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# **CRS Report for Congress**

# Public Transit Program Funding Issues in Surface Transportation Reauthorization

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#### Summary

As enacted in the Safe, Accountable, Flexible, Efficient Transportation Equity Act — A Legacy for Users (SAFETEA), federal public transit programs are currently authorized through September 2009. Decisions about reauthorization will likely hinge on the amount of funds available from the Mass Transit Account of the Highway Trust Fund, the source of about 80% of federal transit funding. Without an increase in the federal fuels tax, the use of other dedicated revenue mechanisms, or more money from the general fund, federal funding available to support both highways and transit will slow in the short term, and may decline in the medium term. Because of the growth in authorized spending in SAFETEA and the spending down of unexpended balances over the last few years, however, the transit account is expected to go into deficit in FY2011 or FY2012.

At the spending level provided for in SAFETEA in FY2009, the fuels tax dedicated to the transit account would need to be raised by approximately 1 cent per gallon to remedy the current deficit in transit funding. This would allow for no growth in the program to deal with growing needs or inflation. The U.S. Department of Transportation, however, estimates that the country needs to spend 25% more annually over the next 20 years than is currently being spent to maintain the current conditions and performance of transit systems, and 73% more to make substantial improvements. At the current federal share of overall transit finances, this translates to an additional 0.6 cents per gallon in the federal fuels tax for transit to maintain the system and 1.8 cents per gallon to improve the system.

Without new revenue, Congress may have to modify transit program priorities or, alternatively, may want to reexamine the federal role in the financing of transit systems. Some of the options that may be considered include reducing the federal matching share, encouraging more private-sector involvement, including the use of public-private partnerships and innovative financing, encouraging improvements in transit system productivity, and the broad restructuring of current federal transit programs.

The report outlines several ways of restructuring federal public transit programs, each an alternative to the possibility of leaving the existing system unchanged. First, Congress might decide to focus more resources on major capital expenses for the rehabilitation and expansion of transit service in places that are best served by this mode, primarily the densely populated parts of large cities that are often severely congested. Second, Congress might focus on supporting and rehabilitating existing services rather than major capital expansion. Third, Congress might eliminate the capital improvement programs altogether, to be replaced with a simple "block grant" that could be distributed based on transit ridership or population. This would allow state and local governments to decide how best to allocate transit funding support among existing and new services.

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# Public Transit Program Funding Issues in Surface Transportation Reauthorization

# Introduction

As enacted in the Safe, Accountable, Flexible, Efficient Transportation Equity Act — A Legacy for Users (SAFETEA), P.L. 109-59, federal public transit programs are currently authorized through September 2009. Decisions about reauthorization will likely hinge on the amount of funds available for surface transportation, particularly revenues from the federal fuels tax and related taxes.<sup>1</sup> Currently, approximately 80% of federal transit funding is derived from the Mass Transit Account of the Highway Trust Fund, and the other roughly 20% is taken from the General Fund of the U.S. Treasury. Without an increase in the fuels tax, the use of other dedicated revenue mechanisms, or more money from the general fund, federal funding available to support both highways and transit will slow in the short term, and may decline in the medium term. Because of the growth in spending provided for in SAFETEA and the spending down of unexpended balances over the last few years, however, the highway account<sup>2</sup> of the trust fund is likely go into deficit in FY2009 and the transit account is expected to follow in FY2011 or FY2012.<sup>3</sup>

Fiscal austerity may require a reassessment of federal transportation priorities. A significant increase in the fuels tax, the identification of other revenues, or a combination of the two, on the other hand, may allow the programs to grow as they have in the recent past. In terms of transit programs, SAFETEA authorized approximately \$53 billion from FY2004 through FY2009. In nominal terms, this was a 46% increase in transit spending over the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), as amended, P.L. 105-178 and P.L. 105-206, and double the amount authorized in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), P.L. 102-240.

In this context, this report examines the financing of the federal public transit program, and transit financing in general. The report begins with an overview of

<sup>&</sup>lt;sup>1</sup> Revenues deposited in the Highway Trust Fund come from taxes on several fuels (gasoline, diesel, gasohol, and special fuels) as well as taxes on tires, sales of trucks and trailers, and heavy vehicle use.

<sup>&</sup>lt;sup>2</sup> Although not named in law, the part of the Highway Trust Fund outside of the Mass Transit Account is typically called the highway account, a convention followed in this report.

<sup>&</sup>lt;sup>3</sup> *Transportation Weekly*, "New HTF Figures Show Long-Term Fiscal Imbalance," Vol. 8, Issue 28, July 19, 2007; *Transportation Weekly*, "CBO Revises Highway Trust Fund Estimates," Vol. 8, Issue 33, September 12, 2007.

public transit finance and the role of the federal government. This is followed by a discussion of the funding issues that Congress is likely to face in the reauthorization of the transit programs. These include the overall level of funding, issues with the Mass Transit Account of the Highway Trust Fund, state and local matching shares, the role of the private sector and innovative financing, and transit industry productivity. The report concludes with a discussion of broad options for restructuring federal transit program finances.

# **Public Transit Finance**

In 2004, a total of \$39.5 billion from all sources was spent on providing transit service in the United States, with \$28.4 billion of this amount derived from public funds and \$11.1 billion from system-generated revenues such as passenger fares and advertising. The federal contribution amounted to about \$7 billion, representing 18% of all transit revenue sources if system-generated revenue is included (**Figure 1**). If system-generated revenue is excluded, local government contributed almost half of the funding spent on transit provision, with state government contributing slightly more than one-quarter and the federal government slightly less than one-quarter (**Figure 2**).



Figure 1. Public Transit Revenue From All Sources, 2004

**Source:** U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2006 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance (Washington, DC, 2007).





**Source:** U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2006 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance (Washington, DC, 2007).

Note: Percentages do not add to 100 due to rounding.

There was very little public funding of transit until the mid-1960s, when, with falling ridership and mounting debts, many private transit companies were reestablished as public agencies. The federal government supported this process with capital grants beginning in a substantial way with the Urban Mass Transportation Act of 1964 (P.L. 88-365). Public funding for transit at all levels of government expanded rapidly toward the end of the 1960s and through the 1970s. In the 1980s, overall public funding remained relatively constant, at about \$15 billion a year (in constant 2004 dollars), followed by a period of growth in the 1990s that has been particularly rapid since the late 1990s. The federal share of public funding for transit grew rapidly in the 1970s, peaking in the early 1980s at around 40% before stabilizing at around 25% during the past decade.<sup>4</sup>

Although the federal government provides only 18% of transit revenues, including system-generated revenues, this support is particularly important for capital expenditures. Almost three-quarters of federal funds go for capital, representing 39%

<sup>&</sup>lt;sup>4</sup> U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2006 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance (Washington, DC, 2007), chapter 6. [http://www.fhwa.dot.gov/policy/2006cpr/ index.htm].

of transit capital expenditures.<sup>5</sup> As rail modes are generally more capital-intensive than non-rail modes, about 70% of this federal capital support goes to rail, with most of the remaining 30% used for bus and bus-related capital expenses.

As noted in the introduction, about 80% of federal transit funding comes from the Mass Transit Account of the Highway Trust Fund, with the remaining roughly 20% from the General Fund of the U.S. Treasury. Of the 18.4 cents federal tax on a gallon of gasoline, 2.86 cents is deposited in the transit account. Of the rest, 15.44 cents is deposited in the highway account, and 0.1 cent is deposited in the Leaking and Underground Storage Tank (LUST) Trust Fund. Revenues credited to the trust fund also come from taxes on diesel, gasohol, and special fuels.<sup>6</sup> Since the Surface Transportation Assistance Act of 1982 (P.L. 97-424), it has been customary for 20% of federal fuels tax increases to be dedicated to the transit account. In 1983, the transit account was established with a dedicated 1.0 cent of a 5.0-cent-per-gallon increase in the federal fuels tax.<sup>7</sup> Increases in the fuels tax since then have seen the amount per gallon dedicated to transit increase to 1.5 cents in 1990, 2.0 cents in 1995, 2.85 cents in 1997, and to 2.86 cents in 1998 (retroactive to October 1, 1997).<sup>8</sup>

SAFETEA authorized approximately \$53 billion for transit programs from FY2004 through FY2009. In nominal terms, this was a 46% increase in transit spending over the TEA-21, as amended, and more than double the amount authorized in the ISTEA.<sup>9</sup> In addition to federal funding for transit from the transit programs themselves, federal funding is also available from several surface transportation programs that allow highway money to be spent on transit projects and vice versa. Most funds "flexed" to the transit programs come from the Surface Transportation Program (STP) and the Congestion Mitigation and Air Quality Improvement Program (CMAQ). Flexing funds is largely the decision of state decision-makers; hence, the amount transferred can vary widely from year to year. In 15 years, from FY1992 through FY2006, a total of \$13.1 billion has been flexed from highways to transit,

<sup>&</sup>lt;sup>5</sup> It is assumed in this calculation that operating revenues are applied exclusively to operating expenses, and that capital expenses are funded entirely with government funding.

<sup>&</sup>lt;sup>6</sup> U.S. Department of Transportation, Federal Highway Administration, Office of Policy Development, *Highway Trust Fund: A Primer* (Washington, DC: 1998). [http://www.fhwa. dot.gov/aap/primer98.pdf].

<sup>&</sup>lt;sup>7</sup> The Surface Transportation Assistance Act of 1982 actually dedicated one-ninth of the fuels tax to the transit account, reflecting the fact that the tax on gasoline, diesel, and some other fuels was being raised to 9 cents per gallon. This was contentious, hence, in the Deficit Reduction Act of 1984 (P.L. 98-369) the law was revised to specify that the transit account would receive 1.0 cent per gallon.

<sup>&</sup>lt;sup>8</sup> U.S. Department of Transportation, Federal Highway Administration, *Financing Federal -aid Highways* (Washington, DC, 2007), Appendix L. [http://www.fhwa.dot.gov/reports/ financingfederalaid/financing\_highways.pdf].

<sup>&</sup>lt;sup>9</sup> American Public Transportation Association (APTA), *Safe, Accountable, Flexible, Efficient Transportation Equity Act* — A Legacy for Users: A Guide to Transit Related *Provisions* (Washington, DC: 2005), p. 1. [http://www.apta.com/government\_affairs/ safetea\_lu/documents/brochure.pdf].

ranging from \$0.3 billion in FY1992 to \$1.6 billion in FY2000.<sup>10</sup> Very little transit program funding has been flexed to highways.

Paratransit is another area in which funding is available from the federal government outside the transit program. Paratransit, also known as demand response or dial-a-ride, is non-fixed route service for people with disabilities and the elderly, and typically involves the use of small buses, vans, or passenger cars. In a 2003 report, the General Accounting Office (now the Government Accountability Office), or GAO, found that 56 federal programs in seven federal agencies other than DOT fund transportation services to transportation-disadvantaged populations.<sup>11</sup> The same report could not estimate the transportation spending in these programs because the money often was not tracked separately from other types of spending.

Because of the complexity of federal programs and overlapping responsibilities in paratransit, the President issued Executive Order (EO) 13330 on Human Service Transportation Coordination on February 24, 2004, directing federal agencies to examine and improve the coordination of federal programs supporting paratransit, and, to implement the effort, created the Federal Interagency Coordinating Council on Access and Mobility (CCAM).<sup>12</sup> The CCAM launched a national initiative, United We Ride, and prepared a report to the President on the issue of coordinating federal paratransit programs with five recommendations that focused on 1) coordinated planning, 2) vehicle sharing, 3) cost sharing, 4) performance measures, and 5) demonstration grants.<sup>13</sup> According to CCAM's latest progress report, 40 states have United We Ride-coordinated transportation plans, and a number of grants have been distributed to help demonstrate the various strategies.<sup>14</sup>

<sup>&</sup>lt;sup>10</sup> American Public Transportation Association, *Public Transportation Fact Book 2007* (Washington, DC, 2007), table 44; and American Public Transportation Association, *Public Transportation Fact Book 2006* (Washington, DC 2006), table 44.

<sup>&</sup>lt;sup>11</sup> U.S. General Accounting Office (now the Government Accountability Office), *Transportation-Disadvantaged Populations: Some Coordination Efforts Among Programs Providing Transportation Services, but Obstacles Persist*, GAO-03-697 (Washington, DC, 2003). [http://www.gao.gov/new.items/d03697.pdf].

<sup>&</sup>lt;sup>12</sup> *Federal Register*, Vol. 69, No. 38, Executive Order 13330, of February 24, 2004: Human Services Transportation Coordination, pp 9185-9187. [http://a257.g.akamaitech.net/7/257/2422/14mar20010800/edocket.access.gpo.gov/2004/pdf/04-4451.pdf].

<sup>&</sup>lt;sup>13</sup> Coordinating Council on Access and Mobility, *Report to the President: Human Service Transportation Coordination, Executive Order 13330* (Washington, DC, 2005). [http://www.unitedweride.gov/0216\_LAYOUT\_1.3F\_v6.pdf].

<sup>&</sup>lt;sup>14</sup> Coordinating Council on Access and Mobility, *Progress Report: Implementation of Executive Order 13330, Human Services Transportation Coordination, 2005-2007* (Washington, DC, 2007). [http://www.unitedweride.gov/UWRProgress\_report2005-20072\_2\_07.doc].

# **Issues for Congress**

With looming fiscal difficulties and growing demand on the transportation system, there is likely to be vigorous debate over the level of funding for surface transportation programs in the reauthorization of SAFETEA. The overall level of transit funding, therefore, is likely to be a major issue for Congress. Without new revenue, Congress may have to reexamine the federal role in the financing of transit systems. Some of the options discussed below include reducing the federal matching share, encouraging more private-sector involvement, including the use of publicprivate partnerships and innovative financing, encouraging improvements in transit system productivity, and the broad restructuring of current federal transit programs.

#### Transit Funding Level

The overall level of federal transit funding is likely to be a major issue in the reauthorization of SAFETEA, particularly as it relates to the relative balance between highway and transit funding. A number of groups, including the American Association of State Highway and Transportation Officials (AASHTO), the U.S. Chamber of Commerce, and the American Society of Civil Engineers, argue that America is underinvesting in transportation infrastructure, including public transit infrastructure.<sup>15</sup> These groups contend that the physical condition and operational performance of public transit is suffering and will continue to suffer unless there is an increase in funding levels. In their view, federal infrastructure investment should be significantly increased to deal with an existing backlog of projects and other future needs.

This view is bolstered, to some degree, by the most recent highway and transit "needs assessment" by DOT, which suggests that the capital cost to maintain the current condition and operational performance of transit systems in the United States from 2005 through 2024 is 25% more annually than is being currently spent by all levels of government. In 2004, transit capital spending by all levels of government in 2004 was \$12.6 billion, \$3.2 less than the \$15.8 billion that DOT estimates will be needed annually over the next 20 years.<sup>16</sup> Of this \$15.8 billion, \$10.4 billion is for replacement and rehabilitation of current infrastructure, and \$5.4 billion is for new vehicles and infrastructure to accommodate new riders. Capital spending to improve

<sup>&</sup>lt;sup>15</sup> See, for instance, American Society of Civil Engineers, "Report Card for America's Infrastructure 2005," [http://www.asce.org/reportcard/2005/page.cfm?id=34]; American Association of State Highway and Transportation Officials (AASHTO), *Surface Transportation Policy Recommendation* (Washington, DC, March 2007) [http://www.transportation1.org/tif2report/]; National Chamber Foundation, *Future Highway and Public Transportation Financing, Executive Summary* (Washington, DC, 2005), [http://www.uschamber.com/ncf/publications/default.htm].

<sup>&</sup>lt;sup>16</sup> U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2007, p. 8-8.

conditions and operational performance is estimated to require \$21.8 billion annually, 73% more than is currently being spent.<sup>17</sup>

It should be pointed out, however, that, as with any attempt to estimate current and future system conditions and performance, there are a host of simplifying assumptions, omissions, and data problems that influence the results. Nevertheless, this analysis suggests that if total government spending is not increased above current levels, the physical condition and operational performance of system elements may decline.

DOT makes no recommendation about the shares of capital spending made by different levels of government in its estimates of capital needs. However, in the current ratio of capital spending, according to DOT's estimates of total need, this would translate to \$6.2 billion of federal spending annually to maintain the system and \$8.5 billion annually to improve the system. In 2004, the federal government provided \$4.9 billion for capital expenses (the remaining \$2 billion in federal spending went for non-capital expenses).

In its most recent policy statement on national transportation infrastructure, AASHTO contends that it will be very difficult for the country to build enough highway infrastructure to keep up with the current forecasted growth in highway travel. Consequently, it argues that a national policy goal should be to double transit ridership over the next 20 years to reduce highway demand and to meet the needs of the transit-dependent. AASHTO believes this would require increasing federal transit assistance from \$10.3 billion in FY2009, the amount authorized in the final year of SAFETEA, to \$17.3 billion by FY2015, possibly the last year of the next authorizing legislation.<sup>18</sup> One way to boost ridership, according to AASHTO, is to provide more funding for the New Starts program (49 U.S.C. §5309), which provides up to 80% of federal matching funds for the creation or extension of fixed-guideway transit systems (including bus rapid transit). New Starts funding is in great demand. By AASHTO's estimate, \$35 billion is needed to fund the 36 projects that have moved beyond the initial planning stages,<sup>19</sup> and, in a survey of transit project sponsors, GAO found that there are another 141 projects planned, of which three-

<sup>&</sup>lt;sup>17</sup> Ibid., p. 7-18. Based on data supplied by Metropolitan Planning Organizations (MPOs), DOT estimates that passenger miles traveled (pmt) on transit will increase at an annual rate of 1.57%. Over the 20 years of the forecast, therefore, pmt will increase by a total of 37%. This is about twice the growth in the U.S. population forecast by the Census Bureau. MPOs are local government entities responsible for carrying out the metropolitan transportation planning process, and are required by federal law in urbanized areas with a population of 50,000 or more.

<sup>&</sup>lt;sup>18</sup> AASHTO, March 2007, p. 35.

<sup>&</sup>lt;sup>19</sup> AASHTO, *Future Needs of the U.S. Transportation System* (Washington, DC, February 2007), p. 45. [http://www.transportation1.org/tif1report/TIF1-1.pdf].

quarters are likely to request federal New Starts funding.<sup>20</sup> In SAFETEA, the New Starts program is authorized at \$1.8 billion in FY2009.

An alternative view of the overall level of government transportation spending in general, and of transit spending in particular, is that it has not been dramatically deficient. In terms of the nation's transit systems, the DOT needs analysis shows that total government spending on capital and operations (excluding farebox and other revenue) grew by approximately 80% between 1980 and 2004 (in real terms), much faster than passenger trips and passenger miles, which grew by 12% and 23%, respectively.<sup>21</sup> However, it is true that federal spending grew relatively slowly over this period, particularly when compared with state and local spending, 4% and 129%, respectively (in real terms). Consequently, the federal share of total spending over the period declined from 42% to 25%. The federal share of capital spending has also declined, from approximately 50% in the mid-1990s to 39% in 2004. Since 1995, federal spending has slightly outpaced state and local spending, growing by 43% and 39%, respectively.<sup>22</sup>

As a result of this increase in overall government spending, transit service has grown and the condition and performance of transit systems have generally improved over the past decade. Transit system capacity, measured in capacity-equivalent revenue miles, increased by 30% between 1995 and 2004. With the opening of several new systems and extensions, light rail capacity more than doubled over the period. Bus capacity grew by a more modest 18%.<sup>23</sup> The growth in ridership, on average, has generally lagged behind the growth in capacity; hence, capacity utilization has slipped. Between 1995 and 2004, utilization, as measured in terms of passenger miles per capacity-equivalent vehicle, increased for heavy rail, decreased for commuter rail and light rail, and remained about the same for motorbus.<sup>24</sup>

The overall physical condition of transit systems is a more complex picture. Nonetheless, conditions have generally improved, particularly in the bus fleet. The condition of the urban bus fleet weighted for bus size has improved from 2.88 in

<sup>&</sup>lt;sup>20</sup> U.S. Government Accountability Office, *Public Transportation: Future Demand is Likely for New Starts and Small Starts Programs, but Improvements Needed to the Small Starts Application Process*, GAO-07-917 (Washington, DC, 2007). [http://www.gao.gov/new. items/d07917.pdf].

<sup>&</sup>lt;sup>21</sup> U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2007, exhibit 6-22; American Public Transportation Association, "Unlinked Passenger Trips by Mode, 1890-2004." [http://www.apta.com/research/stats/ridership/trips. cfm]; U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *National Transportation Statistics 2007* (Washington, DC, 2007), table 1-3. [http://www.bts.gov/publications/national\_transportation\_statistics/html/table\_01\_37.html].

<sup>&</sup>lt;sup>22</sup> CRS calculation using GDP implicit price-deflator based on U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2007, exhibits 6-20, 6-23.

<sup>&</sup>lt;sup>23</sup> Ibid., exhibit 2-25.

<sup>&</sup>lt;sup>24</sup> Ibid., exhibit 4-17.

1995 to 3.08 in 2004 on a 5-point scale (1 = poor; 5 = excellent). Rail vehicle condition has remained about the same over the period, at around 3.5. Rail maintenance facilities are in reasonable condition. Of the 152 facilities in 2004, only 7% were considered substandard and 1% poor. Additionally, 48% were rated adequate and 43% were rated good or excellent. Rail systems — communication, train control, traction power, and revenue collection — all improved, except for train control systems. About one-quarter of train control systems were rated substandard or worse in 2004. Other structures such as elevated structures and tunnels and track have improved, and are rated good overall. Rail yards have deteriorated slightly over the past few years, and had an overall rating of 3.8 in 2004. One area of concern, according to the DOT study, is transit rail stations, as about half are rated substandard.<sup>25</sup>

A third view on the overall level of transit funding is that governments, including the federal government, spend too much on public transit relative to the benefits it provides.<sup>26</sup> It is often pointed out that while transit spending amounts to about 16% of all government highway and transit spending and about 14% of federal highway and transit capital expenditure (in 2004),<sup>27</sup> only about 2% of all trips are made by this mode.<sup>28</sup> Even for commuting trips, for which transit is better-suited, transit only accounts for 5% nationwide, a share that has changed little over the past two decades. Only in two cities, New York and Chicago, does the transit share rise above 10%.<sup>29</sup> The effect, according to transit critics, is to short-change highway spending, thereby causing highway conditions and performance, including highway congestion, to be worse than they would be otherwise.<sup>30</sup> A corollary to this view is that a significant proportion of federal transit funding, roughly 80%, comes from taxes paid by highway users.

A number of critics of federal transit policy argue that it focuses too much on financial support for building new rail systems. These critics contend that such systems are expensive to build and maintain, less flexible compared with regular bus transit, and ill-suited to today's low-density, dispersed metropolitan areas. These critics contend that rail transit may only be worth the cost in high-density corridors,

<sup>&</sup>lt;sup>25</sup> Ibid., chapter 3.

<sup>&</sup>lt;sup>26</sup> Cox, Wendell, "Transit's Limited Capability and Promise," in Wendell Cox, Alan Pisarski, and Ronald D. Utt (eds), 21<sup>st</sup> Century Highways: Innovative Solutions to America's Transportation Needs (Washington, DC, Heritage Foundation, 2005).

<sup>&</sup>lt;sup>27</sup> U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2007, exhibits 6-8, 6-20, 6-23.

<sup>&</sup>lt;sup>28</sup> U.S. Department of Transportation, Bureau of Transportation Statistics, *NHTS 2001 Highlights Report*, BTS03-05 (Washington, DC, 2003), figure 6.

<sup>&</sup>lt;sup>29</sup> U.S. Census Bureau, "Most of Us Still Drive to Work Alone: Public Transportation Commuters Concentrated in a Handful of Large Cities," *U.S. Census Bureau News*, June 13, 2007. [http://www.census.gov/Press-Release/www/releases/archives/american\_community\_survey\_acs/010230.html].

<sup>&</sup>lt;sup>30</sup> Cox, W. And R. O'Toole, "The Contribution of Highways and Transit to Congestion Relief: A Realistic View," *Heritage Foundation Backgrounder*, No. 1721, January 24, 2004. [http://www.heritage.org/Research/UrbanIssues/bg1721.cfm].

and that few of these corridors remain without rail service.<sup>31</sup> Moreover, critics contend that construction of new rail systems in search of discretionary riders, primarily suburban commuters, have worked to the detriment of bus-dependent populations in the central city. Overall, these critics argue, the effect has been to switch those riding buses to riding rail, with little net gain in transit patronage.<sup>32</sup> Even the environmental benefits of new rail lines have been called into question because many new rail riders must drive to a station to access the system. Consequently, the reduction in emissions from building new rail lines has been found in many cases to be negligible.<sup>33</sup>

In the view of some, federal support for new transit capacity would be better spent on BRT, in which express buses run over roads with some sort of priority system ranging from signal preemption to an exclusive busway. Others argue that BRT projects, while cheaper than rail systems, are still more expensive and less effective than conventional bus service. For instance, one analyst contends that "modest improvements to basic bus services combined with an attractive fares policy have shown they can secure substantially greater ridership increases than capital-intensive projects involving either light rail or busway construction."<sup>34</sup> Others note that BRT projects favor suburban commuters over more centrally located transit such as streetcars, a lighter, cheaper, but slower type of light rail.<sup>35</sup>

A counter argument to these critics, and one in favor of increased transit spending, is that transit's worth must be analyzed in terms of economic value, not just transportation value.<sup>36</sup> The economic value argument includes economic development as well as mobility, such as mobility for non-drivers and congestion management. By this measure, according to proponents, transit investment is highly productive, often more productive than an alternative highway investment. The implication for transit's detractors is that "the reality that transit cannot as a rule make it financially seems to have created a belief in some quarters that it cannot make it economically either."<sup>37</sup> This has been an issue in the New Starts program, as some have argued that federal funds should be used to support projects that

<sup>33</sup> Ibid.

<sup>34</sup> Ibid., p. 161.

<sup>35</sup> Siggerud, K. Director of Physical Infrastructure, "U.S. Government Accountability Office, Preliminary Analysis of Changes To and Trends in FTA's New Starts and Small Starts Programs," Statement Before House Subcommittee on Highways and Transit, May 10, 2007, GAO-07-812T, [http://www.gao.gov/new.items/d07812t.pdf]; Herrick, T., "A Streetcar Named Aspire: Lines Aim to Revive Cities, *Wall Street Journal*, June 20, 2007, B1.

<sup>36</sup> Lewis, D. and F.L. Williams, *Policy and Planning as Public Choice: Mass Transit in the United States* (Brookfield, VT, Ashgate, 1999).

<sup>37</sup> Testimony of David Lewis, Consultant, in U.S. Congress, House Subcommittee on Highways and Transit, Implementation of New Starts and Small Starts Program, May 10, 2007.

<sup>&</sup>lt;sup>31</sup> Wachs, M., "U.S. Transit Subsidy Policy: In Need of Reform," *Science*, Vol. 244, pp. 1545-1549.

<sup>&</sup>lt;sup>32</sup> Richmond, J., "A Whole-System Approach to Evaluating Urban Transit Investments," *Transport Reviews*, 2001, Vol. 21, No. 2, pp. 141-179.

provide the most transportation mobility benefits, such as bus rapid transit, and others have contended that funding ought to be available for projects that have fewer mobility benefits but may provide greater economic development benefits, such as light rail and streetcars.<sup>38</sup>

### **Highway Trust Fund Issues**

The amount of funding available for transit programs, at least in the short to medium term, is likely to depend on decisions surrounding the Highway Trust Fund. At the moment, about 80% of federal transit funding comes from the Mass Transit Account of the Highway Trust Fund, with the rest coming from general funds. In the summer of 2007, the Congressional Budget Office (CBO) estimated that with current revenues and outlays at the level provided for in SAFETEA (with adjustments made for inflation after FY2009), the transit account would go into deficit in FY2012.<sup>39</sup> The Office of Management and Budget (OMB) currently estimates that transit account funds will not be enough to cover outlays in FY2011.<sup>40</sup> Problems with the highway account are more immediate, however, as both CBO and OMB estimate that this will go into deficit in FY2009. At funding levels provided for in SAFETEA, OMB estimates that expenditures from the Highway Trust Fund will exceed revenues by \$7.5 billion in FY2009, with a \$5.4 billion difference in the highway account and \$2.1 billion difference in the transit account. Expenditures from the transit account do not become a problem until FY2011, however, because of previously accrued unexpended balances. The unexpended balance in the highway account is being exhausted more quickly; hence, the more immediate problem this presents.

Funding shortfalls in the highway and transit programs are related to a few key underlying factors. To begin with, the fuels tax has not been increased since 1993, when 4.3 cents per gallon were added as a general budget deficit reduction measure. This tax increment was redirected to the Highway Trust Fund in October 1, 1997. In addition, the fuels tax is not indexed to inflation. Consequently, since 1993, inflation has eroded about one-third of the purchasing power of the fuels tax.<sup>41</sup> One current estimate suggests that the fuels tax would need to be increased by about 10 cents per gallon to restore its 1993 purchasing power.<sup>42</sup> Despite no increase in the federal fuels tax and the problem of inflation, which has been especially severe in construction materials and fuel over the past few years, SAFETEA authorized funding increases based primarily on spending down the unexpended balances that had accrued in the Highway Trust Fund accounts. These balances have been eliminated more quickly than estimated when SAFETEA was enacted.

<sup>&</sup>lt;sup>38</sup> See CRS Report RL34171, *Public Transit Program Issues in Surface Transportation Reauthorization*, by William J. Mallett.

<sup>&</sup>lt;sup>39</sup> Transportation Weekly, September 12, 2007.

<sup>&</sup>lt;sup>40</sup> Transportation Weekly, July 19, 2007.

<sup>&</sup>lt;sup>41</sup> Transportation Research Board, National Cooperative Highway Research Program, *Future Financing Options to Meet Highway and Transit Needs*, NCHRP Web-Only Document 102 (Washington, DC, 2006), pp. 2-16. [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\_w102.pdf].

<sup>&</sup>lt;sup>42</sup> Ibid., p. 6-2.

Although receipts from the fuels tax are subject to a good deal of uncertainty, as they depend on projections of travel demand and fuel usage, the current rule of thumb is that a 1.0-cent-per-gallon tax increase generates approximately \$1.6 billion to \$2 billion in revenue for the Highway Trust Fund as a whole and \$0.3 billion to \$0.4 billion for the transit account, assuming 20% of the increase goes to the transit account. At the funding level currently provided for in FY2009, with expenditures exceeding revenues by \$7.5 billion in total and by \$2.1 billion in the transit account, and assuming revenue at the higher end of the range, the fuels tax would need to be raised by approximately 5 cents per gallon to close the gap (with 1 cent per gallon dedicated to the transit account). This allows for no growth in the program to deal with growing needs or inflation. Indexing the fuels tax to inflation would allow the programs to remain at the FY2009 level in real terms. One estimate of indexing the fuels tax (beginning in FY2010) predicts that this alone would raise the current 18.3-cent-per-gallon tax, excluding the 0.1 cents dedicated to the Leaking and Underground Storage Tank Trust Fund, to 21.8 cents per gallon by FY2017.<sup>43</sup>

CBO estimates that expenditures from the transit account will exceed revenues by about \$1.8 billion in FY2009, somewhat lower than the \$2.1 billion estimated by OMB. But both OMB and CBO estimate that, under current assumptions, the gap between transit account receipts and expenditures will continue to widen. OMB estimates that in FY2011, expenditures will exceed receipts by \$3.1 billion; CBO estimates that the difference will be \$3.7 billion. By FY2017, CBO estimates that expenditures will exceed receipts by \$4.7 billion.

Another way to look at fuel taxes and future funding needs is to assess the fuels tax in relation to the DOT needs assessment discussed above. There is no requirement that the federal government provide extra funding to alleviate deficiencies in highway and transit infrastructure identified in the DOT report. But at the level of its current share, the federal government would have to raise an extra \$1.3 billion per year, from 2005 though 2024, for capital expenditures to maintain the current condition and performance of the system. To improve the current condition and performance would require an extra \$3.6 billion annually. Assuming revenue at the higher end of the range again, these estimates suggest a 0.6- to 1.8-cent-pergallon increase in the fuels tax for the transit account. At the current ratio, this would require a 3.0-cent to 9.0-cent-per-gallon increase in the fuels tax overall. This does not include any additional funding for non-capital expenses, currently about 30% of federal transit support.

It should be emphasized that these are approximate calculations based on estimates of travel, fuel use, and other factors that may change in the future. Moreover, these calculations are based on assigning 20% of any fuels tax to the transit account, as has been the case since 1983, and which transit supporters are very keen to maintain in any future legislation.<sup>45</sup> A number of highway advocates,

<sup>&</sup>lt;sup>43</sup> Ibid., p. 6-1.

<sup>&</sup>lt;sup>44</sup> Transportation Weekly, July 19, 2007; Transportation Weekly, September 12, 2007.

<sup>&</sup>lt;sup>45</sup> Millar, W., President, APTA, U.S. Congress, Senate Committee on Banking, Housing, (continued...)

however, argue that highway user fees should be used to improve the condition and performance of highways. These highway advocates note that the trust fund was created in 1956 to provide money for the construction of the interstate highway system and for other highway programs. They note that over time, however, an increasing share of trust fund revenue has been diverted to other purposes, particularly to public transit, but also to historic preservation, recreational trails, air pollution mitigation, and, through earmarking, to projects that reward specific constituencies to the detriment of transportation mobility. Continued large-scale federal funding, they argue, has also come at the price of burdensome federal regulation in a number of areas that raises costs and stifles innovation.<sup>46</sup>

**Rate of Return.** Aside from consideration of tax rates and receipts into the Highway Trust Fund, reauthorization may also involve greater debate about each state's "rate of return" from the transit account, the so-called "donor-donee" issue. This issue concerns the amount of funds each state receives from the trust fund relative to the amount paid in by a state's drivers. A state that pays in more than it receives is known as a donor state. A state that pays in less than it receives is known as a donee state. Highway legislation at least as far back as the Surface Transportation Assistance Act of 1982 has been marked by such concerns.<sup>47</sup> Transit funding, on the other hand, has generally been immune to this issue, mainly because of the heavy concentration of transit service and ridership in just a few states, and because such concerns have been assuaged with relatively large increases in highway and transit spending. In an era of fiscal austerity, however, the debate surrounding each state's share of transit funding may appear as an issue.<sup>48</sup>

#### Federal and State/Local Funding Shares

Federal funding for highways and transit, in most instances, is predicated on sharing project costs with states and localities. From very early on, federal funding for highway and, later, transit infrastructure was conceived as providing support to programs run by state and local government. Consequently, most "federal aid" must be matched with state or local money in a ratio determined by federal law. These matching shares vary from program to program, and have occasionally been adjusted according to the goals of federal policy.

<sup>&</sup>lt;sup>45</sup> (...continued)

and Urban Affairs, *Hearing on The Administration's Proposal for Reauthorization of the Federal Public Transportation Program*, S.Rept. 108-640, June 10, 2003.

<sup>&</sup>lt;sup>46</sup> Utt., R, "Reauthorization of TEA-21: A Primer on Reforming The Federal Highway and Transit Programs," *Heritage Foundation Backgrounder*, No. 1643, April 7, 2003, [http://www.heritage.org/Research/SmartGrowth/upload/39789\_1.pdf]; Utt, R., "Proposal to Turn Federal Highway Program Back to the States Would Relieve Traffic Congestion," *Heritage Foundation Backgrounder*, No. 1709, November 21, 2003, [http://www.heritage.org/Research/SmartGrowth/upload/52771\_1.pdf].

<sup>&</sup>lt;sup>47</sup> See CRS Report RL31735, *Federal-Aid Highway Program: "Donor-Donee" State Issues*, by Robert S. Kirk, Updated June 10, 2005.

<sup>&</sup>lt;sup>48</sup> Utt, R., "Time for Congress to End the Regional Inequities in the Federal Highway Program," *Heritage Foundation WebMemo*, #645, February 1, 2005. [http://www.heritage.org/Research/SmartGrowth/wm645.cfm].

Because of this, some suggest that one way to deal with the impending federal transportation funding shortfall is to shrink the size of the federal role. This is particularly true in the area of transit, which is often viewed as a local, not a national, mode of transportation. Why, it is sometimes asked, should a driver in South Carolina pay fuels taxes to subsidize a train rider in Philadelphia?<sup>49</sup> Proponents of turning back more responsibility to state and local governments sometimes argue that withdrawal of federal support for transit programs, and with it federal regulations, particularly the labor protection provisions enacted as Section 13(c) of the Urban Mass Transportation Act of 1964, now Section 5333(b) of Title 49, might even spur transit innovation and ridership, and lower costs. Under this labor protection provision, some argue, it is difficult for transit agencies to reduce the number of staff through the introduction of new technologies or by contracting out some or all agency functions (see the discussion under "Transit System Productivity," below).<sup>50</sup>

Supporters of a continued, and in some cases an even greater, federal role in transit argue that transit is part of a national systemm, in that it provides a link at the beginning and end of intercity trips. Moreover, they argue, transit can provide congestion relief in major cities and in major travel corridors. Metropolitan areas with large transit systems are viewed as drivers of the national economy. For instance, the top 10 metropolitan areas in terms of transit ridership account for 25% of the nation's population and 30% of national personal income.<sup>51</sup> Consequently, transit supporters argue that improvements in transit systems may predominantly improve local mobility, but will have national economic benefits. Other national benefits cited include improving the response to national emergencies, a cleaner environment, and energy conservation.<sup>52</sup>

**Transit and Highway Matching Shares.** The federal matching share has typically varied by program, and these shares have been changed in authorizing legislation throughout the history of the federal-aid program. Before passage of ISTEA, transit advocates often complained that the federal matching share for transit projects was lower than that for highway projects, biasing state and local decision-making toward highway projects so as to receive the extra federal money. ISTEA did away with that supposed inequity by raising matching shares in various transit programs, including the New Starts program, to 80%.

The great demand from transit agencies for federal funding from the New Starts program has led some to argue for lowering the cap on the federal share for such projects. Supporters of this view argue that lowering the cap would allow federal funding to be shared among more worthwhile projects. Moreover, supporters argue

<sup>&</sup>lt;sup>49</sup> Ibid.

<sup>&</sup>lt;sup>50</sup> Utt. R., *Heritage Foundation Backgrounder*, No. 1643, April 7, 2003.

<sup>&</sup>lt;sup>51</sup> U.S. Department of Transportation, Federal Highway Administration, *Freight Facts and Figures 2006* (Washington, DC, 2007), figure 2-7. [http://ops.fhwa.dot.gov/freight/freight\_ analysis/nat\_freight\_stats/docs/06factsfigures/fig2\_7.htm].

<sup>&</sup>lt;sup>52</sup> American Public Transportation Association (APTA) "The Benefits of Public Transportation — An Overview." [http://www.apta.com/research/info/online/ben\_overview. cfm#ltn].

that a lower cap would encourage states and localities with more of their own money at stake to advance only the strongest projects. GAO found that more economic analysis of the costs and benefits of a project is typically done when more local funding is required.<sup>53</sup> In addition, supporters point out that although the maximum share is 80%, prior to SAFETEA it was FTA policy to rate a project as low if it sought a federal share of more than 60%. This policy was a response to House Appropriations Committee reports that a lower share was warranted because demand for funding help was outstripping the available resources.<sup>54</sup> Provisions in SAFETEA now prohibit the Secretary of Transportation from requiring more than 20% and FTA's policy, beginning in FY2007, no longer downgrades a project that seeks more than 60%.<sup>55</sup> Nevertheless, projects approved or with pending New Starts funding in FY2007 have a federal share ranging from 34% to 80%.<sup>56</sup> In FY2008, the federal share of New Starts projects ranges from 28% to 80%.<sup>57</sup>

Opponents of lowering the maximum federal share argue that lowering the cap might bias state and local decision-makers to favor highways projects that have an 80% match.<sup>58</sup> Others contend that lowering the match will result in a wider distribution of federal transit new starts investment, which will have the effect of diluting its effectiveness. Some also advocate reducing the federal share for both highways and transit, say to 50%, to encourage states and localities to focus on the most productive projects.<sup>59</sup>

#### **Private-Sector Involvement**

Another idea for dealing with the potential federal funding shortfall in the transit program is to encourage more private participation in developing transit projects through public-private partnerships (PPPs) or private development. Two types of PPPs in the development of transit projects are joint development and turnkey

<sup>54</sup> See, for example, House Appropriations Report, Department of Transportation and Treasury and Independent Agencies Appropriations Bill, 2004, 108-243.

<sup>55</sup> U.S. Government Accountability Office, *New Starts Program Is in a Period of Transition*, GAO-06-819 (Washington, DC, 2006). [http://www.gao.gov/new.items/d06819.pdf].

<sup>56</sup> Ibid., p. 13.

<sup>57</sup> U.S. Department of Transportation, Federal Transit Administration, Annual Report on Funding Recommendations, Proposed Allocations of Funds for Fiscal Year 2008, New Starts, Small Starts, Alternative Transportation in Parks and Public Lands (Washington, DC, 2007). [http://www.fta.dot.gov/documents/FY2008\_Entire\_NS\_Report.pdf].

<sup>58</sup> Beimborn, E. and R. Puentes, "Highways and Transit : Leveling the Playing Field in Federal Transportation Policy," in Bruce Katz and Robert Puentes, eds., *Taking the High Road: A Metropolitan Agenda for Transportation Reform*. (Washington, DC. Brookings Institution Press, 2005.)

<sup>59</sup> Luberoff, D., "The Triumph of Pork Over Purpose," *Blueprint Magazine*, September 10, 2001. [http://www.ndol.org/ndol\_ci.cfm?contentid=3765&kaid=141&subid=299].

<sup>&</sup>lt;sup>53</sup> U.S. Government Accountability Office, *Highway and Transit Investments: Options for Improving Information on Projects' Benefits and Costs for Increasing Accountability for Results*, GAO-05-172 (Washington, DC, January 2005). [http://www.gao.gov/new.items/ d05172.pdf].

procurements, such as design-build-operate-maintain (DBOM). Joint development involves the construction of private facilities on or over transit agency land in exchange for some kind of benefit, such as a one-time payment, rent, or improvement of transit facilities.<sup>60</sup> The principal argument for these mechanisms is the increased ridership that results from the new uses and the direct financial benefits. A prominent example of joint development is the mixed-use facilities (offices, retail, and a hotel) surrounding the Washington Metropolitan Area Transit Authority's (WMATA) Bethesda, MD, station, completed in 1985. The air-rights lease for this development generates \$1.6 million annually in rents for WMATA.<sup>61</sup>

Turnkey procurements, such as DBOM, involve public-private agreements that turn over more control to private entities in exchange for a lower cost, faster project delivery, or both. In these types of procurements, the public sector contracts with a private contractor to deliver a construction project at a certain time for a certain price. The rationale for this is that the contractor is better able to manage the risks involved, whereby cost and time overruns reduce the contractor's profit, but delivering early and under budget increases profit. Projects can range from design-build-transfer, where the contractor designs and builds the project and then transfers it to the owner, to more complex agreements such as DBOM, where the contractor may be involved for decades in the operation and maintenance of the facility.<sup>62</sup> An example of DBOM is the construction and operation of the Hudson-Bergen Light Rail in New Jersey, which opened in 2000. In addition to construction of the project, the agreement with the contractor, 21<sup>st</sup> Century Rail Corporation, includes operation and maintenance of the system for 15 years. According to DOT, using this procurement method to build the project saved an estimated 30% (\$345 million) over the more traditional design-bid-build procurement method, and the line was open almost five years ahead of projections.<sup>63</sup>

Private development and operation of facilities are another possibility for greater private-sector involvement in transit. An example of predominantly private development of transit is the Las Vegas monorail, a four-mile system that connects hotels and other attractions on the Las Vegas Strip. The original segment operating between two hotels, opened in 1995, was expanded in 2004 by a nonprofit corporation financed by tax-exempt bonds and financial and in-kind contributions from hotels and resorts.<sup>64</sup>

<sup>&</sup>lt;sup>60</sup> U.S. Department of Transportation, *Report to Congress on Public-Private Partnerships* (Washington, DC, 2004), p. 36. [http://www.fhwa.dot.gov/reports/pppdec2004/pppdec2004. pdf].

<sup>&</sup>lt;sup>61</sup> Transportation Research Board, Transit Cooperative Research Program, *Transit-Oriented Development in the United States: Experiences, Challenges, and Prospects*, TCRP Report 102 (Washington, DC, 2004). [http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp\_rpt\_102.pdf].

<sup>&</sup>lt;sup>62</sup> U.S. Department of Transportation, Federal Transit Administration, *Innovative Financing Techniques for America's Transit Systems* (Washington, DC, 1998). [http://www.fta.dot.gov/planning/metro/planning\_environment\_3530.html].

<sup>&</sup>lt;sup>63</sup> U.S. Department of Transportation, 2004, pp. 38-39.

<sup>&</sup>lt;sup>64</sup> General Accounting Office (now the Government Accountability Office), *Highways and* (continued...)

A number of legislative and regulatory initiatives have improved the environment for private-sector involvement in transit. These include, among others, the explicit authorization for DBOM in ISTEA, a new joint development policy issued by FTA in 1997, and the Public-Private Partnership Pilot Program (known as Penta-P) in SAFETEA. Although there are some remaining issues in federal and state laws regarding the formation of PPPs, many believe that PPPs will be increasingly important in the future.

Despite the potential for greater private-sector involvement and PPPs, the overall difference they may make to the financing of transit system services is likely to be relatively small. A study of joint development around transit stations contends that WMATA is a national leader, yet this aggressiveness only yields about \$6 million in annual revenues.<sup>65</sup> While this is substantial, it is a relatively small amount compared with an annual budget of more than \$1.9 billion (in FY2007).<sup>66</sup> Similarly, a study by GAO of private involvement in major highway and transit projects concluded that

[u]nder current conditions and circumstances, private sector sponsorship and investment seems best able to finance a relatively small number of projects but seems unlikely to stimulate significant increases in the funding available for highways and transit.<sup>67</sup>

As noted earlier, however, financial accounting largely ignores the economic benefits that transit can generate for local areas through land development, job creation, and an increase in the tax base, among other benefits.<sup>68</sup> Others prefer, therefore, to focus on the wider economic benefits that joint development, and transit-oriented development more generally, can provide.

**Innovative Financing.** Related to the discussion of private-sector involvement in infrastructure financing is the use of so-called "innovative financing." Several innovative financing mechanisms have been developed in the past two decades to leverage existing federal resources or to develop new revenue-generating assets. Federal laws have been modified to broaden the ways in which states can match and obligate federal funds. This has enabled states and localities to use their resources more efficiently, to use private funds for the non-federal share on a project, and for projects to be completed more quickly. Moreover, several mechanisms have been created to allow states to issue bonds against future federal aid, making it easier

<sup>&</sup>lt;sup>64</sup> (...continued)

*Transit: Private Sector Sponsorship of Investment in Major Projects Has Been Limited*, GAO-04-419 (Washington, DC, 2004), pp. 52-53. [http://www.gao.gov/new.items/ d04419.pdf].

<sup>&</sup>lt;sup>65</sup> Transportation Research Board, 2004, p. 9.

<sup>&</sup>lt;sup>66</sup> Washington Metropolitan Area Transit Authority, *Approved Fiscal 2007 Annual Budget* (Washington, DC). [http://www.wmata.com/about/board\_gm/FY2007\_Budget\_Book\_final. pdf].

<sup>&</sup>lt;sup>67</sup> Government Accounting Office, 2004, p. 6.

<sup>&</sup>lt;sup>68</sup> Lewis and William, 1999.

to complete large projects more quickly and cost effectively than would be possible on a pay-as-you-go basis. In transit, Grant Anticipation Notes (GANs) have been used in this way. State Infrastructure Banks (SIBs) have also been set up to create a mechanism to leverage other resources through lending instead of granting federalaid funds. In the case of generating new revenue-generating assets, state and local governments and nonprofit corporations are allowed to issue tax-exempt bonds on behalf of private project developers. For example, in the case of the Las Vegas monorail, the State of Nevada issued \$600 million of tax-exempt bonds on behalf of the private developers. These bonds were secured by farebox and advertising revenue.<sup>69</sup>

Again, although there have been successes in innovative financing in transportation, the ability of these mechanisms to generate extra resources is likely to be modest. This is particularly true in transit, where the possibilities for generating new revenue streams or profit from operations are limited. The tolling of roads, bridges, and tunnels is a much more likely source of new revenue to make these types of financing vehicles possible.<sup>70</sup>

### **Transit System Productivity**

Despite rising patronage over the past decade, financial deficits in the transit industry have continued to rise. A financial deficit exists when system costs exceed system-generated revenue. In 2004, system-generated revenue, passenger fares and other income, accounted for 28% of all revenue sources for both operating and capital costs, down from 30% in 1995.<sup>71</sup> In terms of operating costs alone, system-generated revenue has declined, from 59% in 1975 to 41% in 2004 (**Table 1**).

A number of reasons have been put forward for the continuing and worsening problem of financial deficits. A major factor is the difficulty public transit has with maintaining market share when traveling by car is relatively easy and cheap. DOT's periodic national survey of personal travel found that in 2001, about 1.6% of all trips were made by transit, down from 3.4% in 1969.<sup>72</sup> Data from the decennial census shows a similar trend in the usual mode of commuting, with public transit declining from 8.9% in 1970 to 4.7% in 2000.<sup>73</sup> The struggle for market share has been exacerbated, in particular, by the growth of low-density suburbs that are relatively

<sup>&</sup>lt;sup>69</sup> Transportation Research Board, 2006.

<sup>&</sup>lt;sup>70</sup>U.S. Department of Transportation, Federal Highway Administration, *Innovative Finance Primer* (Washington, DC). [http://www.fhwa.dot.gov/innovativefinance/ifp/ifprimer.pdf].

<sup>&</sup>lt;sup>71</sup> U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, 2007, exhibits 6-23, 6-25.

<sup>&</sup>lt;sup>72</sup> Polzin, S. and X. Chu, *Public Transit in America: Results from the 2001 National Household Travel Survey* (Tampa, FL, 2005), p. 61. [http://www.nctr.usf.edu/pdf/527-09.pdf].

<sup>&</sup>lt;sup>73</sup> Ibid.

difficult to serve with transit. In 2000, about 50% of the nation's population lived in suburbs, up from 36% in 1970.<sup>74</sup>

Type of Revenue	1975	1985	1995	2004
System-Generated	59%	44%	42%	41%
Passenger Fares	54%	38%	NA	NA
Other Operating Income	5%	6%	NA	NA
State/Local Government	32%	49%	53%	52%
Federal Government	9%	8%	5%	8%

# Table 1. Public Transit Revenue Sources forOperating Expenditures, 1975-2004

**Key:** NA = Not Available.

**Sources:** American Public Transit Association, *1990 Transit Fact Book* (Washington, DC, 1990); U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, *2006 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance* (Washington, DC, 2007).

Although total transit ridership has grown to a level not seen since the late 1950s, the supply of transit service has grown more quickly, and productivity, output divided by input, has declined. Even if the costs of providing transit service had remained constant, therefore, total outlays would probably have risen faster than revenue. At the same time, the cost of producing transit service has not stayed constant, but has risen over time. The biggest drop in productivity most likely occurred between the mid-1960s and the mid-1980s. By one estimate, the cost of running a transit bus per hour nearly doubled, in real terms, between 1964 and 1985.<sup>75</sup> Over the past 15 years, according to FTA data, productivity improved until 1998, when productivity began to slowly decline again.<sup>76</sup>

Several reasons are typically given for the drop in transit productivity over the past 40 years. First, there has been a lot of pressure to expand transit to areas that are costly to serve, particularly low-density suburbs, and to support a variety of social service needs and other community goals that often boost costs. Second, some argue that transit service is overcapitalized, as cities have been encouraged to build rail lines where buses would make more sense, and to use full-sized buses where small buses or vans would be more appropriate. Third, according to some, work rules and

<sup>&</sup>lt;sup>74</sup> Pisarski, Alan. E, *Commuting in America III* (Washington, DC, Transportation Research Board, 2006), p. 27.

<sup>&</sup>lt;sup>75</sup> Lave, C. "It Wasn't Supposed to Turn Out Like This," *Access*, No. 5, Fall 1994, pp. 21-25.

<sup>&</sup>lt;sup>76</sup> CRS calculation of operating costs per revenue hour using the implicit price deflator for GDP and U.S. Department of Transportation, Federal Transit Administration, *National Transit Summaries and Trends* (Washington, DC, various years). [http://www.ntdprogram. gov/ntdprogram].

other labor protections have made it relatively costly to staff transit agencies. Fourth, governments have pushed to keep transit fares low in an effort to boost ridership. Additionally, transit agencies are increasingly using simple or flat fare structures, despite great variations in the cost of providing service, depending on location, direction of service, and time of day.<sup>77</sup> Fifth, large infusions of government support, including from the federal government, have tended to weaken the constraint on transit management to aggressively manage costs and revenues.<sup>78</sup>

As noted earlier, some argue that transit should be evaluated in terms of all the economic benefits it generates for an area as a whole, including all the non-transportation benefits, not just on the basis of simple financial cost and revenue calculations. Nonetheless, the reasons proffered for the drop in transit productivity suggest that less public funding, including less federal funding, would be necessary if transit operations could be made more financially self-sustaining. Much of this comes down to policies pursued at the state and local level and by the transit agencies themselves. However, Congress may also want to consider several broad policy options during reauthorization that address the issue of financial sustainability.

Some suggest that transit agencies should stop many of the expansions of fixedroute transit service, particularly in difficult-to-serve areas, and that the federal government should encourage them to do so.<sup>79</sup> According to this view, transit agencies may also need to consider cutting services that lose the most money, except perhaps paratransit service. In cases where new transit services are appropriate, such as along densely populated and congested corridors, agencies might look to invest in less costly transit modes, particularly buses and bus rapid transit.<sup>80</sup> Others have suggested that public assistance, including federal funding, should go mainly to support transit's core mission of improving mobility, particularly for transit dependent populations, instead of supporting a profusion of policy goals in energy and the environment, economic development, and highway congestion.<sup>81</sup> For example, although about half of the funding in the Congestion Mitigation and Air Quality (CMAQ) Improvement Program goes to fund transit projects, the available

<sup>&</sup>lt;sup>77</sup> Transportation Research Board, *Fare Policies, Structures, and Technologies: Update*, Transit Cooperative Research Program (TCHRP) Report 94 (Washington, DC, 2003), table 2-6. [http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp\_rpt\_94.pdf].

<sup>&</sup>lt;sup>78</sup> Lave, 2004; Taylor, B.D. "The Geography of Urban Transportation Finance," in Susan Hanson and Genevieve Giuliano (eds), *The Geography of Urban Transportation, Third Edition* (New York, Guilford Press, 2004).

<sup>&</sup>lt;sup>79</sup> UGT, R. "Getting Urban Transit Systems Focused on Cost and Service," *Heritage Foundation Web Memo*, #717, April 11, 2005. [http://www.heritage.org/Research/SmartGrowth/wm717.cfm].

<sup>&</sup>lt;sup>80</sup> O'Toole, R. "A Desire Named Streetcar: How Federal Subsidies Encourage Wasteful Local Transit Systems," *Policy Analysis*, No. 559, January 5, 2006. [http://www.cato.org/pubs/pas/pa559.pdf].

<sup>&</sup>lt;sup>81</sup> Downs, 2006.

evidence appears to show that such projects are not particularly effective in reducing vehicle emissions.<sup>82</sup>

Another suggestion is for states and localities to inject more competition into the provision of transit service or to find other ways to reduce costs. These usually entail proposals to competitively bid transit service provision and to allow private operators to provide new services to compete with public transit agencies.<sup>83</sup> This could be accomplished, according to some advocates, by making the elimination of local barriers to privatization a condition of federal funding.<sup>84</sup> In many places, these local barriers take the form of state and local laws and regulations that "provide local or regional monopoly powers over public transit service to RTAs [regional transportation agencies] or taxi companies."85 Moreover, contracts with transit workers unions often do not allow transit agencies to employ part-time workers or to require split-shifts to cover the peaking of demand in the morning and evening.<sup>86</sup> In addition, some argue that federal labor protections in transit, commonly known as Section 13(c), should be abolished or modified, a position rejected by unions representing transit workers.<sup>87</sup> A GAO report released in 2001 found that 13(c) labor protections had minimal impact on labor costs and other factors in transit operations, except in the ability of transit agencies to contract out for fixed-route transit services.<sup>88</sup> A TRB report on contracting in the provision of bus service found that few transit managers mentioned federal or state laws or policies, including 13(c), as a reason to contract out or not.<sup>89</sup>

Another potential way of reducing the need for public assistance is to increase fares, where possible, to cover costs. Fares need not necessarily be increased across

<sup>85</sup> Downs, p. 150.

<sup>&</sup>lt;sup>82</sup> Transportation Research Board, *The Congestion Mitigation and Air Quality Improvement Program: Assessing 10 Years of Experience*, Special Report 264 (Washington, DC, 2002). [http://onlinepubs.trb.org/onlinepubs/sr/sr264.pdf].

<sup>&</sup>lt;sup>83</sup> Winston, C. and C. Shirley, *Alternate Route: Toward Efficient Urban Transportation* (Brookings Institution Press, Washington, DC, 1998).

<sup>&</sup>lt;sup>84</sup> Testimony of Jim Seal, Consultant, in U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Hearing on The Administration's Proposal for Reauthorization of the Federal Public Transportation Program*, S.Rept. 108-640, June 10, 2003.

<sup>&</sup>lt;sup>86</sup> Wachs, M., "U.S. Transit Subsidy Policy: In Need of Reform," *Science*, Vol. 244, pp. 1545-1549.

<sup>&</sup>lt;sup>87</sup> Testimony of R. Molofsky, General Counsel, Amalgamated Transit Union in U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Hearing on The Administration's Proposal for Reauthorization of the Federal Public Transportation Program*, S.Rept. 108-640, June 10, 2003.

<sup>&</sup>lt;sup>88</sup> U.S. General Accounting Office (now the Government Accountability Office), *Transit Labor Arrangements: Most Transit Agencies Report Impacts are Minimal*, GAO-02-78 (Washington, DC, 2002). [http://www.gao.gov/new.items/d0278.pdf].

<sup>&</sup>lt;sup>89</sup> Transportation Research Board, *Contracting for Bus and Demand-Responsive Transit Services*, Special Report 258 (Washington, DC, 2001). [http://onlinepubs.trb.org/ onlinepubs/sr/sr258.pdf].

the board, but could be adjusted to more accurately reflect the cost of providing a particular service. The federal government might encourage transit systems to do this, particularly with the use of electronic fare payment technology that makes it relatively easy to collect variable fares.

It might also be possible to reduce the need for government assistance of public transit by making automobile use more expensive. One way to do this is to institute new highway tolls, particularly ones that vary based on traffic levels. Such road pricing schemes usually make the most sense in severely congested regions where good transit options exist. Congress, therefore, might encourage congested metropolitan areas to design comprehensive congestion management schemes that incorporate highway pricing and transit, as DOT is doing with its Urban Partnership Agreements (UPAs). In the summer of 2007, DOT announced UPAs with five cities, New York City (NYC), Minneapolis, Seattle, San Francisco, and Miami. The NYC proposal, for example, involves charging vehicles a congestion fee to enter the central business area on weekdays, the development of a BRT network, and ferry boat, traffic signal, and pedestrian improvements. DOT pledged to provide \$354.5 million of federal funding to NYC, contingent on legislative and other actions at the state and local level.<sup>90</sup>

Finally, some have proposed that the federal transit program include a performance incentive element that rewards transit agencies for providing more service per dollar of public subsidy. During the reauthorization of TEA-21, the Administration proposed a \$1.3 billion incentive program with funding going to agencies with the largest increases in transit ridership.<sup>91</sup> Transit industry representatives argued against this proposal, noting that it might unfairly penalize agencies that cannot increase transit ridership because of factors beyond their control, such as capacity limitations or a local economic downturn. Moreover, they noted that several of the formula programs already include factors that reward systems with levels of ridership that are high relative to operating costs.<sup>92</sup> A new performance incentive program was not enacted in SAFETEA, but some observers maintain that it is an option worth considering again.

<sup>&</sup>lt;sup>90</sup> U.S. Department of Transportation, "Urban Partnership Agreement by and between U.S. Department of Transportation and its New York City Urban Partner." [http://www.fightgridlocknow.gov/docs/termsheetnewyork.htm]. For more information on the Urban Partnership Agreements in general, see the DOT website at [http://www.fightgridlock now.gov/upas.htm].

<sup>&</sup>lt;sup>91</sup> Testimony of Norman Y. Mineta, Secretary of Transportation, in U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Hearing on The Administration's Proposal for Reauthorization of the Federal Public Transportation Program*, S.Rept. 108-640, June 10, 2003.

<sup>&</sup>lt;sup>92</sup> Testimony of William Millar in U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Hearing on The Administration's Proposal for Reauthorization of the Federal Public Transportation Program*, S.Rept. 108-640, June 10, 2003.; Molofsky, R., General Counsel, Amalgamated Transit Union, Response to Written Questions of Senator Shelby, in U.S. Congress, Senate Committee on Banking, Housing, and Urban Affairs, *Hearing on The Administration's Proposal for Reauthorization of the Federal Public Transportation*, S.Rept. 108-640, June 10, 2003.

### **Federal Public Transit Program Priorities**

If federal funding for transit remains flat or possibly even declines over the next decade, Congress may opt to adjust the structure of the programs based on a reexamination of its priorities. Under SAFETEA, 43% of funds are authorized for the Capital Investment Program, 42% for the Urbanized Area Formula Grants Program, and 15% for several other formula programs, such as the Other Than Urbanized Area Formula Program (commonly referred to as the Rural Formula Program), state and metropolitan planning, research, and FTA operations.<sup>93</sup> Several possible ways of restructuring federal public transit programs, among many others, are outlined below, each an alternative to the possibility of leaving the existing system unchanged.

One way to reorder federal priorities would be to focus more resources on major capital expenses for the rehabilitation and expansion of transit service in places that are best served by this mode, primarily the densely populated parts of large and often heavily congested cities. This would require expanding the programs that make up the Capital Investment Program (the New Starts Program, the Rail Modernization Program, and the Bus Capital Program) and cutting back on the more broadly spread grants under the Urbanized and Non-Urbanized Formula Programs that are going for smaller and more routine types of expenses. This change would likely result in a concentration of resources in a few large cities where transit usage is already relatively high.

Alternatively, Congress may decide that the era of retrofitting large and medium-sized cities with new transit rail systems is largely over, and that resources should now go to supporting and rehabilitating existing services. This could entail a reduction in spending on the New Starts program, currently about 18% of the federal transit program, and more support for the other capital programs and the formula grants programs. The effect of these changes on the distribution of funds is likely to be more mixed, and would depend on the share of funds dedicated to the Rail Modernization program, a program that includes relatively few cities, and the share dedicated to buses and formula programs that include a much larger number of places.

A third alternative would be to eliminate the capital programs altogether, to be replaced with a simple "block grant" that could be distributed based on transit ridership or population. This would allow state and local governments to decide how best to allocate transit funding support among existing and new services. Funds distributed according to transit ridership would reward areas that commit their own resources successfully to providing transit service. The distribution of funding in this way would again depend on how this program would be structured, but it might also depend on how states and localities react to the changes in terms of how aggressively they promote transit ridership.

<sup>&</sup>lt;sup>93</sup> For more information on the current structure of the federal transit program see CRS Report RL34171, *Public Transit Program Issues in Surface Transportation Reauthorization* by William J. Mallett.

Much of this presupposes that federal transit funding may cease to grow or even decline in real terms in the next reauthorization, which might take surface transportation programs through FY2015. This need not be the case if the federal fuels tax is raised and some of this new revenue dedicated to transit, or if other types of dedicated revenues are created, or if Congress decides to fund transit programs at a higher level from the general fund. Revenue and spending growth may make programmatic decisions a good deal easier to make, but that does not necessarily preclude Congress from making changes in the way the federal government supports public transit provision.