.10
Arkansas	Yes	Roads: 34 counties, 17 cities	35%	?
California	Yes	Multimodal: 13 counties Roads: 3 counties, 1 town	49% 3%	\$ 59.50 \$ 41.50
Colorado	Yes	Roads: 15 counties, 10 cities	> 46%	\$ 58.20
Florida	Yes	Multimodal: 6+ counties	> 23%	\$ 41.80
Georgia	Yes	Roads: more than ___ of counties	> 25%	\$ 112.00
Iowa	Yes	Roads: 21 of 99 counties	23%	\$ 50.00
Kansas	Yes	Roads: 2 counties, 8+ cities	> 13%	?
Louisiana	Yes	Roads: 7 parishes, 1 city	29%	\$ 60.50
Minnesota	Yes	Roads: 1 city	2%	\$ 32.60
Missouri	Yes	Roads: 40+ counties, 8 cities	32%	\$ 96.20
Montana	Yes	None	-	-
Nebraska	Yes	Roads: 1+ cities	> 1%	?
Nevada	Yes	Roads: 4 counties Railroads: 2 counties	6% 18%	\$ 29.50 \$ 18.40
New Mexico	Yes	Roads: 8+ counties, 20 cities	40%	\$ 6.60
New York	No	Roads: 1 county	< 1%	\$ 15.40
North Dakota	No	?	?	?
Ohio	Yes	Roads: 5+ counties	> 3%	\$ 59.30
Oklahoma	Yes	Roads: 17 counties	?	?
Pennsylvania	Yes	None	-	-
South Carolina	Yes	Roads: 2 counties	7%	\$ 150.60
South Dakota	No	?	?	?
Tennessee	Yes	Roads: 9 counties	21%	\$ 7.40
Texas	Yes	?	?	?
Utah	Yes	Roads: 19 cities	8%	\$ 13.10
Vermont	Yes	None	-	-
Washington	Yes	None	-	-
Wyoming	Yes	Roads: 3 counties	14%	?

Here are some observations on the use of sales taxes around the country:

- Local governments in Georgia have come to rely on 1% special-purpose sales taxes to generate revenue for capital improvements, including transportation projects. Georgia voters have demonstrated a remarkable willingness to approve these taxes routinely. These sales taxes typically last for less than five years, which makes the tax more attractive and less foreboding to local voters. The taxes are also structured to reduce the likelihood of cost overruns.
- Seven counties in Nevada have adopted sales taxes for a variety of transportation purposes. The two most populous counties have approved 1/4% sales taxes for public transit operations. Four smaller counties have adopted 1/4% sales taxes for roads (with one setting aside a small portion for transit). Two counties are pursuing railroad-related projects, one is using a 1/4% sales tax to restore an abandoned rail line, and another is using a 1/8% sales tax to re-grade freight rail tracks in downtown Reno below street level.
- In two counties in Florida, sales taxes have been used in part to eliminate tolls on existing bridges.

**Table 4b: Local Option Sales Taxes for Transit**

State	Vote Required?	Areas Imposing Tax for Transit	% of Population Taxed	Annual Per Capita Revenues
Alabama	Yes	1 district	15%	\$ 6.10
Arizona	Yes	2 cities	30%	?
Arkansas	No	None	-	-
California	Yes	7 counties	46%	\$ 85.80
Colorado	Yes	3 counties, 1 city, and 1 dist.	59%	\$ 81.60
Georgia	Yes	1 district	17%	\$ 182.60
Illinois	Yes	2 districts	69%	\$ 58.90
Louisiana	Yes	1 district	11%	\$ 98.90
Missouri	Yes	1 county, 3 cities	34%	\$ 67.40
Nebraska	Yes	?	?	?
Nevada	Yes	3 counties	85%	\$ 39.60
New Jersey	Yes	None	-	-
New Mexico	Yes	2 cities	28%	\$ 129.30
New York	No	1 county, 1 district	71%	\$ 24.90
North Carolina	Yes	1 county	8%	\$ 84.00
Ohio	Yes	6 districts	36%	\$ 62.10
Oklahoma	Yes	1 county	?	?
Texas	Yes	Transit: 8 districts	40%	\$ 108.30
Utah	Yes	Transit: 4 counties and 22 cities	84%	\$ 33.90
Washington	Yes	Transit: 10 counties and 14 districts	87%	\$ 82.60

- One of the most visible contributions of local option sales taxes has been the funding of various rail transit projects around the country. Voters in Atlanta, Charlotte, Dallas, Denver, Houston, Los Angeles, Phoenix, Sacramento, Salt Lake City, Seattle, San Diego, San Francisco, San Jose, and St. Louis have approved sales taxes for new rail construction projects. Other areas that have so far been unsuccessful at winning approval for sales tax-financed light rail projects include Austin, Kansas City, Miami, San Antonio, Portland's northern suburbs, and San Francisco's northern suburbs.
- In some rapidly growing metropolitan areas, including San Jose and Phoenix, sales taxes that once funded only highways are being replaced with sales taxes that fund new transit projects.
- California has two types of transportation sales taxes. Seven counties have adopted permanent sales taxes (six at 1/2%, one at 1%) that are used exclusively for public transit. Sixteen counties have time-limited 1/2% sales taxes (ranging between 10 and 30 years in duration) that can be used for any mix of transportation purposes. The use of these taxes varies significantly among the various counties,

with some favoring freeway expansion programs, others investing in rail extensions, and others favoring street maintenance, transit services, and other less capital-intensive investments. Most of these taxes were adopted under rules that required approval of a simple majority of voters. However, under current law, two-thirds of voters must approve any new local option taxes, or any extensions of the existing taxes beyond their current expiration dates.

- Texas relies heavily on local option sales taxes between 1/4% and 1% to fund eight major public transportation systems. Both Houston and Dallas have pursued diversified transit capital programs, incorporating rail projects as well as investments in high occupancy vehicle lanes and busways.
- At nearly 12 million residents, New York's Metropolitan Commuter Transportation District is the most populous transportation taxing district in the country. In addition to the 1/4% sales tax imposed throughout its 12-county region (including the five boroughs of New York City), the region also has a special excise tax on companies in the transportation and transmissions industries (including trucking, telephone companies, and other businesses). This tax raises nearly twice as much revenue as the region's 1/4% sales tax. Phoenix, Arizona has a similar charge: a 0.2% excise tax on telecommunications businesses, with revenues used for street and pedestrian improvements.
- The highest rate for taxes dedicated entirely to public transportation is found in Aspen (Pitkin County, Colorado), which has a 1.5% transit sales tax. Close behind are Seattle (1.2%), and Atlanta, Austin, Cleveland, Dallas, Houston, Los Angeles, and New Orleans (all 1%). Beginning in 2006, California's Santa Clara County will also have 1% in sales taxes dedicated entirely for public transit.

## **2.5. Income, payroll, and employer taxes**

### *Characteristics*

Most local income taxes have a flat rate, and their incidence can be said to be roughly income-neutral. The true incidence of a local income tax will depend on various exemptions, deductions, and credits that may disproportionately favor taxpayers at one end of the income spectrum or the other. In contrast, the federal income tax and many states' income taxes have graduated rates that rise with income, making them more strongly progressive.

Income taxes are generally considered to be horizontally equitable as well, since individuals of comparable incomes tend to pay comparable taxes. However, inequalities can arise when the tax is not levied uniformly across a metropolitan region. In cases where cities have higher income taxes than their surrounding suburbs, the tax may help drive higher-income residents out to the suburbs.

An alternative to the income tax that circumvents this problem is the payroll tax, which taxes employers based on the total of all salaries they pay out. It essentially taxes income based on a worker's place of employment, rather than place of residence, except that the tax is invisible because it is built into the employee's salary. This approach is particularly appropriate for supporting transit and other urban services because it ensures that commuters into a city contribute to services that benefit them. However, it is also controversial because commuters have no representation within the government imposing the tax, and therefore no control over its implementation. In addition, unless the tax is implemented region-wide, it may provide an incentive for businesses to relocate out to the suburbs.

Income taxes are not as stable as sales, gas, or property taxes, because they vary more with economic conditions. Revenues can spike during periods of strong economic growth as workers receive bonuses and investors reap capital gains. Similarly, revenues can fall sharply in areas experiencing high

unemployment during a recession, just when tax revenues are most needed to fund public services. Income taxes do provide an advantage over gasoline taxes in that they keep pace with inflation.

Aside from income taxes, several states authorize occupational privilege taxes or business license taxes that vary according to profits, number of employees, or other factors. Because of these taxes' relationship to income and employment, we have included them here.

#### *Authority and Use*

The fifteen states that authorize local income or payroll taxes are primarily located in the Mid-Atlantic, the Midwest, and the South. The majority of these authorize income taxes as a general revenue source for their cities or counties.

**Figure 4: Map of Local Option Employment Taxes for Transportation**



The use of income taxes to generate transportation revenues is rather limited. Only four states (Kentucky, Indiana, Oregon, and Virginia) make a specific statutory connection between income taxes and transportation-related expenditures. In a fifth state, Ohio, one city voluntarily earmarked a portion of its income tax for transit purposes.

Here are highlights of our findings:

- Indiana allows counties to adopt a local option income tax of up to 1% for transit operations, or up to 0.5% for economic development purposes, including infrastructure investments. Most counties have adopted income taxes, but no centralized information is available on how the revenues are used. Two public transit districts, in Lafayette and South Bend, report receiving small amounts of support from income taxes.
- Kentucky permits cities or counties to adopt occupational license taxes on 1% of wages and/or profits to fund “mass transportation programs,” which may include expenditures on road construction. This tax requires voter approval. Four counties have adopted this tax, three to support the Transit Authority of Northern Kentucky in suburban Cincinnati, and one to support the Transit Authority of River City in Louisville. Because these are taxes on business payrolls, they operate as commuter taxes, deriving revenues from all workers in these counties, not just residents. These taxes primarily support transit operations, but the Louisville area is considering an increase in the tax to help fund a light rail line.
- Ohio authorizes cities to adopt income taxes up to 1% for general revenues without voter approval. Taxes higher than 1% require voter approval, and must have a specified purpose. Cincinnati has a 0.1% income tax for the construction and maintenance of transportation and other infrastructure, and 0.3% income tax to support the Southwest Ohio Regional Transit Authority. These are commuter taxes imposed on all individuals working in the city of Cincinnati, as with the corresponding income taxes across the river in Kentucky.

**Table 5: Local Option Income and Payroll Taxes**

State	Allowable Uses	Voter Approval Required?	Areas imposing tax	% of Pop. Taxed	Per Capita Revenues
Alabama	General Revenues	No	None	-	-
Arkansas	General Revenues	Yes	None	-	-
Delaware	General Revenues	No	None	-	-
Georgia	General Revenues	Yes	None	-	-
Indiana	Transit, Infrastructure	No	Transit: 2 districts	4%	\$ 1.70
Kentucky	Transit, Parking	Yes	Transit: 1 county, 1 district	25%	\$ 33.30
Maryland	General Revenues	No	None	-	-
Michigan	General Revenues	Yes	None	-	-
Missouri	General Revenues	No	None	-	-
New Jersey	General Revenues	No	None	-	-
New York	General Revenues	No	None	-	-
Ohio	Economic Dev., Any	Yes	Transit: 1 district	6%	\$ 35.40
Oregon	Transit, Services	Yes	Transit: 2 districts	37%	\$ 136.60
Pennsylvania	General Revenues	Yes	None	-	-
Virginia	Transportation Facilities	Yes	None	-	-
Washington	Various	Yes	Congestion Relief: 30 cities	8%	\$ 22.40

- Oregon authorizes public transit districts to adopt a 1% income tax or a 0.6% payroll and self employment tax, with voter approval. Two areas have adopted the payroll and self-employment taxes. The Lane County Transit District (serving Eugene) uses its revenues for a mix of transit capital and operating expenses, and Tri-Met Transit District (serving metropolitan Portland) dedicates its payroll tax to help fund a light rail extension. The income tax has not been implemented, and the self-employment tax was adopted only within the past decade.
- Virginia permits voters in cities and counties meeting certain size criteria to approve an income tax of up to 1% to fund the construction, operation and maintenance of transportation facilities, including highways, transit systems, airports, and ports. This tax has not been adopted anywhere in the state.
- Washington allows a wide range of different taxes on employers. With voter approval, cities may tax businesses based on their floor area, number of employees, type of business activity, or gross proceeds. While not exactly an income or payroll tax, these taxes serve a similar purpose: getting businesses to pay for their transportation impacts. Generally, funds are used for congestion relief programs, such as vanpool services. Employers involved in their own trip reduction efforts are generally exempt from the tax. Local governments in Colorado also impose per-employee taxes on businesses, but do not necessarily earmark the revenues for transportation purposes.

Overall, the use of income taxes in local transportation finance is small and stable. There do not appear to be any significant trends toward or away from their use.

## 2.6. Other key taxes

Several other taxes emerged as important local revenue options in particular locations around the country.

Severance taxes are weight-based charges on natural resource extraction operations, such as the removal of timber, coal, or stone. Because these industries use some remote roads with few other users, and their heavy trucks cause disproportionate damage to roads, taxation of the removal of natural resources has become an important way of financing rural road repair. This tax might be considered a user fee, except that in many places it is also used to fund education and general government services. Most states that have severance taxes impose them at a uniform rate statewide, but a few states allow severance taxes to vary at the local level. Minnesota and Alabama impose severance taxes directly by state law in some

counties (Alabama also authorizes local adoption of these taxes in a few other counties). Alaska, Tennessee and Virginia authorize severance taxes to be adopted anywhere.

**Table 6: Other Local Option Transportation Taxes**

State	Allowable Uses	Tax Type	Vote Required?	Adopted for transportation	% of Pop. Taxed	Per Capita Revenues
Alabama	Any	Severance	No	7 counties	-	?
Minnesota	Roads, Environment	Severance	No	22 counties	-	Roads: \$ 0.60
Tennessee	Roads	Severance	No	40 counties	-	Roads: \$ 0.90
Virginia	Roads, Econ. Dev.	Severance	No	1 city, 8 counties	-	Roads: \$ 2.60
Louisiana	Any	Lodging	Yes	1 district	11%	Transit: \$ 8.70
Nevada	Roads/Streets, Transit	Lodging	Yes	4 counties	78%	Road/RR: \$ 16.80
South Carolina	Tourism, Roads	Food/Bev./Lodging	No	1 county	4%	Roads: \$ 16.30
California	Any	Development Impact	No	Roads: 3 counties Transit: 1 county	10% 2%	Roads: \$ 10.20 Transit: \$ 6.40
Colorado	Roads	Development Impact	No	3 cities, 1 county	34%	Roads: ?
Illinois	Roads	Development Impact	No	1 county, 1 city	7%	Roads: ?
Idaho	Capital Improvements	Development Impact	No	1 county, 4 cities	26%	Roads: \$ 21.10
Maryland	Roads	Development Impact	No	1+ county	> 16%	Roads: \$ 1.60
Nevada	Roads/Streets, Transit	Development Impact	Yes	3 counties	87%	Roads: \$ 23.90
Colorado	Any	Real Estate Transfer	Yes	1 county	< 1%	Roads: \$ 45.00
New York	Transit	Mortgage Recording	No	5 districts	85%	Transit: \$ 14.90
Washington	Roads	Real Estate Transfer	Yes	31 cities	9%	Roads: \$ 18.60

Lodging taxes are charged as a percentage of the cost of hotel and motel rooms, and are authorized in many states throughout the country. They are very politically attractive, because their entire cost is paid by visitors from out of town. To prevent abuse, states generally limited the revenues from these taxes to tourism-related activities, such as tourism promotion bureaus and visitor information centers. However, in a few places they are also being used to fund major investments in transportation infrastructure. In Nevada a room tax is funding road improvements along the Las Vegas Strip, and the relocation to below grade of a freight rail line in downtown Reno. In Louisiana, a hotel tax will be used to restore service on an abandoned trolley line in New Orleans. In South Carolina, the Myrtle Beach area levies a “hospitality tax” to help fund the county’s road program.

Several different taxes have been developed to ensure that newcomers to an area pay a fair share of the cost of the area’s infrastructure and services. The most common is the use of one-time impact fees or development privilege taxes based on the floor area of new commercial or residential developments. While these are very common at the local level to pay for street improvement costs (e.g. traffic signals at new shopping centers), they are also being used in a few places to pay for significant infrastructure projects. After repeated voter rejection of sales tax proposals for the construction of new freeways, Orange County, California, created two highway authorities to build the roads with a combination of development fees and toll-financed bonds. San Francisco charges an impact fee for new downtown office construction to fund peak-hour transit services. In Nevada, Clark County has adopted development fees of \$500 per new home and 50¢ per square foot of commercial space to fund a beltway around Las Vegas. Impact fees have also been used to fund transportation improvements in Colorado, Illinois, Idaho, Maryland, Nevada, Washington, and other states.

Another option is the real estate transfer tax, or mortgage recording tax, which is essentially a tax on the sale of property. All five of New York State’s major metropolitan areas support transit operations using these taxes, which were imposed by a state act (some counties may choose to opt out, and have done so). At least four other states authorize similar taxes, including Colorado, Delaware, Illinois, and Washington.

## 2.7. Comparing the tax options

Each of these various revenue options has a unique set of advantages and disadvantages from the standpoint of transportation finance. The table below summarizes some of the major characteristics of the most common local option taxes.

**Table 7: Characteristics of Five Common Local Option Transportation Taxes**

	Fuel	Vehicle	Property	Sales	Income
<b>Equity</b>					
Do all households pay?	No	No	Yes	Yes	Yes <sup>a</sup>
Is the tax regressive?	Yes	Yes <sup>b</sup>	Moderately	Yes	No
Do non-residents contribute?	Yes	No	No	Yes	Yes <sup>c</sup>
<b>Stability</b>					
Broad tax base?	Narrow	Narrow	Very broad	Broad	Broad
Indexed for inflation?	No	No <sup>d</sup>	Yes <sup>e</sup>	Yes	Yes
Fluctuates with economy?	Some	No	No	Yes	Some
<b>Transportation Relevance</b>					
Relevance to highways?	Strong	Strong	Moderate	Weak	Moderate <sup>c</sup>
Relevance to streets?	Strong	Strong	Strong	Weak	Weak
Relevance to transit?	Moderate	Moderate	Strong	Moderate	Moderate <sup>c</sup>
<b>Typical Applications</b>					
Types of projects funded	Highway Cap. & Maint.	Highway Cap. & Maint.	Street/Transit Maint. & Oper.	Hwy/Transit Cap. & Oper.	Transit Operations
Typical tax rate	5¢ per gallon	\$10 per vehicle	5 mills	0.5%	0.25%
Typical revenues per capita	\$20 - \$35	\$7 - \$8.50	\$30 - \$300	\$40 - \$70	\$30 - \$60

a. Except people with very low incomes.

b. Flat vehicle taxes are strongly regressive, and value-based (*ad valorem*) taxes are moderately regressive.

c. Payroll taxes only.

d. *Ad valorem* vehicle taxes keep pace with inflation.

e. Except where property tax limitation measures interfere.

### Equity

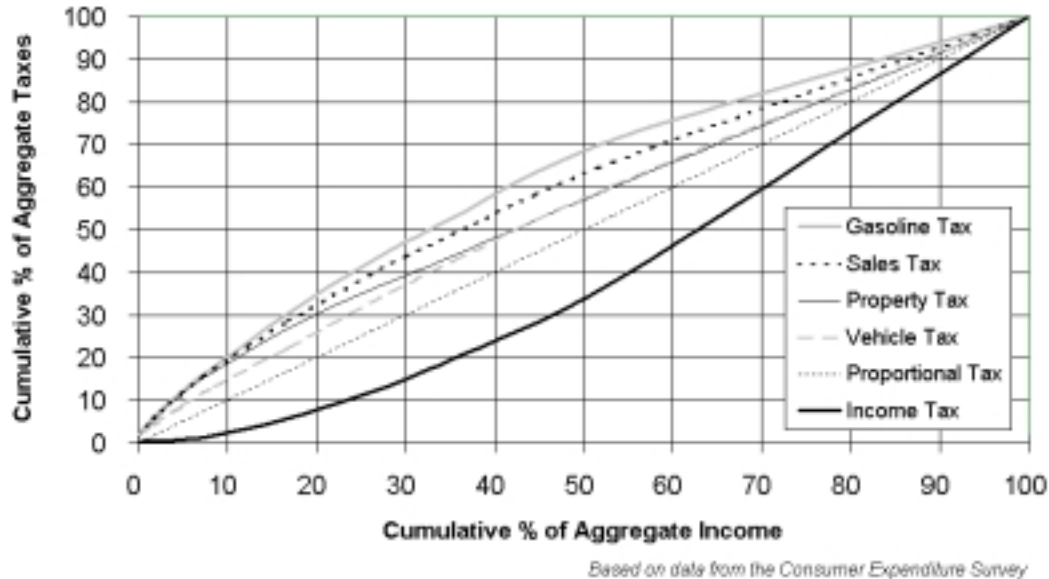
The most common concern over local option taxes is their equity, or fairness. There are many different ways of interpreting the “fairness” of a tax, and so there are many different measures of equity. Key types of equity include:

- *Vertical equity*: Does the tax treat individuals of different income levels proportionately? Regressive taxes fall excessively on poor households, while progressive taxes more strongly impact wealthy ones. The diagram below, based on data from the Consumer Expenditure Survey, compares the cumulative share of income to the cumulative share of tax burden, starting with the poorest households and moving up through the income scale. A proportional tax appears as a straight line, because the set of households that collectively earns half of society’s total income should pay half of its total taxes. A progressive tax, in which the households earning the first half of total income pay a smaller share of taxes, appears to curve below the proportional tax line. Regressive taxes curve higher. As the chart indicates, sales and gasoline taxes are the most highly regressive taxes, property and vehicle taxes are more moderately regressive, and income taxes are progressive.
- *Horizontal equity*: Does the tax treat similarly groups of people with similar incomes? By this standard, income taxes are inherently equitable. Sales taxes are close behind: people of similar incomes do not necessarily consume the same amounts of taxable goods, but at least there is a rough correspondence between consumption and ability to pay. Property taxes can be very inequitable by



the standard of horizontal equity because some people (such as retirees) can be property-rich but income-poor. Transportation user taxes also rate low because people who do not own cars can avoid paying gasoline and vehicle taxes no matter how high their incomes.

**Figure 5: Income vs. Tax Incidence, U.S. Average**



- Geographic equity:* Does the tax ensure that the area that pays the tax also receives the benefits from the revenues? This tends to be a dominant concern of many policymakers and taxpayers, who worry that their tax dollars will be transferred for another region’s benefit. Local option taxes inherently address this concern: they ensure that tax dollars are spent where they are collected. Yet this apparent fairness masks a genuine inequity: outsiders often shoulder a large share of the tax burden (this can be the case with sales, lodging, development, payroll, and gasoline taxes, depending on the area). Politicians are well aware of this, and often use it to argue in favor of the taxes, but it rarely provokes debate because outsiders don’t have a voice in local politics. The only way geographic equity tends to emerge as a political issue is in the allocation of revenues *within* a taxing district. Ensuring geographic balance among project locations often becomes a dominant planning objective in order to boost the chances for voter approval of the taxes.
- Fiscal equity:* Do different areas have the same capacity to generate tax revenues? Some areas can generate a lot more revenue with a given tax than other areas can. “Tax rich” areas (those with higher property values or retail sales) can therefore afford better transportation investments than “tax poor” areas. Because of this, taxes collected statewide or nationwide and distributed according to a policy- or need-based formula (like the federal gasoline tax) are more equitable according to this standard than taxes collected and distributed within small districts. This is essentially the flip side of geographic equity. While fiscal equity is an important concern in many other areas of public finance (particularly education), it tends to be less of an issue in local transportation policy.
- Benefit equity:* Are the costs incurred by an individual due to a tax proportional to the benefits received from the tax? Depending on the types of projects being funded, different taxes will appear to be the most equitable according to this standard. Road and highway investment primarily benefit drivers, so taxes on fuel and vehicles would be appropriate funding sources for these projects from a benefit equity perspective. Streets and local transit services are basic public goods, so may be best funded with property taxes. Payroll taxes are most appropriate for transit and demand management

projects that primarily fund peak-hour congestion relief. Sales taxes seem best suited for projects that promote regional economic development.

- *Social equity:* Are the costs incurred by an individual due to a tax proportional to the benefits received from the tax and the costs imposed by the individual on society? From the broader perspective of society as a whole, an equitable tax system ensures that taxpayers pay for the benefits they receive as well as the costs they impose. In the case of transportation policy, this would mean that travelers would ideally pay for the delay, air pollution, and other costs they inflict on others. In principle, incorporating these externalities into the price structure of the transportation system would maximize total economic efficiency by creating a meaningful set of price signals. Examples of taxes that include aspects of this principle are fuel taxes that are based on contributions to greenhouse gas emissions, and variable tolls that reflect congestion costs at different times of day.

### *Stability*

Another important concern is whether the tax will provide a strong and reliable revenue stream over time. There are several components to this:

- *Base:* Is the tax base large enough that it can generate large revenues from a low marginal tax rate? Sales, property and income taxes pass this test. Fuel and vehicle taxes have smaller tax bases, and so cannot generate large revenues without high tax rates.
- *Inflation resistance:* Will the tax generate revenues that keep pace with inflation? Gasoline consumption and the number of registered vehicles tend to grow more slowly than the rate of inflation, so the real revenues generated by gas taxes and flat vehicle fees fall over time. Over the long run, economic growth will cause retail sales, wages, property values, and vehicle values to keep pace with or outgrow the rate of inflation, so theoretically sales, income, property, and *ad valorem* vehicle taxes should all provide long-term revenue security. However, many states have policies that limit the growth of property taxes, so these may grow much more slowly than property values.
- *Recession stability:* Is the tax a stable revenue source in bad economic times? Retail sales are strongly dependent on the economic climate, so transportation agencies that are highly dependent on sales taxes may find themselves in serious trouble during a recession. Gasoline taxes and income taxes also vary with the economy, particularly if unemployment rises sharply. Vehicle and property taxes are generally not as susceptible to dips during recessions.<sup>5</sup>

### *Transportation Relevance*

A third issue in the selection of a tax option is whether it has a logical connection to the benefit it is being used to provide. This incorporates lessons from the equity characteristics of the taxes, as well as simple common sense.

- *Taxes relevant to highway investments.* Motor fuel and vehicle taxes have a clear and obvious connection to roads and highways, since automobile drivers are the primary users of these transportation facilities. Property taxes may also be related, to the extent that the road improvements reduce the travel time to places of employment or commerce, thus increasing the land's value. Payroll taxes are appropriate in cases where the primary function of the investments is to reduce rush-

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<sup>5</sup> For property taxes, this will depend on a state's reassessment policies. In states that reassess property frequently, property tax revenues will rise and fall with market values. In states where property is not reassessed unless it is sold, property tax revenues tend to be much more stable than overall market prices.

hour congestion. Sales taxes are relevant only to the extent that road investments promote regional economic development, such as improving truck access to port facilities.

- *Taxes relevant to street investments.* Motor fuel and vehicle taxes are appropriate ways of funding street improvements because streets provide basic mobility and parking for automobile users. Property taxes are relevant because streets imbue property with value, and because all households benefit from the services that are delivered by the street network. Sales and payroll taxes may be connected to street investments that are part of a program aimed at local economic development.
- *Taxes relevant to transit investments.* Property taxes are seen as an appropriate means of funding public transit operations, because transit is a basic public service providing travel options to all households, regardless of whether they regularly use the service. Payroll taxes are appropriate if the investments reduce rush hour congestion, and gasoline and vehicle taxes are appropriate if they reduce congestion generally. Sales taxes are relevant to the extent that the investments promote the regional economy.

### *Typical applications and revenues*

Earlier parts of this chapter explored the major uses of each of these taxes around the country, and noted how much revenue they generate on an average statewide basis. But how much money can an individual city, county, or taxing district hope to make from one of these taxes? That depends on the tax rate chosen and the characteristics of the area's tax base.

- Fuel taxes depend on many factors, including the intensity of vehicle use in an area, the amount of through traffic stopping to refuel there, and whether diesel fuel is included in the tax base. Annual per capita revenues from a 5¢ per gallon gasoline tax typically ranged between \$20 and \$35. Metropolitan counties tended toward the lower end of the scale. The extreme values on both ends tended to correspond to rural areas.
- Vehicle tax revenues depend on vehicle ownership, the structure of the tax, and whether certain classes of vehicles (e.g. farm vehicles) are exempt. Annual per capita revenues for a flat, \$10 annual tax ranged between \$7 and \$8.50.
- Property taxes vary widely, depending on land values, population densities, homestead exemptions, their applicability to incorporated areas, and an area's mix of land uses. In the handful of states for which we had both rate and revenue data, average annual per capita revenues for a 5 mill (0.5%) property tax ranged between \$30 and \$300, with the range within each of these states varying by a factor of two to three.
- Sales taxes varied according to an area's economic strength, its cost of living, and the degree to which it serves as a magnet for retail activity for non-residents. Annual per capita revenues from a 1/2% sales tax ranged from less than \$20 in rural counties in Alabama and Louisiana to over \$200 in remote ski resort area in Colorado and Wyoming. The typical range was much narrower: from below \$40 in rural counties to \$50 in suburban counties, to \$60 or \$70 in counties containing central cities.
- Payroll taxes vary according to an area's average wage level and the size of its employment force relative to its resident population. A central city with many commuters from outside can generate very high revenues from a payroll tax. A 1/4% payroll tax would generate between \$30 per capita annually in Cincinnati and \$60 per capita annually in Portland.

### **3. Observations and policy issues**

#### **3.1. Shift from user taxes to sales taxes**

An overall pattern that emerged in the course of this study was a gradual shift toward sales taxes and away from user taxes. As discussed earlier, the sales tax generates a very large amount of revenue at a low marginal tax rate, and tends to meet less opposition from voters than most other revenue options.

Aware of the public's acceptance of local sales taxes elsewhere, many states passed new legislation over the past decade authorizing or expanding the use of local sales taxes: nine for public transit (Alabama, Arkansas, Colorado, Hawaii, Iowa, Missouri, New Mexico, North Carolina and Utah), and eight for roads or other capital improvements (Colorado, Illinois, Louisiana, Minnesota, New Mexico, Oklahoma, South Carolina, and Utah). The number of local governments adopting sales taxes for transportation purposes expanded significantly in Arizona, Colorado, Georgia, Iowa, Louisiana, Missouri, New Mexico, North Carolina, Ohio and Utah in the 1990s. Four other states (Minnesota, South Carolina, Vermont and Wyoming) put their toes in the water, experimenting with these taxes in a more limited way.

In contrast, taxes on motor fuels and vehicles have been relatively stagnant. Just four states passed legislation authorizing new local gas taxes during the 1990s: California, Montana, Tennessee, and Washington. In all four cases, local adoption of these taxes has been minimal or non-existent. Only in Illinois did major areas adopt new local gasoline taxes where none existed previously. Florida and Nevada, which have local fuel taxes everywhere, saw average tax rates rise over the course of the decade.

Over the past ten years, seven states (California, Colorado, Montana, Nevada, New Hampshire, North Carolina and Washington) passed new legislation authorizing local vehicle registration taxes, and five (Indiana, Kentucky, North Carolina, Utah and Washington) authorized new taxes on vehicle rentals. However, during the same time, a political backlash against high personal property taxes on motor vehicles led to their elimination in several states (including local taxes in Rhode Island and Virginia, and statewide taxes in Washington and elsewhere).

Tolls, another important local user charge, were not examined in this study. Several major new highway projects around the country are being financed with tolls (including projects in Colorado and California), so this form of user finance may be on the rise. However, our study found two examples, both in Florida, of sales taxes being used to abolish tolls, thus directly shifting user fees to non-user taxes.

Although user taxes on gasoline and motor vehicles have not been popular over the past decade, the idea remains strong that transportation investments should be paid for by those who use them. Some local governments have shown great creativity in identifying and taxing user groups who stand to benefit from particular transportation projects. Las Vegas has been particularly innovative, adopting an aviation fuel tax to fund airport access projects, a hotel tax to fund improvements to Las Vegas Boulevard, and a development tax to fund a regional beltway. Many other areas around the country have also adopted taxes targeted at tourism, mining, and real estate development to fund transportation infrastructure that serve these industries. While these are not "user taxes" in the traditional sense, they are similar from a benefit equity perspective.

#### **3.2. Fiscal and competitive pressures**

Several trends that emerged in the late 1970s and continue to be felt today have helped influence the widespread adoption of local option taxes. First, a series of "tax revolts" around the country limited the ability of local governments to raise property taxes, and made state legislators wary of increasing other taxes. Today, it remains extremely difficult to win political support for increasing state gasoline taxes.

Meanwhile, a weak economy and high inflation and fuel prices hurt state and federal gasoline tax revenues, while raising the costs of meeting local capital investment needs. The purchasing power of traditional channels of transportation funding has been reduced by rapidly growing construction and right-of-way costs, escalating design and environmental standards, and eroding of gasoline tax revenues due to inflation and fuel efficiency improvements. Furthermore, as state and national highway systems have reached maturity (along with local water and sewer systems and other infrastructure), a growing share of these revenues has been needed for basic maintenance and repair of these systems.

State and federal motor fuel taxes are generally distributed to local governments using formulas that weigh each area's population, road mileage, and gasoline consumption, as well as other factors. But these formulas generally overlook congestion levels, economic and population growth rates, and other indicators of need.

The combination of these factors has led local governments to turn to local option taxes to provide the additional funding needed to undertake new transportation initiatives not possible with the traditional transportation revenue streams.

Another factor has been competitive pressures among local governments. Local governments have a strong interest in enhancing their relative political or economic positions through the pursuit of pro-development policies (Peterson 1981). Their pursuit of new jobs and land development has been another important factor leading to the wider adoption of local option transportation taxes.

Expansion of the local tax base has emerged as an important strategy for coping with the fiscal pressures described earlier. In their efforts to keep taxes low while satisfying constituent demands for services, local governments compete for forms of land development that will maximize tax revenues, such as large-scale commercial and high-income residential development. This process, known as the "fiscalization of land use" has intensified with the shift toward greater reliance on local sales taxes, and has been cited as a leading cause of the jobs-housing imbalances troubling many metropolitan areas.

The desire for economic development has long motivated local governments to seek transportation infrastructure improvements (Ward 1998; D. Brown 1999). Several state governments have made economic growth a central objective of their highway programs (Forkenbrock and Plazak 1986). During the 1980s, a growing number of states authorized local option sales taxes targeted for roads and other infrastructure, in order to allow local governments to finance their own economic development strategies.

These practices have continued over the past decade. One emerging trend has been a wave of medium-sized cities that have sought to strengthen their economic competitiveness by building light rail transit systems. Many of these cities have experienced weaker economic growth than the nation's larger cities; many also have lacked the home rule taxation powers enjoyed by larger, older cities. In recent years, however, several cities (including Charlotte, Phoenix and Salt Lake City) have won voter approval for new sales taxes to build these rail projects, and over a dozen others are planning to seek voter support for these taxes in the near future.

Today, cities and regions must also compete on the basis of public amenities. In order to broaden their coalition of support, transportation tax proponents are increasingly highlighting their quality-of-life benefits of their proposals. As a result, these plans are growing more diverse and innovative, with new emphasis on open space protection, recreational trails, bicycle facilities, urban design and other nontraditional investments. Of course, traditional economic development also remains an important objective.

### 3.3. Divergent devolution of transportation powers

Another central trend in transportation policy has been *devolution*—the de-centralization of control over transportation planning and decision-making to more local levels of government. Congress and several states have passed sweeping reforms aimed at providing lower levels of government with more authority and flexibility to make transportation investment decisions reflective of local priorities.

One factor behind this shift has been an evolving set of federal policy goals in transportation finance. In the 1950s, at the outset of the Interstate era, the federal government’s goal was simple: construct a uniform system of long-distance, intercity highways for commerce and national defense. Because many state highway departments already had decades of experience in road construction, they were given responsibility for planning and building this system. In the 1960s and 1970s, as the highways’ purpose evolved toward facilitating suburban expansion, the federal government created metropolitan planning organizations (MPOs) to advise the states on regional policy coordination.

With the completion of the Interstates, a new set of federal transportation objectives began to emerge. The Intermodal Surface Transportation Efficiency Act of 1991 shifted federal policy to emphasize a far wider range of goals, including efficient resource management, intermodal linkages, environmental protection, and the economic and quality of life objectives of local communities. Because of their institutional ability to include a range of stakeholders and disciplinary approaches, MPOs’ authority over planning decisions has been greatly expanded.

However, federal legislation can only delegate powers related to the expenditure of federal funds; it cannot grant powers of taxation. Any more fundamental policy devolution – including the power for an area to determine how much to tax itself and spend for transportation purposes – requires authorization from state governments.

States have also devolved unprecedented degrees of authority over transportation finance to the local level. As noted in this study, many state governments have granted revenue and taxation powers to local and regional governments, in the form of local option transportation taxes. Many states have also taken steps to devolve existing revenue streams, such as California’s recent law shifting control over 75% of all state gasoline tax revenues to the local level. Yet when state legislatures have delegated these powers, very few have created a role for MPOs in their implementation:

- Only California and Nevada give authority over local option taxes directly to MPOs. In California, three single-county MPOs (San Diego, San Joaquin, and Santa Barbara) directly administer programs for half-percent sales taxes. Nevada has given authority over local option gasoline and transit sales taxes in its two major metropolitan counties (Clark and Washoe) to their MPOs. Other taxes, such as the taxes funding construction of the Las Vegas beltway, are administered by the counties, not the MPOs. In both Nevada cases, the MPOs are also public transit operators.
- Arizona’s transportation sales taxes and Washington’s vehicle license, real estate excise, and other taxes remain under the control of the counties adopting them. However, the revenues may only be used for projects that are consistent with regional transportation plans.
- Virginia’s gasoline taxes in suburban Washington, D.C. are controlled by two regional transportation commissions, each of which covers multiple counties and has significant transportation planning functions. But the area’s official MPO (the National Capital Region Transportation Planning Board) has not been given a formal decision-making role in the use of these funds.

- Other states with single-county transportation taxes have given power over the revenues to local councils of governments. Although these entities are like MPOs in that they consist of city and county representatives, they do not necessarily share the same policy mandates. California has used this approach extensively: most of its “county transportation authorities” administering sales tax programs operate independently of their regions’ MPOs.
- Many states (including California, Colorado, Georgia, Illinois, Louisiana, New York, Oregon, and Washington) have large, multi-county transit taxes, with revenues controlled by public transit agencies that are institutionally separate from metropolitan planning organizations. Generally, these transit agencies aren’t given much leeway, and must use their revenues for prescribed transit operations or capital projects. However, some do conduct some multimodal transportation planning and can decide for themselves how their tax revenues will be invested.

There are several reasons why states favor traditional local governments over MPOs. To begin with, many policymakers see cities and counties as more accountable to the voters because they are directly elected and their actions tend to be closely monitored by the press. Some state lawmakers may also see MPOs as a federal intrusion on a transportation planning process that they used to control. Whether or not states object to the new role of MPOs in programming federal transportation funds, they have no incentive to further expand MPOs’ powers.

Another reason states route local funds around MPOs is to avoid getting entangled in the MPOs’ complex planning mandates. Supporters of local option taxation argue that self-funded local projects can be delivered more quickly and cost-effectively than those funded through traditional mechanisms, because they avoid some time-consuming federal planning requirements and bureaucratic delays in state transportation departments. Also, by focusing a dedicated revenue stream on projects more quickly, they can significantly reduce the costs of issuing bonds. They can also circumvent the expensive federal labor requirements that MPOs must follow.

Of course, locally-financed projects don’t have completely free reign. They must perform all of the standard environmental impact reviews, and must follow state administrative procedures for contracting practices. Furthermore, if any state or federal matching funds are required, the projects are subject to the full range of federal planning requirements. Metropolitan planning organizations (or state governments in rural areas) retain the authority to direct how any federal matching funds are used.

However, by the time voters have approved a local option tax and legally-binding expenditure plan, MPOs are left with little political and legal flexibility to consider alternative investment scenarios. In general, then, the use of local option taxes is determined outside of MPO planning procedures. To the extent that many region’s major new infrastructure plans are being adopted through these voter-approved local tax initiatives, some important questions need to be addressed. First, to what degree is there interaction between these two parallel planning processes – those led by MPOs for the allocation of state and federal funds on one hand, and those led by ad hoc committees of political and civic leaders proposing new local option taxes? And to what extent are transportation system efficiency, integration of transportation and air quality goals, and other broad public policy objectives addressed if MPOs are no longer driving the metropolitan transportation planning process?<sup>6</sup>

### **3.4. Trade-offs between accountability and flexibility**

In designing local option tax policies, one of the most difficult issues faced by state legislatures is the apparent trade-off between ensuring accountability and preserving flexibility.

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<sup>6</sup> The present study was not designed to address these questions, but other research currently underway by the authors will do so.

As a general rule, local option taxes everywhere require voter support, even if the law does not require an official referendum. For local governments seeking to undertake new investments in transportation infrastructure or services, the greatest challenge may be reassuring the public that the new tax revenues won't be squandered. To help build this confidence, policymakers have developed a variety of ways to guarantee that the implementation of the tax remains accountable to the voters. Some of these include:

- *Time limits.* When a tax funds routine, ongoing needs, such as transit services or road maintenance, it is typically unrestricted in its duration. When capital projects are being funded, however, time limits are often required. These can be set by the state (Georgia requires renewal of its special purpose sales taxes after five years), or left up to the local governments (e.g. durations of sales taxes in California and Ohio must be specified in the ordinances establishing them). Some states have also set local option taxes to expire automatically when pre-specified revenue targets are reached (Florida, Georgia, Minnesota, and North Carolina). In addition to reassuring voters that they will have the opportunity to cancel a tax if it does not deliver on its promises, this short time horizon forces counties to avoid risky mega-projects. Instead, it encourages a greater focus on smaller, more cost-effective investments. These projects increase the likelihood that governments will be able to deliver on their promises, and thus boost the chances for voter renewal of the tax.
- *Legally binding project lists.* Some states require that projects be specified in advance (e.g. sales taxes in Arizona, California, Iowa, Kansas, Louisiana, Minnesota, and Oklahoma; property taxes in Illinois, Massachusetts, Tennessee, Texas, Vermont, and Wyoming). Among the states that do require earmarks, some states are more flexible than others as to whether general types of projects can be specified, or whether individual projects must be named. South Carolina is particularly strict: it requires a separate ballot measure for each individual project.
- *Supermajority voter approval.* In order to protect against a motivated minority passing a tax not favored by the majority of citizens, some states require supermajority approval for certain types of tax increases (e.g. 2/3 for all taxes in California, 3/5 for certain property taxes in Mississippi and West Virginia, 4/7 for any taxes with bonding authority in Missouri). When special assessments are being used in a local improvement district, states often create double-majority requirements, such as a majority of landowners representing a majority of the total property value involved (Massachusetts, Mississippi, Montana); or they simply weight votes by frontage or property value (Connecticut, New York, South Carolina, Wyoming). Some states have options for approving taxes that require supermajority approval of elected bodies.
- *Risk management strategies.* Other areas have voluntarily taken steps to manage risk, such as cost escalations or revenue shortfalls that can prevent a tax from delivering its promised projects. To avoid this problem, some local option tax expenditure plans have been designed with built-in “contingency funds” – unbudgeted projected revenues that can be used to meet any unexpected costs. In California, Contra Costa County built into its expenditure plan a cushion equivalent to 6% of the expected revenues.
- *Long-term financial planning.* In the United States, financial planning for transportation projects rarely looks beyond the ribbon-cutting: we tend to build facilities with little thought to financing their long-term maintenance needs. As a result, maintenance tends to be deferred, substantially driving up costs and draining resources from other much-needed projects. A fiscally responsible strategy for avoiding this problem can be to invest in the long-term maintenance needs of new infrastructure up front, when the project is initially built. Mecklenburg County, North Carolina, sets aside a share of its tax revenues, and invested it as seed money for a resurfacing the facility 15 years in the future.



Unfortunately, some of these constraints can have unintended consequences. A voter approval requirement creates incentives for political leaders to seek to maximize votes by appealing to parochial interests over regional ones. The end result is often a set of investments that favors tax-rich areas on the metropolitan edge over more densely populated cities and older suburbs. This approach typically provides greater geographic equity at the expense of vertical equity and overall cost-effectiveness. In places with supermajority voter approval requirements, the incentives for poll-driven project selection are even stronger.

In some cases, the practice of earmarking taxes for specific projects has proven too restrictive and inflexible in light of changing needs or more detailed study. In North Dakota, counties have found themselves legally bound to voter-approved rural road building programs, despite shifting population patterns that have created greater needs near growing cities and towns. In California, counties have found it difficult to substitute alternative projects after the projects specified in their expenditure plans proved infeasible or controversial. These experiences suggest that the desire to give voters greater control over their tax dollars needs to be balanced against the need for flexibility in transportation planning and programming.

Several areas have found innovative strategies for providing flexibility in their local option tax expenditure programs, while still maintaining accountability. By not earmarking the projects in advance for specific projects, the implementation of these taxes can become supportive of, rather than competitive with, the regional planning process.

- *Primacy of regional plans.* Washington requires that local governments adopting local option fuel, vehicle license, and commercial parking taxes use their revenues in a manner consistent with existing regional transportation and land use plans. The local governments must also spend their revenues in accordance with their own transportation plans, which have six-year planning horizons and must explain how they will be coordinated with regional plans.
- *Expert review.* Washington also requires that any local governments adopting motor vehicle excise taxes, employer taxes, or sales taxes for “high capacity transit” purposes (transit on exclusive rights of way) undertake an alternatives evaluation process before any project can be built. This process includes review by a state-appointed interdisciplinary expert review panel.
- *Goal-oriented planning.* A third approach used in Washington is the establishment of clear planning goals as a condition for the adoption of a new local option tax. Any county wishing to adopt an employer tax or a motor vehicle excise tax for the construction of HOV lanes must adopt specific targets for the reduction of single occupancy vehicle trips. These goals must address levels of transit and ridesharing, employment density, consistency with regional plans, and coordination with neighboring jurisdictions.
- *Citizen oversight.* Several counties have voluntarily created mechanisms to increase their accountability to the public. Leon County, Florida, wrote provisions into its sales tax ordinance requiring it to establish a citizens oversight committee and an annual audit process. Similar provisions have been enacted in Henry County, Georgia, and Phoenix, Arizona.

### **3.5. The puzzle of economic benefits**

As discussed earlier, economic development has been a major motivation for the adoption of local option taxes. It might be expected that local option taxes would create a difficult dilemma for cities and counties, particularly those in areas with struggling economies. Higher taxes might be expected to generate an unfavorable business climate, leading to losses of retail sales to neighboring areas, loss of

retail employment, and ultimately reductions in new retail investment. These costs must be balanced against any benefits from transportation investments. Yet in many states where they have been given the choice, metropolitan counties have chosen to adopt local option transportation taxes. Many successful campaigns for transportation taxes in these areas have relied on the financial support of real estate and development interests or major downtown employers (Beale, Bishop and Marley 1997), suggesting that at least some elements of the private sector expect to see benefits from the taxes despite the costs.

Yet despite these strong economic pressures to adopt local option transportation taxes, the theory that these programs bring overall economic benefits remains unproven. Although a county's transportation investments can bring it significant economic rewards, they also tend to cause comparable negative spillover effects further afield, as economic activity relocates to take advantage of the new facilities (Boarnet 1998). If many counties seek to promote economic development through transportation improvements, then their net effects will likely cancel out.

This raises an interesting policy question: do local option taxes create perverse incentives to over-tax? As noted earlier, a significant share of the tax burden of certain local option sales taxes is often paid by people living outside the taxing district. If the net result of the tax is also the attraction of economic activity from locations outside the district, then a local option tax would appear to be a win-win situation for local residents and businesses. In contrast, residents of surrounding areas may get the dubious privilege of paying for projects that result in net harm to their own local economies.

### **3.6. The extent and quality of local transportation finance data**

In the course of this research, we found that most state departments of transportation had incomplete or inaccurate understandings of local transportation finance. Most states collect local finance data only in response to requests from the Federal Highway Administration (FHWA). As part of its effort to compile an annual picture of transportation finance in its *Highway Statistics* series, the FHWA asks state governments to compile data on local transportation finance at least every other year. To comply with this request, some states keep detailed databases on revenues and expenditures by all local governments, but most do not.<sup>7</sup> Instead, a majority of states base their reports to the FHWA on surveys of a sample of cities and counties.<sup>8</sup> In the past four reporting cycles, 12 to 20% of states have provided no local highway finance reports at all to the FHWA.<sup>9</sup>

Despite FHWA instructions to include all local revenue sources and all levels of government, many states fail to be comprehensive in their examination of local transportation revenues. Many states told us that they collect data only on the taxes that they directly administer, but not on taxes administered locally. Others reported that they look only at the revenues of cities or counties, but not at the activities of certain special districts, which may administer very significant transportation revenue and expenditure programs.

Because of the lack of underlying data; major differences in tax policies, definitions, and data characteristics among the various states; and the twin goals of cross-sectional comparability and longitudinal continuity, FHWA faces a challenge in its annual effort to compile the fiscal data in *Highway Statistics*. The task requires FHWA to use numerous estimates and assumptions, and to adjust the data it

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<sup>7</sup> Arizona, California, Colorado, Connecticut, Idaho, Michigan, Oregon, and Washington maintain comprehensive databases on the road and highway-related finances of all local governments, and assisted our study by making these available.

<sup>8</sup> Sampling can provide valid estimates, particularly if samples are stratified to ensure appropriate representation of urban, suburban, and rural areas. However, it is often desirable to include complete representation of a state's major population centers. The largest cities and suburbs in any state are few in number and diverse, with the result that samples cannot describe them reliably. Unfortunately, the sampling procedures used by some states exclude many of their most populous cities and counties.

<sup>9</sup> This percentage is based on the footnotes of *Highway Statistics*, Table LGF-21, for the years 1991, 1993, 1995, and 1997.

receives state by state to achieve uniformity and comparability. While this effort is necessary and worthwhile, its end product often differs from the data reported by the states. The result can be confusing to users of these data, especially since FHWA does not publish complete documentation of its assumptions and techniques.<sup>10</sup>

Another problem is the fragmentation of highway and transit finance data. Of the eight states from which we received detailed local transportation finance databases, only California and Washington included transit data. In the federal government and most state governments, statistics on highway and transit finance are maintained separately, and are not generally comparable. FHWA's *Highway Statistics* attempts to include the full range of transit services provided in each state, but does not provide revenue data at the same level of detail as it does for highways. The Federal Transit Administration's *National Transit Database* publishes information on the finances of major transit agencies, but does not include transit services provided directly by city and county governments.

Given the trend toward devolution, there is a growing need for more accurate and comprehensive statistics on local transportation finance. It would be useful for states to begin considering more systematic data collection efforts, so that they can better understand and assist local governments' efforts to improve their transportation systems.

Because this study attempted to build a picture of local option transportation taxes from the bottom up, using local level data rather than aggregate data from state departments of transportation, we decided to minimize our use of the aggregate data published by the federal government. Instead, we used these data to help guide our search for important revenue sources. For comparative purposes, we used the federal data to develop comparative indicators of the use of local option transportation taxes in highway and transit finance. These can be found in Appendix A.

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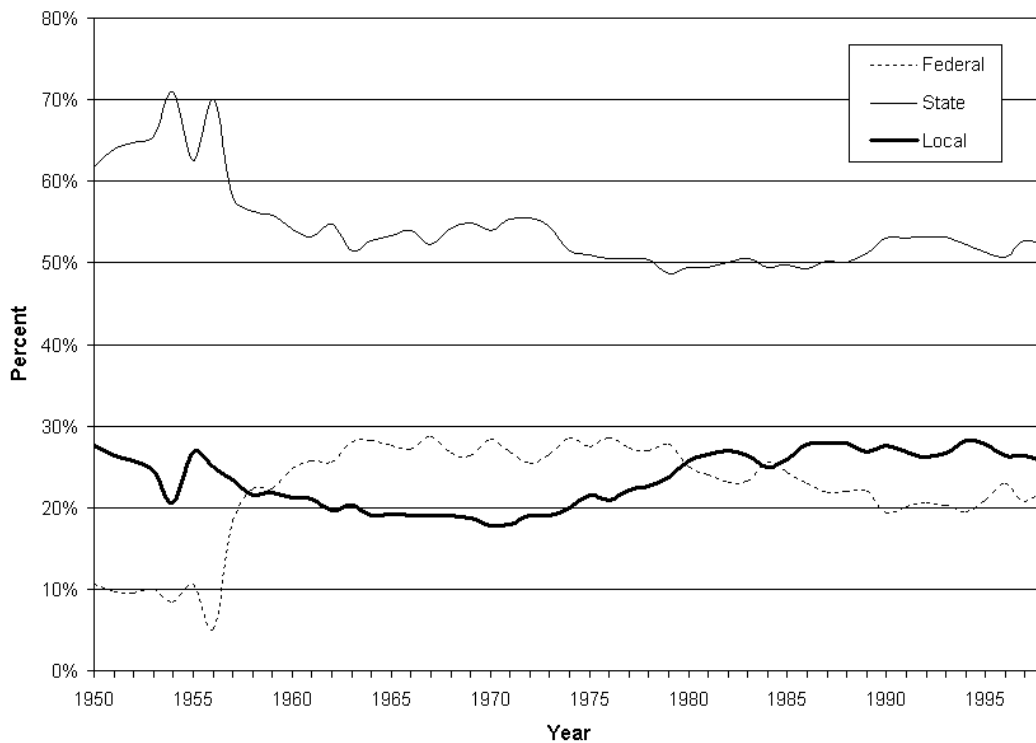
<sup>10</sup> Analysts in at least a half-dozen states complained that they did not know how the FHWA arrived at their published figures.

## Appendix A. Comparative federal data on local transportation finance

Although the local transportation finance data published by the federal government is not directly comparable to the data used in this study, it is still useful for developing an aggregate picture of local option taxation.

One way in which these data are useful is for tracking trends over time. Figure 6 tracks the share of all highway revenues (as defined by the Federal Highway Administration) that has originated at the federal, state, and local levels of government over the past 48 years. It clearly shows the sharp rise of the federal government's role in highway finance that began with the Interstate era in 1956, as well as the rising local role that came with the growth of local option taxes and other sources in the 1970s and 1980s. Unfortunately, comparable historical data for transit funding are not available.

**Figure 6: Sources of Revenues for U.S. Highways, 1950-1998**



Federal data can also be used to draw inter-state comparisons on the use of different local revenue sources. In Table 8 and Table 9, we derived a series of indicators of the use of different types of local options taxes in each state, on a percentage and per capita basis. Because of differences in data collection methodology and the definitions of different types of revenue sources, these data should not be considered directly comparable to the data presented earlier in this study. They are, however, reasonably internally consistent.

**Table 8: Indicators of the Use of Local Option Highway Taxes, 1998**

State	Pop. Millions	System Extent		Non-federal highway revs.		Per capita revenues from dedicated local taxes			Percent of non-federal revenues from		
		Lane miles (1000s)	...per 1000 residents	\$ Millions	per capita	Local Fuel & Veh. Taxes	Property Taxes	Other Local Taxes	Local Fuel & Veh. Taxes	Property Taxes	Other Local Taxes
Alabama	4.35	195.1	44.8	\$1,532	\$352	\$8.38	\$25.32	\$11.91	2.4%	7.2%	3.4%
Alaska	0.62	25.7	41.8	\$355	\$577	\$2.02	\$139.12	\$14.31	0.4%	24.1%	2.5%
Arizona	4.67	116.2	24.9	\$1,898	\$407	-	\$3.51	\$57.28	-	0.9%	14.1%
Arkansas	2.54	192.9	76.0	\$793	\$312	-	\$20.06	\$27.95	-	6.4%	8.9%
California	32.68	373.8	11.4	\$10,991	\$336	-	\$5.16	\$44.45	-	1.5%	13.2%
Colorado	3.97	176.6	44.5	\$1,961	\$494	-	\$21.57	\$76.90	-	4.4%	15.6%
Connecticut	3.27	44.0	13.4	\$1,049	\$321	\$5.69	-	\$3.69	1.8%	-	1.2%
Delaware	0.74	12.4	16.7	\$497	\$667	-	\$2.35	\$1.82	-	0.4%	0.3%
Florida	14.91	249.9	16.8	\$5,654	\$379	\$37.27	\$13.59	\$32.80	9.8%	3.6%	8.6%
Georgia	7.64	238.6	31.2	\$2,079	\$272	\$1.91	\$0.24	\$79.50	0.7%	0.1%	29.2%
Hawaii	1.19	9.1	7.7	\$211	\$177	\$26.51	-	\$37.19	15.0%	-	21.0%
Idaho	1.23	94.5	76.7	\$491	\$399	\$0.61	\$40.31	\$18.95	0.2%	10.1%	4.8%
Illinois	12.07	288.3	23.9	\$3,688	\$306	\$20.00	\$22.50	\$10.87	6.5%	7.4%	3.6%
Indiana	5.91	192.8	32.6	\$1,988	\$336	\$4.42	\$9.76	\$11.97	1.3%	2.9%	3.6%
Iowa	2.86	231.1	80.8	\$1,744	\$610	-	\$86.87	\$18.21	-	14.2%	3.0%
Kansas	2.64	272.5	103.3	\$1,353	\$513	-	\$34.99	\$10.64	-	6.8%	2.1%
Kentucky	3.93	152.6	38.8	\$1,382	\$351	\$0.89	\$0.49	-	0.3%	0.1%	-
Louisiana	4.36	127.6	29.2	\$1,687	\$387	\$0.04	\$20.49	\$44.31	0.0%	5.3%	11.5%
Maine	1.25	46.3	37.1	\$498	\$399	-	-	\$0.69	-	-	0.2%
Maryland	5.13	66.4	12.9	\$1,619	\$316	\$0.63	\$4.49	\$4.79	0.2%	1.4%	1.5%
Massachusetts	6.14	74.4	12.1	\$2,379	\$387	-	\$84.15	\$4.57	-	21.7%	1.2%
Michigan	9.82	255.1	26.0	\$3,254	\$331	-	\$2.94	\$14.58	-	0.9%	4.4%
Minnesota	4.73	269.1	56.9	\$2,875	\$608	-	\$85.75	\$14.68	-	14.1%	2.4%
Mississippi	2.75	151.8	55.2	\$1,035	\$376	\$1.96	\$29.57	\$15.25	0.5%	7.9%	4.1%
Missouri	5.44	251.7	46.3	\$1,976	\$363	\$3.50	\$33.23	\$50.23	1.0%	9.1%	13.8%
Montana	0.88	142.6	162.2	\$296	\$336	\$11.86	\$23.36	\$18.06	3.5%	6.9%	5.4%
Nebraska	1.66	188.1	113.2	\$999	\$601	\$10.82	\$66.68	\$15.41	1.8%	11.1%	2.6%
Nevada	1.74	74.1	42.5	\$588	\$337	\$57.58	\$1.40	\$0.09	17.1%	0.4%	0.0%
New Hampshire	1.19	31.1	26.3	\$448	\$378	\$110.03	\$35.49	-	29.1%	9.4%	-
New Jersey	8.10	77.7	9.6	\$3,144	\$388	-	-	\$0.19	-	-	0.0%
New Mexico	1.73	124.8	72.0	\$464	\$268	\$2.09	\$2.93	\$2.38	0.8%	1.1%	0.9%
New York	18.16	238.5	13.1	\$7,934	\$437	\$0.97	\$34.11	\$21.70	0.2%	7.8%	5.0%
North Carolina	7.55	206.3	27.3	\$2,432	\$322	\$1.70	\$0.83	\$3.94	0.5%	0.3%	1.2%
North Dakota	0.64	175.3	274.9	\$299	\$469	-	\$76.48	\$6.81	-	16.3%	1.5%
Ohio	11.24	244.7	21.8	\$3,868	\$344	-	\$15.38	\$10.39	-	4.5%	3.0%
Oklahoma	3.34	232.0	69.5	\$1,794	\$537	-	\$3.52	\$17.43	-	0.7%	3.2%
Oregon	3.28	140.6	42.8	\$1,144	\$349	\$2.52	\$17.08	\$35.59	0.7%	4.9%	10.2%
Pennsylvania	12.00	248.5	20.7	\$4,188	\$349	\$2.55	\$21.57	\$23.39	0.7%	6.2%	6.7%
Rhode Island	0.99	12.9	13.0	\$255	\$258	\$12.29	\$0.25	\$0.76	4.8%	0.1%	0.3%
South Carolina	3.84	135.9	35.4	\$732	\$191	-	\$11.22	\$5.52	-	5.9%	2.9%
South Dakota	0.73	169.0	231.2	\$411	\$563	\$7.85	\$13.44	\$0.53	1.4%	2.4%	0.1%
Tennessee	5.43	181.5	33.4	\$1,373	\$253	\$4.87	\$0.11	\$0.11	1.9%	0.0%	0.0%
Texas	19.71	629.1	31.9	\$6,900	\$350	\$7.50	\$43.40	\$24.13	2.1%	12.4%	6.9%
Utah	2.10	86.4	41.1	\$993	\$473	-	-	\$1.69	-	-	0.4%
Vermont	0.59	29.3	49.6	\$213	\$361	-	\$106.88	-	-	29.6%	-
Virginia	6.79	151.3	22.3	\$2,956	\$435	\$0.03	\$0.57	\$12.75	0.0%	0.1%	2.9%
Washington	5.69	165.8	29.2	\$2,561	\$450	\$4.92	\$58.70	\$35.19	1.1%	13.0%	7.8%
West Virginia	1.81	73.7	40.7	\$763	\$421	-	\$39.17	\$5.01	-	9.3%	1.2%
Wisconsin	5.22	230.6	44.2	\$2,586	\$495	\$0.11	\$57.07	\$37.87	0.0%	11.5%	7.6%
Wyoming	0.48	59.0	123.0	\$191	\$398	-	-	-	-	-	-

**Data sources:**

**Population:** U.S. Bureau of the Census, County Population Estimates for July 1, 1999 and Population Change: July 1, 1998 to July 1, 1999 (2000).

**Lane Miles:** Federal Highway Administration, *Highway Statistics 1998*, Table HM-60.

**Non-Federal Highway Revenues:** Sum of state highway revenues from FHWA, *Highway Statistics 1998*, Table SF-1; and local revenues from FHWA, *Highway Statistics 1999*, Table LGF-1. Both tables contain 1998 data. Transfers from the Federal government were excluded.

**Local Fuel and Vehicle Taxes:** FHWA, *Highway Statistics 1999*, Table LGF-1 ("Motor-fuel and motor-vehicle tax revenues").

**Property Taxes:** FHWA, *Highway Statistics 1999*, Table LGF-1 ("Property Taxes and Special Assessments").

**Other Local Taxes:** FHWA, *Highway Statistics 1999*, Table LGF-1 ("Other Local Imposts" and "Miscellaneous").

**Table 9: Indicators of the Use of Local Option Transit Taxes, 1998**

State	Pop. Millions	Level of Service		Non-federal transit revenues		Per capita revenues from dedicated local taxes			Percent of non-federal revenues from		
		Sched. Veh. Rev. Miles (M)	per capita	\$ Millions	per capita	Local Fuel Taxes	Property Taxes	Other Local Taxes	Local Fuel Taxes	Property Taxes	Other Local Taxes
Alabama	4.35	3.83	0.88	\$15.6	\$3.58	-	\$1.00	\$0.93	-	28.0%	26.0%
Alaska	0.62	1.83	2.98	\$10.7	\$17.38	-	-	-	-	-	-
Arizona	4.67	21.41	4.59	\$109.6	\$23.48	-	-	\$0.00	-	-	0.0%
Arkansas	2.54	2.77	1.09	\$8.2	\$3.22	-	-	-	-	-	-
California	32.68	373.64	11.43	\$2,727.0	\$83.44	-	\$1.06	\$35.75	-	1.3%	42.8%
Colorado	3.97	36.45	9.18	\$200.8	\$50.60	-	-	\$41.12	-	-	81.3%
Connecticut	3.27	17.83	5.45	\$298.8	\$91.30	-	-	-	-	-	-
Delaware	0.74	5.59	7.52	\$119.5	\$160.62	-	-	-	-	-	-
Florida	14.91	92.63	6.21	\$535.4	\$35.91	\$3.32	\$1.97	\$0.70	9.2%	5.5%	2.0%
Georgia	7.64	58.74	7.69	\$297.2	\$38.92	-	\$0.77	\$31.50	-	2.0%	80.9%
Hawaii	1.19	16.51	13.87	\$80.9	\$67.93	-	-	-	-	-	-
Idaho	1.23	1.14	0.93	\$4.4	\$3.58	-	-	-	-	-	-
Illinois	12.07	179.03	14.83	\$1,110.0	\$91.97	-	\$0.62	\$30.89	-	0.7%	33.6%
Indiana	5.91	17.25	2.92	\$53.6	\$9.07	-	\$2.58	\$0.25	-	28.5%	2.8%
Iowa	2.86	5.78	2.02	\$25.1	\$8.79	-	\$2.11	\$0.01	-	24.0%	0.1%
Kansas	2.64	2.82	1.07	\$8.8	\$3.33	-	\$0.87	-	-	26.0%	-
Kentucky	3.93	12.71	3.23	\$44.0	\$11.19	-	-	\$1.77	-	-	15.8%
Louisiana	4.36	21.12	4.84	\$76.8	\$17.61	-	\$0.68	\$10.89	-	3.9%	61.8%
Maine	1.25	1.38	1.10	\$7.9	\$6.32	-	-	-	-	-	-
Maryland	5.13	44.67	8.71	\$548.1	\$106.84	-	\$3.67	-	-	3.4%	-
Massachusetts	6.14	90.87	14.79	\$1,638.1	\$266.60	-	-	-	-	-	-
Michigan	9.82	51.73	5.27	\$592.8	\$60.36	\$0.05	\$2.86	\$0.02	0.1%	4.7%	0.0%
Minnesota	4.73	27.51	5.82	\$145.9	\$30.86	-	\$18.17	\$0.15	-	58.9%	0.5%
Mississippi	2.75	1.85	0.67	\$11.5	\$4.17	-	-	-	-	-	-
Missouri	5.44	30.27	5.57	\$147.2	\$27.07	-	-	\$6.37	-	-	23.5%
Montana	0.88	1.61	1.84	\$10.5	\$11.93	-	\$4.57	\$0.15	-	38.3%	1.2%
Nebraska	1.66	5.46	3.29	\$17.8	\$10.70	-	\$4.81	-	-	45.0%	-
Nevada	1.74	15.69	9.00	\$43.8	\$25.10	-	-	\$2.49	-	-	9.9%
New Hampshire	1.19	0.60	0.51	\$2.5	\$2.07	-	-	-	-	-	-
New Jersey	8.10	165.20	20.41	\$944.0	\$116.60	-	-	-	-	-	-
New Mexico	1.73	4.92	2.84	\$23.6	\$13.63	-	-	\$2.15	-	-	15.8%
New York	18.16	607.38	33.45	\$5,457.0	\$300.51	-	\$0.30	\$23.55	-	0.1%	7.8%
North Carolina	7.55	14.43	1.91	\$61.8	\$8.19	-	\$0.62	\$1.40	-	7.6%	17.1%
North Dakota	0.64	0.79	1.24	\$2.5	\$3.88	-	\$0.91	\$0.52	-	23.6%	13.4%
Ohio	11.24	67.07	5.97	\$375.4	\$33.41	\$0.10	\$0.80	\$25.19	0.3%	2.4%	75.4%
Oklahoma	3.34	5.41	1.62	\$19.2	\$5.75	-	-	-	-	-	-
Oregon	3.28	29.65	9.03	\$254.6	\$77.57	-	\$4.19	\$52.35	-	5.4%	67.5%
Pennsylvania	12.00	109.32	9.11	\$1,578.6	\$131.53	-	-	\$0.17	-	-	0.1%
Rhode Island	0.99	6.45	6.53	\$37.1	\$37.58	-	-	-	-	-	-
South Carolina	3.84	5.52	1.44	\$20.1	\$5.24	-	-	-	-	-	-
South Dakota	0.73	0.72	0.99	\$4.2	\$5.70	-	-	-	-	-	-
Tennessee	5.43	15.35	2.83	\$79.8	\$14.69	-	-	-	-	-	-
Texas	19.71	120.28	6.10	\$780.9	\$39.61	-	-	\$34.60	-	-	87.3%
Utah	2.10	17.28	8.23	\$70.4	\$33.52	-	-	\$30.11	-	-	89.8%
Vermont	0.59	0.78	1.32	\$19.4	\$32.76	-	-	-	-	-	-
Virginia	6.79	25.23	3.72	\$197.4	\$29.07	\$2.10	-	-	7.2%	-	-
Washington	5.69	73.12	12.86	\$923.4	\$162.35	-	\$18.81	\$46.55	-	11.6%	28.7%
West Virginia	1.81	3.86	2.13	\$12.5	\$6.88	-	\$4.82	-	-	70.0%	-
Wisconsin	5.22	32.43	6.21	\$187.3	\$35.87	-	\$0.11	-	-	0.3%	-
Wyoming	0.48	0.39	0.81	\$2.6	\$5.51	-	-	-	-	-	-

**Data sources:**

*Population:* U.S. Bureau of the Census, County Population Estimates for July 1, 1999 and Population Change: July 1, 1998 to July 1, 1999 (2000).

*Scheduled Vehicle Revenue Miles:* Federal Transit Administration, *National Transit Database 1998*, Table 27.

*Non-Federal Transit Revenues:* Sum of receipts in FHWA, *Highway Statistics 1998*, Tables MT-1A and MT-1B; plus FHWA, *Highway Statistics 1999*, Tables MT-2A and MT-2B. Both tables contain 1998 data. Passenger fares and transfers from the Federal government were excluded.

*Revenues from Dedicated Local Taxes:* Federal Transit Administration, *National Transit Database 1998*, Tables 4, 5, 8, and 9.

## Bibliography

Advisory Commission on Intergovernmental Relations. *Local revenue diversification: User charges A staff report*. SR-6. Washington: Advisory Commission on Intergovernmental Relations (1987).

Advisory Commission on Intergovernmental Relations. *Local revenue diversification: Local sales taxes: A staff report*. SR-12. Washington: Advisory Commission on Intergovernmental Relations (1989).

Advisory Commission on Intergovernmental Relations. *Changing public attitudes on governments and taxes*. S-20. Washington: Advisory Commission on Intergovernmental Relations (1991).

Advisory Commission on Intergovernmental Relations. *Significant features of fiscal federalism: Volume I: Budget processes and tax systems*. M-197. Washington: Advisory Commission on Intergovernmental Relations (1995).

Beale, Henry B. R., Elbert R. Bishop, and William G. Marley. "How to pass local option taxes to finance transportation projects." *Transportation Research Record*. 1558 (1997).

Boarnet, Marlon G. "Spillovers and the locational effects of public infrastructure," *Journal of Regional Science*. 38:3 (August 1998).

Brown, Jeffrey, Michele DiFrancia, Mary C. Hill, Philip Law, Jeffrey Olson, Brian D. Taylor, Martin Wachs, and Asha Weinstein. *The future of California highway finance*. Berkeley: California Policy Research Center (1999).

Brown, Dennis M. *Highway investment and rural economic development: An annotated bibliography*. Bibliographies and Literature of Agriculture No. 133. Food and Rural Economic Division, Economic Research Service, U.S. Department of Agriculture (1999). [<http://www.ers.usda.gov/publications/bl133/>]

Darche, Benjamin Mark, and Keith D. Curry. "Benefit assessment district financing for transit projects," *PTI Journal*. 4:2 (March/April 1990).

Demery, Leroy W., Jr. "A retrospect of rail transit financing votes in the U.S., 1962-1994: Part 1: Metropolitan regions outside of California." *Headlights* 58:1-2 (January-February, 1996).

Demery, Leroy W., Jr. "A retrospect of rail transit financing votes in the U.S., 1962-1994: Part 2: Seattle, (Washington) and California." *Headlights* 58:3-4 (March-April, 1996).

Demery, Leroy W., Jr. "A retrospective of rail transit financing votes in the United States: Part 3." *Headlights* 58:7-8 (May-June, 1996).

Ettlinger, Michael P. *et al.* "Who Pays?: A Distributional Analysis of the Tax Systems of All 50 States." Washington: Citizens for Tax Justice and the Institute on Taxation and Economic Policy (1996). [<http://www.ctj.org/html/whopay.htm>]

Field, Mervin D. and Mark DiCamillo. "Public less willing now than following 1989 Loma Prieta to increase sales or gasoline taxes to pay for earthquake relief and repair." The Field poll release #1700, San Francisco: The Field Institute (1994).

Forkenbrock, David J., and David Plazak. "Economic development and state-level transportation policy," *Transportation Quarterly*. 40:2 (1986).

- Foster, Kathryn A. *The political economy of special-purpose government*. Washington: Georgetown University Press (1997).
- Haas, Peter J., Kristen Sullivan Massey, Linda O. Valenty, and Richard Verbel. "Why campaigns for local transportation funding initiatives succeed or fail: An analysis of four communities and national data." Report 00-1, San Jose: Mineta Transportation Institute (June, 2000).
- Hovey, Hal. "The property tax in the 21<sup>st</sup> Century." Washington: The Finance Project (May, 1996) [<http://www.financeproject.org/property.html>]
- Krmenec, Andrew J. "Sales tax as property tax relief? The shifting onus of local revenue generation." *Professional Geographer* (February 1991), p. 60.
- Mackey, Scott and Mandy Rafool. "State and local value-based taxes on motor vehicles." Denver: National Conference of State Legislatures (1998). [<http://www.ncsl.org/programs/fiscal/autotaxs.htm>]
- Mackey, Scott R. *Critical issues in state-local fiscal policy: A guide to local option taxes*. Denver: National Conference of State Legislatures (1997).
- Mullins, Daniel R., and Kimberley A. Cox. *Tax and expenditure limits on local governments*. M-194. Washington: Advisory Commission on Intergovernmental Relations (1995).
- Navai, Reza. "Transportation financing: a critical review of transportation pricing." *Transportation Quarterly*. 52:1 (1998): 71-83.
- Nelson, Bonnie Weinstein, and Steven B. Colman. "Transportation sales taxes: The California experience." *44th Annual Meeting, District 6, Compendium of Technical Papers*. Anaheim, California: Institute of Transportation Engineers (1991).
- Pagano, Michael A. *Devolution of federal aid highway programs: Cases in state-local relations and issues in state law*. Report M-160. Washington: Advisory Commission on Intergovernmental Relations (1988).
- Pérez, Arturo and Ronald Snell. "Earmarking state taxes." Denver: National Conference of State Legislatures (1995).
- Peters, Robert A. "The politics of enacting state legislation to enable local impact fees." *Journal of the American Planning Association*. 60:1 (1994).
- Peterson, Paul E. *City limits*. Chicago: University of Chicago Press (1981).
- Shoup, Donald C. and Phillip E. Vincent. *Equity in financing the California Transportation Plan*. Los Angeles: Department of Economics, University of Southern California (1975).
- Szeto, Cissy, and Norman H. Wuestefeld. "Historical and contemporary toll revenue uses." *Transportation Research Record* 1558 (1996).
- Taylor, Brian D. "Public perceptions, fiscal realities, and freeway planning: The California case." *Journal of the American Planning Association*. 61:1 (1995).
- Transportation Research Board. *Development impact fees for financing transportation infrastructure*. Transportation Research Circular no. 311. Washington: Transportation Research Board (1986).



U.S. Bureau of the Census. "County Population Estimates for July 1, 1999 and Population Change: July 1, 1998 to July 1, 1999." (2000). [[http://www.census.gov/population/www/estimates/co\\_99\\_1.html](http://www.census.gov/population/www/estimates/co_99_1.html)]

U.S. Department of Transportation, Federal Highway Administration. *Highway Statistics 1999*. [<http://www.fhwa.dot.gov/ohim/ohimstat.htm>]

U.S. Department of Transportation, Federal Transit Administration. *National Transit Database 1998*. [<http://www.ntdprogram.com/NTD/NTDData.nsf/1998+TOC>]

Ward, Stephen V. *Selling places: The marketing and promotion of towns and cities, 1850-2000*. New York: Routledge (1998).