

2014 Report Year



# NTD

National Transit Database



## National Transit Summary and Trends: Appendix

Office of Budget and Policy  
November 2015



Federal Transit Administration  
U.S. Department of Transportation



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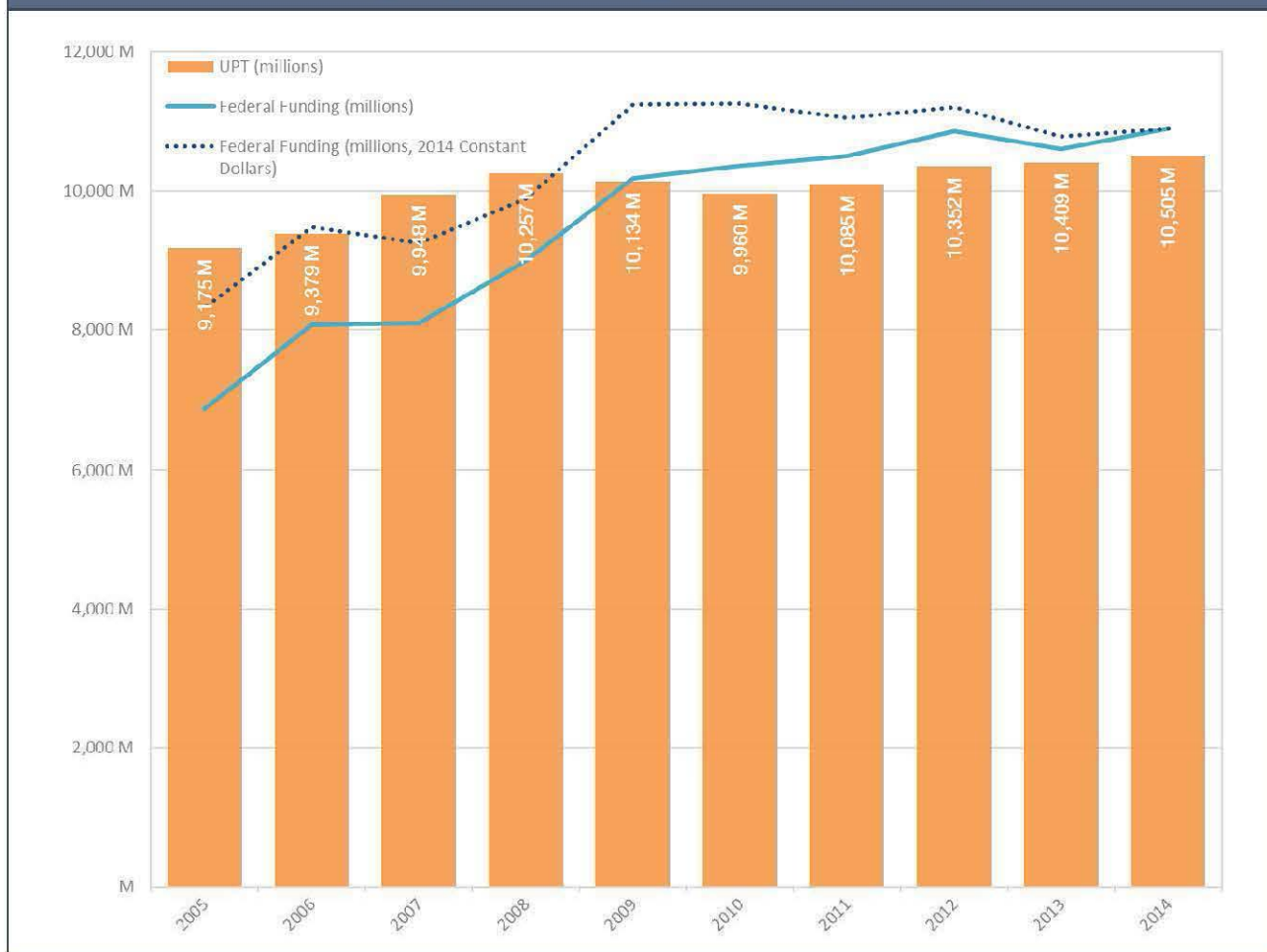
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## Transit in the United States

### Total Federal Assistance Applied to Transit and Unlinked Passenger Trips

The Federal Transit Administration (FTA) uses federal funds to offset operating, capital, and planning costs for agencies. Since 2005, ridership has increased 14.5%, while federal assistance for transit has increased 31.2% (2014 constant dollars).

Exhibit A1 — Unlinked Passenger Trips and Funds Applied to Transit (2004-2014)



### Number of Transit Agencies

Transit agencies that receive or benefit from FTA Urbanized Area Formula Program are required to report financial data and non-financial operating statistics to the National Transit Database (NTD) program. In order to receive funding from FTA, transit agencies must report to the NTD and follow NTD requirements. FTA uses NTD data to apportion funding to transit agencies in the United States. Transit agencies not receiving FTA funds are encouraged to

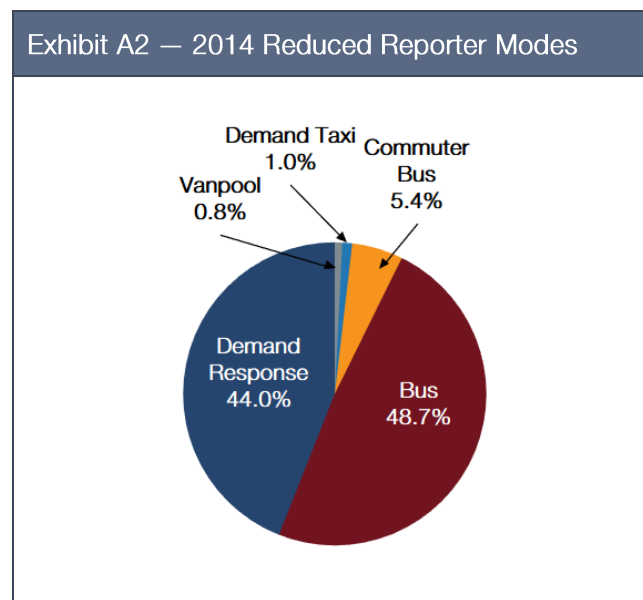


submit data to the NTD on a voluntary basis to help create a clearer picture of the public transit system throughout the United States.

The NTD separates urban and rural recipients and beneficiaries into two reporting groups: urban reporters and rural reporters. In 2014, 858 urban transit agencies, 54 states, 1557 sub-recipients and 130 tribes reported data to the NTD program.

## Reduced Reporters

Prior to 2011, agencies operating less than ten revenue vehicles were granted a waiver from reporting financial and service data. Agencies receiving this waiver, called the 9 or Fewer Vehicles Waiver, were still required to report basic information about their agency, including



the number of vehicles operated in maximum service (VOMS) for each mode of service they offered. In 2011, the 9 or Fewer Vehicles Waiver was eliminated and replaced by the Small Systems Waiver (SSW). This policy required all agencies receiving FTA Urbanized Area Formula Program funding to report financial and service data. Agencies operating 30 or fewer VOMS and no fixed guideway or high intensity busway can report a condensed version of the full NTD report with only basic financial and service data. In 2014, agencies filing a Small Systems Waiver named Reduced Reporters.

The data in Exhibit A2 shows transit modes operated by active agencies that received 9 or Fewer Vehicle Waivers, Small Systems Waivers, or Reduced Reporting Waivers between 2005 and 2015.

## Relative Impact on Data by UZA Size Group

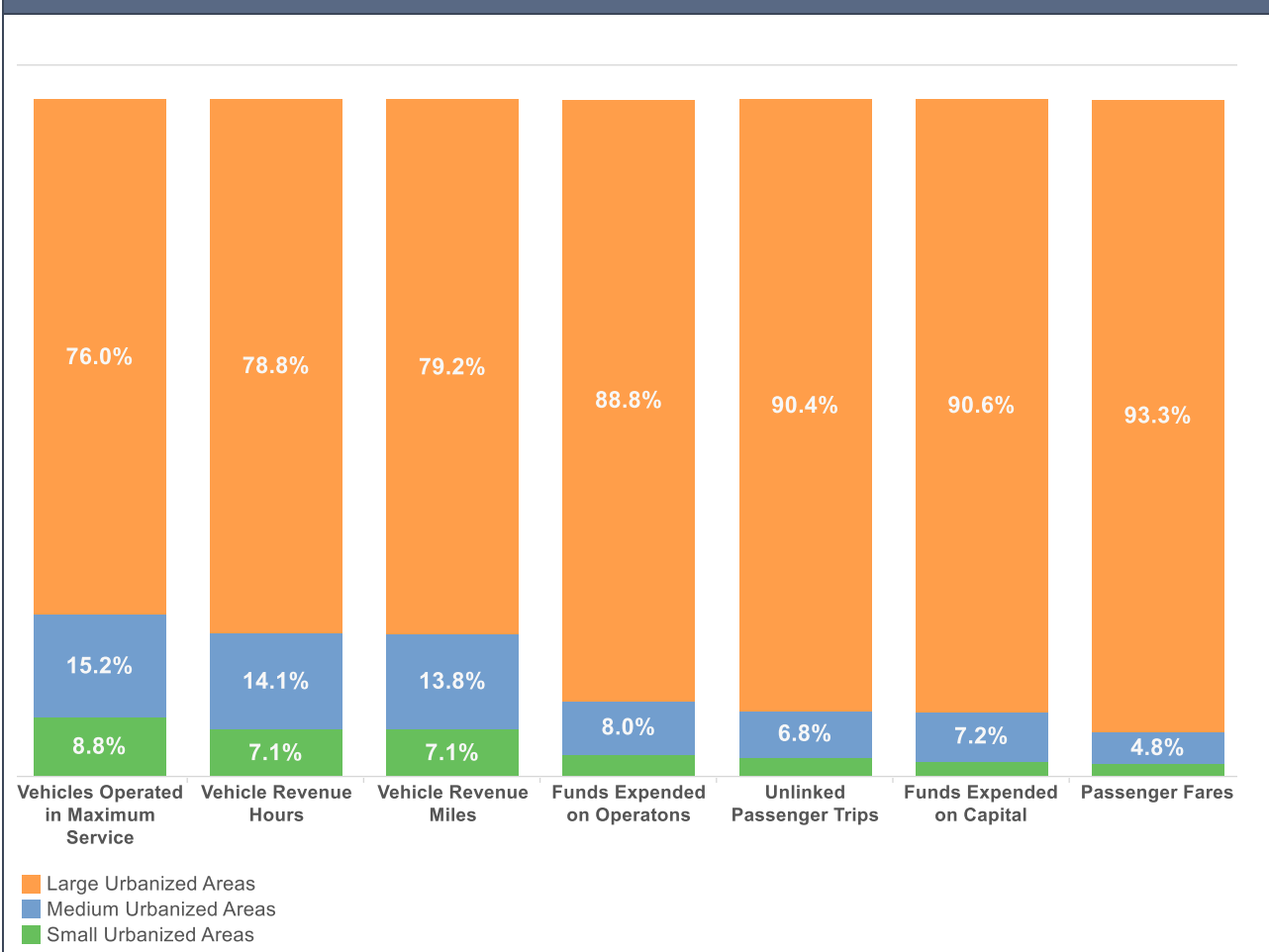
The US Census defines urbanized areas as geographic areas with a population of 50,000 or more. According to the 2010 US Census, there are 498 urbanized areas. For National Transit Database purposes, the NTST groups urbanized areas into three size categories:

- **Large urbanized areas:** population of more than 1 million (42 urbanized areas, 343 agencies, or 32.7% of all agencies reporting). The highest concentration of National

Transit Database data is found in large urbanized areas, as demonstrated in Exhibit A10.

- **Medium urbanized areas:** population of more than 200,000 but less than 1 million (137 urbanized areas and agencies, or 29.2% of all agencies reporting).
- **Small urbanized areas:** population of less than 200,000 but more than 50,000 (319 urbanized areas, 312 agencies, or 37.8% of all agencies reporting).

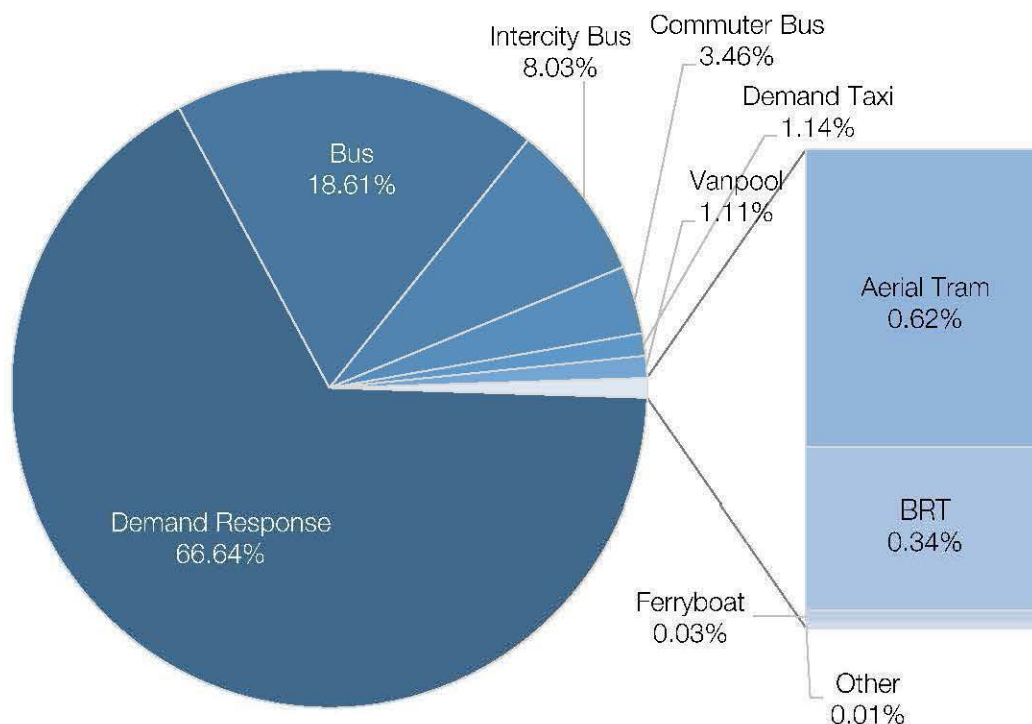
Exhibit A3 — 2014 Data Distribution According to UZA Size



## Rural Reporters

The US Census defines rural areas as geographic areas with a population of less than 50,000. Because many of these geographic areas are quite large, rural areas usually have low population density, resulting in low recovery ratios and high cost per trip.

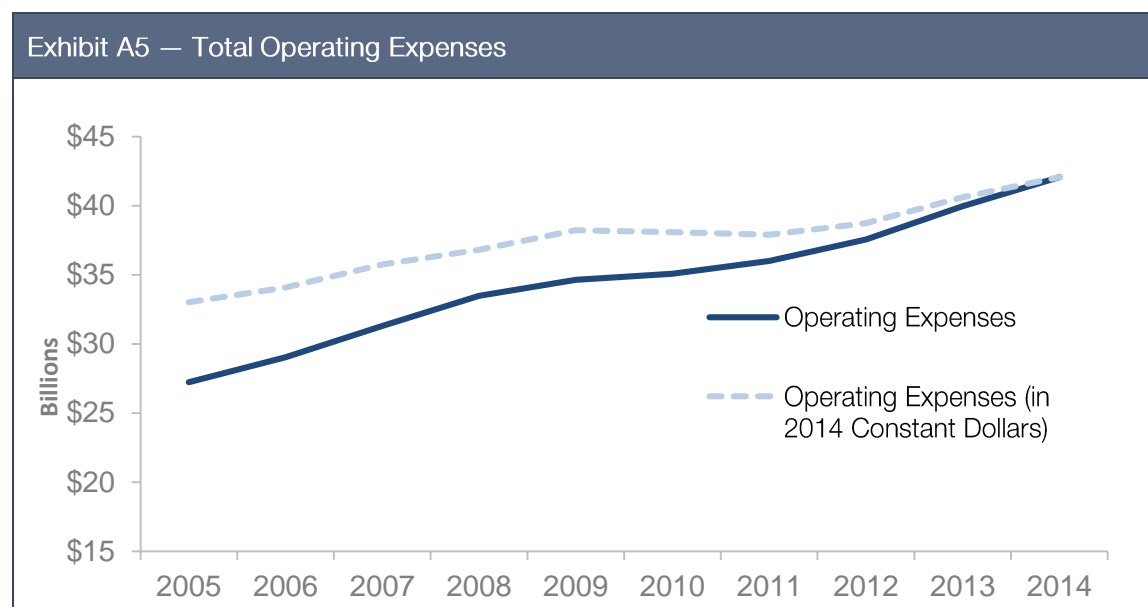
Exhibit A4 — 2014 Breakdown of Rural Service by Mode



For report year 2014, 1547 sub-recipients and 54 states (The NTD considers Puerto Rico, Virgin Islands, American Samoa, Guam, and the Northern Mariana Islands as States for the purpose of rural data collection and funding) submitted data to the NTD through their state's Department of Transportation.

The types of service provided in rural areas are similar to those in urban areas. In rural areas, bus service is divided into four categories: fixed route, deviated fixed route, fixed and deviated route, and private intercity bus service (Exhibit A11 below combines and classifies the fixed route and deviated fixed route as *Bus*). Bus, demand response, and deviated fixed routes accounted for 85.25% of all rural transit service in 2014 due to the low population density of rural areas. For the definitions of modes and types of service, refer to the NTD Glossary available at [www.ntdprogram.gov/ntdprogram/Glossary.htm](http://www.ntdprogram.gov/ntdprogram/Glossary.htm).

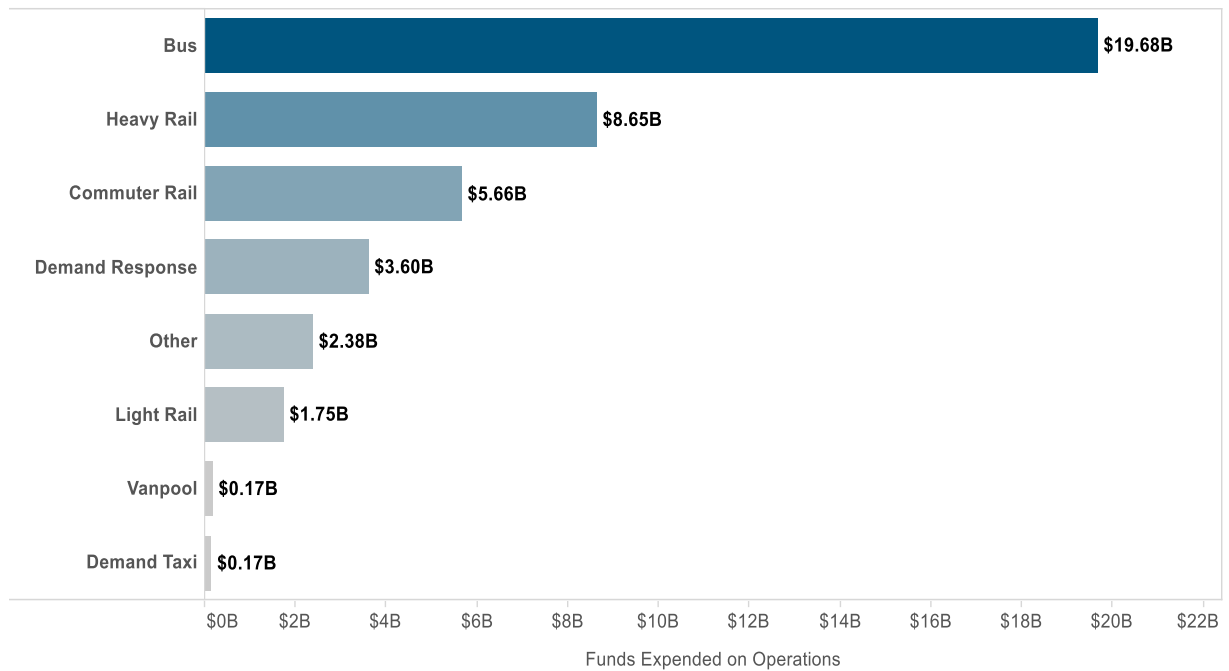
## Operating Expenses and Performance Measures



Transit agencies that provide mass transportation services (vehicle operations, vehicle and non-vehicle maintenance, and administration) incur operating expenses. Transit agencies have various *Reconciling items* expenses because of different accounting practices implemented by local ordinances. The NTST excludes depreciation, interest expenses, leases, and rentals when accounting for *Reconciling items* expenses. Operating expenses have increased 27.3% over the past ten years (in 2014 Constant Dollars).



Exhibit A6 — 2014 Total Operating Expenses by Mode



## Operating Funding

Operating funds are the funds transit agencies receive from federal, state, local, and directly-generated sources that are applied to operating expenditures. Transit agencies apply these funds in the same year that results in liabilities for benefits received, regardless of the year on the receipt or reporting year.

Transit agencies use federal funds to defray some of the operating costs of providing transit service.

Other operating funding sources include:

- Fare revenues
- Federal sources
- State sources
- Local sources
- Other sources

Other funds include non-transportation funds, subsidies from other sectors of operations, auxiliary funds such as advertising and concessions, charter service, freight tariffs, school bus funds, and directly levied taxes.

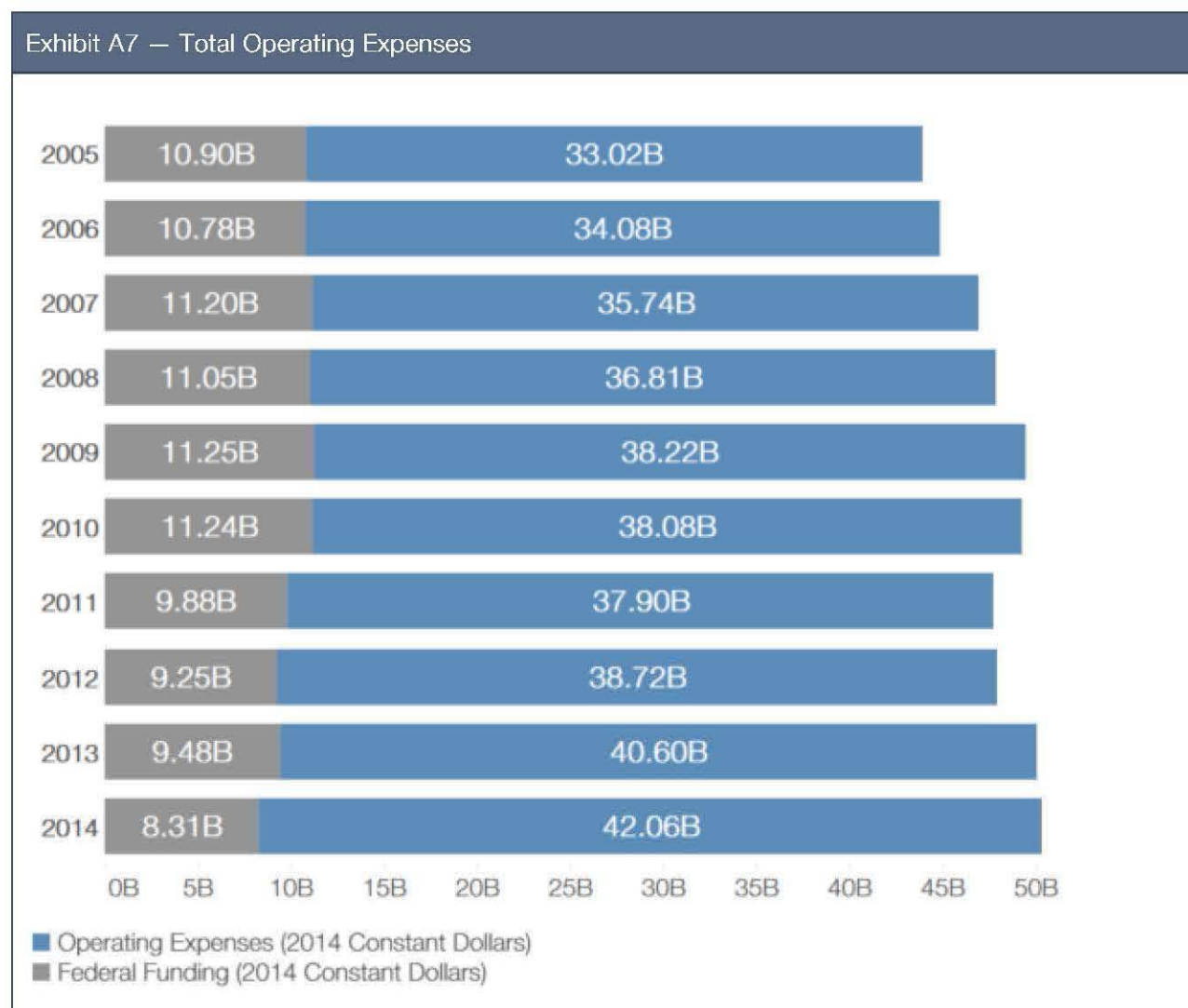


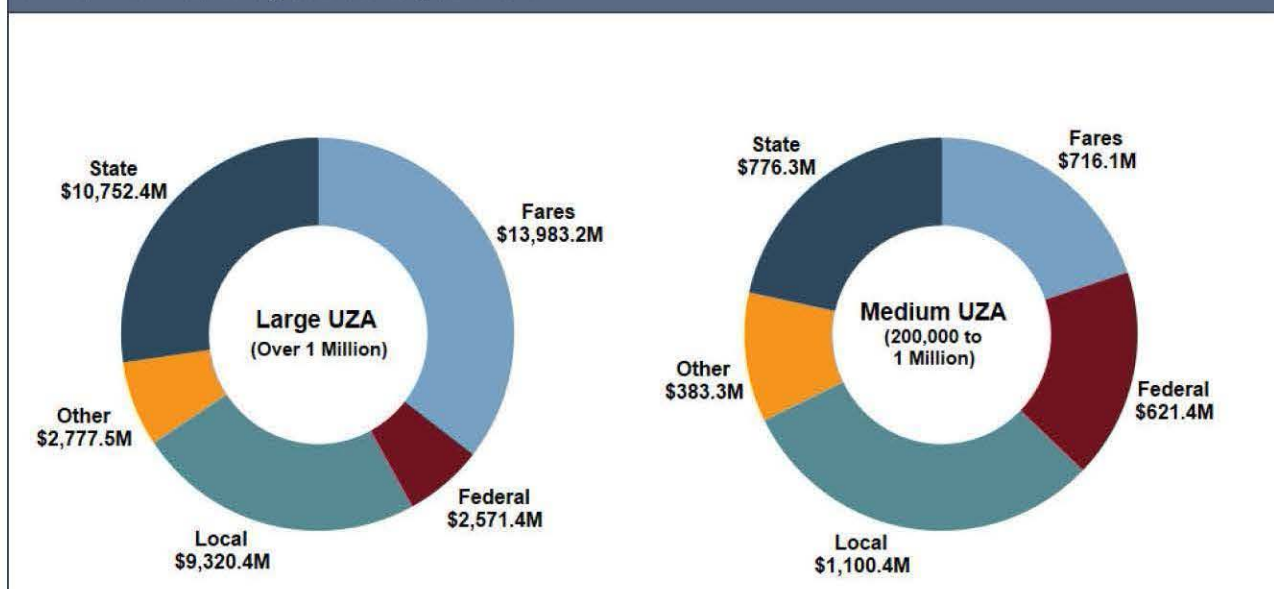
Exhibit A8 — Total Operating Expenses by Source

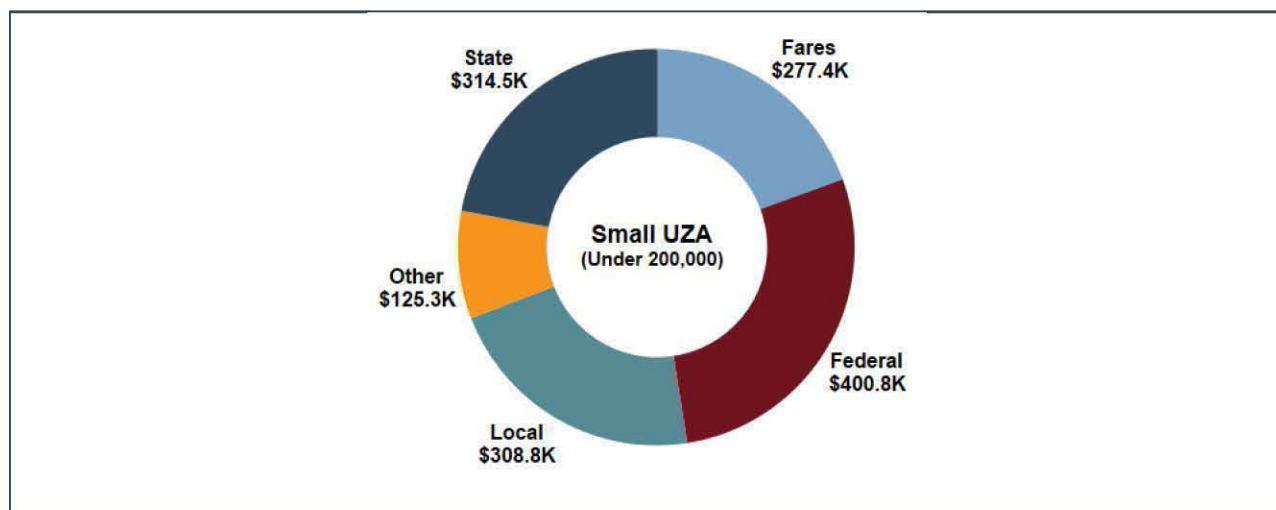
	Federal	State	Fares	Local	Other
2014	\$3,593.5M	\$11,843.2M	\$14,976.7M	\$13,849.8M	\$1,970.7M
2013	\$3,590.3M	\$11,613.1M	\$14,488.5M	\$12,480.5M	\$1,850.1M
2012	\$3,343.6M	\$10,741.4M	\$13,608.4M	\$11,683.2M	\$2,171.0M
2011	\$3,571.3M	\$9,740.3M	\$13,123.2M	\$11,228.4M	\$2,030.5M
2010	\$3,550.9M	\$9,432.4M	\$12,133.6M	\$10,636.4M	\$2,047.6M
2009	\$3,086.4M	\$9,487.3M	\$11,812.7M	\$10,881.0M	\$2,190.2M
2008	\$2,567.7M	\$9,405.1M	\$11,388.2M	\$10,756.1M	\$2,347.1M
2007	\$2,540.4M	\$7,938.3M	\$10,597.3M	\$10,450.8M	\$2,207.7M
2006	\$2,523.4M	\$6,872.5M	\$10,373.6M	\$8,867.2M	\$2,104.4M
2005	\$2,243.1M	\$6,703.0M	\$9,730.0M	\$8,363.8M	\$2,047.7M

When using 2014 constant dollars, the total operating funds applied to transit operations increased 27.3% over the past ten years.

### Operating Funding Sources by UZA

Exhibit A9 — Funding Sources by UZA Size

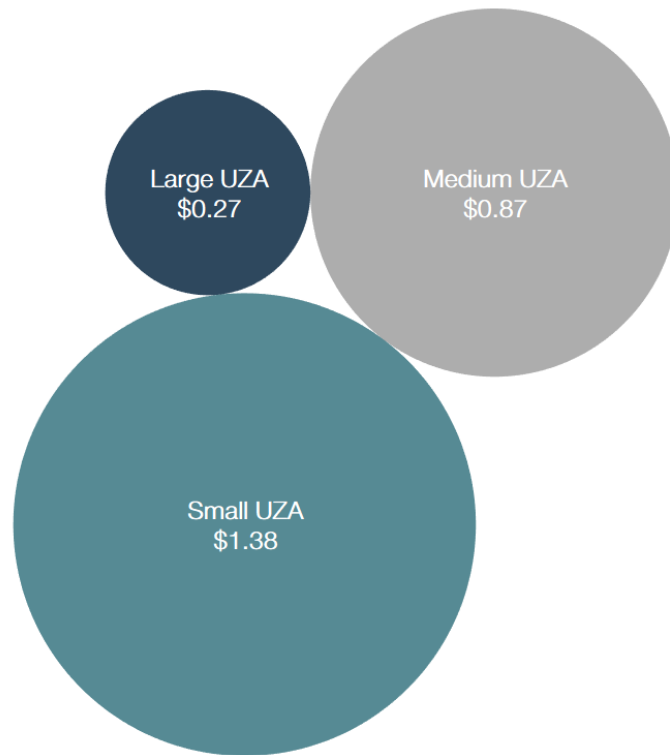




For large urbanized areas, the share of fare revenues decreased 52.4% from 2005 to 2014. Federal and state assistance compensated for a decrease in the share of fare revenues. Small and medium urbanized areas are more dependent upon operating subsidies than large urbanized areas. Fare revenues account for 19.8% for these two types of UZAs in 2014.

## Operating Expenses by Function and Object Class

Exhibit A10 — 2014 Federal Operating Assistance per Trip by Urbanized Area Size



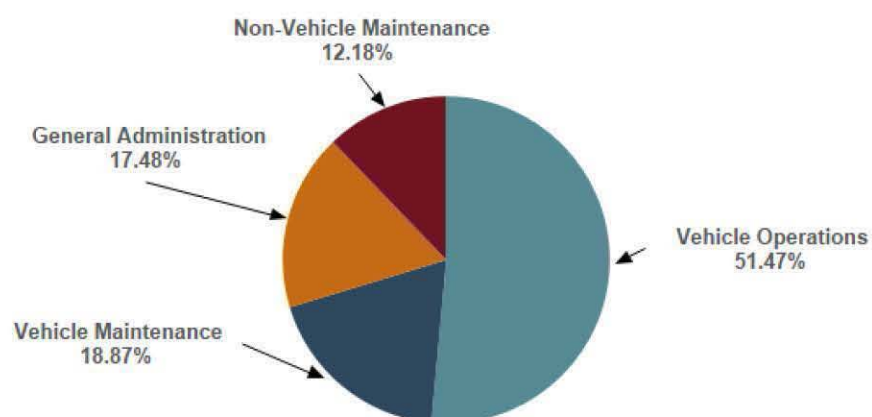
Agencies classified as full reporters must report finances according to the Uniform System of Accounts (USOA). The USOA contains the basic accounting structure required by Federal Transit Laws. Agencies must report operating expense data by mode, function, and object class. *Functions* refer to the activity performed, while *Object classes* refer to the cost of goods or services purchased. Agencies reporting a Small Systems Waiver are not required to classify their operating expenses by function and object; therefore, data from agencies reporting a Small Systems Waiver are not included in Exhibits A19 and A20.

Full reporting agencies group their operating expenses in the four functions listed below:

- Vehicle operations
- Non-vehicle maintenance
- Vehicle maintenance
- General administration

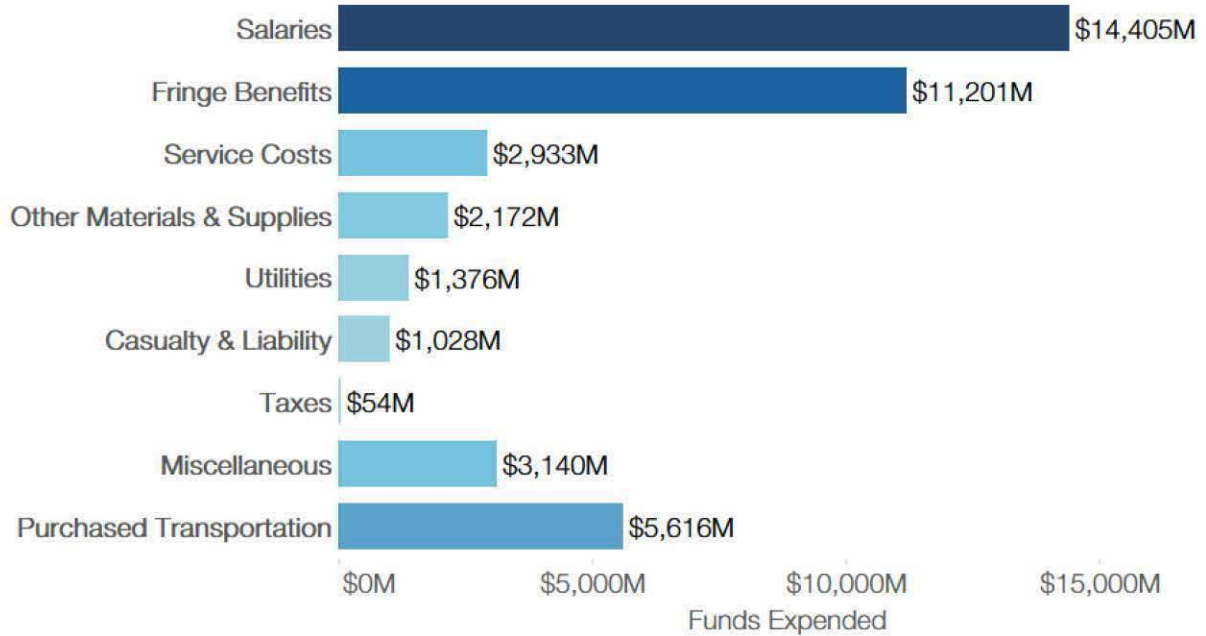
Funds used for Vehicle Operations account for 50.8% of all operating expenses. The categories of salaries and fringe benefits account for 70.5% of the total expenditures from direct operations.

Exhibit A11 — 2014 Operating Expenses by Function



Operating Expenses (in millions)	
Vehicle Operations	\$21,367.6M
Vehicle Maintenance	\$7,833.2M
Non-Vehicle Maintenanc..	\$5,056.4M
General Administration	\$7,256.8M
Total	\$42,054.0M

Exhibit A12 — 2014 Operating Expenses by Object Class

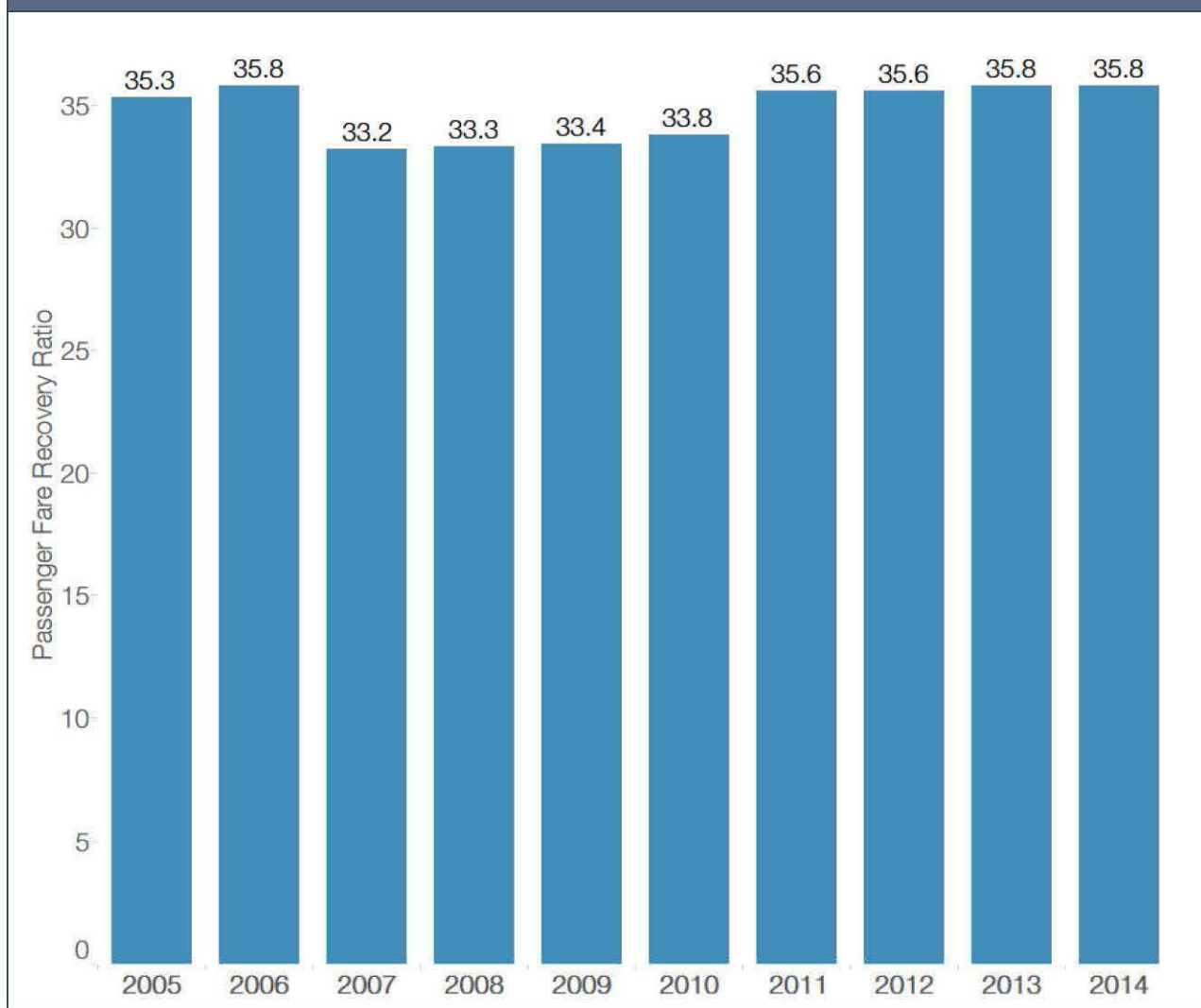


### Farebox Recovery Ratio

Farebox recovery ratio is the proportion of the amount of revenue generated through fares by paying customers as a percentage of the cost of total operating expenses. Fare revenues are funds earned through carrying passengers in regularly scheduled service. It includes the base fare, zone premiums, express service premiums, extra cost transfers and quantity purchase discounts applicable to the passenger's ride.



Exhibit A13 — Farebox Recovery Ratio (2005-2014)

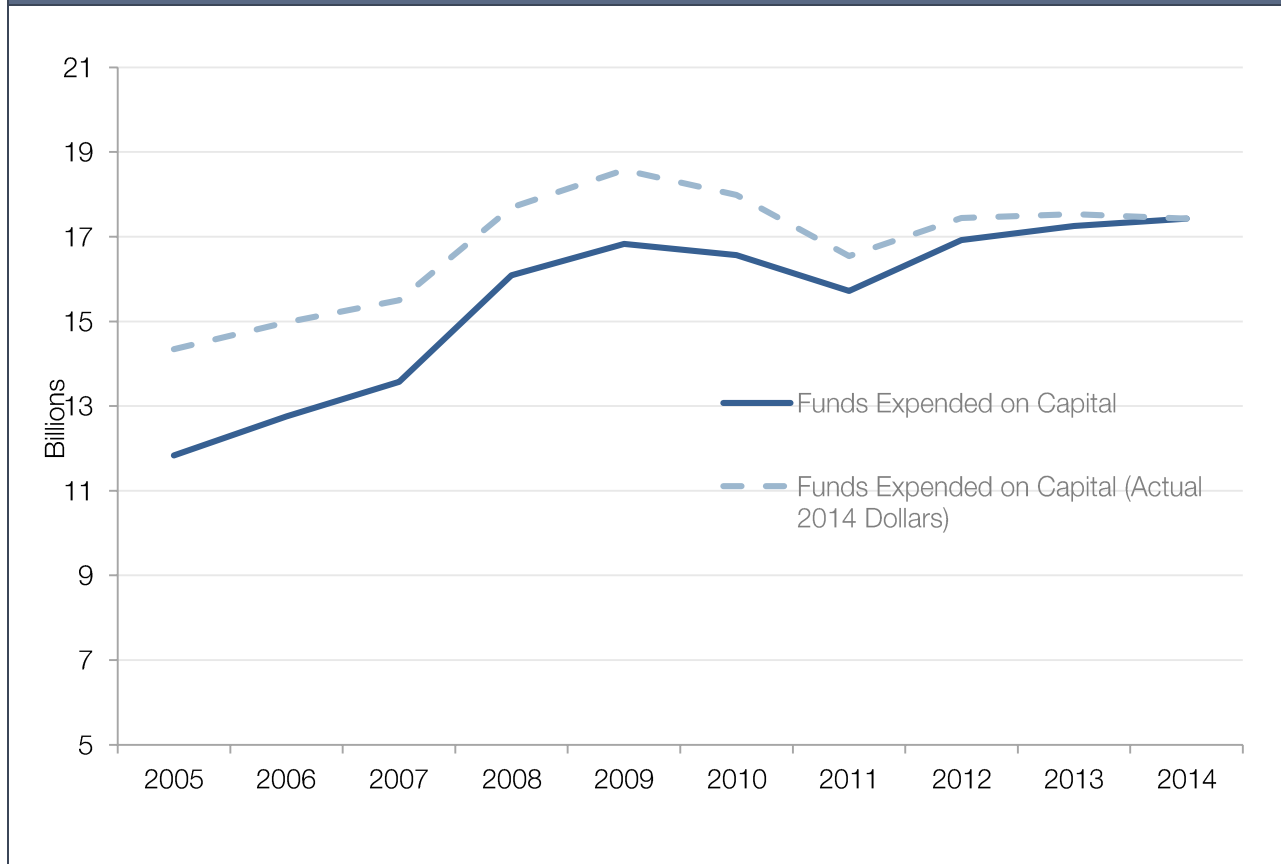


Many large transit agencies have shown a steady improvement in farebox recovery ratios following the 2007 implementation of the Government Accounting Standards Board (as shown in green in Exhibit A46.) The Board requires transit agencies to accrue the cost of other post-employment benefits over an employee's career and to disclose the amount of any unfunded liability. This new requirement significantly increased operating costs and initially affected agencies farebox recovery ratios.



## Capital Expenditures

Exhibit A14 — Capital Expenditures



Uses of capital include:

- **Revenue vehicles:** Vehicles used to provide transit service for passengers. A transit agency may use capital funds for the replacement, rehabilitation, remanufacture, rail overhaul, and expansion of its fleet.
- **Guideway:** Buildings and structures dedicated to the operation of transit vehicles, such as: at grade, elevated and subway structures, tunnels, bridges, track and power systems for rail modes, and paved highway lanes dedicated to bus mode.
- **Communication and information systems:** Communication systems include two-way radios for communication between dispatchers and vehicle operations, cab signaling and train control equipment in rail systems, automatic vehicle locator systems, automated dispatching systems, vehicle guidance systems, telephones, facsimile machines, and public address systems. Information systems include computers, monitors, printers, scanners, data storage devices, and associated

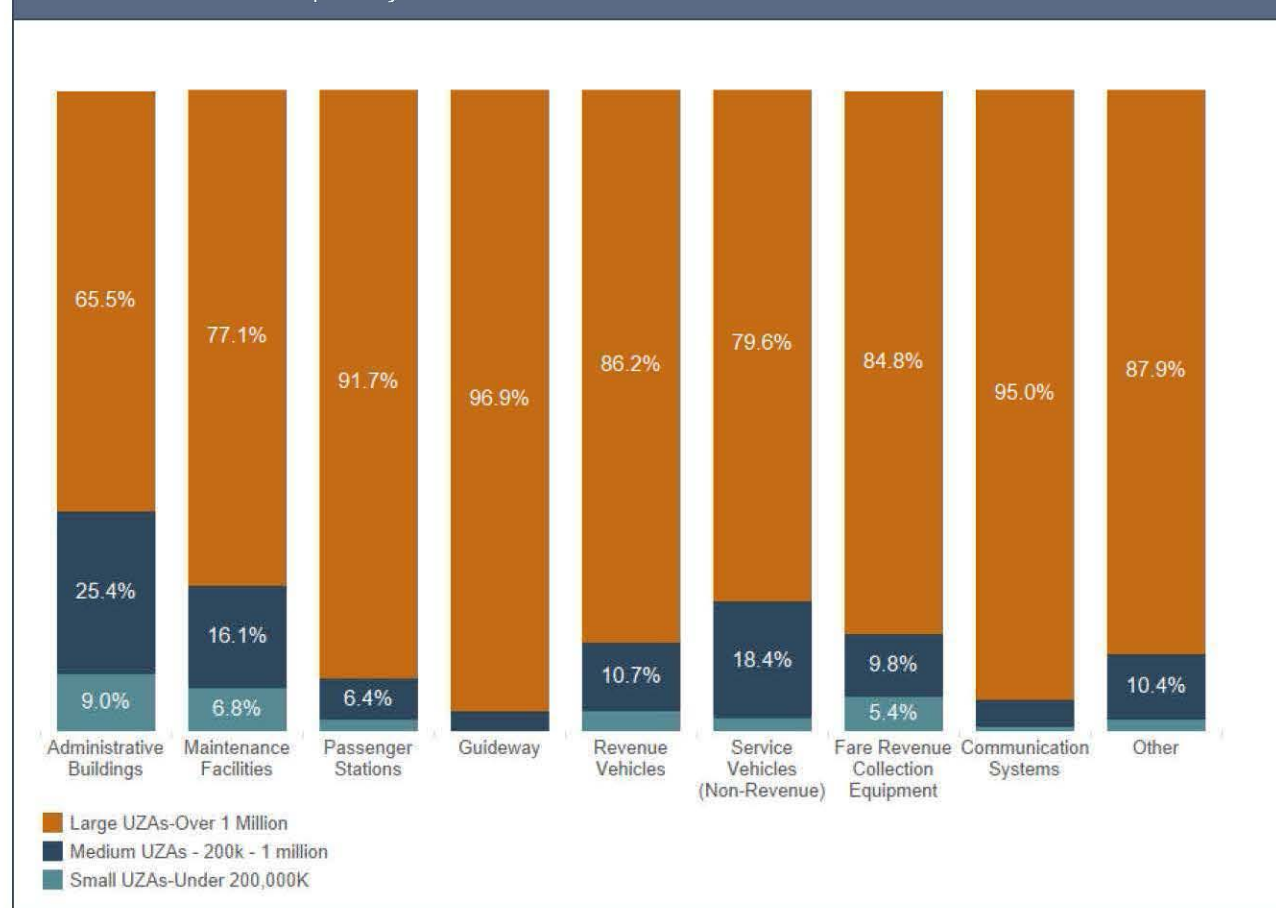
software that support general office, accounting, scheduling, vehicle and non-vehicle maintenance, and customer service functions.

- **Fare revenue collection equipment:** Includes the acquisition of fare revenue collection equipment such as turnstiles, fare boxes (drop), automated fare boxes and related software, money changers, and fare dispensing machines (tickets, tokens, passes).
- **Maintenance facilities:** Central/overhaul maintenance facilities, light maintenance facilities, and storage facilities.
- **Passenger stations:** Boarding/alighting facilities with a platform, which may include stairs, elevators, escalators, passenger controls (e.g., fare gates or turnstiles), canopies, wind shelters, lighting, signs. Buildings with a waiting room, ticket office or machines, restrooms, or concessions. Includes transportation/transit/transfer centers, park-and-ride facilities, and transit malls with the above components, including those only utilized by motor buses.
- **Administration buildings:** Administrative buildings including the cost for design and engineering, land acquisition and relocations, demolition, and purchase or construction of administrative buildings.
- **Service (non-revenue) vehicles:** Service, supervisory, and vehicles other than revenue vehicles.
- **Other:** Includes park and ride facilities, passenger shelters, signs and amenities, furniture, and equipment that are not integral parts of buildings and structures.

## Uses of Capital by UZA Size

Large and medium-sized urbanized areas operate most of the country's rail systems. Guideway and facilities account for a significant portion of the overall capital costs. For small urbanized areas, bus and demand response are the most common modes and most uses of capital are revenue vehicles and facilities.

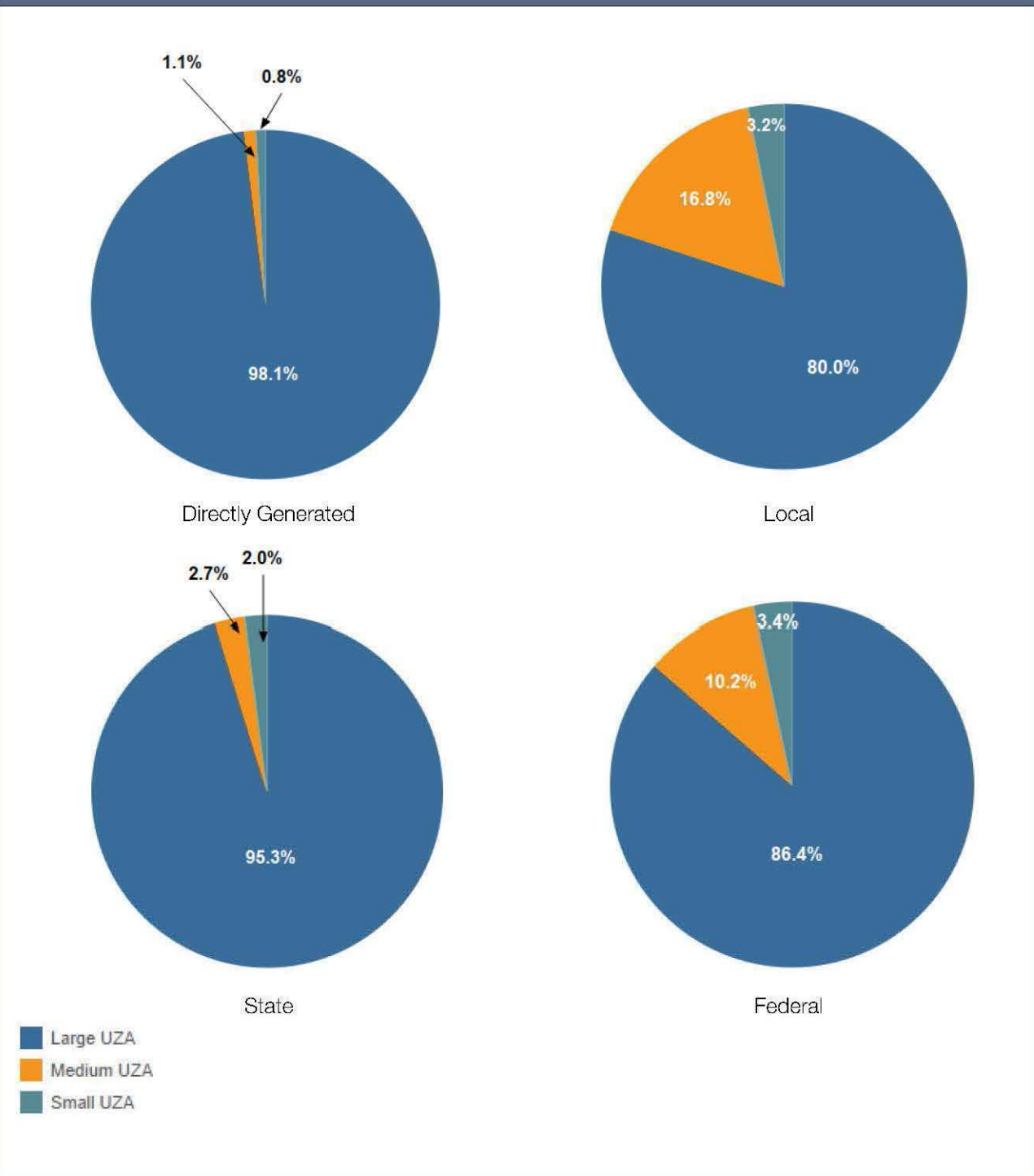
Exhibit A15 — 2014 Capital by Urbanized Area Size



## Sources of Federal Funding by UZA

Federal sources account for most of the capital invested in transit. A significant portion of capital invested in small and medium urbanized areas is from federal funds. Large urbanized areas rely primarily on local and state funds and directly levied taxes to pay for capital projects.

Exhibit A16 — Sources of Capital Funding by UZA



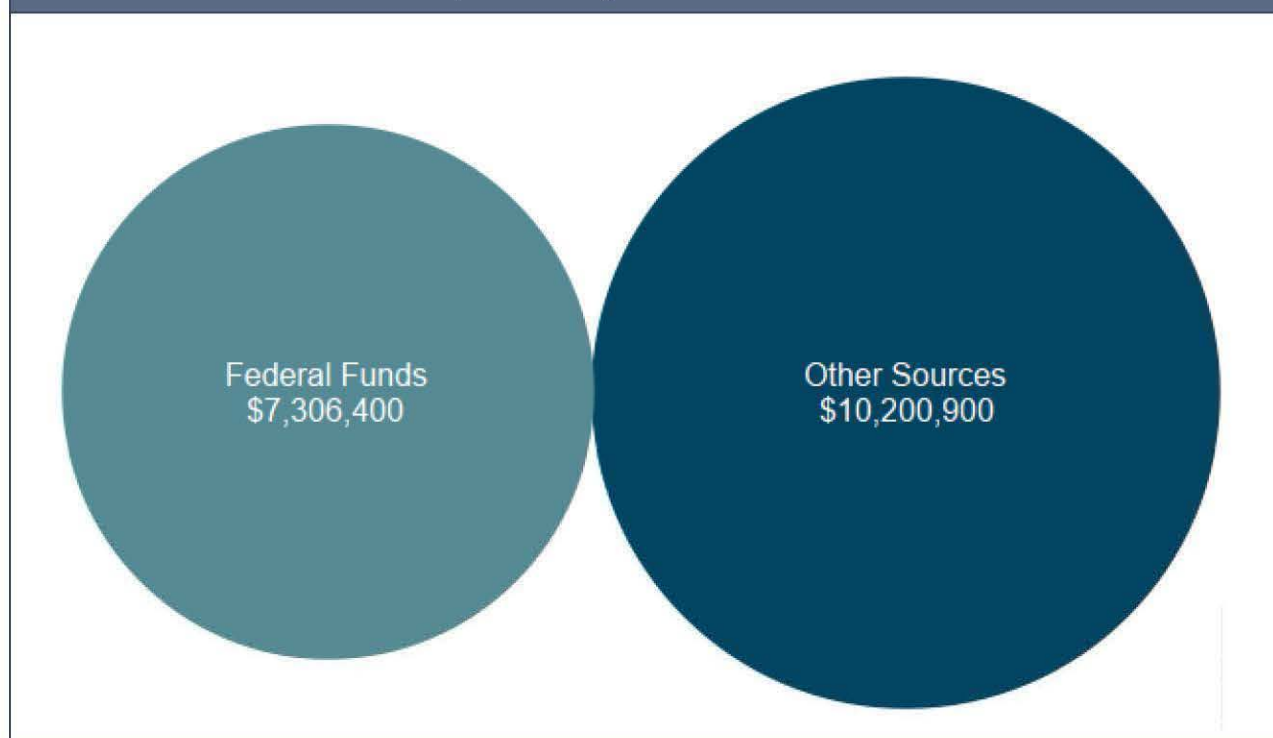
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## Capital Investment in Transit

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Capital funds are funds from federal, state, and local governments and directly generated sources that transit agencies apply to purchases such as equipment or other assets. Directly generated sources include any funds generated or donated directly to the transit agency including passenger fares, advertising revenues, donations, and grants from private entities.

Exhibit A17 — 2014 Sources of Capital Funding



Capital investment increased approximately 89.8% over the past ten years. Funds from the federal government accounted for 41.7% of capital invested in transit in 2014.

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## Distribution of Capital by Mode

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Generally, rail systems are located in high-density corridors within the larger metropolitan areas of the United States. The high levels of service supplied in these areas require large investments in transit infrastructure (e.g., track, signals and communication systems, complex maintenance facilities, passenger stations, inter-modal terminals, real time data

acquisition systems and other cost intensive items). Bus systems do not require the same level of investment in infrastructure as rail. Therefore, revenue vehicles are the main use of capital for bus systems.

Exhibit A18 — Percent of Capital Expended on Non-Rolling Stock by Rail Mode			
	Commuter Rail	Heavy Rail	Light Rail
<b>2005</b>	61.7%	85.7%	87.4%
<b>2006</b>	71.0%	87.6%	91.6%
<b>2007</b>	82.2%	82.8%	89.3%
<b>2008</b>	74.1%	79.8%	85.8%
<b>2009</b>	83.2%	72.9%	88.7%
<b>2010</b>	86.2%	84.0%	89.7%
<b>2011</b>	70.1%	91.6%	91.1%
<b>2012</b>	77.3%	95.3%	93.2%
<b>2013</b>	73.6%	92.8%	91.1%
<b>2014</b>	76.4%	88.1%	92.2%

## Rural Operating and Capital Funding

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The sources of funds for rural areas (operating and capital) include local, state, and the federal government as well as funds generated by service providers (fares and contract revenues).

FTA funding categories available for Rural Transit include:

- Section 5309 – FTA Capital Program
- Section 5310 – FTA Special Needs of Elderly Individuals and Individuals with Disabilities Program
- Section 5311 – FTA Non-Urbanized Area Program
- Section 5316 – FTA Job Access and Reverse Commute Program
- Section 5317 – FTA New Freedom Program
- Section 5320 – FTA Alternative Transportation in Parks and Public Lands Program

The federal government provided 61.1% of the rural transit-operating budget, while 9.8% of funds came directly from service providers.

Exhibit A19 — 2014 Source of Funding Expended on Operations	
Other Urbanized Area Operating Assistance 5311	\$447,869,004
Contract Revenue	\$138,136,337
Fares	\$115,005,602
Other Federal Funds	\$42,976,408
Tribal Transit Funds 5311	\$22,172,853
Special Needs Disabilities Program 5310	\$10,912,868
Job Access Rev Commute 5316 Amt	\$10,768,642
ARRA Other Urbanized Area Program 5311	\$5,253,094
Freedom Program 5317	\$4,210,144
Other FTA Funds	\$1,745,838
ADA Operating Expenses 5310	\$759,518
FTA Capital Program Funds 5309	\$359,227
ARRA Tribal Transit Funds 5311	\$276,266
USDOT Funds	\$20,407
Park Transit 5320	\$1,610
State Funds	\$326,010,152
Local Funds	\$249,335,610
Other	\$30,693,082
<b>Total</b>	<b>\$1,406,506,662</b>

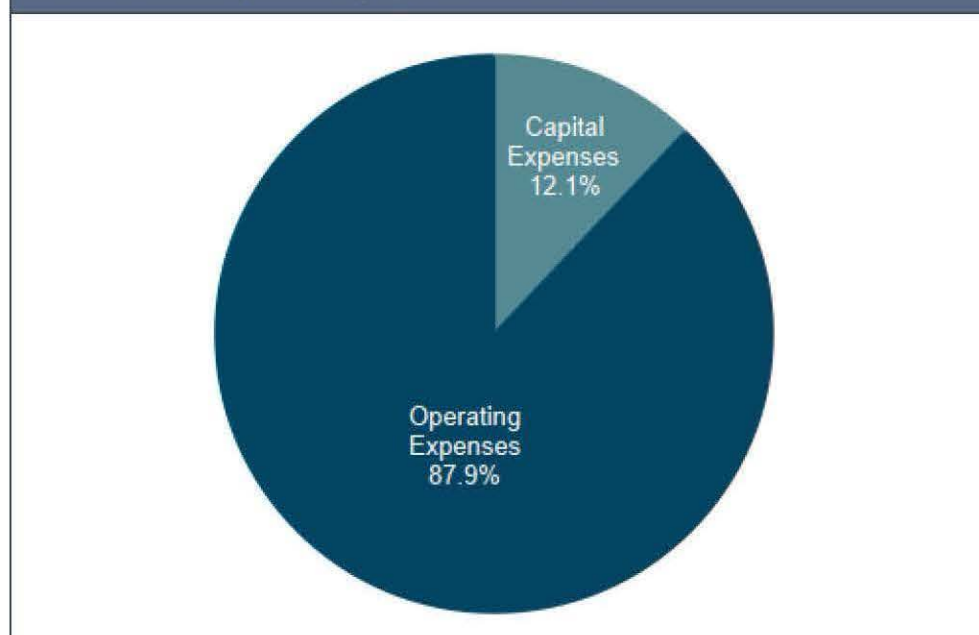
Rural transit capital budgets relied mostly on federal assistance, accounting for 70.26% of all funds expended on capital.



Exhibit A20 — 2014 Source of Funding Expended on Capital

	Funds Expended on Capital	Percentage of Total
Other Urbanized Area Operating Assistance 5311	\$66,186,319	35.12%
FTA Capital Program Funds 5309	\$35,794,853	19.00%
Special Needs Disabilities Program 5310	\$8,390,374	4.45%
ARRA Other Urbanized Area Program 5311	\$5,207,928	2.76%
Tribal Transit Funds 5311	\$4,122,466	2.19%
ARRA TIGGER Funds	\$3,911,017	2.08%
Other FTA Funds	\$3,292,162	1.75%
Job Access Rev Commute 5316 Amt	\$1,871,820	0.99%
Fares	\$1,143,799	0.61%
ARRA Tribal Transit Funds 5311	\$1,007,706	0.53%
Freedom Program 5317	\$976,096	0.52%
Contract Revenue	\$700,139	0.37%
Park Transit 5320	\$676,975	0.36%
ARRA Guideway Capital 5309	\$550,129	0.29%
Other Federal Funds	\$367,551	0.20%
USDOT Funds	\$53,126	0.03%
State Funds	\$31,260,013	16.59%
Local Funds	\$21,680,166	11.51%
Other	\$1,244,226	0.66%
<b>Total</b>	<b>\$188,436,865</b>	

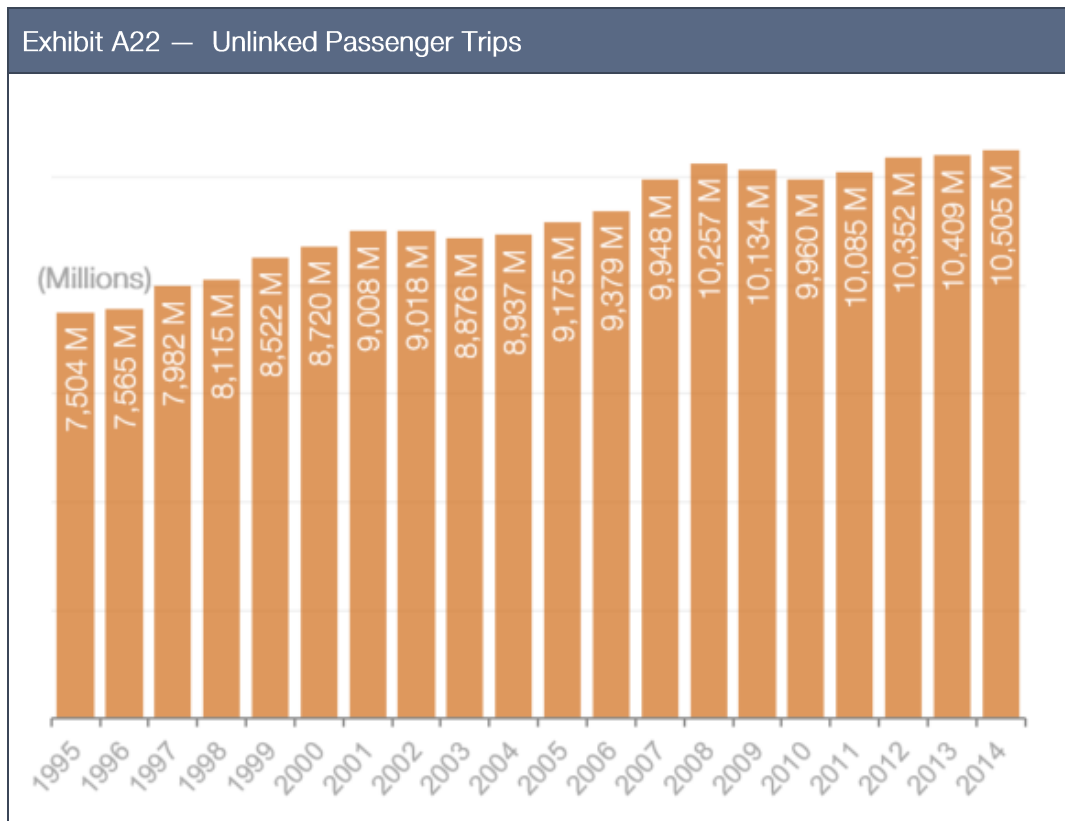
Exhibit A21 — Expenses by Type – Rural Transit





## Unlinked Passenger Trips

The National Transit Database (NTD) defines Unlinked Passenger Trips (UPT) as the number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles, no matter how many vehicles they use to travel from their origin to their destination. Unlinked passenger trips have steadily increased over the past twenty years. Exhibit A22 shows the steady 40% increase in unlinked passenger trips over the twenty-year period spanning 1995 to 2014.



Ridership increased 14.5% from 2005 to 2014. Unlinked passenger trips increased for the following modes over the ten-year period:

- Vanpool – 118.4%
- Demand response – 89.7%
- Heavy Rail – 41.6%
- Light rail – 28.4%
- Commuter Rail – 15.3%
- Bus – 0.6%

Exhibit A23 — Unlinked Passenger Trips by Mode

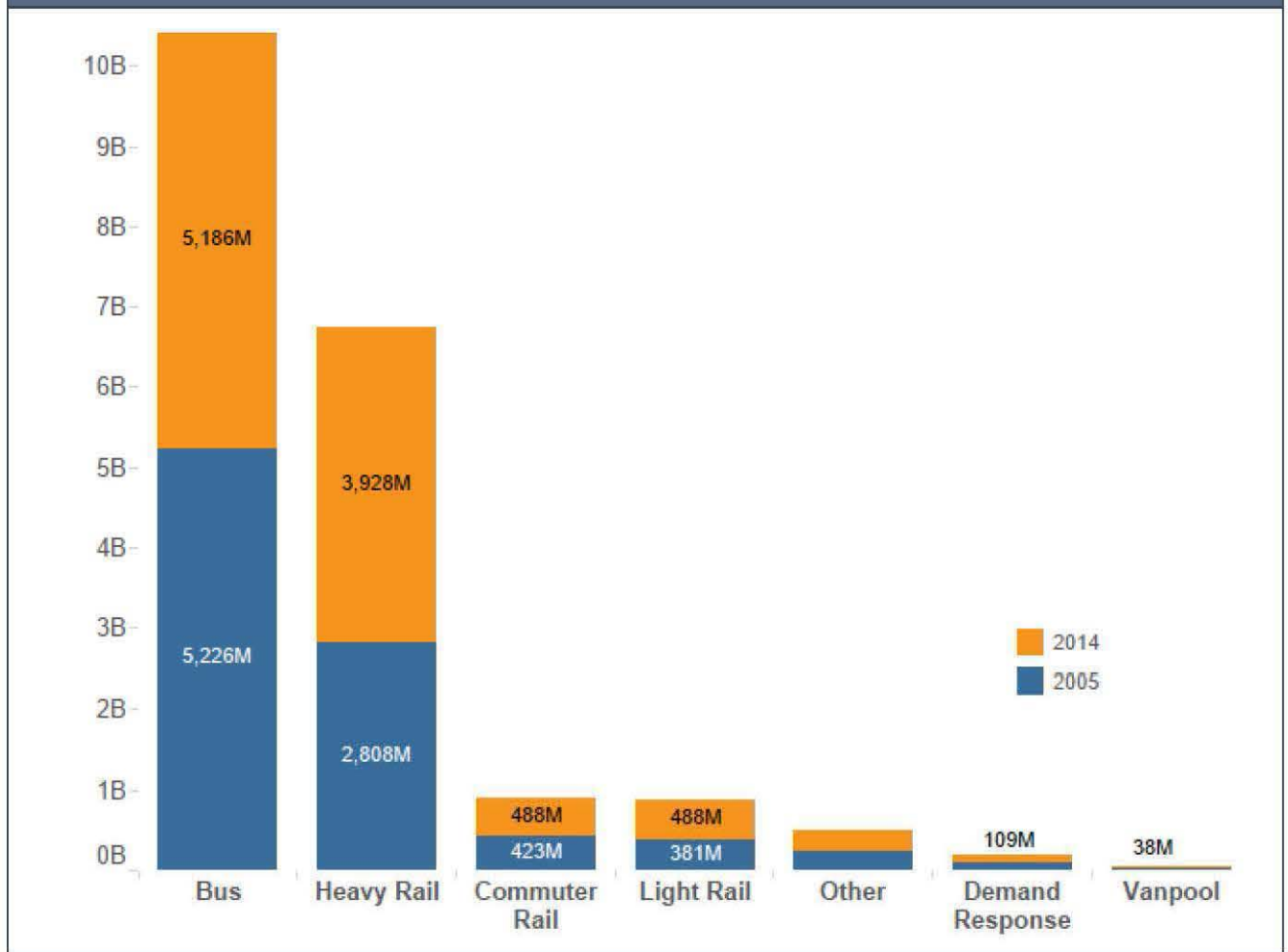


Exhibit A24 – Distribution of Unlinked Passenger Trips (millions) by Mode

	2005	2014	% Change
Bus	5,225,940,443	5,186,026,029	-0.76%
Commuter Rail	422,916,402	487,654,726	15.31%
Demand Response	86,588,540	109,405,147	26.35%
Heavy Rail	2,808,384,605	3,928,139,704	39.87%
Light Rail	380,535,187	488,443,582	28.36%
Vanpool	17,223,290	37,618,379	118.42%
Other	233,535,941	267,912,433	14.72%

Exhibit A25 – Unlinked Passenger Trips	
2014	10,505.2M
2013	10,408.8M
2012	10,352.2M
2011	10,085.4M
2010	9,959.7M
2009	10,134.3M
2008	10,256.7M
2007	9,948.2M
2006	9,379.4M
2005	9,175.1M

## Vehicle Revenue Miles

Exhibit A26 – Vehicle Revenue Miles	
2014	4109.8M
2013	4,039.9M
2012	3,960.5M
2011	3,914.8M
2010	3,919.6M
2009	3,987.8M
2008	3,894.5M
2007	3,769.0M
2006	3,670.7M
2005	3,602.0M

Vehicle revenue miles are the miles a transit vehicle travels while in revenue service. A transit vehicle is in revenue service when the vehicle is available to the public with the expectation of carrying passengers. Revenue service includes both times when passengers pay a fare and when the service is operating fare-free. Agencies must exclude non-public transportation services (charter services, school bus services, etc.) and deadhead travel from revenue service tracking. Deadhead travel consists of the miles a transit vehicle travels while not in revenue service, such as leaving or returning to the garage or yard or changing routes.

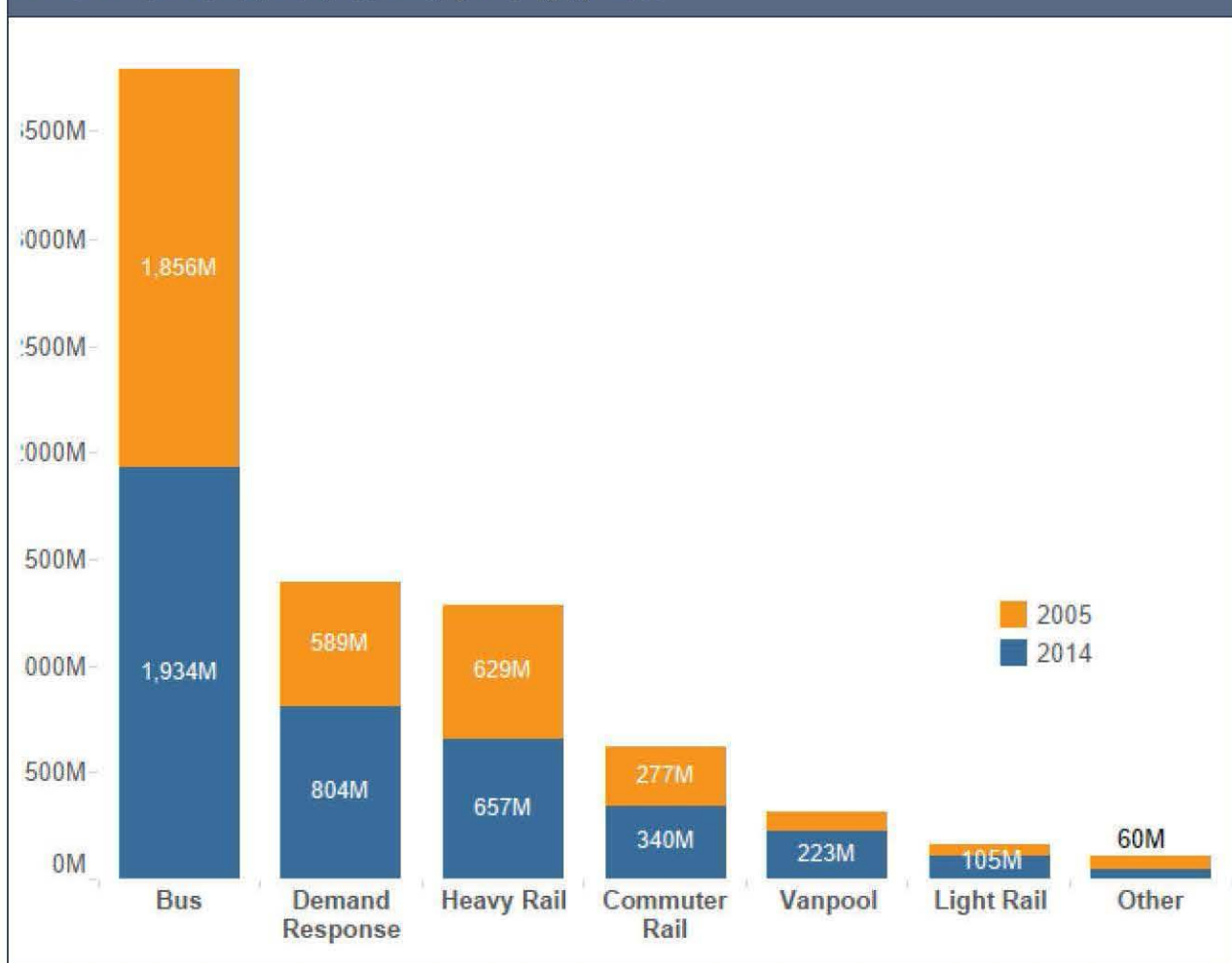
Vehicle revenue miles increased by 14.1% between 2005 and 2014 across all transit modes. The following transit modes

- Vanpool – 136.0%
- Demand response – 36.5%
- Light rail – 70.6%
- Commuter Rail – 22.5%
- Bus – 4.2%
- Heavy Rail – 4.6%

Exhibit A27 – Distribution of Vehicle Revenue Miles by Mode

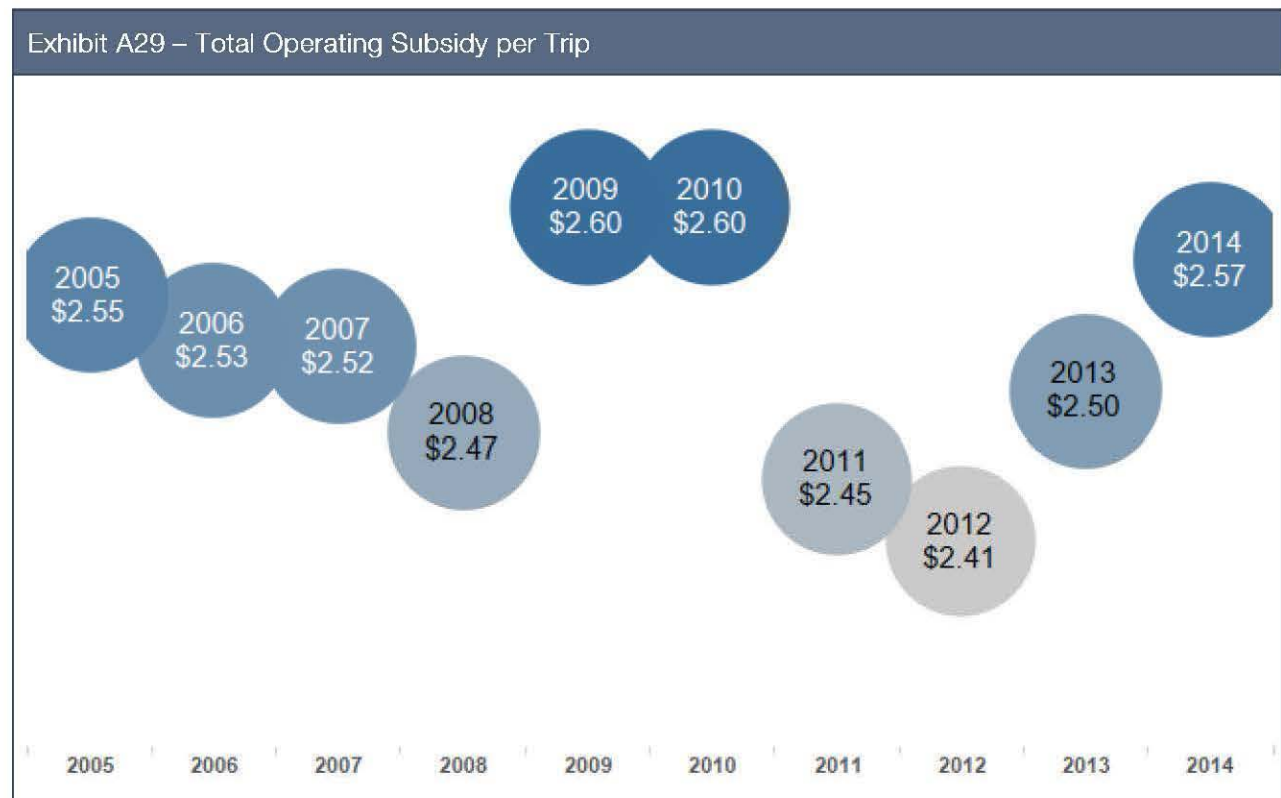
	2005	2014	% Change
<b>Bus</b>	1,855,546,416	1,933,600,000	4.21%
<b>Commuter Rail</b>	277,277,544	339,586,600	22.47%
<b>Demand Response</b>	589,204,380	804,100,000	36.47%
<b>Heavy Rail</b>	628,537,791	657,200,000	4.56%
<b>Light Rail</b>	61,284,327	104,524,300	70.56%
<b>Vanpool</b>	94,363,759	222,600,000	135.90%
<b>Other</b>	60,096,475	48,189,100	-19.81%

Exhibit A28 – Vehicle Revenue Miles (millions) by Mode



## Subsidy per Trip

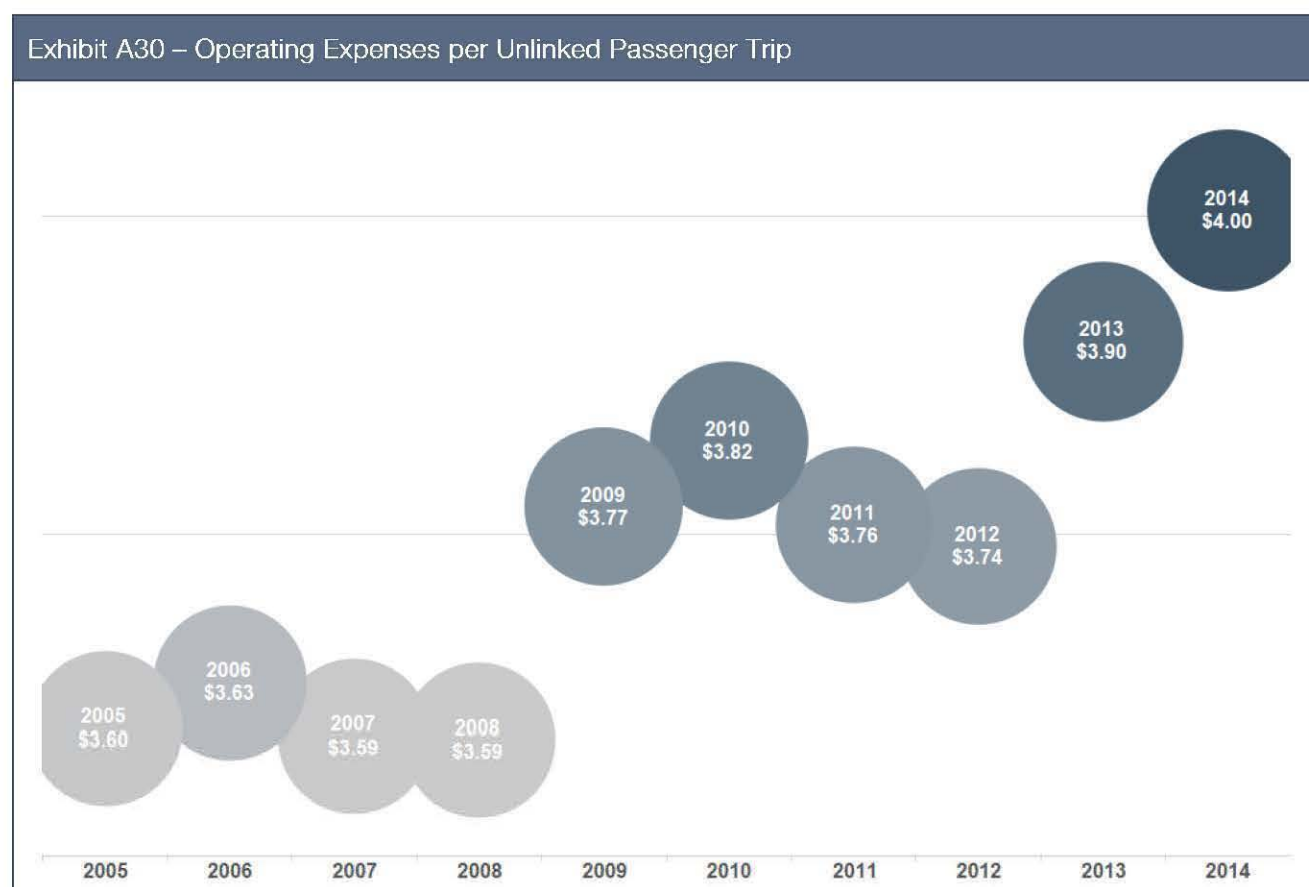
Subsidies are financial assistance received from federal, state and local governments. Subsidies also include directly generated funds, including grants from private foundations, directly levied taxes and other funds dedicated to transit. Subsidies do not include the fare revenue collected by the agency.



Subsidies for prior years adjusted based on 2014 Constant Dollars

Subsidy per trip has increased 0.1% over the past ten years. Medium and small urbanized areas have a greater subsidy per trip rate increase than large urbanized areas. This is due in part to the expansion of fixed route service in low-density areas, combined with the expansion of in-demand response services. Demand response service accounts for a substantial portion of the service provided in medium and small urbanized areas.

## Cost Effectiveness



Operating expenses for prior years adjusted based on National Highway Construction Cost Index

Cost effectiveness is the relationship between service input and service consumption. Service input is the quantity of resources expended to produce transit service, expressed in operating cost (dollars expended for operations, maintenance, and administration). Service consumption is the amount of service used by the public, expressed in non-monetary terms as unlinked passenger trips. Using 2014 constant dollars, operating expense per unlinked passenger trip increased 11.1% over the past ten years.



## Exhibit A31 – Total Operating Expenses per Unlinked Passenger Trip

	Cost Efficiency Ratio		Unlinked Passenger Trips		Operating Expenses
2005	■	\$3.60	■	9,175,124,398	■ \$33,016,681,488
2006	■	\$3.63	■	9,379,390,013	■ \$34,083,122,863
2007	■	\$3.59	■	9,948,210,473	■ \$35,741,405,605
2008	■	\$3.59	■	10,256,681,637	■ \$36,812,200,919
2009	■	\$3.77	■	10,134,262,062	■ \$38,222,239,449
2010	■	\$3.82	■	9,959,675,640	■ \$38,075,960,096
2011	■	\$3.76	■	10,085,446,841	■ \$37,897,439,327
2012	■	\$3.74	■	10,352,177,303	■ \$38,724,727,764
2013	■	\$3.90	■	10,408,796,933	■ \$40,604,763,121
2014	■	\$4.00	■	10,505,200,000	■ \$42,055,511,026

Operating expenses for prior years adjusted based on 2014 Constant Dollars

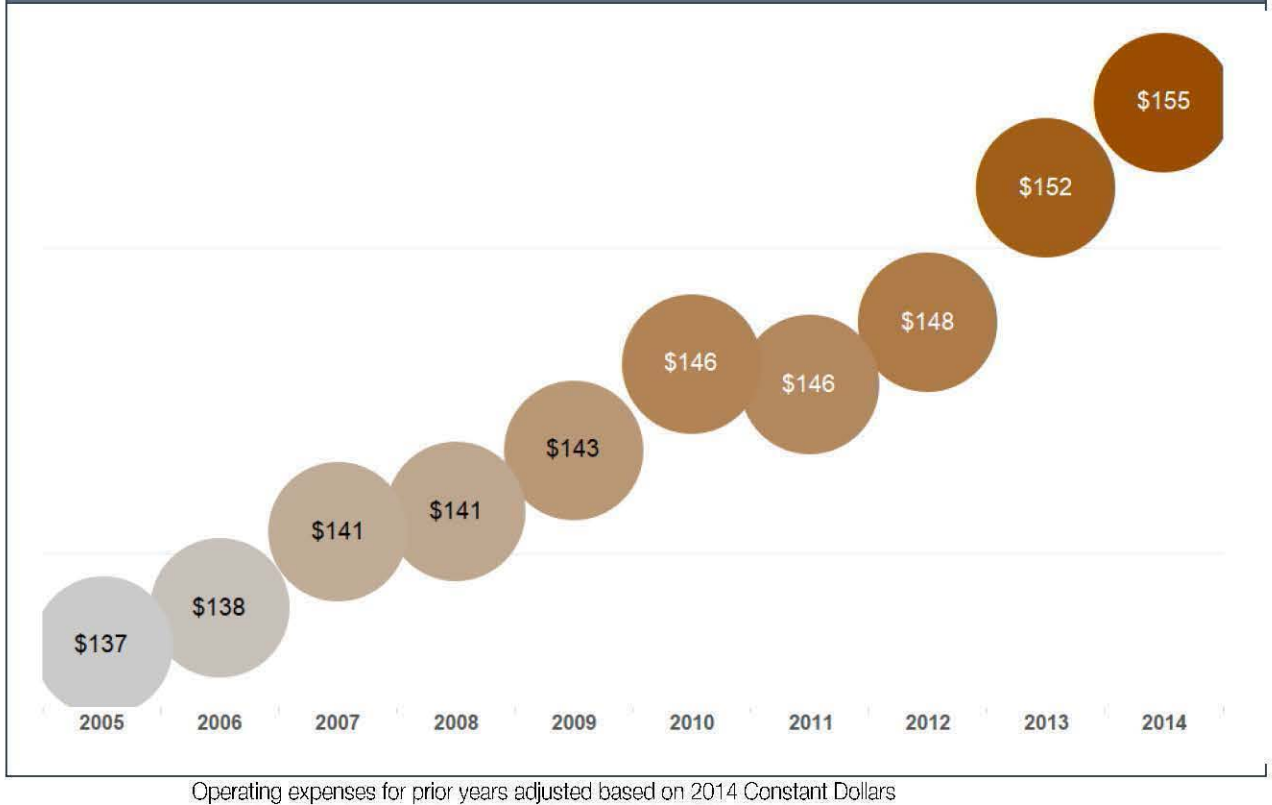
## Exhibit A32 – Operating Expenses per UPT for Bus and Rail Modes

	Bus	Commuter Rail	Heavy Rail	Light Rail
2005	\$3.40	\$8.54	\$2.22	\$2.89
2006	\$3.52	\$8.15	\$2.12	\$2.89
2007	\$3.64	\$8.12	\$1.94	\$2.97
2008	\$3.63	\$8.20	\$1.90	\$2.86
2009	\$3.77	\$8.75	\$1.99	\$3.08
2010	\$3.89	\$8.83	\$1.95	\$3.31
2011	\$3.84	\$8.72	\$1.92	\$3.21
2012	\$3.78	\$8.90	\$1.92	\$3.25
2013	\$3.87	\$9.33	\$2.18	\$3.37
2014	\$3.92	\$11.68	\$2.17	\$3.68

## Cost Efficiency

Cost efficiency is the relationship between service inputs and service outputs. Service output is the quantity of service produced by a transit operator, expressed in non-monetary terms as vehicle revenue hours. Overall, operating expenses per vehicle revenue hour increased 13.1% over the last ten years.

Exhibit A33 – Total Operating Expenses per Vehicle Revenue Hour



## Service Effectiveness

Service effectiveness is the relationship between service consumption and service output. Unlinked passenger trips per vehicle revenue hour increased 1.5% over the past ten years.



Exhibit A36 – Unlinked Passenger Trips per Vehicle Revenue Hour

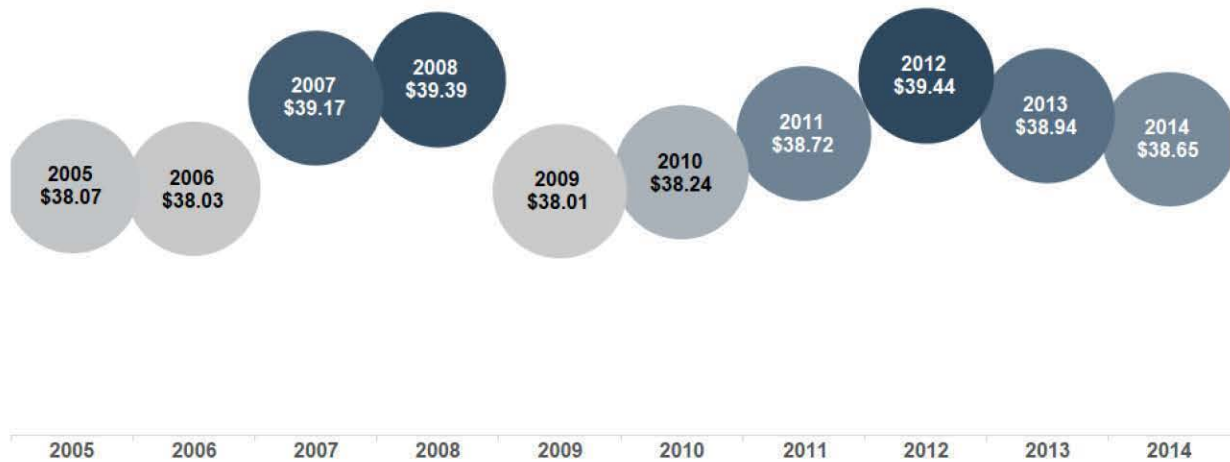
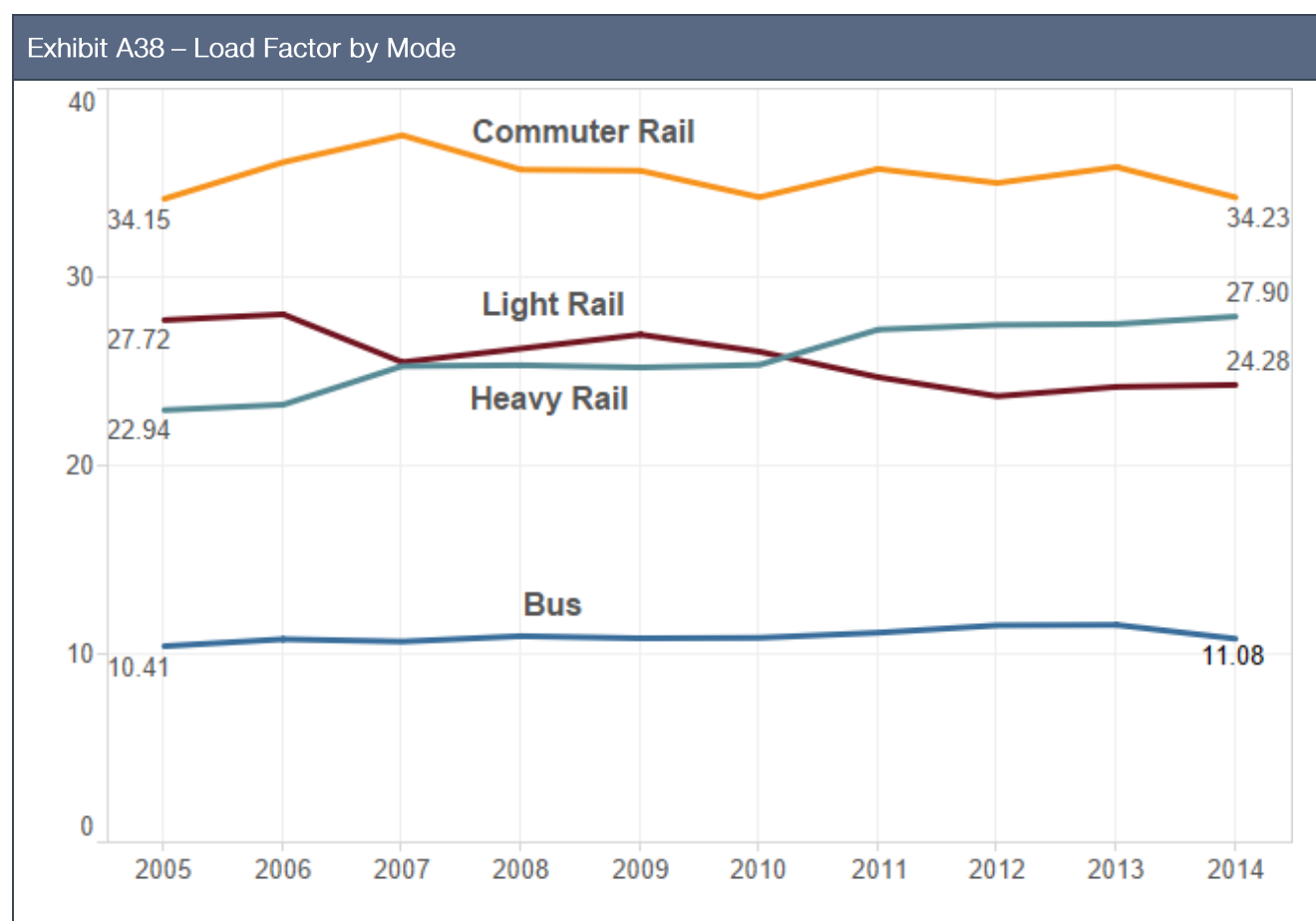


Exhibit A37 – Unlinked Passenger Trips per Vehicle Revenue Hour by Mode

	Bus	Commuter Rail	Heavy Rail	Light Rail
2005	119.7	528.1	198.9	256.8
2006	122.3	504.3	196.3	237.5
2007	124.7	502.3	211.4	228.8
2008	126.3	497.8	207.8	225.2
2009	128.4	515.9	211.9	243.1
2010	130.1	532.5	215.9	246.9
2011	130.6	528.4	216.9	247.8
2012	131.1	533.4	221.2	249.6
2013	131.4	535.6	248.7	241.3
2014	131.9	540.1	263.7	276.9

## Load Factor

Average load factor is the ratio of passenger miles traveled per vehicle revenue mile. Beginning in 2011, reporting agencies operating 30 vehicles or fewer were not required to report passenger miles traveled. For this reason, the NTST excludes data from agencies reporting a Small Systems Waiver or Reporting Waiver during the years 2011 to 2014 in the following load factor exhibits.



Data for agencies reporting a Small Systems or Reduced Reporter Waiver in 2011-2014 have been excluded from this exhibit

The load factor exhibits provide the following information:

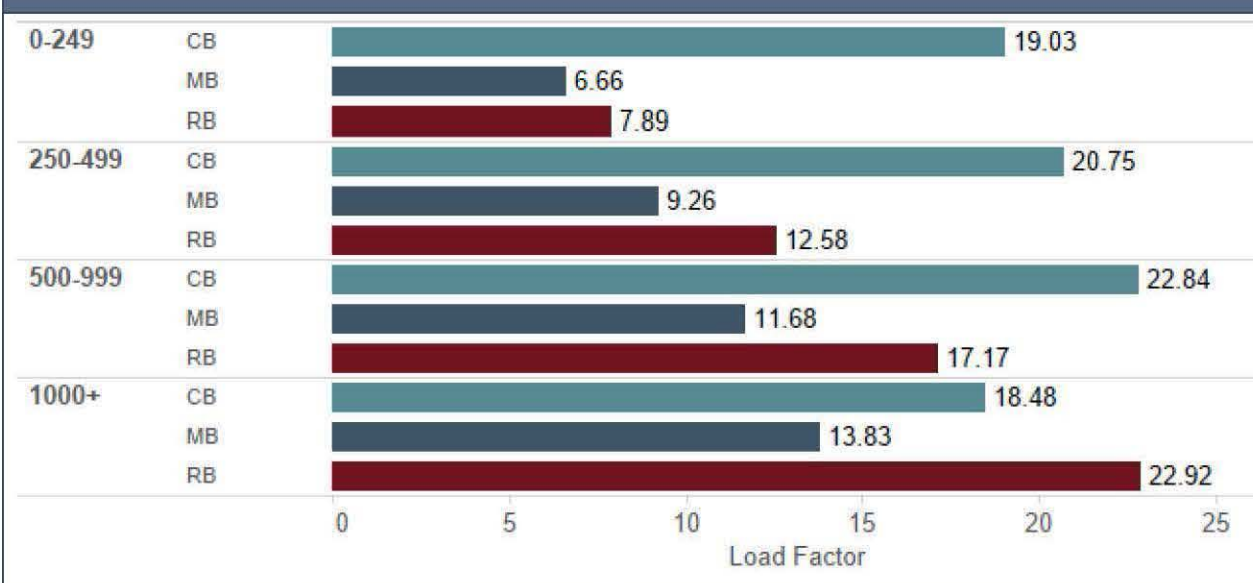
- Commuter Rail average load factor increased 0.2% over the past ten years, but increased 2.2% over the past three years.
- Heavy Rail average load factor increased 21.7% over the past ten years. In the past three years, the heavy rail average load factor increased 1.6%.
- Light Rail average load factor decreased 12.4% in the past ten years. In the past three years, the light rail average load factor increased 2.5%.
- Bus average load factor increased 0.38% in the past ten years. In the past three years, the bus average load factor decreased 0.61%.

Exhibit A39 – Load Factor by Mode

	Commuter Rail	Light Rail	Bus	Heavy Rail
2005	34.15	27.72	10.41	22.94
2006	36.09	28.02	10.78	23.23
2007	37.53	25.48	10.66	25.28
2008	35.70	26.21	10.94	25.32
2009	35.65	26.95	10.83	25.20
2010	34.24	26.04	10.86	25.34
2011	35.74	24.68	11.13	27.21
2012	34.99	23.68	11.52	27.46
2013	35.84	24.17	11.54	27.51
2014	34.23	24.28	11.08	27.90

Data for agencies reporting a Small Systems Waiver or Reduced Reporting Waiver in 2011-2014 have been excluded from this exhibit.

Exhibit A40 – Load Factor by VOMS for Bus Mode



Data for agencies reporting a Small Systems Waiver or Reduced Reporting Waiver in 2011-2014 have been excluded from this exhibit.

Rural Service Supplied and Consumed

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Exhibit A41 – Rural Service Supplied and Consumed

	2014 Totals
Operating Expenses (OE)	\$1,406,506,662.00
Fares	\$116,149,401.00
Unlinked Passenger Trips (UPT)	132,545,105.00
Vehicle Revenue Miles (VRM)	518,450,818
Vehicle Revenue Hours (VRH)	27,264,379
Operating Expenses per UPT	\$10.61
Operating Expenses per VRM	\$2.71
Fare Recovery (Fares per OE)	8.26%

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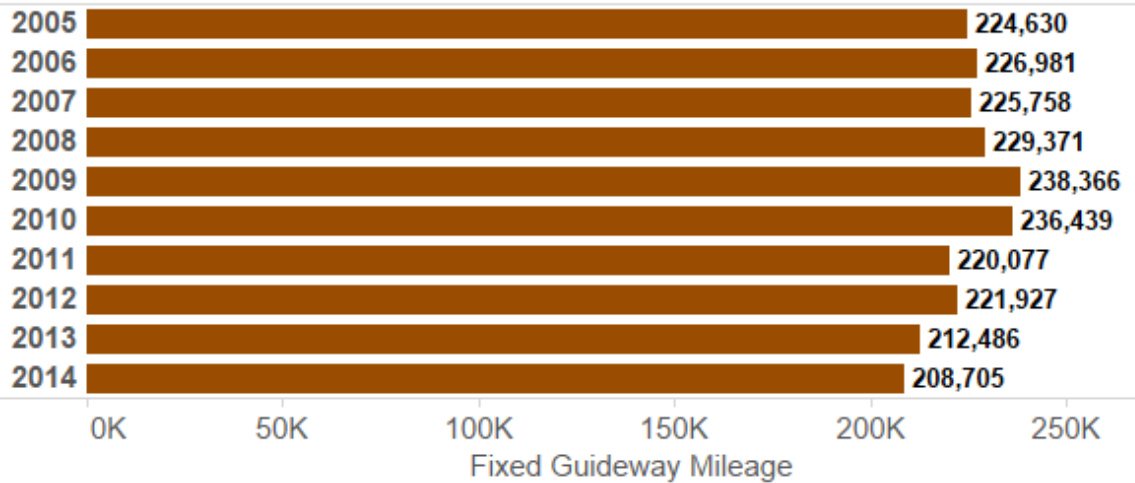
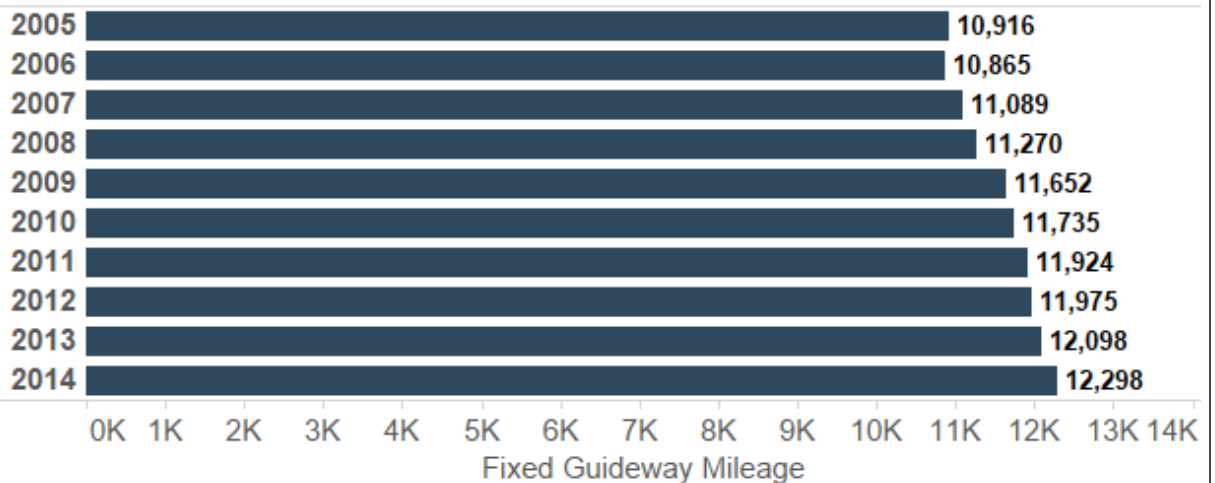
Fixed Guideway Mileage

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Fixed guideway directional route miles are the miles in each direction that transit vehicles travel while in revenue service on fixed guideways (high occupancy vehicle lanes, transit malls, busways, or rail track).

Fixed guideway mileage is a measure of the route path over a facility or roadway; it does not measure the service carried on the facility. This mileage is computed with regard to direction of service and is recorded without regard to the number of traffic lanes or rail tracks existing on the right-of-way.

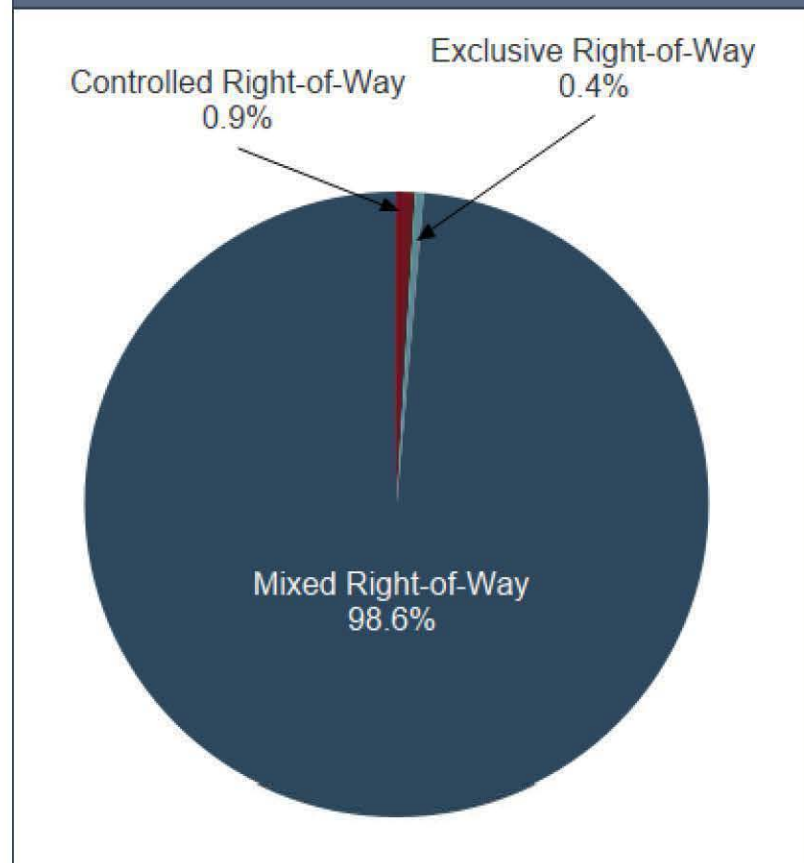
Exhibit A42 – Fixed Guideway Mileage – Bus and Rail Modes

**Bus****Rail**

Beginning in 2013, FTA classified segments previously reported as fixed guideway into three subcategories:

- **Fixed Guideway (FG).** Roadways that agencies reserve at all times (24 hours / 7 days per week) for public transportation vehicles. This type of ROW must meet safe operations and have strict enforcement.
- **High Intensity Bus (HIB).** Roadways that agencies reserve at some times for transit use, for high occupancy vehicle (HOV), or high occupancy / toll (HO/T) operations.
- **Mixed-traffic ROW (Non-Fixed Guideway (NFG)).** Mixed-traffic ROW are normal streets and roads where transit vehicles operate. Public transportation shares these roadways with personal cars and trucks. Mixed Traffic ROW is the most common ROW.

Exhibit A43 – Guideway Classes



## Service Utilization

The NTST defines the average service utilization as the ratio of vehicle revenue miles per directional route mile.

Average service utilization is inversely proportional to average headway, meaning the higher the average service utilization, the smaller the average headway, and vice versa.

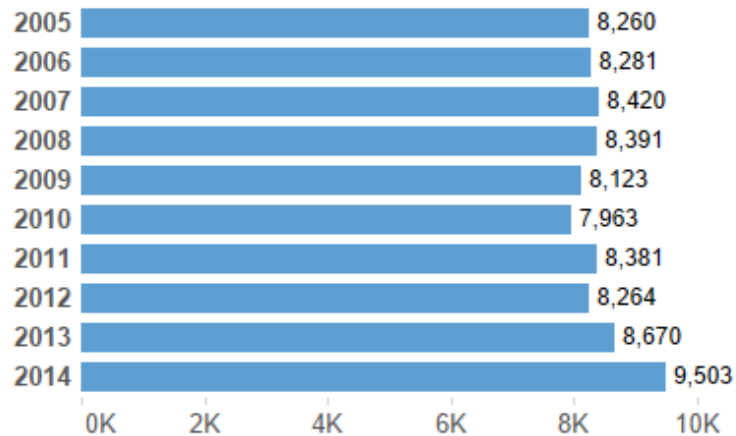
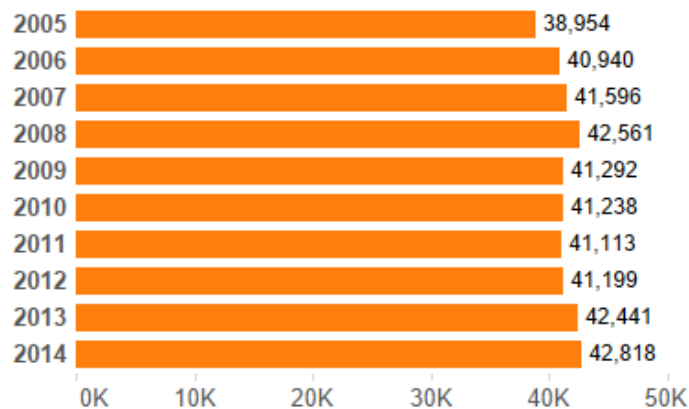
The geographical expansion of transit service contributes to reductions in average service utilization if the average headway of expanded areas is greater than the average headway before the

expansion.

For this section, *Bus* includes motor bus (MB), commuter bus (CB), and bus rapid transit (RB). Beginning in 2011, reporting agencies operating 30 vehicles or fewer were not required to report passenger miles traveled. Hence, the NTST excludes data from agencies reporting a Small Systems or Reporting waiver from 2011 to 2014 in the following service utilization exhibits.

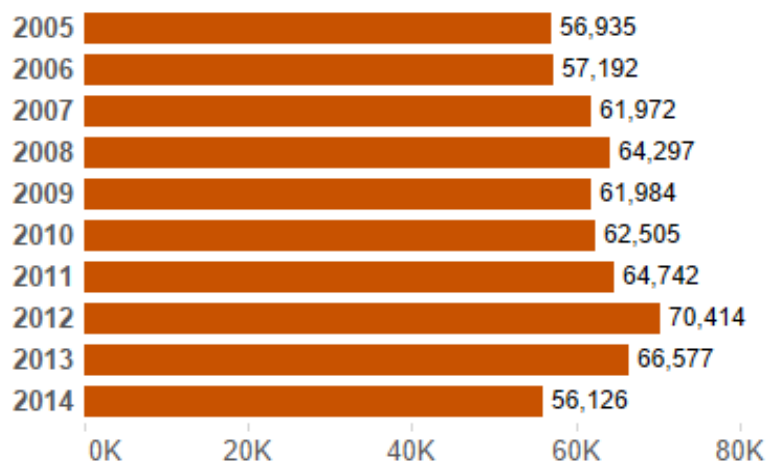
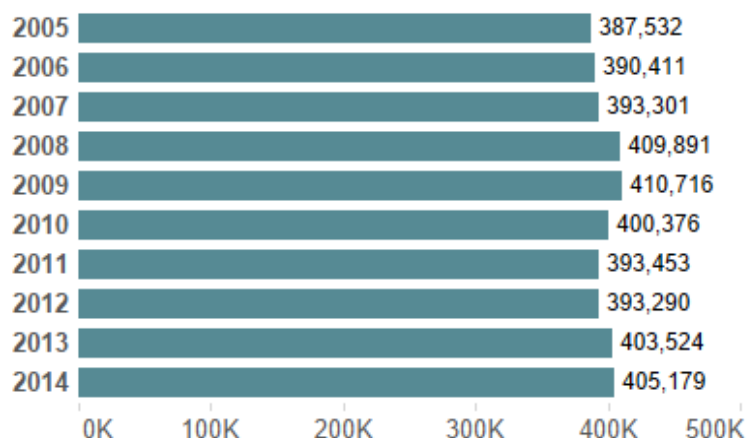


Exhibit A44 – Bus and Commuter Rail Service Utilization

**Bus****Commuter Rail**

- From 2011 to 2014, fixed guideway directional route mile totals for *Bus* included segments defined as Fixed Guideway and High Intensity Bus. The bus-service use average increased 15.0% over the past ten years and increased 15.0% over the past three years. In the past year, the number of bus systems grew from 694 to 701; a net increase of seven.
- Commuter rail use average increased 9.9% over the past ten years and increased 3.9% over the past three years. In the past ten years, eight new commuter rail systems were added with one commuter rail system added since 2013; this indicates an expansion in commuter rail markets combined with an increase in service to meet a higher demand for service.

Exhibit A45– Heavy and Light Rail Service Utilization

**Light Rail****Heavy Rail**

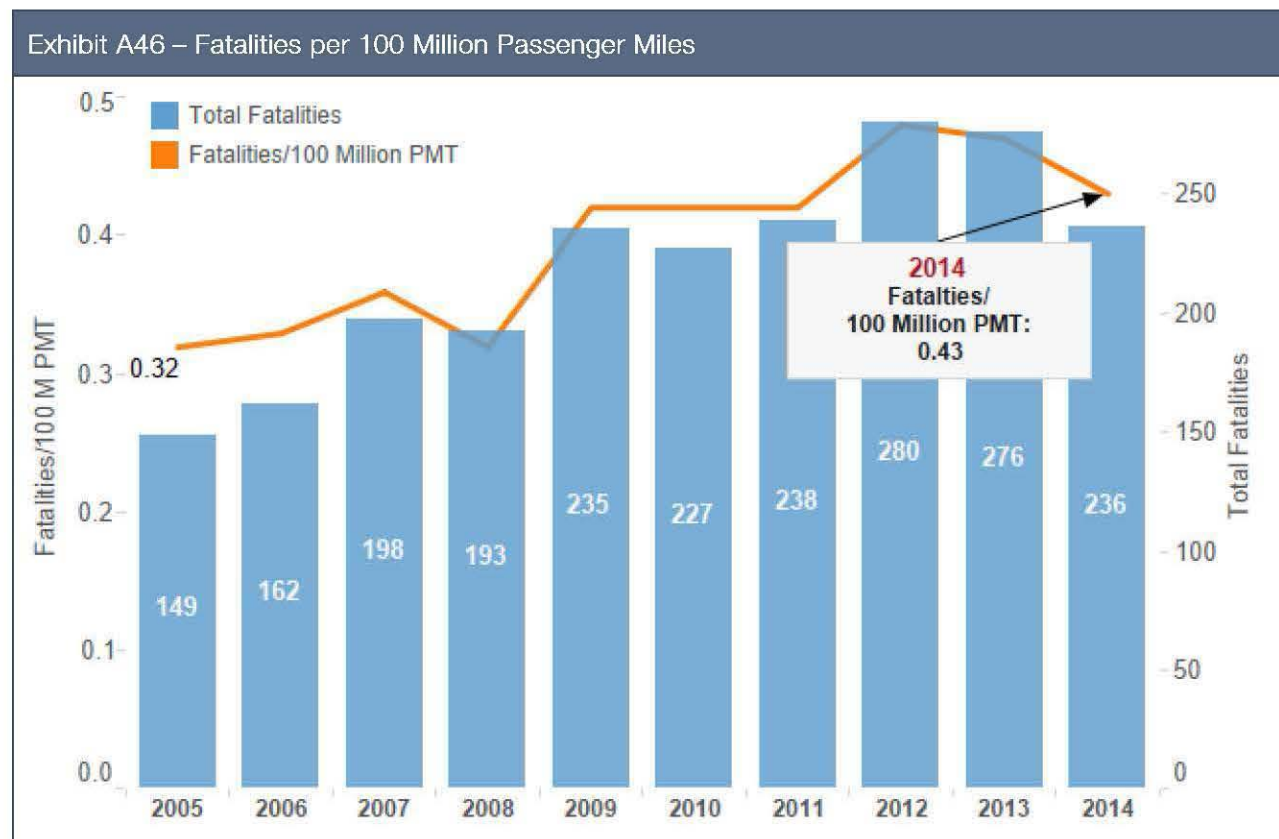
- Light rail average service utilization decreased 0.1% over the past ten years and decreased 2.0% over the past three years. Six new systems were added in the past ten years.
- Heavy rail average service utilization increased 4.6% over the past ten years and 3.0% over the past three years. Only one new system was added in the last ten years.

## Quality of Transit Service

### Safety

The NTD defines a fatality as a death confirmed within 30 days following a transit-related incident. Deaths in or on transit property resulting from illness or other natural causes are not reportable to the NTD and are excluded from this dataset. Suicides are included in these totals.

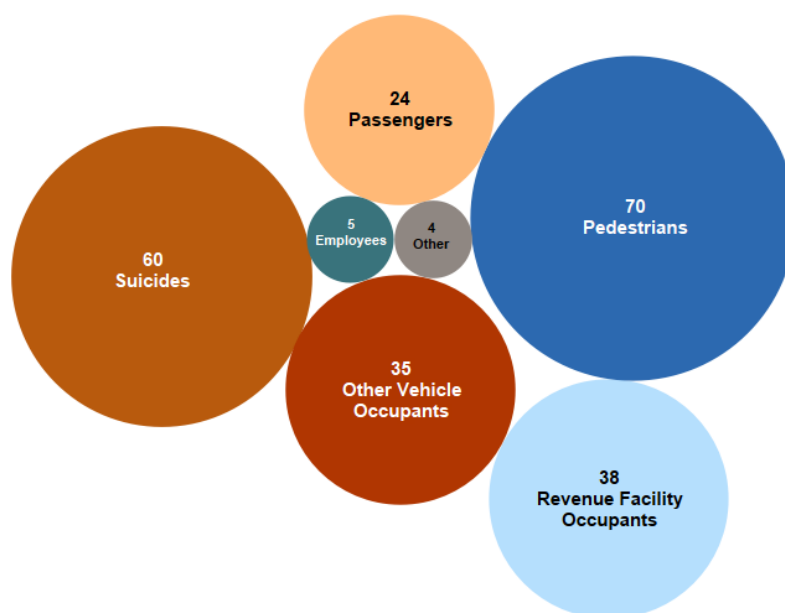
The Federal Railroad Administration (FRA) oversees the safety of the nation's railroad system, including commuter rail systems that report to the NTD. These FRA-overseen systems do not report safety data to the NTD; therefore, the following exhibits exclude safety data from the commuter rail mode and the Port Authority Trans Hudson heavy rail system.



The NTD groups fatalities according to eight categories of individuals:

- **Passenger:** An individual who is onboard a transit vehicle or who is boarding/alighting, including those using ramps and lifts.
- **Revenue facility occupant:** An individual who is inside the public passenger area of transit revenue facility. Employees, other workers, and trespassers are not transit facility occupants.
- **Employee:** An individual who is compensated by the transit agency.
- **Other worker:** An individual who is neither an employee of a transit agency nor a purchased transportation (PT) provider and who is contracted to provide specific services to the transit agency.
- **Pedestrian:** An individual walking in a crosswalk, out of a crosswalk, crossing tracks, or walking along tracks, and bicyclists.
- **Other Vehicle Occupant:** A driver or passenger in a privately-owned vehicle.
- **Suicide:** An individual who commits suicide.
- **Others:** An individual who is not included in the above categories – many trespassing-related fatalities are reported under this category.

Exhibit A47 – 2014 Total Fatalities by Person Type



Most victims in transit-related accidents are non-passengers. Passenger fatalities only accounted for 10.2% of all reportable fatalities in 2014.

Exhibit A48 – Total Injuries

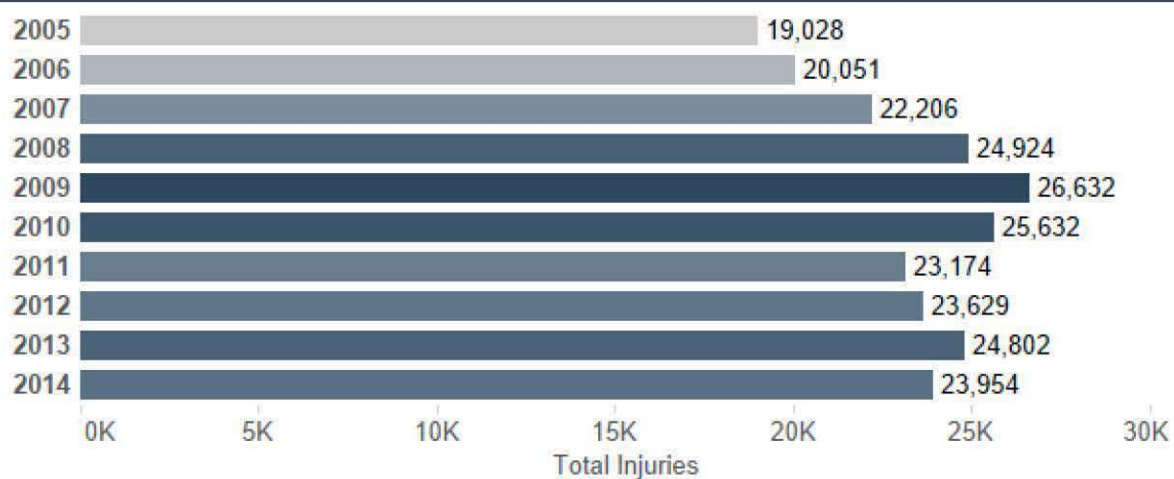


Exhibit A49 – Total Injuries and Fatalities

	Total Fatalities	Total Injuries
2005	149	19,028
2006	162	20,051
2007	198	22,206
2008	193	24,924
2009	235	26,632
2010	227	25,632
2011	238	23,174
2012	280	23,629
2013	276	24,802
2014	236	23,954

## Rural Safety Data

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Exhibit A50 – 2014 Safety Events, Rural Transit

	<b>Fatalities</b>	<b>Injuries</b>	<b>Reportable Incidents</b>
<b>Total Safety Incidents</b>	5.0	251.0	414.0
<b>Number of Subrecipient..</b>	5.0	105.0	181.0

## Reliability

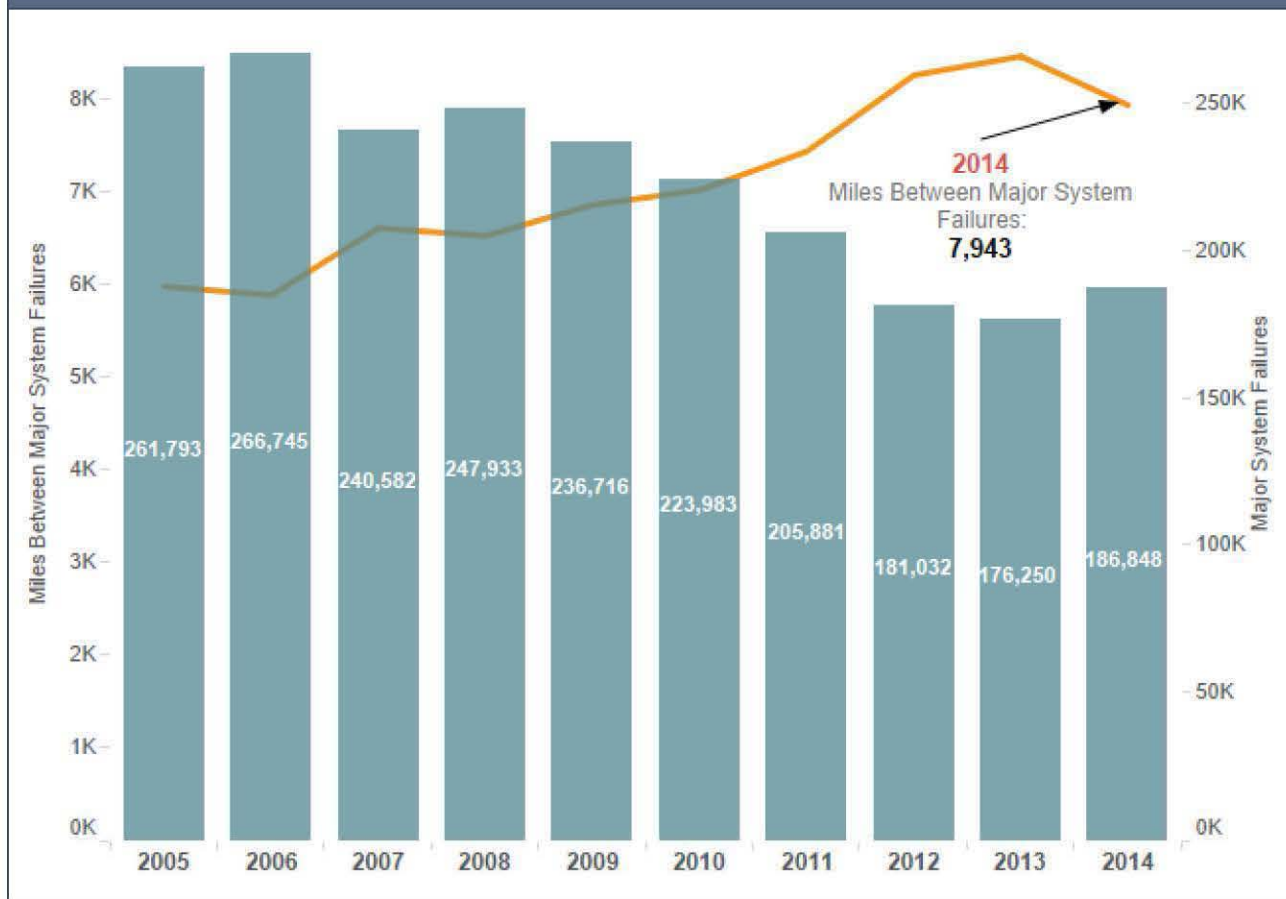
### Miles between Major and Mechanical System Failures

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Major mechanical system failures prevent the revenue vehicle from completing a scheduled revenue trip, starting the next scheduled revenue trip because actual movement is limited, or because of safety concerns. Examples of major mechanical bus failures include breakdowns of air equipment, brakes, doors, engine cooling system, steering and front axle, rear axle, and suspension and torque converters.



Exhibit A51 — Miles between Major Mechanical System Failures, Directly Operated Bus Service



A number of factors can affect how many major mechanical system failures a transit agency incurs. A few examples are local operating conditions, types of vehicles operated, and effectiveness of the maintenance program. However, different transit agencies report the same types of major mechanical system failures. The differences among agencies are in the numbers reported, not the types of major mechanical system failures.

Vehicle miles are the total miles that a vehicle travels while in service (actual vehicle revenue miles and deadhead miles). See the *Transit in the United States* section for definitions of vehicle revenue miles and deadhead miles.

Major mechanical system failures have decreased 28.6% over the last ten years. Vehicle miles between major mechanical system failures have increased 32.8% over the same period.

## Fleet Characteristics

### Average Fleet Age by Vehicle Type

Exhibit A52 – Average Heavy Rail and Light Rail Mode Fleet Age



Exhibit A53 – Average Bus and Vanpool Mode Age

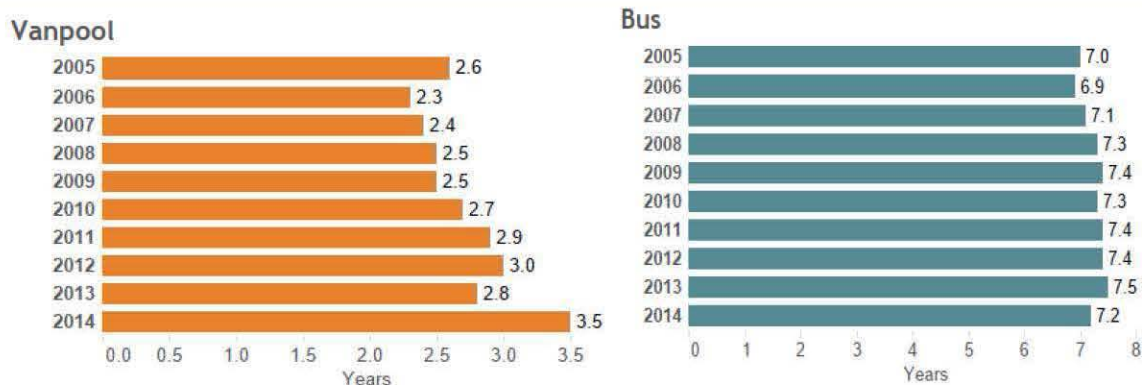
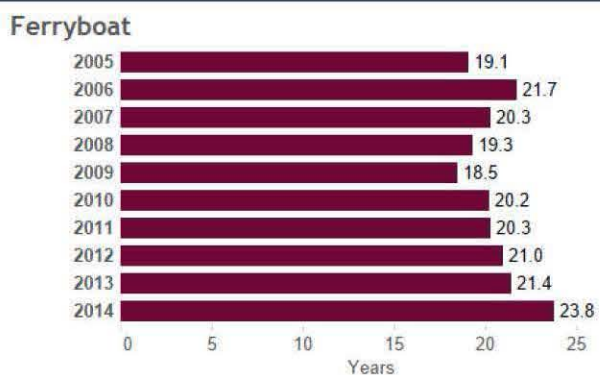


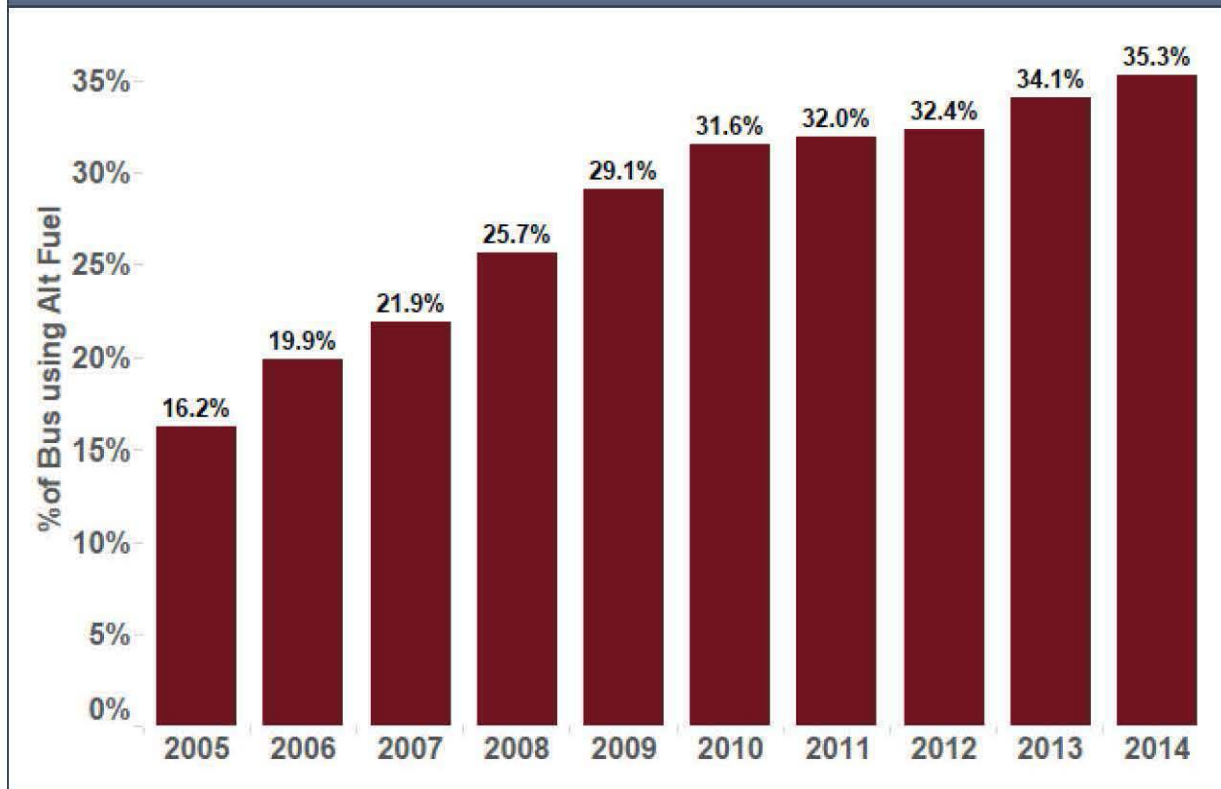
Exhibit A54 – Average Ferryboat Mode Fleet Age



## Alternative Fuel Usage

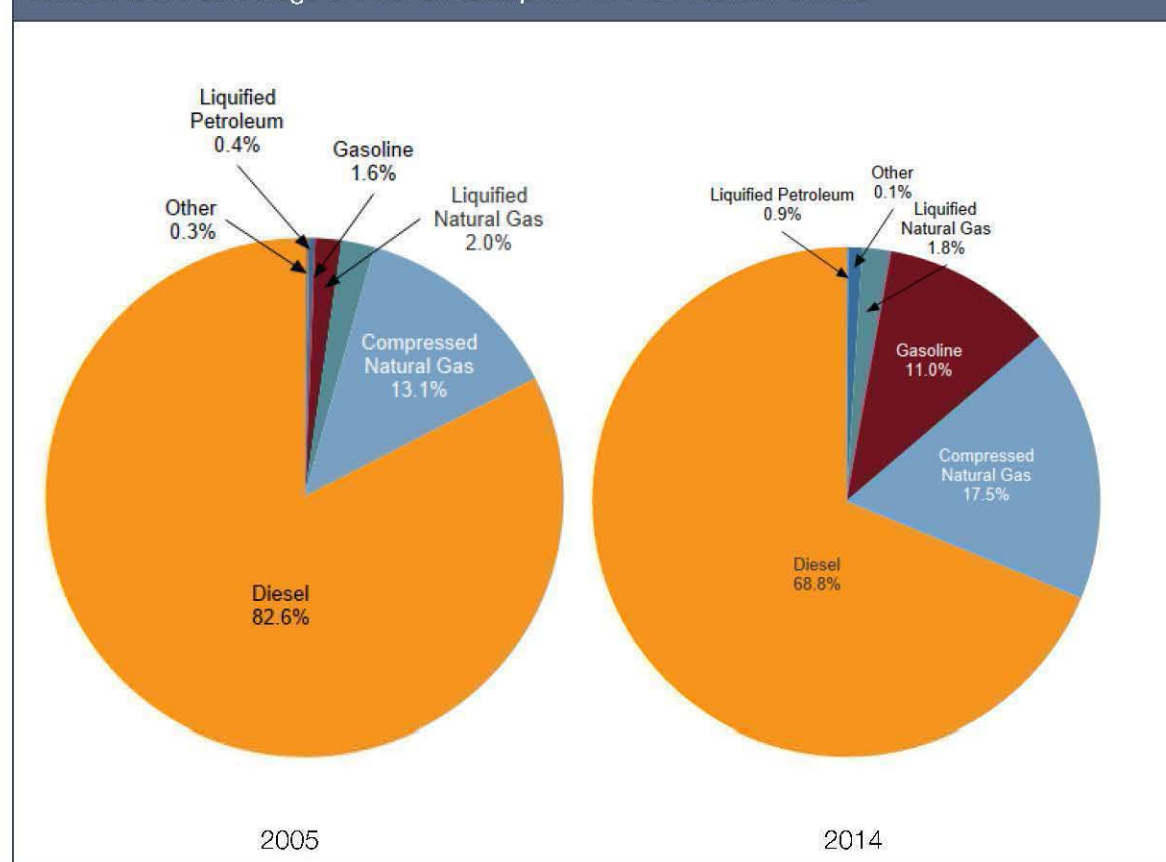
Alternative fuels are not diesel or gasoline. They include compressed natural gas (CNG), electric, battery, ethanol, methanol, liquefied petroleum gas, liquefied natural gas (LNG), kerosene, bio-diesel, grain substitute and other fuels. The national bus fleet includes only buses fully dedicated to transit service.

Exhibit A55 – Percent of National Bus Fleet Using Alternative Fuels



The share of the national bus fleet using alternative fuels rose from 16.2% in 2005 to 35.3% in 2014.

Exhibit A56: Percentage of Fuel Consumption for Non-Electric Modes



## ADA Compliance

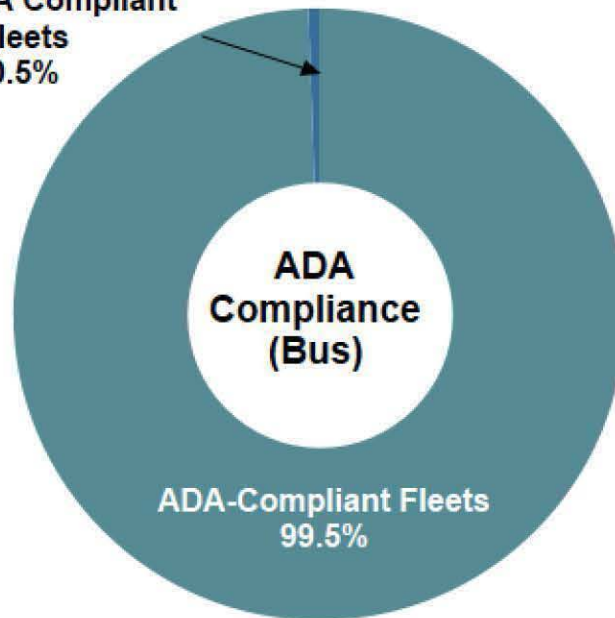
### ADA Lift or Ramp-equipped Vehicles

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The Americans with Disabilities Act of 1990 requires that transit agencies are accessible to individuals with special needs.

Exhibit A57—2014 ADA Compliance (Bus)

**Non-ADA Compliant  
Fleets  
0.5%**



**ADA-Compliant Fleets  
99.5%**

**ADA  
Compliance  
(Bus)**