

*a report on*

# FLORIDA TRANSPORTATION TRENDS AND CONDITIONS



## TRANSPORTATION FUNDING Transportation Resources



March 2012



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[www.dot.state.fl.us/planning/trends](http://www.dot.state.fl.us/planning/trends)

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## Transportation Resources

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### Introduction

The pervasiveness and diversity of transportation modes result in a complex set of financial relationships responsible for the provision and operation of various transportation system elements. Government at all levels is involved in the provision of transportation; however, the private sector and individuals – both as consumers of service and owners of transportation vehicles and, in some cases, whole systems – are actively involved in funding or directly paying for transportation. Ultimately, the resources that build and operate transportation come from the public – directly as fares and costs for owning and using vehicles, or indirectly through various taxes, or as part of the cost of products that are consumed or services that are purchased.

This report is one of three reports on transportation resources, investments and costs. The purpose of this report, “Transportation Resources,” and a companion report, “Transportation Investments,” is to portray the nature of transportation resources and investments by various entities. These reports provide the reader with both an overall picture of transportation funding and some insight into current trends and issues regarding how transportation funding is received and invested. A third report, “Transportation Costs,” describes the cost of various items that comprise transportation infrastructure and services.

### Paying For Transportation

How transportation is paid for varies significantly across modes, and the availability of data on both funding and investment similarly varies, particularly for those modes that have private sector involvement in funding. Thus, there is no standard way to fully portray how funds are received or invested for transportation. The above-mentioned reports use the best available data for each mode. The source, quality, and nature of the data change by mode, and not all modes have equally rich databases on revenues or spending. The available data presented in these reports focus on direct revenues and investments. Other literature beyond the scope of this report attempts to more fully document the economic and financial impacts of the various modes. For example, Litman (2011) summarizes methods for monetizing benefits that are outcomes of non-motorized transportation modes, such as user savings, social cost savings, and contingent value, using methods such as revealed preference studies, hedonic pricing studies, and compensation rates in evaluating non-motorized transportation benefits and costs. Here, the user savings represent the cost savings in vehicle ownership, operation, and parking for individuals and social cost savings represent such things as the cost of road infrastructure and parking for communities.

Some studies also evaluate the influence of transportation systems on the health and safety of the public. A study conducted by Litman and Fitzroy (2006) looked at the safety aspect of transportation systems, and a study by Basset Jr. et al. (2008) evaluated the health benefits associated with non-motorized modes of transport such as bicycling and walking. The influence

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and impact of transportation systems on public health, safety, the environment, or mobility have very significant consequences, ranging from the health care costs attributed to auto accidents, obesity, and vehicle-sourced pollution to the personal income increases and the economic productivity benefits of greater accessibility that comes from more and better transportation.

A common and perhaps historically reasonable perspective is that transportation infrastructure is provided primarily by the government and funded through fuel taxes collected when cars, trucks, or airplanes fill their fuel tanks. The current reality is far more complex.

*The means by which transportation is funded depends upon the mode of transportation, the geographic location, and the local institutional structure for governance.*

Revenues for transportation infrastructure come from myriad sources. Some, such as fuel taxes, are routed through government coffers, and others, such as vehicle purchases, directly or indirectly provide transportation. The actual means by which transportation is funded depends upon the mode of transportation, the geographic location, and the local institutional structure for governance. There can be a huge variation. For example, an individual buys his/her own jogging shoes and runs on a trail paid for with general revenue taxes. Alternatively, an air traveler pays part of the cost through the ticket purchase, but the total transportation experience is also supported by a host of revenue streams, ranging from parking and concession revenues at the airport to various governmental grants and indirect subsidies. Even roadways now have a far more complex set of revenue sources, ranging from developers who pay impact fees and provide transportation infrastructure as part of development approval, to tolls and gas tax revenues. These investments are complemented by the individuals or businesses that incur the costs of owning and operating the cars or trucks on the roads.

As resources have become scarcer and needs have become greater, the complexity and creativity harnessed to fund transportation have become greater. Pursuing partnerships, leveraging private sector participation, making development pay for itself, using various debt instruments, and taking advantage of diverse government funds at all levels are part of the complex mix of project funding. Transportation infrastructure cost increases in the 2000-2007 period far outpaced revenue growth. Subsequently, construction costs declined with the economic recession but revenue streams also declined dramatically. Thus, significant challenges for transportation funding have persisted.

Table 1 summarizes how resources are obtained to provide and operate various modes. As the table indicates, there is a large difference across modes in terms of how resources are provided. Some modes, such as personal auto travel, are highly dependent on the individual making the investment in vehicle ownership and operation as a significant share of the total cost of providing transportation. Other modes, such as public transit, are highly dependent on government resources to provide the majority of the infrastructure and operations. Ultimately,

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all the resources come from individuals but, in some cases, those resources are expended by the individual directly in the purchase of transportation, and in others they are routed through government taxes and fees to provide transportation. In the case of freight or commercial transportation, the consumer ultimately pays through the price of products or fees. Those resources are routed through business investments – for example, purchasing and operating trucks and through business taxes and fees.

**Table 1 – Users and Providers of Transportation**

| <i>Travelers</i>  | <i>Use</i>                                | <i>Mode</i>    | <i>Provider</i>                                    |                                       |  |
|---|---|----------------|--|---------------------------------------|--|
|   |   |                | <i>Operations</i>                                  | <i>Vehicle</i>                        | <i>Supporting Infrastructure</i>             |
| <b>Individuals<br/>and<br/>Businesses<br/>and<br/>Governments/<br/>Institutions</b> | <b>Person Travel</b>                      | Auto           | Individual   | Individual                            | Individual,<br>government,<br>private sector |
|   |   | Walk, Bike     | Individual   | Individual                            | Government                                   |
|   |   | Air            | Private sector,<br>government                      | Private sector                        | Private sector,<br>government                |
|   |   | Intercity Rail | Semi-private<br>sector, <sup>a</sup><br>government | Semi-private<br>sector,<br>government | Semi-private<br>sector,<br>government        |
|   |   | Intercity Bus  | Private sector                                     | Private sector                        | Private sector,<br>government                |
|   |   | Public Transit | Government   | Government                            | Government                                   |
|   | <b>Freight/<br/>Commercial<br/>Travel</b> | Truck          | Private sector                                     | Private sector                        | Private sector,<br>government,               |
|   |   | Rail           | Private sector                                     | Private sector                        | Private sector,<br>government,               |
|   |   | Barge, Ship    | Private sector                                     | Private sector                        | Private sector,<br>government,               |
|   |   | Air Cargo      | Private sector                                     | Private sector                        | Private sector,<br>government,               |

<sup>a</sup> Semi-private refers to Amtrak, a government-created entity that continues to receive public funds.

Source: Center for Urban Transportation Research (CUTR), University of South Florida

The remainder of this report discusses how resources are directed to the provision of transportation for both person and freight travel. Given that roadway travel is the dominant mode of transportation and the area where most financial information is available, this report includes extensive data on how consumer transportation spending and roadway travel are linked.

### Spending for Person Travel

Survey data collected at the national level provide a detailed picture of how household resources are expended, including how much spending goes to purchase transportation. Household expenditures on transportation make up the revenues for the providers of

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equipment, services, and facilities that comprise transportation. Table 2 on page 5 shows how much is spent on all modes of travel and indicates that the share of household annual expenditures for transportation is 17 percent. Expenditures associated with owning and operating a private vehicle comprise the vast majority of household transportation spending. These consumer expenditure survey data are the most comprehensive data available and capture identifiable spending for transportation. Additional spending for transportation not captured in this dataset includes other taxes and fees such as property, sales, or income taxes, some share of which support transportation in some communities and states. Other indirect spending occurs for such things as a garage that may house a vehicle, among other things, or the building of a house, which may have included the cost of local streets or transportation improvements paid by the developer as a condition of approval of the development. Additionally, part of the cost of most consumables covers the cost of transportation of the products to and from the household and the transportation of the components throughout the supply chain.

The Consumer Expenditure Survey does not produce state-level data for Florida, but does collect data for various metropolitan areas including Miami. Table 3 on page six provides trend and peer city comparison data for several southern metropolitan areas. It is worth noting that the spending data fluctuate significantly over time. Differences in spending on vehicles between years, and perhaps the modest sample sizes used for the metro area surveys appear to explain the yearly variations. The data show increases in fuel expenditures over time, with significant increases in 2006, 2007 and 2008.

**Table 2 – Average U.S. Household Expenditures by Major Spending Category, 2008**

|  |                 |             |
|--|-----------------|-------------|
| <b>Average income (before taxes)</b>             | <b>\$63,563</b> |             |
| <b>Average annual expenditures</b>               | <b>\$50,486</b> | <b>100%</b> |
| Housing  | \$17,109        | 34%         |
| Food   | \$6,443         | 13%         |
| Apparel and services                             | \$1,801         | 4%          |
| Personal insurance and pensions                  | \$5,605         | 11%         |
| Health care                                      | \$2,976         | 6%          |
| Transportation                                   | \$8,604         | 17%         |
| <i>Private vehicle expenditures</i>              | <i>\$8,091</i>  |             |
| <i>Vehicle purchases</i>                         | <i>\$2,755</i>  |             |
| <i>Gasoline and motor oil</i>                    | <i>\$2,715</i>  |             |
| <i>Other vehicle expenditures</i>                | <i>\$2,621</i>  |             |
| <i>Public transportation expenditures</i>        | <i>\$513</i>    |             |
| <i>Airline fares</i>                             | <i>\$343</i>    |             |
| <i>Ship fares</i>                                | <i>\$38</i>     |             |
| <i>Mass transit fares</i>                        | <i>\$61</i>     |             |
| <i>Taxi fares</i>                                | <i>\$25</i>     |             |
| <i>Intercity train fares</i>                     | <i>\$22</i>     |             |
| <i>Local transportation on out-of-town trips</i> | <i>\$12</i>     |             |
| <i>Intercity bus fares</i>                       | <i>\$11</i>     |             |
| <i>School bus</i>                                | <i>\$1</i>      |             |
| Other <sup>a</sup>                               | \$5,113         | 10%         |

Note: Numbers do not add up to totals due to rounding.

<sup>a</sup> Includes entertainment, personal care products and services, education, tobacco products and smoking, and miscellaneous.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, 2008; March 2010.

## Transportation Resources

**Table 3 – Household Transportation Expenditure Trends, Southern Metro Areas**

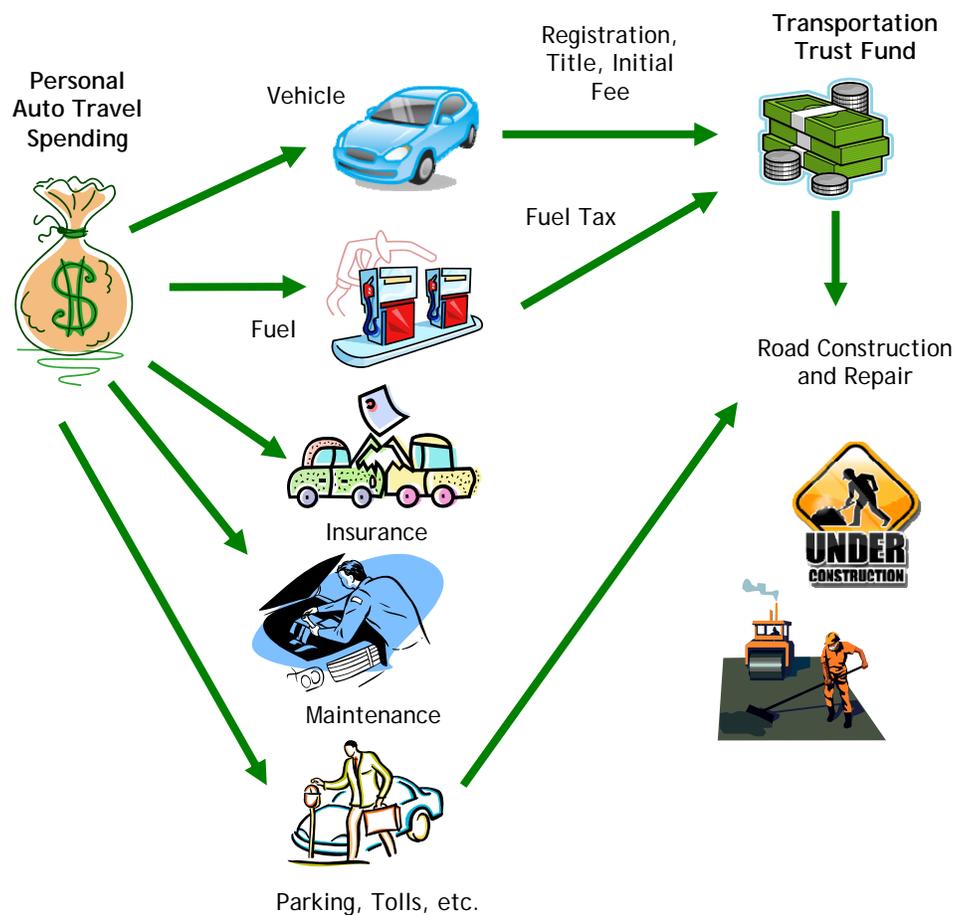
| <i>Year</i>      | <i>Spending Category</i>    | <i>Miami<br/>(annual \$)</i> | <i>Washington,<br/>D.C.<br/>(annual \$)</i> | <i>Baltimore<br/>(annual \$)</i> | <i>Atlanta<br/>(annual \$)</i> | <i>Houston<br/>(annual \$)</i> |
|------------------|-----------------------------|------------------------------|---|----------------------------------|--------------------------------|--------------------------------|
| <b>2001-2002</b> | <b>Transportation Total</b> | 7,617                        | 7,543                                       | 5,108                            | 7,458                          | 9,536                          |
|                  | Vehicle Purchases           | 3,097                        | 3,256                                       | 1,643                            | 3,504                          | 4,473                          |
|                  | Gasoline and Motor Oil      | 1,315                        | 1,242                                       | 1,182                            | 1,276                          | 1,525                          |
|                  | Other Vehicle Expenses      | 2,781                        | 2,331                                       | 1,970                            | 2,392                          | 3,044                          |
|                  | Public Transportation       | 424                          | 714   | 313                              | 286                            | 494                            |
| <b>2002-2003</b> | <b>Transportation Total</b> | 8,348                        | 7,853                                       | 5,605                            | 7,400                          | 9,891                          |
|                  | Vehicle Purchases           | 3,709                        | 3,374                                       | 1,852                            | 3,610                          | 5,243                          |
|                  | Gasoline and Motor Oil      | 1,324                        | 1,318                                       | 1,139                            | 1,222                          | 1,467                          |
|                  | Other Vehicle Expenses      | 2,868                        | 2,454                                       | 2,215                            | 2,289                          | 2,794                          |
|                  | Public Transportation       | 447                          | 707   | 400                              | 280                            | 386                            |
| <b>2003-2004</b> | <b>Transportation Total</b> | 6,791                        | 8,086                                       | 5,970                            | 5,794                          | 9,126                          |
|                  | Vehicle Purchases           | 2,386                        | 3,280                                       | 2,290                            | 2,320                          | 4,250                          |
|                  | Gasoline and Motor Oil      | 1,397                        | 1,496                                       | 1,257                            | 1,295                          | 1,686                          |
|                  | Other Vehicle Expenses      | 2,562                        | 2,570                                       | 2,055                            | 1,975                          | 2,838                          |
|                  | Public Transportation       | 446                          | 739   | 369                              | 204                            | 352                            |
| <b>2004-2005</b> | <b>Transportation Total</b> | 6,282                        | 7,876                                       | 5,799                            | 6,044                          | 10,326                         |
|                  | Vehicle Purchases           | 2,013                        | 2,758                                       | 2,052                            | 2,359                          | 4,584                          |
|                  | Gasoline and Motor Oil      | 1,633                        | 1,726                                       | 1,541                            | 1,695                          | 2,249                          |
|                  | Other Vehicle Expenses      | 2,284                        | 2,601                                       | 1,844                            | 1,748                          | 3,107                          |
|                  | Public Transportation       | 353                          | 790   | 363                              | 242                            | 386                            |
| <b>2005-2006</b> | <b>Transportation Total</b> | 8,186                        | 7,341                                       | 7,554                            | 7,599                          | 11,636                         |
|                  | Vehicle Purchases           | 3,199                        | 2,133                                       | 2,929                            | 3,146                          | 5,305                          |
|                  | Gasoline and Motor Oil      | 2,069                        | 1,958                                       | 2,073                            | 2,124                          | 2,743                          |
|                  | Other Vehicle Expenses      | 2,480                        | 2,503                                       | 2,076                            | 1,965                          | 3,068                          |
|                  | Public Transportation       | 437                          | 747   | 476                              | 364                            | 519                            |
| <b>2006-2007</b> | <b>Transportation Total</b> | 7,938                        | 9,531                                       | 8,673                            | 8,053                          | 11,119                         |
|                  | Vehicle Purchases           | 2,859                        | 3,319                                       | 3,562                            | 2,957                          | 4,544                          |
|                  | Gasoline and Motor Oil      | 2,457                        | 2,272                                       | 2,508                            | 2,407                          | 2,936                          |
|                  | Other Vehicle Expenses      | 2,092                        | 3,163                                       | 2,049                            | 2,119                          | 3,149                          |
|                  | Public Transportation       | 530                          | 778   | 554                              | 570                            | 490                            |
| <b>2007-2008</b> | <b>Transportation Total</b> | <b>8,506</b>                 | <b>10,452</b>                               | <b>7,793</b>                     | <b>7,316</b>                   | <b>10,880</b>                  |
|                  | Vehicle Purchases           | 3,049                        | 3,492                                       | 2,396                            | 2,101                          | 4,070                          |
|                  | Gasoline and Motor Oil      | 2,863                        | 2,666                                       | 2,665                            | 2,821                          | 3,274                          |
|                  | Other Vehicle Expenses      | 2,076                        | 3,190                                       | 2,191                            | 1,893                          | 3,064                          |
|                  | Public Transportation       | 518                          | 1,103                                       | 542                              | 501                            | 472                            |

Source: Bureau of Labor Statistics, *Consumer Expenditure Series*.

## Transportation Resources

Figure 1 portrays the flows of the majority of resources necessary to provide personal vehicle transportation. The individual consumer is the source of these funds by virtue of the choices he or she makes to attain vehicle mobility, whether it be purchasing a vehicle, maintaining it, or paying user fees. These expenses are then directed towards road construction, repair, and maintenance.

**Figure 1 – Major Money Flows for Personal Vehicle Travel**



Source: CUTR

*Vehicle purchases/leases are the largest personal transportation expenditure. Other vehicle costs and fuel and oil are the next most significant categories.*

## Transportation Resources

Total household spending for transportation increased 16 percent between 2000 and 2008, but then dropped significantly, with spending in 2009 only 3 percent above 2000 levels as shown in Table 4. The majority of the spending change has been related to gasoline and motor oil expenditure increases, much of which has been offset by lower vehicle purchase or lease expenditures. Most other costs remained similar.

**Table 4 – National Household Transportation Spending Trends, 2000-2009**

|   | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008   | 2009   | 2009-2000 Change |
|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|------------------|
| <b>Total transportation (\$)</b>                            | 7,417 | 7,633 | 7,759 | 7,781 | 7,801 | 8,344 | 8,508 | 8,758 | 8,604  | 7,658  | 241              |
| <i>Change from prior yr. (\$)</i>                           |       | 216   | 126   | 22    | 20    | 543   | 164   | 250   | -154   | -946   |                  |
| <i>% change from prior yr.</i>                              |       | 2.9%  | 1.6%  | 0.3%  | 0.3%  | 7.0%  | 2.0%  | 2.9%  | -1.8%  | -11.0% |                  |
| <b>Vehicle purchases (\$)<br/>(net outlay)</b>              | 3,418 | 3,579 | 3,665 | 3,732 | 3,397 | 3,544 | 3,421 | 3,244 | 2,755  | 2,657  | -761             |
| <i>% change from prior yr.</i>                              |       | 4.7%  | 2.4%  | 1.8%  | -9.0% | 4.3%  | -3.5% | -5.5% | -17.7% | -3.6%  |                  |
| <b>Gasoline and motor oil (\$)</b>                          | 1,291 | 1,279 | 1,235 | 1,333 | 1,598 | 2,013 | 2,227 | 2,384 | 2,715  | 1,986  | 695              |
| <i>Change from prior yr. (\$)</i>                           |       | -12   | -44   | 98    | 265   | 415   | 214   | 157   | 331    | -729   |                  |
| <i>% change from prior yr.</i>                              |       | -0.9% | -3.4% | 7.9%  | 19.9% | 26.0% | 10.6% | 6.6%  | 12.2%  | -26.9% |                  |
| <i>Share of all transportation spending</i>                 | 17.4% | 16.8% | 15.9% | 17.1% | 20.5% | 24.1% | 26.2% | 27.2% | 31.6%  | 25.9%  |                  |
| <b>Other vehicle expenses (\$)</b>                          | 2,281 | 2,375 | 2,471 | 2,331 | 2,365 | 2,339 | 2,355 | 2,592 | 2,621  | 2,536  | 255              |
| <b>Vehicle finance charges (\$)</b>                         | 328   | 359   | 397   | 371   | 323   | 297   | 298   | 305   | 312    | 281    | -47              |
| <b>Maintenance and repairs (\$)</b>                         | 624   | 662   | 697   | 619   | 652   | 671   | 688   | 738   | 731    | 733    | 109              |
| <b>Vehicle insurance (\$)</b>                               | 778   | 819   | 894   | 905   | 964   | 913   | 886   | 1,071 | 1,113  | 1,075  | 297              |
| <b>Vehicle rental, leases, licenses, other charges (\$)</b> | 551   | 534   | 483   | 436   | 426   | 458   | 482   | 478   | 465    | 447    | -104             |
| <b>Public transportation (\$)</b>                           | 427   | 400   | 389   | 385   | 441   | 448   | 505   | 538   | 513    | 479    | 52               |
| <i>% change from prior yr.</i>                              |       | -6.3% | -2.8% | -1.0% | 14.6% | 1.6%  | 12.7% | 6.1%  | -4.9%  | -6.6%  |                  |

Source: Bureau of Labor Statistics, *Consumer Expenditure Series*

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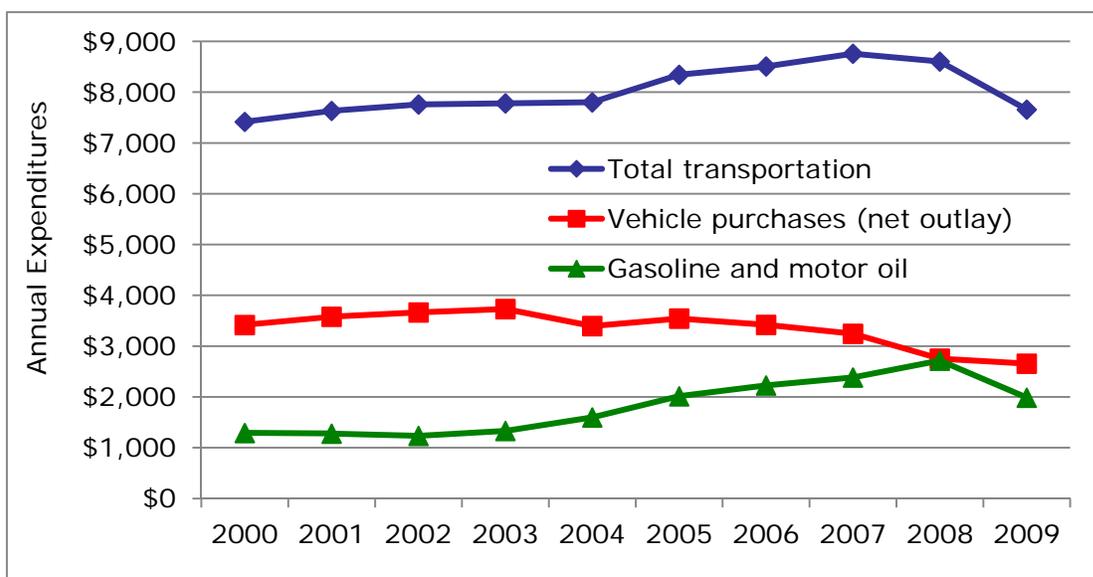
## Transportation Resources

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A persistent drop in the share of household expenditure for transportation is observed between 2000 and 2009. It dropped from 19.5 percent in 2000 to 17 percent in 2008 and further fell to 15.6 percent in 2009. While the share declined, there was a modest increase in actual household transportation expenditures during the same period. The decline in 2009 from 2008 was due to moderating fuel prices (relative to their peak in 2008) and the further deterioration of economic conditions. Thus, the burden of transportation costs was held approximately constant over the decade in spite of the very substantial increases in fuel costs relative to the beginning of the decade. Low interest costs, a very competitive vehicle sales environment, savings from deferred vehicle replacement, and relatively stable insurance and maintenance costs managed to keep overall vehicle transportation spending levels not significantly different than historic norms.

Figure 2 depicts the trend in national household spending on vehicle purchases, gasoline, and total transportation. It highlights the influence of higher gas prices and also points out the moderation in vehicle spending (even without adjusting for inflation) that has occurred over the past several years.

**Figure 2 – Household Transportation Expenditure Trends**



Source: Bureau of Labor Statistics, *Consumer Expenditure Series*.

As illustrated in Figure 1 on page seven, some of the expenditures for vehicle travel, specifically fuel taxes and vehicle registration and license fees, are part of the revenue streams that are collected by local, state and federal governments to pay for transportation infrastructure. The fuel tax in Florida, is comprised of components levied by the federal government (\$0.184 per gallon), state and local government. The total of these components is shown below in Figure 3.

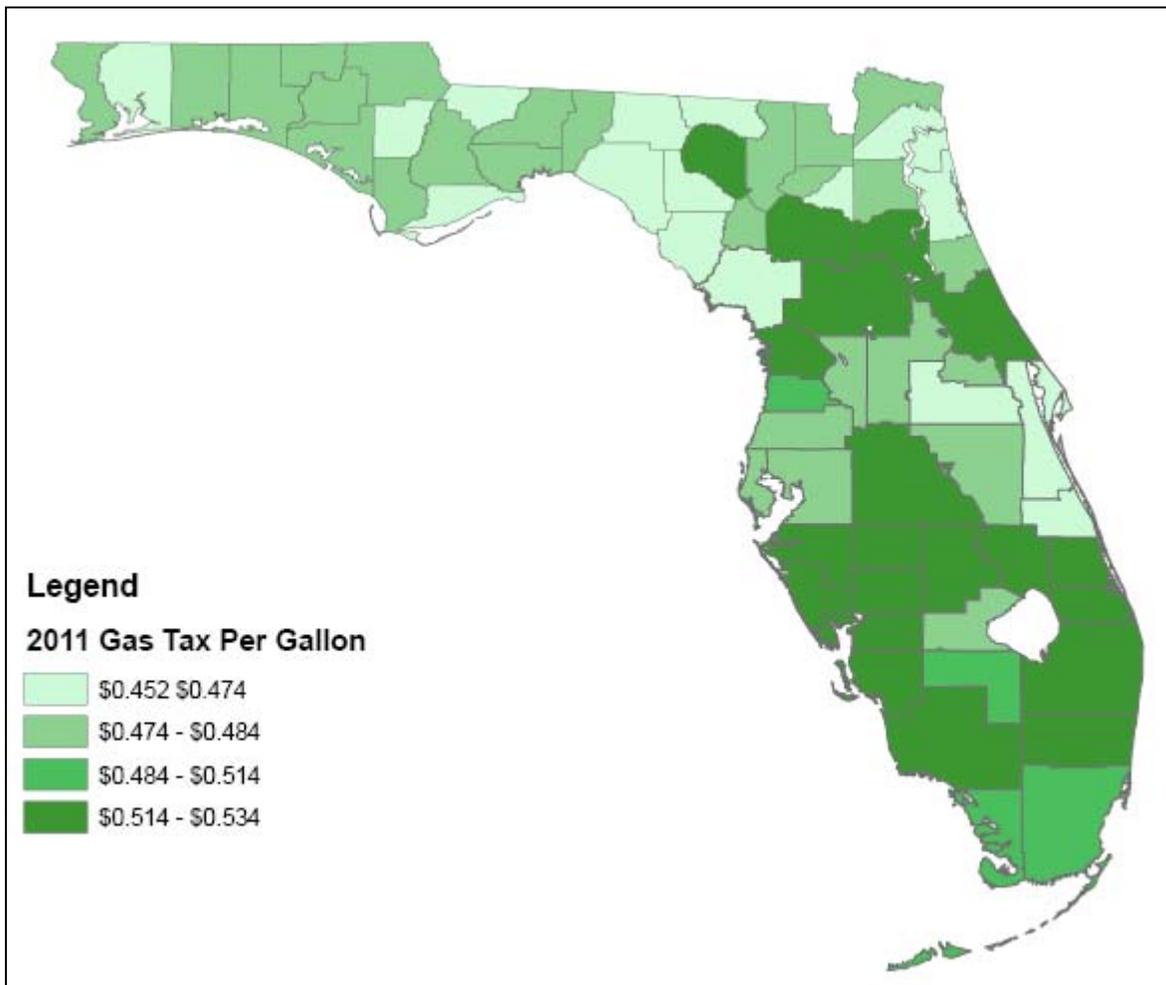
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## Transportation Resources

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Local fuel taxes may be imposed by counties as a result of county legislative action and/or by referenda.<sup>1</sup> This revenue stream, which over the past several years has ranged from approximately one-third to one-sixth of the total amount a household pays for fuel, has been the principal though not the only source of revenues for transportation trust funds at the local, state and federal levels.

**Figure 3 – Combined Gas Taxes per Gallon by County**



Tax rates on this map are effective as of January 1, 2011.  
Source: Florida Department of Revenue, *Florida Fuel Tax*.

As one might imagine, the availability of data on transportation spending by the private business sector is more limited due to both the cost of data collection and the desires of businesses to not disclose proprietary information that could impact their competitive position.

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<sup>1</sup> See *Florida's Transportation Tax Sources – A Primer*, for specific tax rates and more detailed information.  
<http://www.dot.state.fl.us/financialplanning/revenue/primer.shtml>

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## Transportation Resources

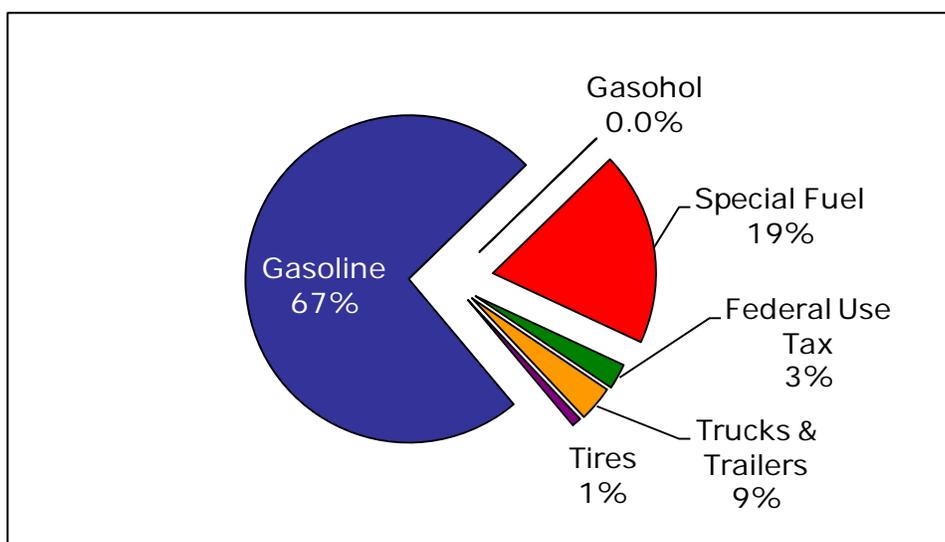
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### Resources for Providing Transportation

#### *Federal Funds for Transportation*

The Federal Government collects revenues to support the Federal Highway Trust Fund with its shares coming from taxes on three types of fuels (gasoline, gasohol, and special fuel), tire loads, truck sales and federal use tax as shown in Figure 4. The predominant source of funds to support federal transportation initiatives are the federally-levied fuel taxes. Minor shares of revenues are also derived from taxes and fees on tires, trucks and trailers and the federal use tax.

**Figure 4 – Federal Highway Trust Fund Receipts from Florida, 2008**



Source: Federal Highway Administration. *Highway Statistics Series*.

The above shares for Federal Highway Trust Fund from each of the above discussed sources are arrived at as follows:

Trucks & Trailers – 12% of retailer sales price.

Tires – 9.45 cents per 10 pounds max. rated load capacity over 3,500 pounds (4.725 cents in case of bias ply or super single tires).

Federal Use Tax – Annual Tax on Motor Vehicles: 55,000 to 75,000 pounds gross weight, \$100 plus \$22 per 1,000 pounds over 55,000 pounds; over 75,000 pounds, \$55.

Gasoline – 18.4 cents per gallons (includes 0.1 cents per gallon tax for Leaking Underground Storage Tank Trust Fund).

Gasohol – 18.4 cents per gallon.

Special Fuel (e.g., LPG, Benzyl, Benzene, Naptha, etc.) – 13.6 cents per gallon.

Diesel Fuel – 24.4 cents per gallon.

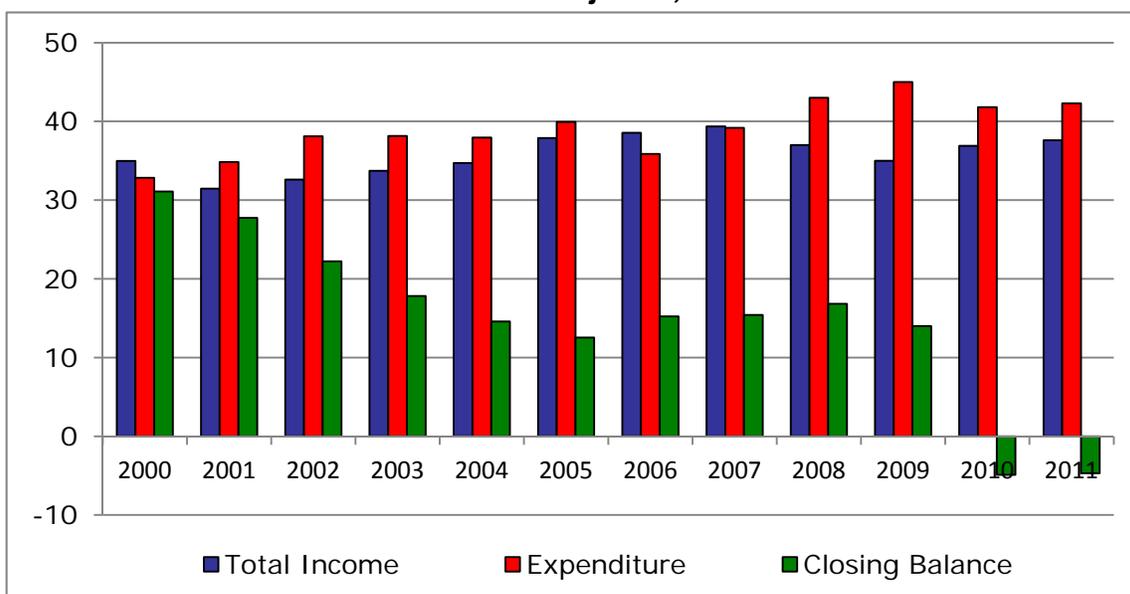
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## Transportation Resources

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Gasoline and special fuel taxes are the dominant source of federal funds for transportation as illustrated in Figure 4 and discussed earlier in this section. These assessments are “per gallon” assessments, so growth in revenues is dependent on additional fuel sales. It is not indexed to construction costs or the general consumer price index. In the recent past, improvements in fuel efficiency have put downward pressure on growth in gas and fuel tax revenues. More recently, slowing travel demand growth is resulting in very modest growth in federal transportation collections. Looking ahead, high fuel prices and their impact on travel demand and vehicle type use (smaller, more efficient vehicles are anticipated to be used/purchased) combined with tightening of the Corporate Average Fuel Economy standards (CAFE) are anticipated to result in slow or no growth in fuel tax revenues. The collective impact of modest or no trust fund revenue growth and continuing transportation project costs is creating financial challenges that are being widely discussed in transportation policy circles.

**Figure 5 – Status of the Highway Trust Fund, 2000–2009 Actual, 2010–2011 Projected, Billions**



Source: Projected/estimated data were obtained from the Government Accountability Office, historic data are from FHWA, *Highway Statistics Series*.

The Highway Trust Fund trend shows a declining closing balance as expenditures have exceeded income for several years and exhausted the reserves as shown in Figure 5. A negative balance was projected for 2010 and 2011 resulting in Congress making general fund contributions to the trust fund to cover authorized appropriations as expenditures consumed the historic reserves, interest contributions, and the current revenue stream. This deficit in revenues versus authorized spending has led to significant rethinking of transportation funding and the relative roles of different levels of government and the private sector in funding future transportation. A reluctance to increase traditional fuel and use taxes exacerbates the

## Transportation Resources

significance of the problem as do concerns about deficit reduction. The next few years promise to be an interesting period with the prospect of changes in the historical roles of various entities and the sources of revenues that support transportation.

*The federal fuel tax is a flat rate per gallon. Revenue growth has been dependent on growing consumption. Construction cost inflation, slowing VMT growth and improved fuel efficiency result in a growing mismatch between needs and resources.*

**Table 5 – Federal Highway Trust Fund Revenues Attributable to Florida Highway Account (\$000)**

| Year | MOTOR FUEL |         |               |           | OTHER           |                     |        | TOTAL     | Percent Change |
|------|------------|---------|---------------|-----------|-----------------|---------------------|--------|-----------|----------------|
|      | GASOLINE   |         | SPECIAL FUELS | TOTAL     | FEDERAL USE TAX | TRUCKS AND TRAILERS | TIRES  |           |                |
|      | GASOLINE   | GASOHOL |               |           |                 |                     |        |           |                |
| 1995 | 647,109    | 1,457   | 172,938       | 821,504   | 26,109          | 76,928              | 15,143 | 939,684   |                |
| 1996 | 811,994    | 1,090   | 190,316       | 1,003,400 | 28,371          | 72,047              | 20,413 | 1,124,231 | 19.6%          |
| 1997 | 759,137    | 359     | 177,721       | 937,217   | 28,713          | 63,112              | 11,299 | 1,040,341 | -7.5%          |
| 1998 | 1,098,028  | 866     | 246,515       | 1,345,409 | 33,805          | 79,937              | 15,643 | 1,474,794 | 41.8%          |
| 1999 | 1,080,763  | 914     | 250,616       | 1,332,293 | 31,785          | 109,761             | 16,251 | 1,490,090 | 1.0%           |
| 2000 | 1,101,118  | 625     | 270,898       | 1,372,641 | 35,701          | 128,687             | 17,133 | 1,554,162 | 4.3%           |
| 2001 | 1,074,743  | 1,361   | 250,643       | 1,326,747 | 23,383          | 57,103              | 13,146 | 1,420,379 | -8.6%          |
| 2002 | 1,148,287  | 823     | 261,203       | 1,410,313 | 38,004          | 48,999              | 13,601 | 1,510,917 | 6.4%           |
| 2003 | 1,161,168  | 394     | 270,577       | 1,432,139 | 36,613          | 66,561              | 15,691 | 1,551,004 | 2.7%           |
| 2004 | 1,142,198  | -       | 294,644       | 1,436,842 | 38,199          | 74,678              | 18,030 | 1,567,749 | 1.1%           |
| 2005 | 1,285,977  | 17      | 332,263       | 1,618,257 | 46,236          | 126,959             | 19,815 | 1,811,267 | 15.5%          |
| 2006 | 1,238,389  |         | 357,684       | 1,596,073 | 62,057          | 160,009             | 21,586 | 1,839,725 | 1.57%          |
| 2007 | 1,278,407  |         | 399,778       | 1,678,185 | 46,152          | 170,382             | 20,617 | 1,915,336 | 4.10%          |
| 2008 | 1,253,610  |         | 325,431       | 1,579,041 | 42,795          | 59,582              | 15,935 | 1,697,353 | -11.40%        |
| 2009 | 1,192,676  |         | 270,473       | 1,463,149 | 37,187          | 73,020              | 12,142 | 1,585,498 | -6.59%         |

Source: Federal Highway Administration. *Highway Statistics Series*.

Table 5 provides the historic trend of revenues collected from Florida for the Federal Highway Trust Fund. The trend in this table illustrates that the revenue for the Highway Trust Fund spiked in 2005, due to overall increases in revenue from all sources with significant increases in revenue from trucks and trailers (associated with booming construction and hurricane recovery activity). It maintained this trend up until 2007, followed by a significant drop in 2008. This drop occurred across all sources listed in Table 5, but reductions in revenue from trucks and trailers were relatively higher as compared to other sources. The revenue from trucks and trailers decreased by 65% in 2008, which is close to the spike it had witnessed in 2005 of about 70%.

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## Transportation Resources

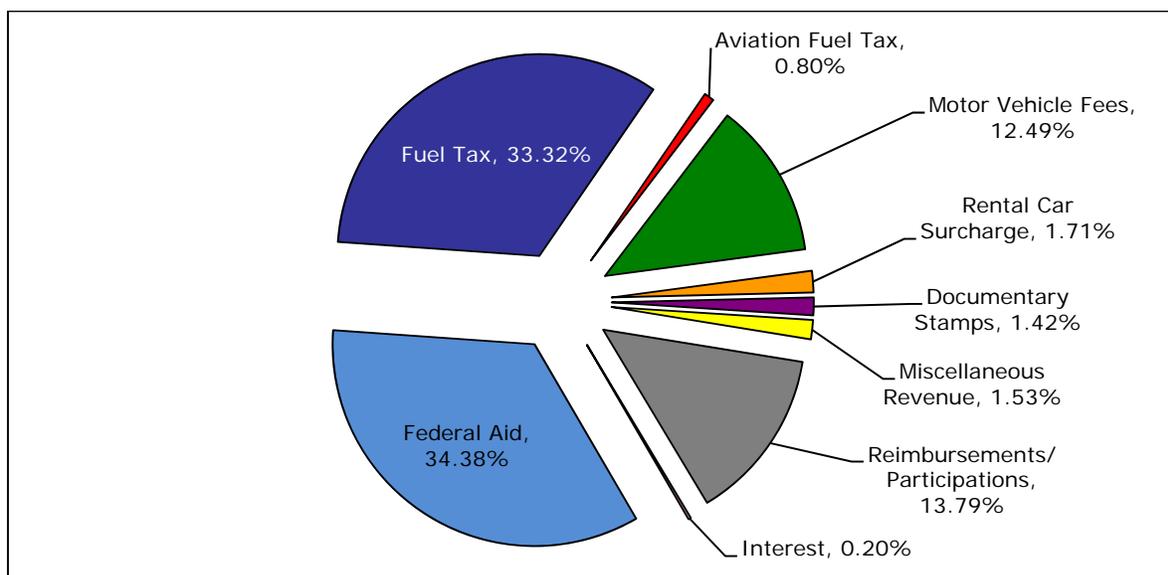
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Federal Highway Trust Fund sources are not all invested on transportation, are not returned to Florida in proportion to collections from Florida and are not the sole source of federal investments on transportation, as general fund receipts are also programmed to transportation spending initiatives.

### ***State Sources of Funds for Transportation***

Florida's State Transportation Trust Fund is similar to the Federal Highway Trust Fund as shown in Figure 6, but has a more diverse set of revenue sources that ranges from federal aid to motor vehicle fees and documentary stamps. The relative shares of funds from the different dedicated transportation sources for the State Transportation Trust Fund (Figure 6) reveals that the state fuel taxes comprise approximately one-third of the trust fund revenues, with motor vehicle license and tag/vehicle registrations fees comprising the other significant source. These funds are directed to transportation unless legislative actions result in diversions.

**Figure 6 – 2009–2010 State Transportation Taxes and Fees**



Source: FDOT, Office of Financial Development

**Aviation Tax.** As per Section 206.9825 of the Florida Statutes, “an excise tax of 6.9 cents per gallon of aviation fuel is imposed upon every gallon of aviation fuel sold in this state, or brought into this state for use, upon which such tax has not been paid or the payment thereof has not been lawfully assumed by some person handling the same in this state.” A large part of this tax is used to fund airport and air traffic control operations.

**Vehicle Registration Fee.** This annual registration fee varies depending upon the type and use of vehicle and includes some additional fees such as the initial registration fee, the new metal

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plate issue fee, and the fee for transferring a license plate from another vehicle. These fees were increased significantly in 2009.

*Rental Car Surcharge.* This surcharge is imposed on the lease or rental of motor vehicles for the first 30 days. It is \$2 per day or any part of a day in Florida. It is included in the lease or rental price on which sales tax is computed and must be listed separately on the invoice. This tax is exempted for some entities such as churches and government organizations.

*Document Stamp Tax.* Stamp duty is a form of tax that is levied on documents. A Documentary Stamp Tax is levied on documents as provided under Chapter 201, Florida Statutes.

Documents subject to the tax include, but are not limited to:

- Deeds – documents used for transfer of interest in real property; the tax rate is \$0.70 per \$100 transfer.
- Bonds – the tax rate on bonds is \$0.35 per \$100 (or portion thereof), based upon the face value of the bond.
- Notes and written obligations to pay money – the tax rate on a written obligation to pay money is \$0.35 for each \$100 (or portion thereof) of the obligation evidenced by the document.
- Mortgages, liens and other evidences of indebtedness – A Documentary Stamp Tax is due on a mortgage, lien, and other evidence of indebtedness filed or recorded in Florida; the tax rate is \$0.35 per \$100 (or portion thereof) and is based on the amount of indebtedness or obligation secured, even if the indebtedness is contingent.

The trend in revenue from the above sources for the State Transportation Trust Fund from 2000 through 2010 is presented in Table 6. The revenues from aviation fuel tax and rental car surcharge were lower in 2009-2010 than any other fiscal year of the decade. Documentary stamp revenues showed their lowest level in 2008-2009; however, 2009-2010 data are not yet available. Fuel taxes for 2009-2010 were the second highest of the decade. Rental car surcharges and motor vehicle fees declined from their peaks in 2006-2007 and 2007-2008, respectively.

State transportation revenues have been supplemented with document stamp revenues in recent years and in 2006 with general fund revenues. More recently, funds from the trust fund or those previously programmed for it have been diverted to general revenues. In the 2009-2010 fiscal year, \$76 million was diverted.

## Transportation Resources

**Table 6 – State Transportation Fund Trend (\$ millions)**

| FY      | Fuel Tax | Aviation Fuel Tax | Motor Vehicle Fees | Rental Car Surcharge | Documentary Stamp |
|---------|----------|-------------------|--------------------|----------------------|-------------------|
| 2001-02 | 1,346.90 | 49.80             | 452.80             | 98.70                | 1,572.50          |
| 2002-03 | 1,424.60 | 46.80             | 454.90             | 93.70                | 2,001.50          |
| 2003-04 | 1,516.70 | 51.60             | 495.70             | 94.20                | 2,631.10          |
| 2004-05 | 1,579.40 | 53.60             | 516.10             | 106.70               | 3,365.20          |
| 2005-06 | 1,719.60 | 57.40             | 556.90             | 111.70               | 4,058.30          |
| 2006-07 | 1,793.20 | 57.20             | 574.38             | 108.36               | 3,060.41          |
| 2007-08 | 1,787.10 | 61.70             | 553.90             | 112.20               | 1,825.59          |
| 2008-09 | 1,732.50 | 54.50             | 531.50             | 100.70               | 1,015.50          |
| 2009-10 | 1,787.65 | 42.50             | 503.33             | 91.99                | Not Available     |

Sources: Revenue Estimating Conference Reports, FDOT Office of Financial Planning and Florida Department of Revenue: [http://dor.myflorida.com/dor/taxes/doc\\_stamp\\_coll.html](http://dor.myflorida.com/dor/taxes/doc_stamp_coll.html)

**Table 7 – State Fuel Tax Components and Trends**

| Year | Sources (cents/gal) |        | Total Rate (cents/gal) | Gasoline Sale (1000's of gallons) | State Transportation Trust Fund Total Fuel Receipt (\$1000's) |
|------|---------------------|--------|------------------------|-----------------------------------|---|
|      | Fuel Sales Tax      | SCETS* |                        |                                   |   |
| 1995 | NA                  | NA     | 12.9                   | 6,657,235                         | 858,783   |
| 1996 | NA                  | NA     | 13.2                   | 6,881,674                         | 908,381   |
| 1997 | NA                  | NA     | 13.6                   | 7,027,564                         | 955,749   |
| 1998 | NA                  | NA     | 14                     | 7,132,027                         | 998,484   |
| 1999 | NA                  | NA     | 14.1                   | 7,319,126                         | 1,031,997   |
| 2000 | NA                  | NA     | 14.4                   | 7,172,031                         | 1,032,772   |
| 2001 | NA                  | NA     | 14.9                   | 7,513,051                         | 1,119,445   |
| 2002 | 9.9                 | 5.5    | 15.4                   | 8,093,766                         | 1,246,440   |
| 2003 | 10.1                | 5.6    | 15.7                   | 8,381,678                         | 1,315,923   |
| 2004 | 10.3                | 5.7    | 16                     | 8,605,240                         | 1,376,838   |
| 2005 | 10.5                | 5.8    | 16.3                   | 8,606,189                         | 1,402,809   |
| 2006 | 10.9                | 6      | 16.9                   | 8,639,441                         | 1,460,065   |
| 2007 | 11.3                | 6.2    | 17.5                   | 8,510,012                         | 1,489,252   |
| 2008 | 11.6                | 6.4    | 18                     | 7,798,663                         | 1,403,759   |
| 2009 | 12.1                | 6.7    | 18.8                   | 7,735,007                         | 1,454,181   |
| 2010 | 12.2                | 6.8    | 19                     | Not Available                     | Not Available   |

\*State Comprehensive Enhanced Transportation Service Tax.

Sources: (i) FDOT Office of Financial Development, *Tax Rate & Distribution*;  
(ii) Energy Information Administration, *Gasoline Sales*.

The Florida Fuel Tax components and trends shown in Table 7 presents a comparison of trends in gasoline sales and total fuel tax rates. It reveals a decline in sales from 2007 following a decade long increase in sales. The fuel tax also followed the same trend as

## Transportation Resources

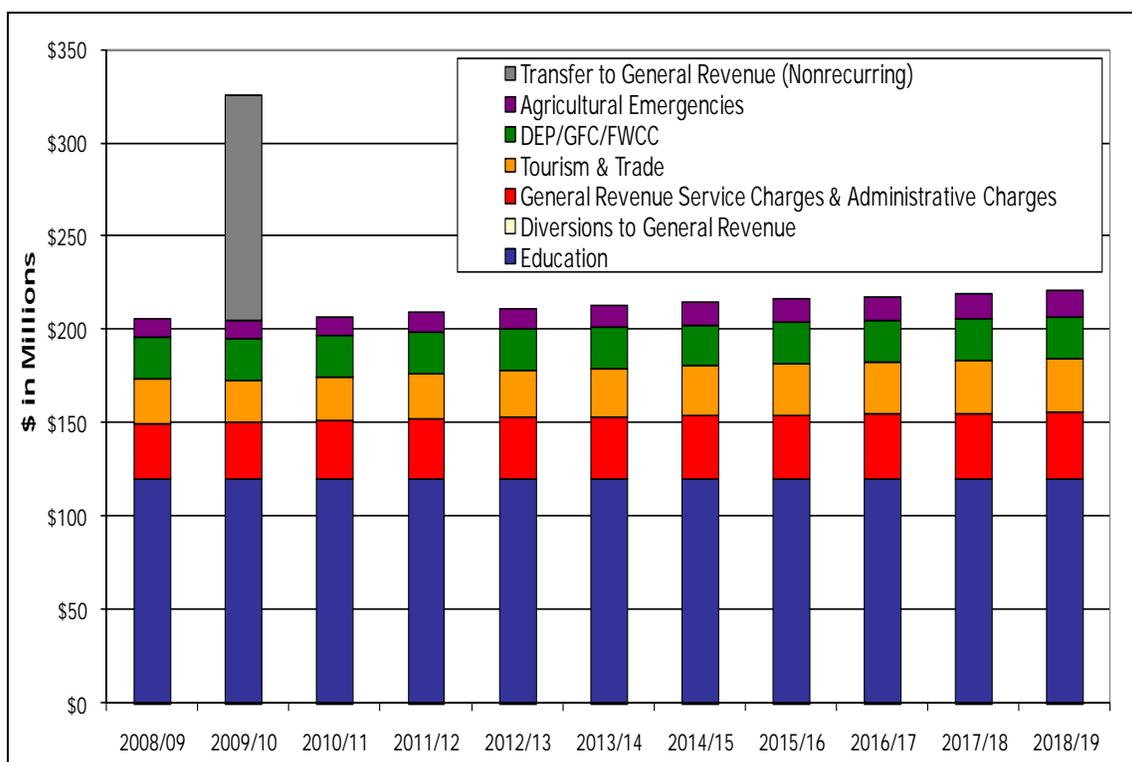
sales up until 2007, with annual increases in taxes being higher relative to the increases observed prior to 2007. The tax rate reflects formula-driven inflationary adjustments. The gallon sales trends reflect the frequently mentioned impacts of the changing economy and fuel price and vehicle efficiency pressures on fuel consumption over the decade. While transportation trust fund revenues historically have been dedicated to transportation, diversions to and from other programs and sources occur on occasion – in some cases systematically and in other cases in response to particular incidents or needs. For more on diversions from the trust fund, go to:

<http://www.dot.state.fl.us/financialplanning/revenue/rec/20100804/Divr2010AUG.pdf>

*The Florida fuel sales tax and SCETS are indexed to the overall consumer price index and adjusted in January of each year.*

The trend in diversions of funds over time from 2008-2009 to 2018-2019 is shown in Figure 7. Each year, over \$200 million is anticipated to be used for other purposes. The challenging economic environment may lead the legislature to alter these assumptions.

**Figure 7 – Transportation Funds Used for Other Purposes  
(February 2010 REC)**

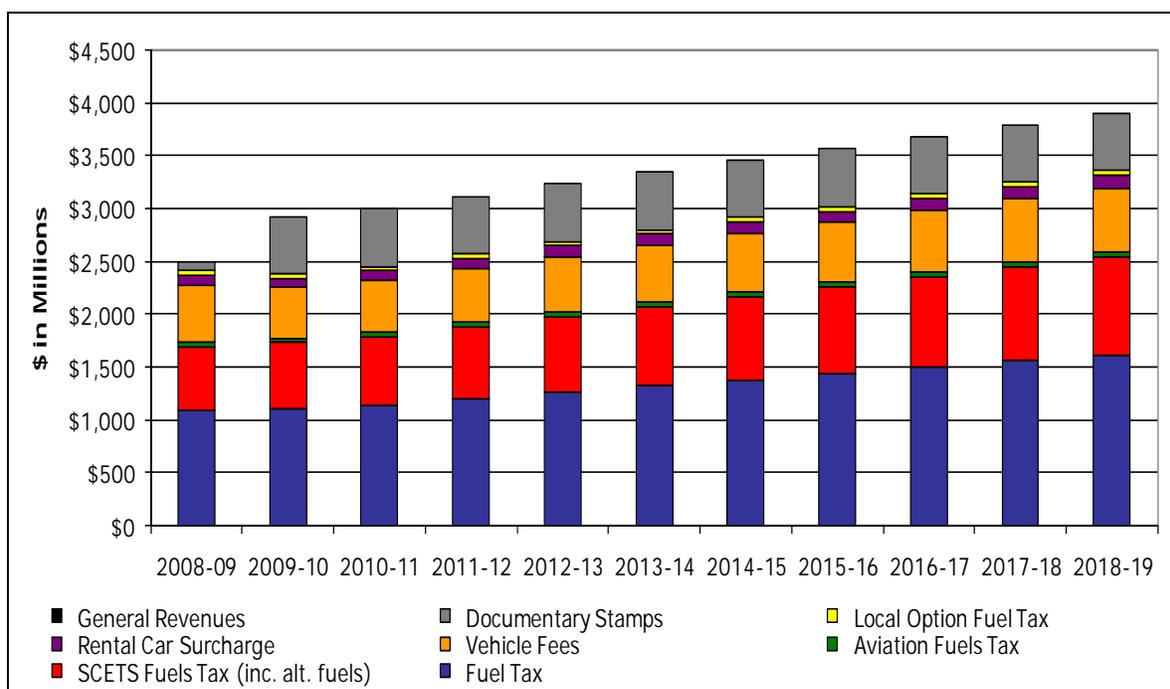


Source: FDOT, *Transportation Funds Used for Non-Transportation Purposes*.

## Transportation Resources

Figure 8 shows the forecast trend for Florida's State Transportation Trust Fund revenues. Each year legislative actions can alter the actual obligations of funds to transportation categories. Slowing VMT growth due to slower immigration, fewer tourists, higher fuel prices and a slower economy is moderating the fuel tax revenues. Tight overall budgets result in greater potential for diversions from the trust fund.

**Figure 8 – State Transportation Revenues by Major Category**



Source: FDOT, *Transportation Funds Used for Non-Transportation Purposes*.

### Local Sources of Funds for Transportation

Transportation spending by local governments is far more complex, as the number of entities is far larger, the range of revenue sources and mechanisms is far greater, and the data availability and comparability are far poorer. Responsibilities for the provision of roadways and other transportation infrastructure vary across jurisdictions, as do the mechanisms for raising revenues and the magnitudes of resources expended on transportation infrastructure and services. Thus, it is not possible to provide a single comprehensive picture of all local resources directed to the provision of transportation.

Over time, the complexity of local transportation funding strategies has grown as various areas have used innovative approaches to secure resources in an effort to keep up with the growth in travel demand. Most recently, these efforts have focused more aggressively on involving the private sector in the provision of transportation infrastructure and services. In Florida, impact

## Transportation Resources

fees and concurrency requirements as well as assessment districts and other strategies have resulted in significant shares of private resources being directed to the provision of infrastructure for transportation. This can take the form of government collections of funds or having the private sector make the improvements and ultimately deeding them over to public ownership.

### *Local Government Funding*

Table 8 reports Florida local government funding for roadways. The data, compiled and reported in *National Transportation Statistics*, itemize the general types of revenue streams that are used to support transportation. In addition to these funds, local governments are also the recipients of some of the state and federal funds and toll revenues. Bonded debt, interest income and other financial strategies can influence the actual amount of funds available for expenditure in any given time period.

**Table 8 – Florida Local Government Funding for Roadways (\$000)**

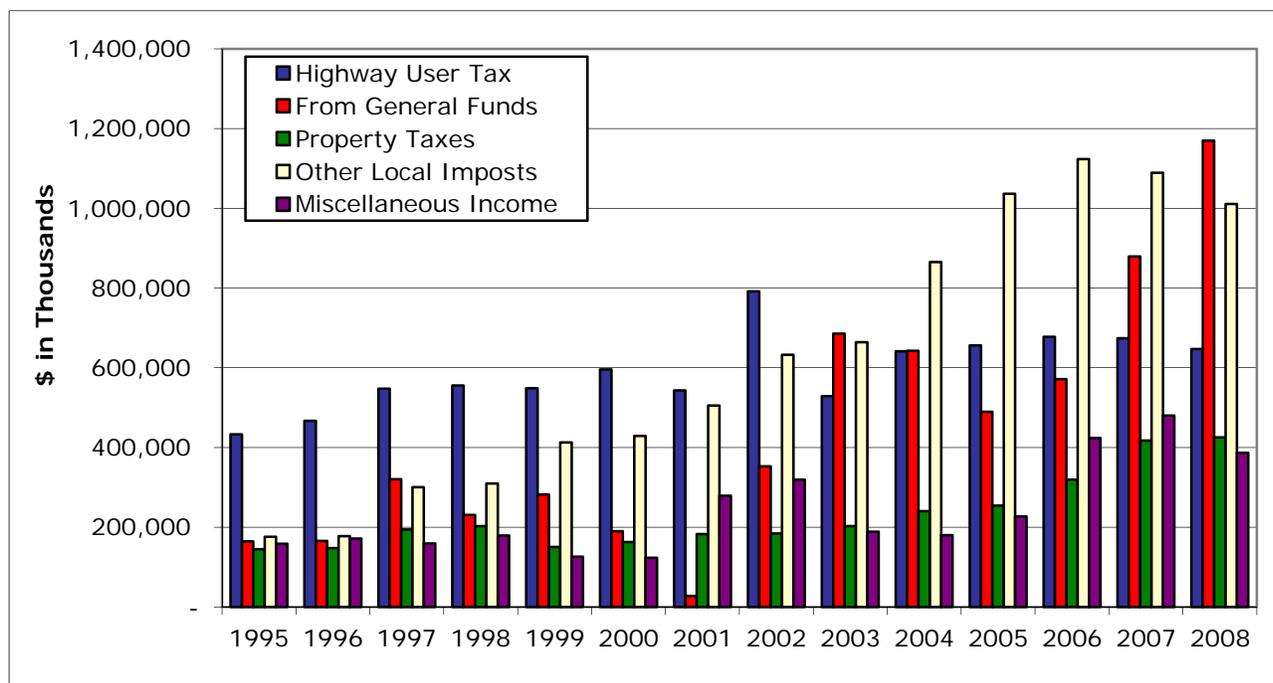
| Year | Receipts                        |                         |                                   |                |                     |                      | Total Collections |
|------|---------------------------------|-------------------------|-----------------------------------|----------------|---------------------|----------------------|-------------------|
|      | Local Highway-User Tax Revenues | Road and Crossing Tolls | Appropriations from General Funds | Property Taxes | Other Local Imposts | Miscellaneous Income |                   |
| 1995 | 432,870                         | 16,399                  | 164,596                           | 144,866        | 175,964             | 158,254              | 1,092,949         |
| 1996 | 466,890                         | 26,159                  | 165,417                           | 147,768        | 177,718             | 171,457              | 1,155,409         |
| 1997 | 547,590                         | 28,381                  | 320,303                           | 194,143        | 300,422             | 159,076              | 1,549,915         |
| 1998 | 555,562                         | 17,578                  | 230,787                           | 202,649        | 309,831             | 179,215              | 1,495,622         |
| 1999 | 548,733                         | 44,863                  | 282,133                           | 150,536        | 412,682             | 126,000              | 1,564,947         |
| 2000 | 595,964                         | 48,283                  | 189,974                           | 162,645        | 429,144             | 123,448              | 1,549,458         |
| 2001 | 543,062                         | 51,220                  | 27,379                            | 182,922        | 505,030             | 278,927              | 1,588,540         |
| 2002 | 791,879                         | 38,950                  | 352,726                           | 184,482        | 632,392             | 319,138              | 2,319,567         |
| 2003 | 528,825                         | 55,358                  | 685,415                           | 202,664        | 663,859             | 188,581              | 2,324,702         |
| 2004 | 641,396                         | 49,462                  | 642,536                           | 240,182        | 865,264             | 179,876              | 2,618,716         |
| 2005 | 655,864                         | 69,973                  | 489,831                           | 254,122        | 1,036,462           | 227,071              | 2,733,323         |
| 2006 | 677,741                         | 70,034                  | 571,469                           | 319,407        | 1,123,453           | 423,785              | 3,185,889         |
| 2007 | 674,060                         | 72,804                  | 878,988                           | 417,459        | 1,089,071           | 479,873              | 3,612,255         |
| 2008 | 646,936                         | 70,521                  | 1,169,482                         | 425,247        | 1,010,656           | 386,811              | 3,709,653         |

Source: FHWA, *Highway Statistics Series*.

Figure 9 graphically presents data on the source of local government transportation revenues. Historically, the Highway User Tax was the dominant source for transportation funding. However, in more recent years, general funds and other local imposts have taken over the Highway User Tax as the major sources.

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**Figure 9 – Florida Local Government Highway Revenues by Source**



Source: FHWA, *Highway Statistics Series, LGF-21*.

### *Private Sector Funding*

As noted above, the private sector makes significant investments in transportation infrastructure. This is particularly true in Florida where infrastructure investment is often a prerequisite to permission to develop. Private sector contributions are as modest as providing employee and customer parking as part of constructing a facility to as significant as paying for major roadway facility improvements and/or donating right-of-way and infrastructure. Local roadways as part of new developments are often paid for by the developer, with costs passed on to future homeowners and business tenants as part of their purchase or rent costs. In other cases, development districts are established and debt used to fund transportation infrastructure is paid off through subsequent tax assessments. Determining the aggregate value of these transportation expenditures is complicated by the diversity and the nature of the contributions.

Roads subsequently deeded to a community may be constructed simultaneously with utility and earthwork site preparations, and it is difficult to apportion costs. Similarly, it is difficult to determine an appropriate cost basis for donated right-of-way. Table 9 reports the total collections of transportation impact fees by local governments, as reported in a survey of Florida impact fees.

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**Table 9 – Reported Florida Impact Fee Revenue for Transportation**

| <b>Year</b> | <b>Impact Fee Revenue (\$)</b> | <b>Number of Government Entities</b> |
|-------------|--------------------------------|--------------------------------------|
| 1993        | 84,796,721                     | 55                                   |
| 1994        | 91,299,136                     | 55                                   |
| 1995        | 91,767,344                     | 58                                   |
| 1996        | 91,114,607                     | 70                                   |
| 1997        | 137,230,917                    | 70                                   |
| 1998        | 133,889,335                    | 71                                   |
| 1999        | 163,351,985                    | 80                                   |
| 2000        | 194,806,718                    | 82                                   |
| 2001        | 194,779,870                    | 85                                   |
| 2002        | 204,438,019                    | 87                                   |
| 2003        | 281,112,115                    | 90                                   |
| 2004        | 352,460,793                    | 83                                   |
| 2005        | 520,674,221                    | 92                                   |
| 2006        | 661,017,056                    | 104                                  |
| 2007        | 507,721,267                    | 113                                  |
| 2008        | 375,268,003                    | 125                                  |
| Cum. Totals | 4,085,728,107                  | -                                    |

Sources: 1993-2006 Data - Florida Legislative Committee on Intergovernmental Relations/Office of Economic & Demographic Research. 2007-2008 Data – Local Government Electronic Reporting (LOGER) program, Florida Department of Financial Services 2008. *Florida Legislative Committee on Intergovernmental Relations. Florida Department of Financial Services.*

### **Toll Revenues**

Another source of revenue beyond dedicated taxes in the trust fund is toll revenues on toll facilities. Tolls are a growing source of revenues, as the mileage of the toll systems, their use, and their toll rates have increased over time. As shown in Table 10, Florida's toll facilities now constitute only 5.3 percent of centerline miles and 6.6 percent of lane miles but carry nearly 10 percent of state highway system traffic. Revenues from tolls have grown over the past several years; however, the economic slowdown in the past few years is evident in slowing toll road revenues.

*Toll revenues are anticipated to become a more significant source of transportation funding due to both a reluctance to increase fuel taxes and increased interest in privatizing existing and new facilities.*

## Transportation Resources

**Table 10 – VMT Share on Select Toll Facility in Florida**

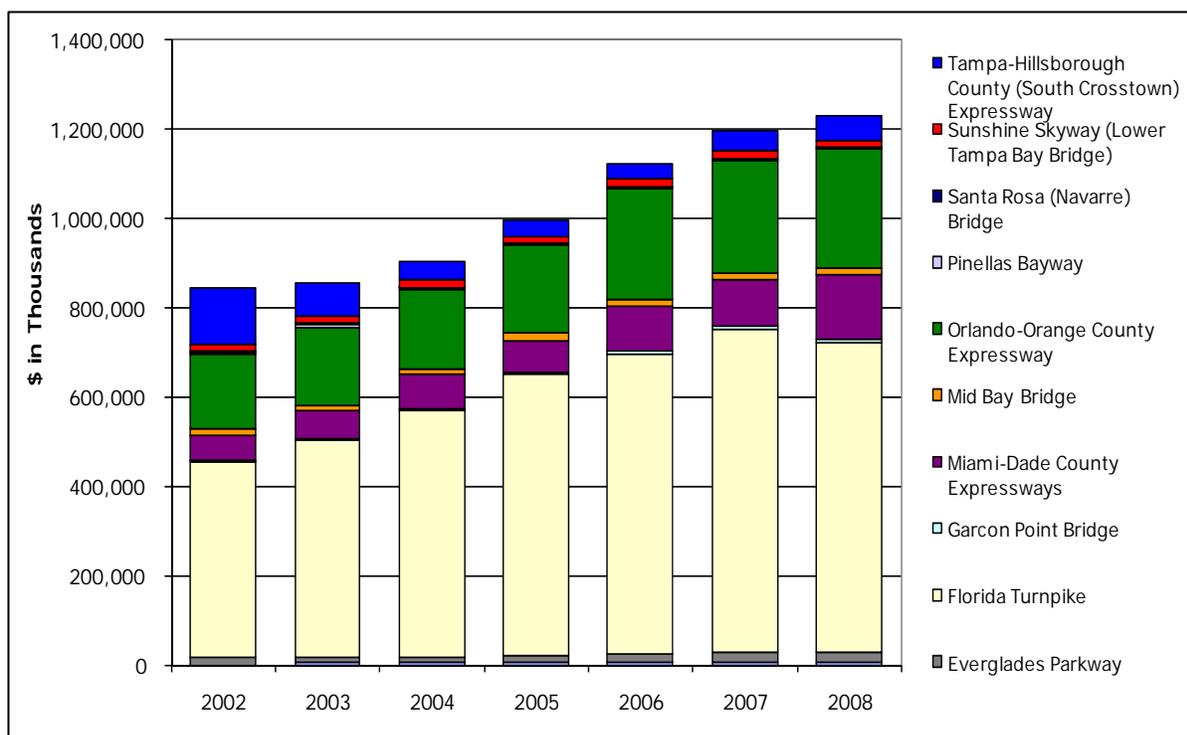
|                               | State Highway System (SHS) |                                  |                | Strategic Intermodal System (SIS) |                                  |                |
|-------------------------------|----------------------------|----------------------------------|----------------|-----------------------------------|----------------------------------|----------------|
|                               | <i>State System Total</i>  | <i>Toll Facility<sup>a</sup></i> | <i>% Share</i> | <i>SIS Total</i>                  | <i>Toll Facility<sup>a</sup></i> | <i>% Share</i> |
| Daily Vehicle Miles of Travel | 286,888,000                | 28,076,300                       | 9.78%          | 157,383,900                       | 27,340,900                       | 17.37%         |
| Lane Miles                    | 42,633.50                  | 2,818.5                          | 6.61%          | 18,068.3                          | 2,676.5                          | 14.81%         |
| Centerline Miles              | 12,088.00                  | 643.1                            | 5.32%          | 4,299.40                          | 596.2                            | 13.87%         |

<sup>a</sup> Not including tolled interstates. Toll facilities include Florida's Turnpike Enterprise, Orlando-Orange County Expressway Authority, Miami-Dade Expressway Authority, Mid-Bay Bridge Authority, and Tampa-Hillsborough County Expressway Authority.

Source: CUTR, *Florida Toll Agency Performance Measures*.

Figure 10 shows the trend for state-governed toll facilities. State toll receipts were obtained from state and quasi-state toll facilities.

**Figure 10 – Toll Revenues for State Facilities**

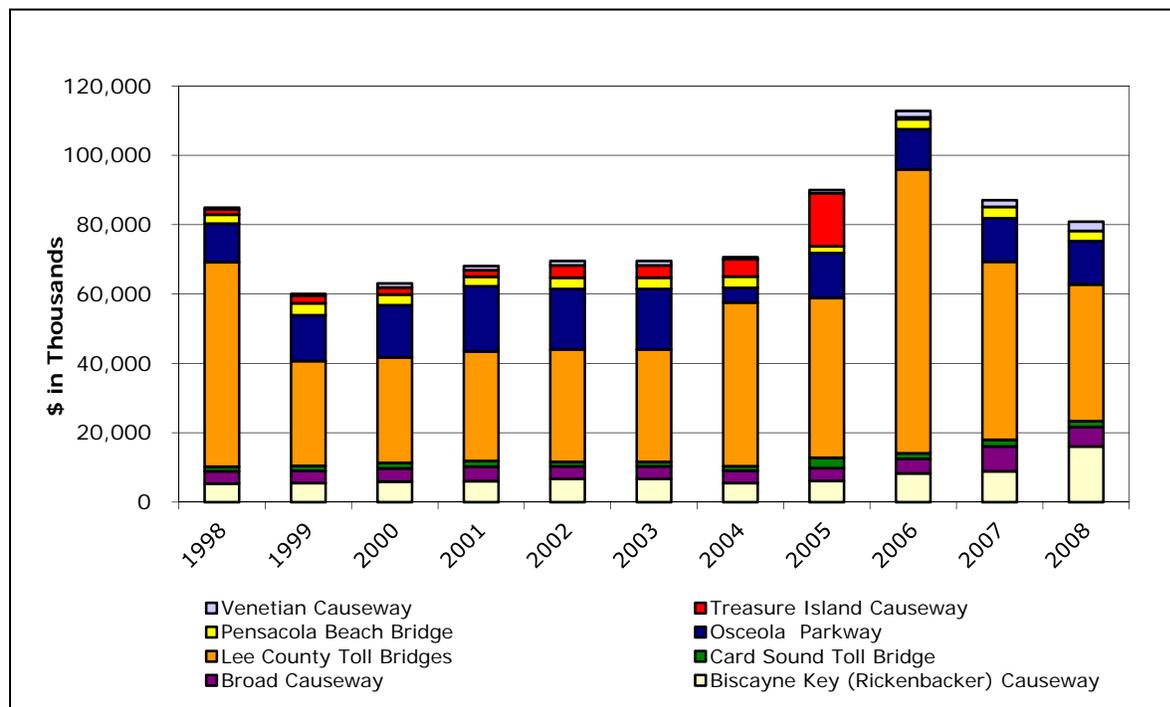


Source: FHWA. *Highway Statistics Series, SF-3B*

Figure 11 shows the same trend for revenues from local facilities. Local toll receipts are obtained from publicly owned toll facilities operated by local governments, local road and bridge districts and specially created authorities.

## Transportation Resources

Figure 11 – Toll Revenues for Local Facilities



Source: FHWA. *Highway Statistics Series, LGF-3B*

### Resources for Providing Selected Transportation Facilities and Services

#### **Public Transportation**

In this section, public transportation refers to bus, rail, and paratransit services that are governed and typically provided by local governments. These services meet the mobility needs of those persons who are not able to drive and to provide travel options that offer resource efficiencies for others. Funding for public transportation comes from a diversity of sources, including fares paid by travelers, contributions from all levels of government, concession revenues, and occasionally private sector contributions as part of the development permitting process. Impact fees or betterments occasionally, include resources or assets that support public transportation. In addition, the vast majority of public transportation services also use the roadway network. Some public transportation services are supported partially by other government agencies that purchase services as part of their service responsibilities associated with carrying out their respective responsibilities. These might include funding travel for populations with disabilities or special needs, or educational institutions that pay for services for their educational facilities.

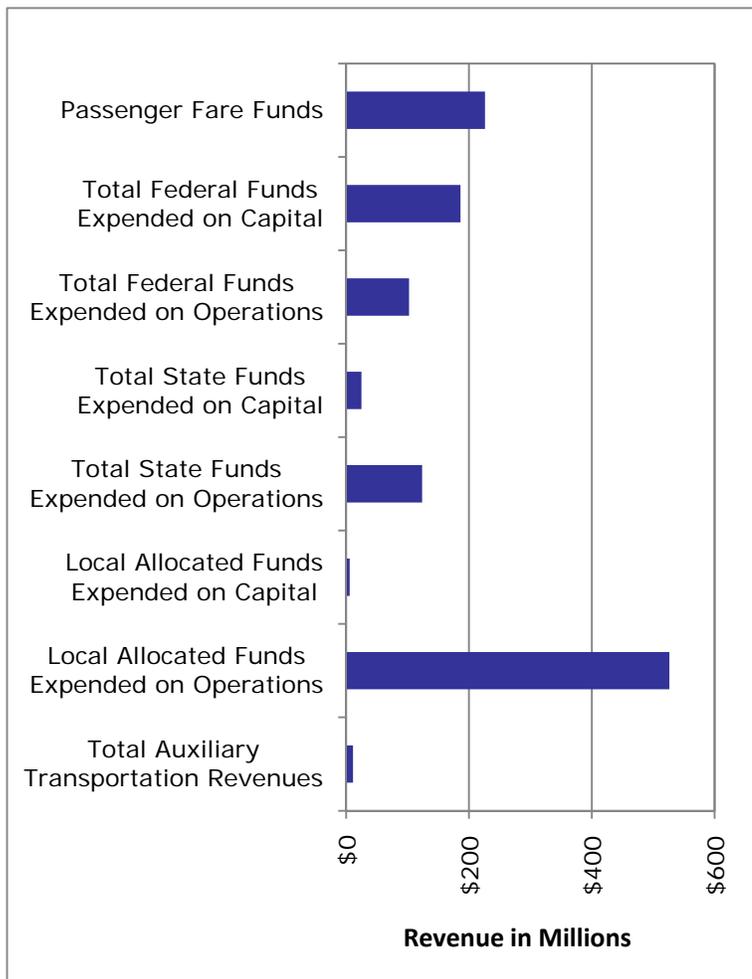
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## Transportation Resources

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Figure 12 shows the revenue sources for fixed-route public transportation by those Florida transit agencies that file National Transit Data (NTD) reports. The figure exemplifies the diversity of revenue sources and shows the allocation on both operations and capital expenditures. Passenger fares are a significant revenue source and in Florida average approximately 20 to 25 percent of operating expenditures. Local funding provides the majority of operating subsidy. State and federal sources focus primarily on capital and operating support. Various guidelines influence the actual eligibility of various federal and state funds for operations. Auxiliary revenues, refers to miscellaneous revenues that a transit agency might receive from various sources such as advertising, concessions, or joint development revenues. Revenues generated from these sources are modest, as the primary purpose of transit agencies is to provide services and opportunities to generate revenues beyond fares are fairly small.

**Figure 12 – Revenue Sources for Florida Transit Investments in 2008**



Source: CUTR analysis of NTD data via Florida Transit Information System (FTIS).

To add perspective, in Florida in 2009, agencies expended \$7.44 in operating resources per revenue mile, \$107.71 in operating resources per revenue hour, and \$4.08 in operating resources per passenger trip.

In addition to fixed-route transit services, Florida counties provide services for those who are transportation disadvantaged, i.e., those who cannot obtain their own transportation due to a disability, age, or income. The Florida Legislature created the Commission for the Transportation Disadvantaged (CTD) in 1989 to coordinate the transportation services provided

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## Transportation Resources

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to the transportation disadvantaged. The goal of this coordination is to ensure the cost-effective provision of transportation by qualified community transportation coordinators or transportation operators for the transportation disadvantaged. The authority of the CTD derives from Chapter 427.011-017, Florida Statutes and Rule 41-2, Florida Administrative Code. The Commission also administers the Transportation Disadvantaged Trust Fund (TDTF), which provides for carrying out the statutory responsibilities of the Commission. In 2009, operating revenue of the coordinated system was \$253 million.

The Agency for Health Care Administration accounted for 12.68 percent of the total operating revenue for the system. Funding from local entities, both government and non-government, totaled \$176 million, or 49.65 percent of the total operating revenue. The CTD accounted for 10.72 percent of the revenue for the coordinated system, which included those funds that were transferred from Medicaid. FDOT contributed \$22 million, or 6.21 percent. The Florida Agency for Persons with Disabilities accounted for 5.85 percent of the total operating revenue, or \$20 million. The Florida Department of Elder Affairs spent \$8 million on transportation services, which accounted for 2.38 percent of the total system revenues. Work and Gain Economic Self-Sufficiency (WAGES) represented a small percentage of total revenues. Other programs, including the Florida Departments of Community Affairs, Education, Health, and Juvenile Justice, and other federal or state programs accounted for 2.34 percent of the total revenue in the coordinated transportation system.

In 2009, the operating expense per total passenger trip was \$7.57, and the operating expense per paratransit passenger trip was \$21.60. To learn more about the spending and costs for disadvantages services, consult the *2009 Annual Performance Report* by Florida Commission for the Transportation Disadvantaged, January 1, 2010, <http://www.dot.state.fl.us/ctd/docs/APR/2009/Final%20APR%20Pages%20%20012510.pdf>

### ***Air Travel***

The predominant means of air travel is via commercial air services. Commercial airlines are private companies that use public airports as an integral component of the air transportation system. The revenue streams that support air travel are diverse and include a variety of revenues from travelers and shippers, governmental transportation sources, and revenues associated with operations at the airports. The Florida airport system includes 131 public aviation facilities (airports/ heliports/seaplane bases), approximately 370 private airports, and about 280 private heliports. This discussion will focus on public aviation facilities.

The average annual household spending on aviation fares in 2008 was \$343 nationwide. In addition, a large share of airline fare revenues is business-travel-related. Table 10 on page 23 shows examples of the revenue streams for various airlines including the

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revenues per available seat mile. Given the nature of the air travel network, it is often difficult to obtain location-specific allocation of revenue. Furthermore, even though these data could be obtained, they are not particularly meaningful for analysis purposes.

**Table 11 – System<sup>a</sup> Airline Unit Revenue**

**Carriers Ranked by 2<sup>nd</sup> Quarter 2010 Unit Revenue(operating revenue per available seat mile)**

| 2010 Rank | Network Carriers     | Cents per Mile               |                              |                              |                              |                              | 2010 2 <sup>nd</sup> Quarter Operating Revenue \$(millions) |
|-----------|----------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---|
|           |                      | 2009 2 <sup>nd</sup> Quarter | 2009 3 <sup>rd</sup> Quarter | 2009 4 <sup>th</sup> Quarter | 2010 1 <sup>st</sup> Quarter | 2010 2 <sup>nd</sup> Quarter |   |
| 1         | Delta Airlines       | 14.9                         | 14.5                         | 15.5                         | 15.5                         | 16.6                         | 8,205   |
| 2         | American Airlines    | 12.7                         | 13.3                         | 13.7                         | 13.8                         | 14.8                         | 5,669   |
| 3         | United Airlines      | 13.0                         | 14.1                         | 14.9                         | 15.3                         | 17.0                         | 5,163   |
| 4         | Continental Airlines | 12.8                         | 13.0                         | 13.9                         | 13.8                         | 15.3                         | 3,660   |
| 5         | U.S. Airways         | 15.0                         | 15.0                         | 16.2                         | 16.4                         | 17.6                         | 3,252   |
| 6         | Southwest            | 10.2                         | 10.8                         | 11.5                         | 11.6                         | 12.4                         | 3,168   |
| 7         | Jet Blue Airways     | 9.8                          | 10.2                         | 10.4                         | 10.3                         | 10.8                         | 940   |
|           | Seven-Carrier Total  | 12.9                         | 13.3                         | 14.0                         | 14.3                         | 15.4                         | 30,058  |

<sup>a</sup>System = domestic + international.

Source: Bureau of Transportation Statistics

**Table 12 – FY 2009 Revenues by Major Sources, Miami International Airport**

| Sources                        | Budget FY 2009 |
|--------------------------------|----------------|
| Cash Carryover                 | \$50,528,523   |
| Aviation Revenues              | \$243,781,986  |
| Rental Revenues                | \$90,909,412   |
| Other Revenues                 | \$13,497,242   |
| Commercial Operations          | \$177,819,046  |
| Concessions                    | \$92,309,678   |
| General Aviation Airports      | \$1,864,512    |
| Transfer from Improvement Fund | \$65,000,000   |
| Total                          | \$735,710,399  |

Source: Miami-Dade Aviation Authority, *Fiscal Year 09-10 Adopted Budget*.

**Table 13 – FY 2008 Revenues, Tampa International Airport**

| Revenue Classification | Fiscal Year 2008     |
|------------------------|----------------------|
| Airfield               | \$12,447,693         |
| Terminal Building      | \$39,521,557         |
| Airside Buildings      | \$19,250,500         |
| Commercial Landside    | \$92,299,833         |
| Cargo                  | \$2,062,612          |
| Auxiliary Airports     | \$990,001            |
| General Aviation       | \$1,504,016          |
| Federal Reimbursements | \$1,223,514          |
| Other                  | \$7,615,767          |
| <b>Total</b>           | <b>\$176,915,493</b> |

Source: Tampa International Airport, *Annual Report 2009*.

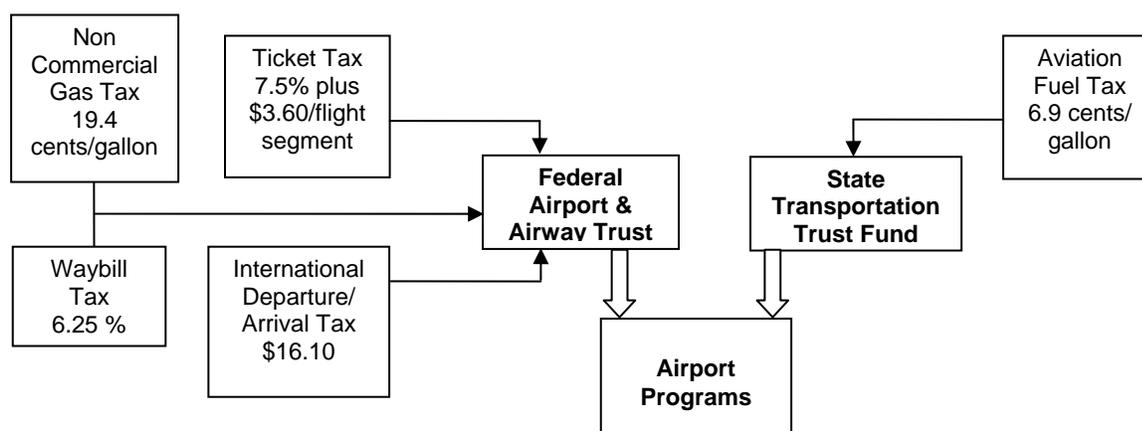
Another way to gain insight on revenues that support the air travel system is to look at revenue streams that support major commercial airports. As examples, Table 12 shows the 2009 revenue budget for Miami International Airport, and Table 13 shows the 2008 revenue budget for the Tampa International Airport. These tables indicate the diversity of

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revenue sources and, while categorized differently, the reliance on parking and other commercial activities in addition to revenues derived from aircraft landings and terminal use.

Two public trust fund sources support airport investments in Florida: the Federal Airport and Airway Trust Fund and the State Transportation Trust Fund. The Federal Airport and Airway Trust Fund receives all the revenue from Aviation User Fees, which include the Non Commercial Gas Tax, Ticket Tax, Waybill Tax, and International Departure/ Arrival Tax. Most of the State Transportation Trust Fund revenue comes from the Aviation Fuel Tax. These funds support airport infrastructure needs. Figure 13 outlines how these funding sources work.

**Figure 13 – Airport Trust Fund Sources and Disbursements**



Source: CUTR

**Table 14 – FDOT’s Share of Airport Project Funding**

| <i>Type of Development</i>  | <i>If federal funding is available</i>  | <i>If federal funding is not available</i> |
|-----------------------------|---|--|
| Commercial Service Airports | FDOT provides up to 50% of local share  | FDOT provides up to 50%                    |
| General Aviation Airports   | FDOT provides up to 50% of local share  | FDOT provides up to 80%                    |
| Economic Development        | Not applicable                          | FDOT provides up to 50%                    |
| Airport Loans               | Not applicable                          | FDOT provides 75%                          |
| Security                    | FDOT provides up to 100% of local share | FDOT provides up to 100%                   |

Source: FDOT, Office of Financial Development & Florida Aviation System Plan(FASP).

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Table 14 shows FDOT's financial contributions to airport projects. As can be seen, FDOT provides reduced funding for several types of development when federal funding is available.

### Seaports

Seaports are similar to airports in that they serve as intermodal transfer locations where people or freight arrive by ship or barge. They are transferred to surface modes of travel, typically road or rail. Occasionally, pipeline or subsequent transfer to air travel is part of the ultimate journey of products or people using ports. Ports are governed by local governments or authorities. Their clients comprise transportation providers and businesses that require extensive transportation of materials as a critical element of their business. A summary of the freight activity of ports is included in Table 15. More descriptive details on Florida ports are provided in the Trends and Conditions report on seaports: <http://www.dot.state.fl.us/planning/trends/tc-report/Seaport032509.pdf>

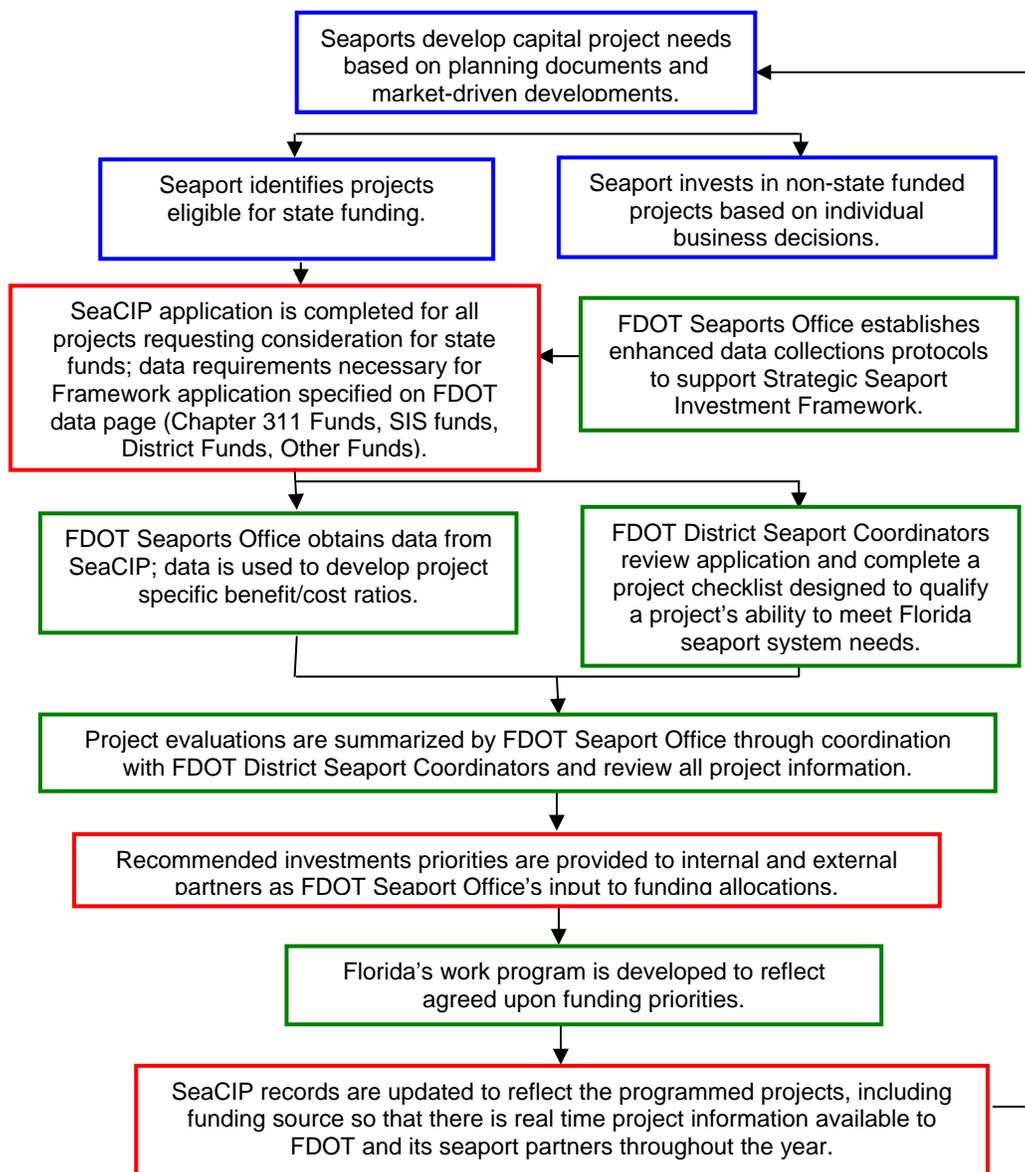
**Table 15 – Freight Movement at Florida's Seaports**

| <i>Year</i> | <i>Tons</i>       | <i>Containers</i> | <i>Value of Trade (billion \$)</i> |               |              |
|-------------|-------------------|-------------------|------------------------------------|---------------|--------------|
|             | <i>(millions)</i> | <i>(TEUs)</i>     | <i>Import</i>                      | <i>Export</i> | <i>Total</i> |
| 2001        | 111.4             | 2,511,810         | NA                                 | NA            | 44.34        |
| 2002        | 115.2             | 2,489,570         | 18.17                              | 26.84         | 45.01        |
| 2003        | 118.2             | 2,564,976         | 28.55                              | 17.84         | 46.39        |
| 2004        | 122.0             | 2,671,927         | 31.05                              | 20.34         | 51.39        |
| 2005        | 127.0             | 2,970,545         | NA                                 | NA            | 62.89        |
| 2006        | 128.8             | 2,991,465         | 43.1                               | 30.35         | 73.45        |
| 2007        | 121.2             | 2,949,546         | 40.3                               | 32.9          | 73.2         |
| 2008        | 114.2             | 2,895,371         | 41                                 | 41.5          | 82.5         |
| 2009        | 104.8             | 2,712,804         | 27.62                              | 29.24         | 56.87        |

Source: Florida Ports Council.

The ultimate revenue source for ports is primarily the consumer of travel or products that are shipped through ports; however, port revenues are part of the overall price of the product or travel cost. Some other governmental funds also support ports. Figure 14 outlines the process for securing state distributed funds to support port infrastructure.

**Figure 14 – Florida Strategic Seaport Investment Framework**



Source: *FDOT Florida Strategic Seaport Investment Framework, Final Report*, June 2007.

### **Rail and Truck Transportation**

Resources for rail and truck transportation derive primarily from consumers of these transportation services, as the services are provided by the private sector. As noted earlier in this report, trucks play a significant role in roadway traffic, and the various fees they pay contribute toward the construction and operation of the roadway system. Truck travel amounted to 11.4 percent of vehicle miles of travel on the SIS in 2009, up from 11.2 percent in 2008.

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FHWA Highway Statistics data indicate that trucks constitute approximately 7.6 percent of all roadway vehicle miles of travel in the nation in 2008, and coupled with lower miles per gallon figures for large trucks and higher fuel tax rates, they make a major contribution to the state and federal transportation trust funds.

Expenditures for freight transportation are derived from fees and charges that consumers and producers of products pay to have the items transported. Logistics expenses including transportation have declined to 7.7 percent of Gross Domestic Product in 2009, compared with 9.3 percent in 2008.<sup>2</sup> While technology has contributed to the downward movement of logistics costs as a share of the GDP, the economic conditions and the decline of several key freight sectors impacted the 2009 numbers. Nationwide, transportation spending for business were 20.2 percent below the 2008 level. Nearly 32 percent of the rail car fleet was in storage, and 20 percent of the container fleet was idle.

**Table 16 – Passenger and Freight Transportation Expenditures  
(current \$ millions)**

|   | 1998      | 1999      | 2000      | 2001      |
|---|-----------|-----------|-----------|-----------|
| <b>PASSENGER AND FREIGHT transportation expenditures, total</b> | 1,395,875 | 1,498,672 | 1,566,965 | 1,589,782 |
| <b>PASSENGER transportation expenditures, total</b>             | 867,445   | 936,917   | 991,190   | 1,010,172 |
| Highway, total  | 762,367   | 827,468   | 859,697   | 886,697   |
| Highway, auto purchases and ownership                           | 722,484   | 787,407   | 809,429   | 835,560   |
| Local, bus and transit  | 21,445    | 21,702    | 30,586    | 30,591    |
| Local, taxi   | 6,355     | 6,200     | 5,580     | 5,735     |
| Local, school bus   | 10,326    | 10,340    | 12,104    | 12,624    |
| Intercity, bus  | 1,757     | 1,819     | 1,998     | 2,187     |
| Air total   | 97,358    | 101,750   | 119,997   | 111,866   |
| Rail total  | 5,691     | 5,611     | 6,834     | 7,421     |
| Water total (includes international)                            | 2,029     | 2,088     | 4,663     | 4,187     |
| <b>FREIGHT transportation expenditures, total</b>               | 528,430   | 561,755   | 575,775   | 579,610   |
| Highway, total  | 427,231   | 456,781   | 460,841   | 467,299   |
| Local, truck  | 144,276   | 152,067   | 155,530   | 157,707   |
| Intercity bus   | 141       | 151       | 146       | 148       |
| Intercity truck   | 282,814   | 304,563   | 305,165   | 309,444   |
| Air (domestic and international) total                          | 24,222    | 25,277    | 27,648    | 25,810    |
| Rail total  | 35,294    | 35,893    | 36,454    | 36,736    |
| Water total   | 22,503    | 24,494    | 28,670    | 27,632    |
| Oil pipeline total  | 8,579     | 9,067     | 8,958     | 9,066     |
| Other total   | 10,601    | 10,243    | 13,204    | 13,068    |

Source: National Transportation Statistics 2009, *Passenger and Freight Transportation Expenditures*.

<sup>2</sup> Since 1988, the "State of Logistics Report®" has tracked and measured all costs associated with moving goods through the U.S. supply chain.

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Table 16 shows the distribution of all transportation expenditures (ultimately, revenues to the modes) for all modes. This gives perspective to the comparative expenditure of freight transportation relative to person travel. Freight transportation expenditures constitute approximately one-third of all transportation expenditures and are dominated by truck.

*The basis for transportation funding is destined to change.*

### Conclusions

Resources to support transportation are gathered in a variety of ways depending on the mode, the jurisdiction, the role of government and the specific context. Transportation funding has become far more complex as a result of several trends:

- Greater public involvement in historically private sector modes such as rail and port facilities.
- A growing desire to capture the land value increases attributed to increased transportation accessibility to help pay for transportation needs. Thus, impact fees, concurrency, development and tax finance districts, joint development, and related revenue mechanisms are more important in transportation finance.
- Recognition that trust fund revenues are increasingly inadequate due to moderating growth in VMT, improved fuel efficiency, and the fact that some fuel taxes are not inflation-indexed while construction costs have grown far more rapidly than overall inflation.
- A desire to tap the private equity markets both as a source of revenue and as a means of outsourcing the administration and pricing of transportation to remove it from political influence and ensure a sustainable revenue stream.
- A realization that the magnitude of project costs has outpaced the ability of any single existing source to provide adequate funds.

The consequences of these trends have been a growing deficit of unmet needs, as the traditional means of raising revenues for transportation have not kept pace with the growth in the costs of providing additional transportation infrastructure and services. The retrenchment in construction and right-of-way costs as a result of the recession, as well as the reduction in demand, have mitigated these pressures to a certain extent, but revenue pressures have been exacerbated by the same demand reductions which have reduced user revenues.

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This structural deficit in resources substantiates the arguments that the historical revenue mechanisms and pricing for transportation must change. With expectations of both demand and cost pressures resuming upward trends with an economic recovery, demand for and the supply and performance of transportation ultimately will stabilize at a sustainable level at some point. As much of the available transportation capacity is being used and trust fund balances are exhausted, the public is left with a need to settle for deteriorating travel conditions, direct other revenues to transportation purposes, or increased prices (revenue streams, taxes, fees) to provide a sustainable transportation system. Thus, the cost structures and funding strategies for transportation are likely to continue to evolve as governments shift toward a transportation funding strategy that reflects the current costs and political will.

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