2013 Report Year

NTD

National Transit Database

National Transit Summaries and Trends: Appendix

Office of Budget and Policy

December 2014

Federal Transit Administration
U.S. Department of Transportation

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Transit in the United States

Total Federal Assistance (Operating and Capital) Applied to Transit and Unlinked Passenger Trips

The Federal Transit Administration (FTA) uses federal funds to offset operating costs and pay for capital projects. Since 2004, ridership has increased 18.0%, while federal assistance for transit has increased 64.9% (2013 constant dollars).

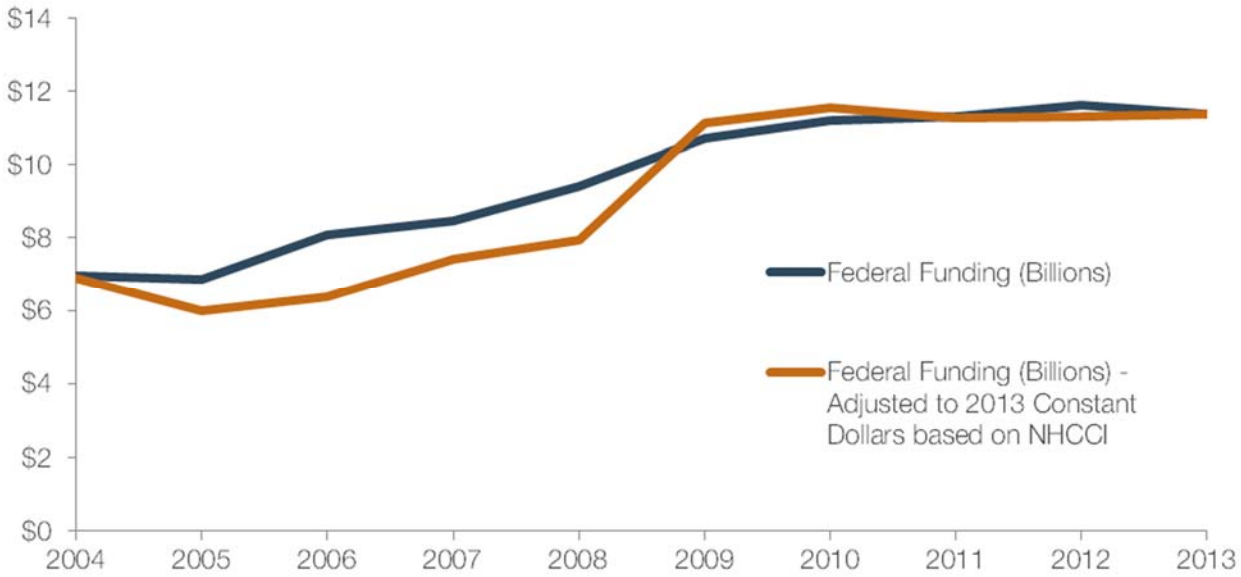


Exhibit A1: Federal Funds Applied to Transit (2004 – 2013)

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.

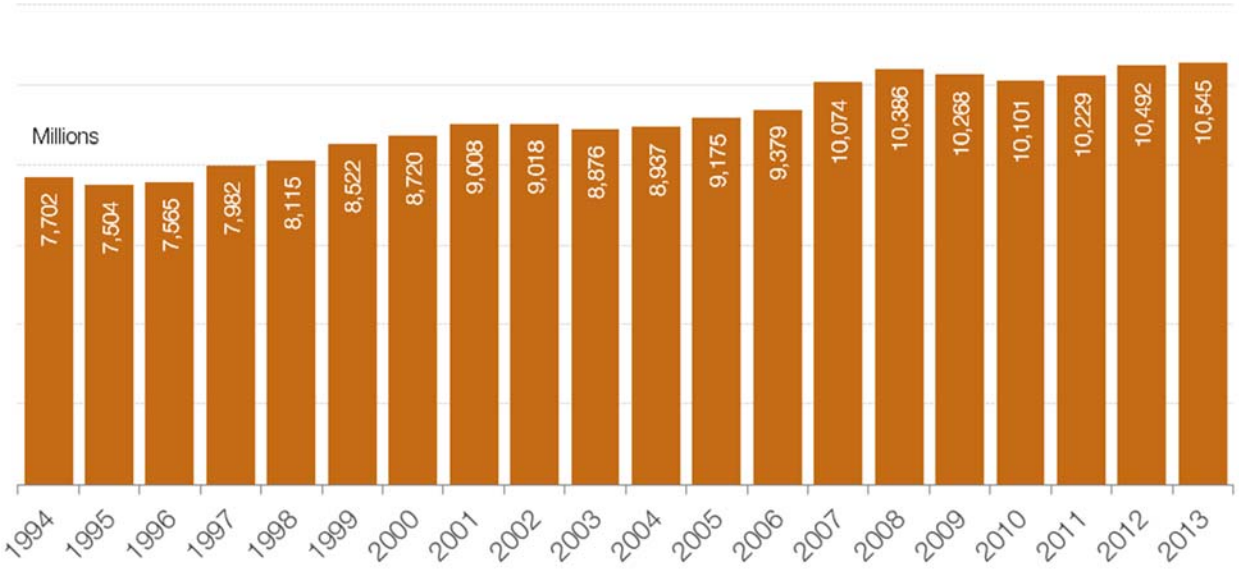


Exhibit A2: Unlinked Passenger Trips (1994 – 2013)

Since 2004, ridership has increased 18.0% while federal assistance applied to transit has increased by 64.9% (2013 constant dollars).

Number of Transit Agencies

Transit agencies that receive funds from or benefit from the Federal Transit Administration (FTA) Urbanized Area Formula Program are required to report financial data and non-financial operating statistics to the National Transit Database (NTD) program. Transit agencies not receiving FTA funds are encouraged to submit data to the NTD to help create a clearer picture of the public transit system throughout the United States. In 2013, 825 urban transit agencies reported data to the NTD program.

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. However, agencies operating 30 or fewer VOMS can report a condensed version of the full NTD report with only basic financial and service data.

The data in Exhibit A3 shows transit modes operated by active agencies that received 9 or Fewer Vehicle Waivers or Small Systems Waivers between 2004 and 2013. As evident in the Exhibit, the number of bus systems increased 50% in the past ten years with the addition of 265 new systems. This includes the incorporation of 19 new systems between 2012 and 2013 from the bus

rapid transit and the commuter bus modes, in addition to an increase in urban reporters following the changes to urbanized areas (UZAs) in the 2010 Census. Demand response increased 53.8% (268 new systems) over the same ten-year period, reflecting the need to continue providing special transit service for the elderly and the disabled. Vanpool increased 67.7% (21 new systems) during the ten-year period.

Year	Bus	Demand Response	Vanpool	Heavy Rail	Light Rail	Commuter Rail	Other
2004	530	498	44	14	27	19	31
2005	545	513	51	15	27	20	32
2006	558	533	52	15	27	20	30
2007	621	604	65	15	26	21	47
2008	653	629	68	15	29	22	47
2009	676	660	75	15	29	25	40
2010	686	676	65	15	29	25	37
2011	699	680	75	15	30	26	44
2012	776	749	86	15	32	26	52
2013	795	766	92	15	33	26	52

Exhibit A3: Number of Active 9 or Fewer/SSW Agencies by Year by Mode (2004 – 2013)

Vehicle Revenue Miles

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. Passengers may pay full fares, reduced fares (senior citizen, student, special ride fares, etc.), or provide payment through some contractual agreement. Deadhead travel, which consists of the miles a transit vehicle travels while not in revenue service (leaving or returning to the garage or yard or changing routes), is not included in vehicle revenue miles.

Vehicle revenue miles increased by 28.9% between 2004 and 2013 across all transit modes. Transit modes with the most significant growth had an increase in the number of systems in operation during the period.

- Vanpool – 179.0%
- Demand response – 105.2%
- Light rail – 61.4%
- Commuter Rail – 22.1%
- Bus – 9.7%
- Heavy Rail – 4.8%

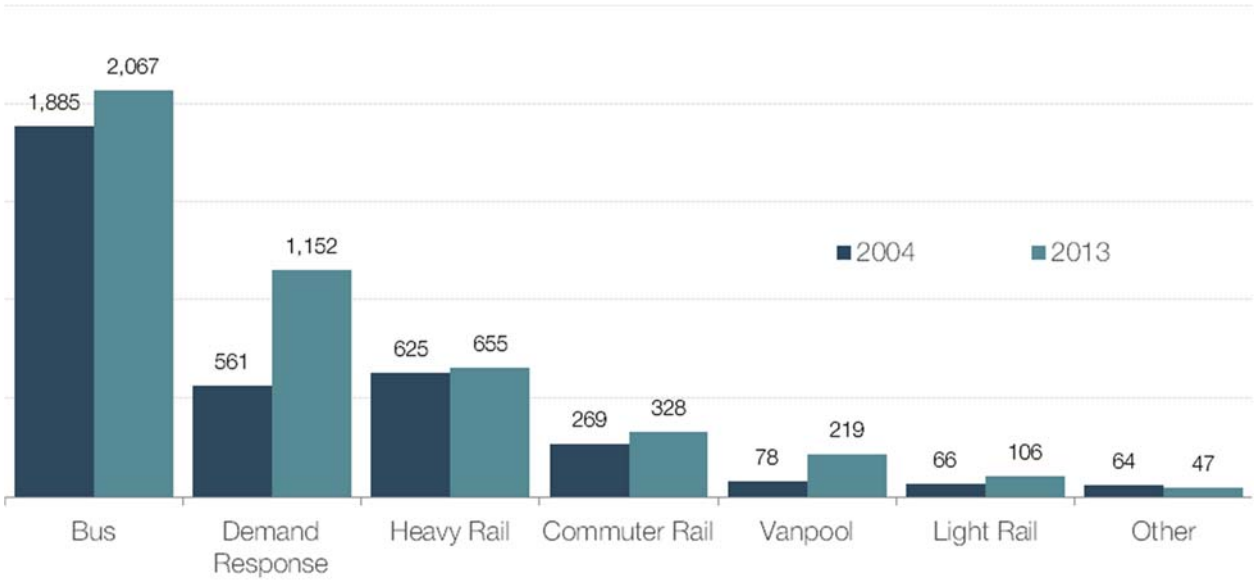


Exhibit A4: Vehicle Revenue Miles (Millions) by Mode (2004 – 2013)

Year	Total	Year Percent Change
2004	3,547.9	-
2005	3,602.0	1.53%
2006	3,670.7	1.91%
2007	4,225.1	15.11%
2008	4,373.0	3.50%
2009	4,508.7	3.10%
2010	4,489.9	-0.42%
2011	4,486.1	-0.09%
2012	4,518.8	0.73%
2013	4,573.4	1.21%

Exhibit A5: Vehicle Revenue Miles (2004 – 2013)

National Transit Summaries & Trends 2013

Year	Bus	Commuter Rail	Demand Response	Heavy Rail	Light Rail	Vanpool	Other	Total	Percent Change
2004	1,885	269	561	625	67	78	64	3,548	-
2005	1,885	277	589	629	68	94	60	3,602	1.53%
2006	1,910	287	607	634	73	110	49	3,671	1.91%
2007	2,062	297	963	638	82	134	49	4,225	15.11%
2008	2,087	309	1,014	655	86	160	61	4,373	3.50%
2009	2,106	312	1,081	667	89	174	80	4,509	3.10%
2010	2,071	315	1,107	647	92	185	73	4,490	-0.42%
2011	2,070	311	1,124	636	94	195	55	4,486	-0.09%
2012	2,060	318	1,141	638	98	212	52	4,519	0.73%
2013	2,067	328	1,152	655	106	219	47	4,573	1.21%

Exhibit A6: Distribution of Vehicle Revenue Miles (Millions) by Mode (2004 – 2013)

Unlinked Passenger Trips

Ridership increased 18.0% from 2004 to 2013. An increase in unlinked passenger trips occurred for each mode over the ten-year period.

- Vanpool – 150.1%
- Demand response – 99.3%
- Light rail – 47.4%
- Heavy Rail – 38.9%
- Commuter Rail – 15.3%
- Bus – 4.2%

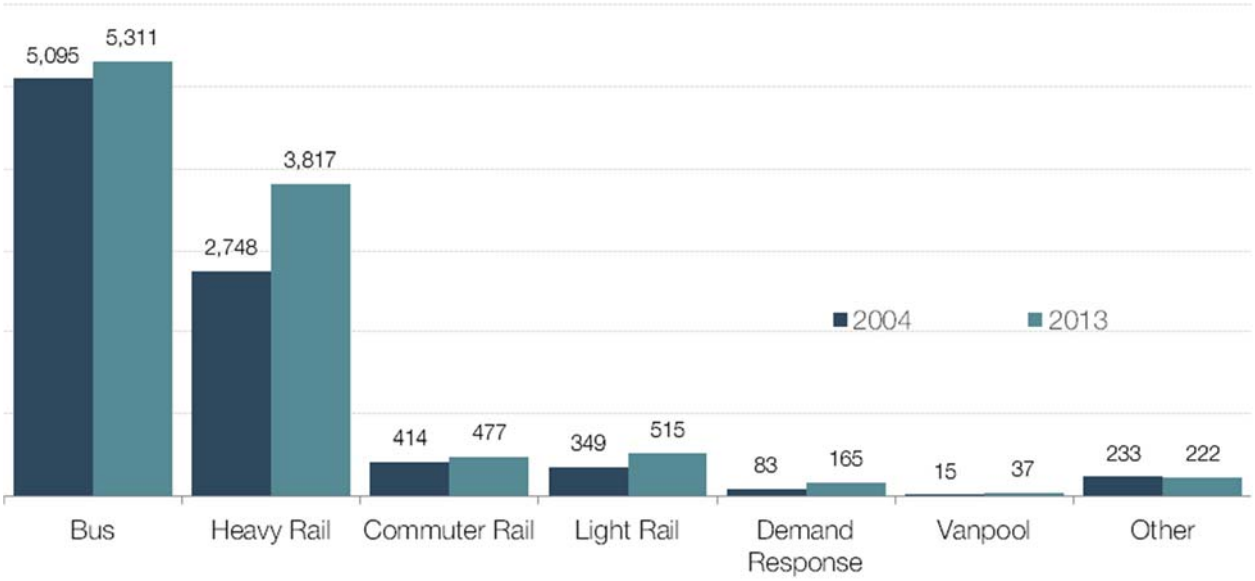


Exhibit A7: Unlinked Passenger Trips (Millions) by Mode (2004 – 2013)

Year	Unlinked Passenger Trips (Millions)	Year Percent Change
2004	8,937.1	
2005	9,175.1	2.66%
2006	9,379.4	2.23%
2007	10,074.2	7.41%
2008	10,385.8	3.09%
2009	10,268.2	-1.13%
2010	10,100.9	-1.63%
2011	10,228.5	1.26%
2012	10,492.4	2.58%
2013	10,544.8	0.50%

Exhibit A8: Unlinked Passenger Trips (2004 – 2013)

Year	Bus	Commuter Rail	Demand Response	Heavy Rail	Light Rail	Vanpool	Other	Total	Percent Change
2004	5,095	414	83	2,748	349	15	233	8,937	-
2005	5,227	423	87	2,808	380	17	234	9,175	2.66%
2006	5,275	441	88	2,927	406	20	222	9,379	2.23%
2007	5,346	458	147	3,460	418	24	221	10,074	7.41%
2008	5,516	471	153	3,547	451	30	217	10,386	3.09%
2009	5,434	464	158	3,490	464	32	226	10,268	-1.13%
2010	5,218	460	159	3,550	456	32	226	10,101	-1.63%
2011	5,217	462	162	3,647	483	34	223	10,229	1.26%
2012	5,346	470	164	3,743	502	37	230	10,492	2.58%
2013	5,311	477	165	3,817	515	37	222	10,545	0.50%

Exhibit A9: Distribution of Unlinked Passenger Trips (Millions) by Mode (2004 – 2013)

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, 270 agencies, or 32.7% of all agencies reporting). National Transit Database data are highly concentrated in large urbanized areas.
- **Medium urbanized areas:** population of more than 200,000 and less than 1 million (137 urbanized areas and 241 agencies, or 29.2% of all agencies reporting).
- **Small urbanized areas:** population of less than 200,000 and more than 50,000 (319 urbanized areas, 312 agencies, or 37.8% of all agencies reporting).

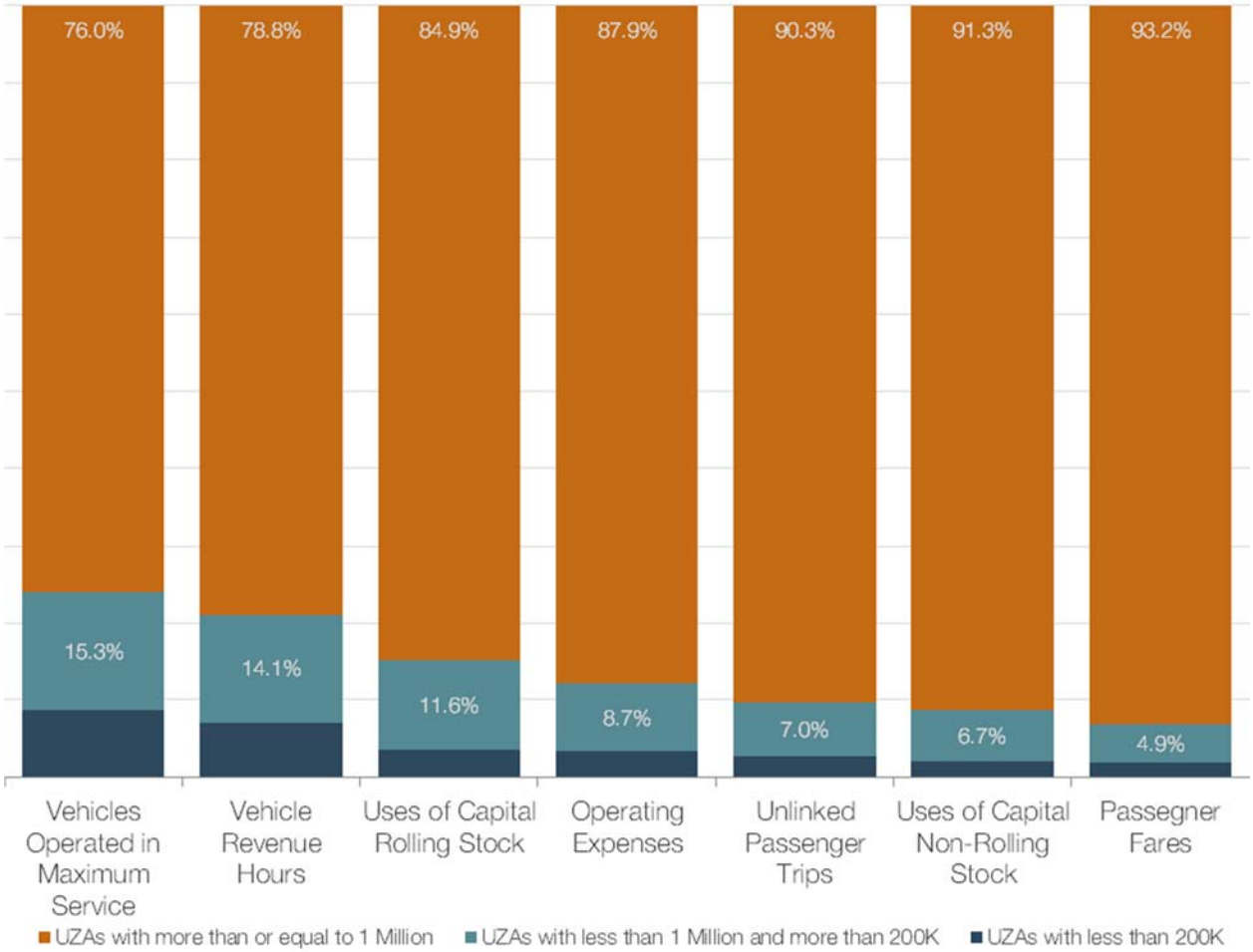


Exhibit A10: Data Distribution According to UZA Size (2013)

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. For report year 2013, 1,708 subrecipients submitted data to the NTD through their state's Department of Transportation.

Types of service provided in rural areas are similar to urban areas; however, the bus system in rural areas divides 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*). Due to the low population density of rural areas, the most common types of service, such as demand response and deviated fixed routes, accounted for 75.2% of all rural transit service in 2013. For definitions of modes and types of service, refer to the NTD Glossary available at www.ntdprogram.gov/ntdprogram/Glossary.htm.

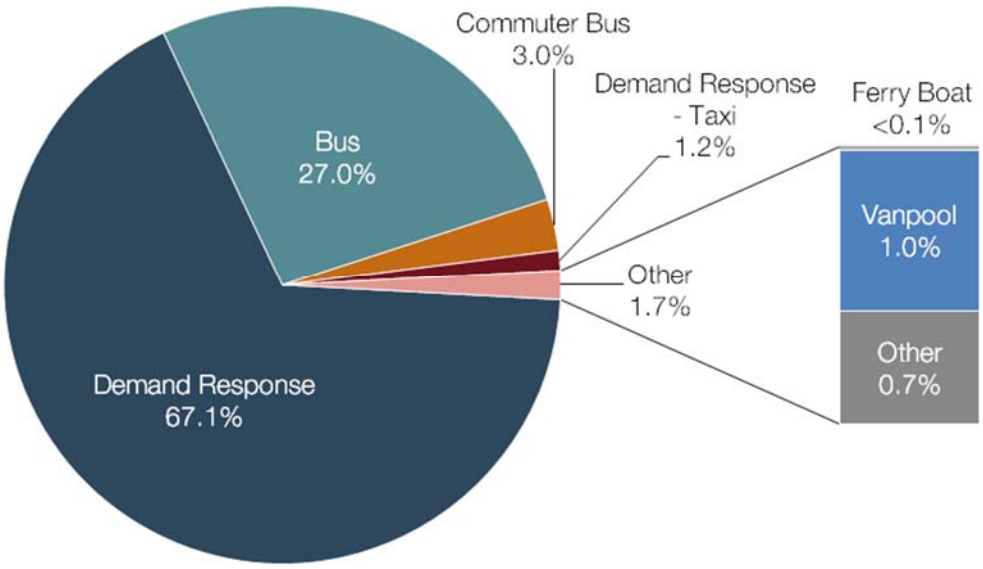


Exhibit A11: Breakdown of Rural Service by Mode (2013)

Rural Operating and Capital Funding

Sources of funds (operating and capital) include local, state, and the federal government and funds generated by service providers (fares and contract revenues).

FTA funding categories available for Rural Transit are:

- Section 5309
- Section 5310
- Section 5311
- Section 5316
- Section 5317
- Section 5320

The federal government provided 33.9% of the rural transit-operating budget, while 18.6% of funds came directly from service providers.

Funds	Funds Expended on Operations	Percent of Total
Local Funds	$424,824,199	27.3%
FTA Other than Urbanized Area Formula Funds (§5311)	$393,930,813	25.3%
State Funds	$287,938,735	18.5%
Contract Revenues	$144,814,557	9.3%
Fare Revenues	$144,708,295	9.3%
Other Federal Funds	$71,314,395	4.6%
Other Funds	$27,451,880	1.8%
FTA Tribal Transit Funds (§5311)	$20,576,256	1.3%
FTA Job Access and Reverse Commute Formula Program Funds (§5316)	$14,509,990	0.9%
FTA Transportation for Elderly Persons and Persons with Disabilities (§5310)	$12,416,508	0.8%
ARRA Other than Urbanized Area Formula Funds (§5311)	$8,127,985	0.5%
FTA New Freedom Program Funds (§5317)	$6,066,284	0.4%
Other FTA Funds	$1,615,669	0.1%
FTA Capital Program Funds (§5309)	$354,788	0.0%
ARRA Tribal Transit Funds (§5311)	$137,522	0.0%
ARRA TIGGER (Greenhouse Gas and Energy Reduction)	$0	0.0%
FTA Alternative Transportation in Parks and Public Lands Program Funds (§5320)	$0	0.0%
Total	$1,558,787,876	

Exhibit A12: Source of Capital Funding (2013)

Rural transit capital budgets relied mostly on federal assistance, accounting for 73.0% of all capital applied.

Funds	Funds Expended on Capital	Percent of Total
FTA Capital Investment Program Funds (§5309)	$58,914,189	21.3%
FTA Other than Urbanized Area Formula Funds (§5311)	$56,495,882	20.4%
Local Funds	$41,610,516	15.0%
ARRA Other than Urbanized Area Formula Funds (§5311)	$37,169,758	13.4%
State Funds	$29,280,061	10.6%
Other Federal Funds	$16,788,872	6.1%
Other FTA Programs Funds	$14,699,072	5.3%
FTA Transportation for Elderly Persons and Persons with Disabilities Funds (§5310)	$10,162,777	3.7%
Other Funds	$3,884,492	1.4%
FTA Job Access and Reverse Commute Formula Program Funds (§5316)	$2,545,073	0.9%
FTA Tribal Transit Funds (§5311)	$2,259,606	0.8%
FTA New Freedom Program Funds (§5317)	$1,760,343	0.6%
ARRA Tribal Transit Funds (§5311)	$942,248	0.3%
ARRA TIGGER (Greenhouse Gas and Energy Reduction)	$454,844	0.2%
Fare Revenues	$87,869	0.0%
FTA Alternative Transportation in Parks and Public Lands Program Funds (§5320)	$0	0.0%
Total	$277,055,602	

Exhibit A13: Source of Operating Funds (2013)

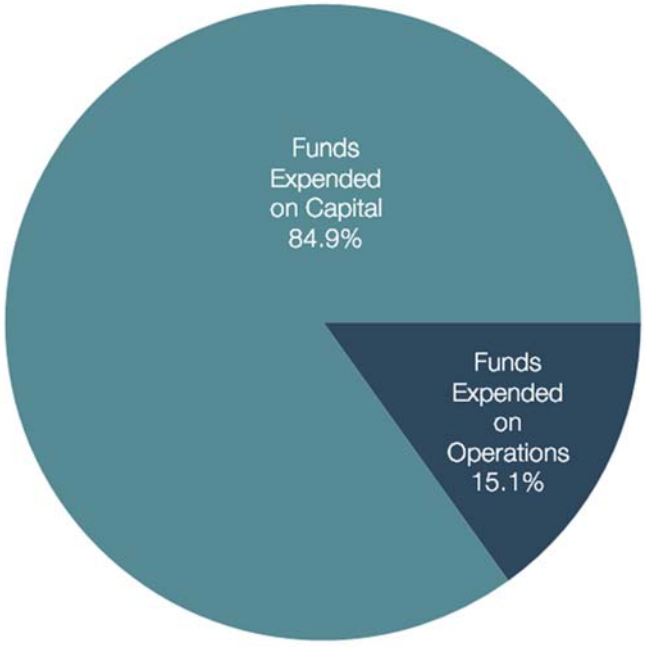


Exhibit A14: Rural Operating vs. Capital (2013)

Rural Service Supplied and Consumed

Data Point	Amount
Fare Revenues	$144,796,164
Operating Expenses	$1,276,537,352
Unlinked Passenger Trips	124,102,455
Vehicle Miles	533,493,563
Vehicle Hours	28,277,217
Operating Expenses per Vehicle Mile	$2.39
Operating Expenses per Vehicle Hour	$45.14
Operating Expenses per Unlinked Passenger Trip	$10.29
Recover Ratio (Fare Revenues per Operating Expense)	11.3%

Exhibit A15: Rural Service Supplied and Consumed (2013)

Incident Type	Total Number of Sub-recipients	Safety Incidents	Number of Subrecipients Reporting Incidents
Major Incidents	1,708	239	115
Major Injuries	1,708	198	92
Fatalities	1,708	10	9

Exhibit A16: Rural Safety Incidents (2013)

Operating Expenses and Performance Measures

Operating Expenses

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 63.4% over the past ten years.

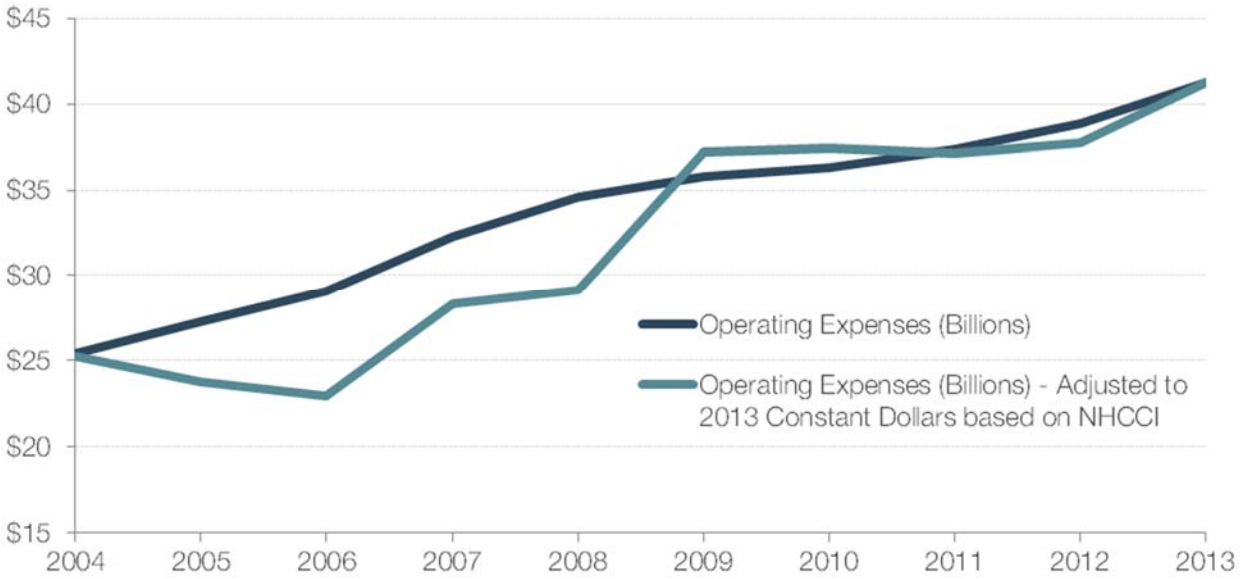


Exhibit A17: Total Operating Expenses (2004 – 2013)

Mode	Operating Expenses (Actual Dollars) (Millions of Dollars)	Percent of Total
MB	$19,919	49.9%
HR	$8,173	20.5%
CR	$5,320	13.3%
DR	$3,464	8.7%
LR	$1,766	4.4%
VP	$167	0.4%
DT	$159	0.4%
Other	$989	2.5%
Total	$39,957	

Exhibit A18: Total Operating Expenses by Mode (2013)

Operating Expenses by Function and Object Class

Agencies report operating expense data by mode, function, and object. *Function* refers to the activity performed or cost center of a transit agency. *Object* refers 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
- Vehicle maintenance
- Non-vehicle maintenance
- General administration

Function	Operating Expenses (Actual Dollars) (Millions of Dollars)	Percent of Total
Vehicle Operations	$20,568	52.1%
Vehicle Maintenance	$7,367	18.7%
Non-Vehicle Maintenance	$4,632	11.7%
General Administration	$6,896	17.5%
Total	$39,463	

Data for agencies reporting a Small Systems Waiver in 2012 have been excluded from this exhibit

Exhibit A19: Operating Expenses by Function (2013)

Salaries and fringe benefits account for 74.8% of the total expenditures from direct operations. Vehicle operations account for 53.6% of total expenses.

Objects	Operating Expenses (Actual Dollars) (Millions of Dollars)*	Percent of Total
Salaries	$13,647	39.8%
Fringe Benefits	$10,598	30.9%
Services	$2,856	8.3%
Materials and Supplies	$4,326	12.6%
Utilities	$1,262	3.7%
Other	$1,628	4.7%
Total - Directly Operated	$34,317	
Purchased Transportation	$5,146	
Total	$39,463	

Data for agencies reporting a Small Systems Waiver in 2012 have been excluded from this exhibit

Exhibit A20: Operating Expenses by Object Class (2013)

Cost Effectiveness

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 2013 constant dollars based on the National Highway Construction Cost Index (NHCCI), operating expense per unlinked passenger trip increased 38.5% over the past ten years.

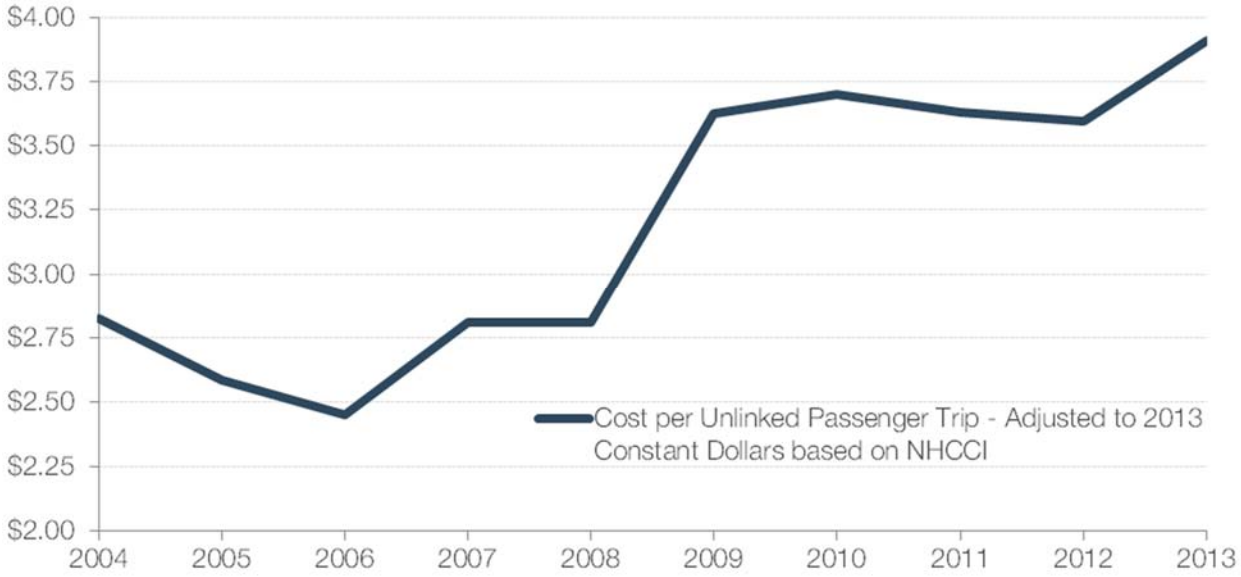


Exhibit A21: Operating Expenses per Unlinked Passenger Trip (2004 – 2013)

Year	Operating Expenses (2013 Constant Dollars)*	Unlinked Passenger Trips	Operating Expense per Unlinked Passenger Trip
2004	$25,233,351,826	$8,937,072,091	$2.82
2005	$23,727,026,039	$9,175,124,398	$2.59
2006	$22,949,600,571	$9,379,390,013	$2.45
2007	$28,293,535,203	$10,074,192,902	$2.81
2008	$29,165,131,126	$10,385,840,503	$2.81
2009	$37,225,819,463	$10,268,233,183	$3.63
2010	$37,406,184,194	$10,100,865,524	$3.70
2011	$37,149,641,433	$10,228,505,333	$3.63
2012	$37,744,931,186	$10,492,423,874	$3.60
2013	$41,233,129,515	$10,544,764,077	$3.91

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

Exhibit A22: Total Operating Expenses per Unlinked Passenger Trip (2004 – 2013)

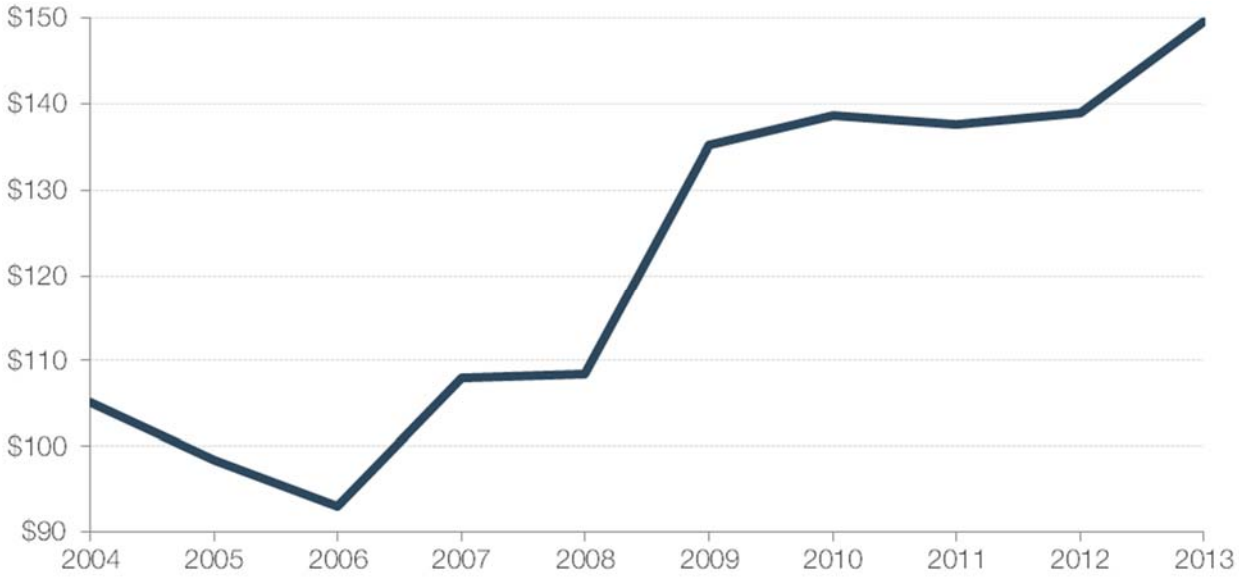
Year	Bus	Commuter Rail	Heavy Rail	Light Rail
2004	$2.69	$8.24	$1.71	$2.52
2005	$2.44	$7.53	$1.60	$2.24
2006	$2.37	$6.75	$1.43	$2.08
2007	$2.79	$7.65	$1.49	$2.43
2008	$2.78	$7.69	$1.46	$2.35
2009	$3.55	$10.17	$1.88	$3.12
2010	$3.68	$10.28	$1.85	$3.38
2011	$3.63	$10.09	$1.82	$3.18
2012	$3.56	$10.22	$1.81	$3.22
2013	$3.80	$11.15	$2.14	$3.43

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

Exhibit A23: Operating Expenses per Unlinked Passenger Trip for Bus and Rail Modes (2004 – 2013)

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 expense per vehicle revenue hour increased 42.1% over the last ten years.



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

Exhibit A24: Total Operating Expenses per Vehicle Revenue Hour (2004 – 2013)

Year	Bus	Commuter Rail	Heavy Rail	Light Rail
2004	$92.56	$400.00	$153.13	$204.98
2005	$86.00	$362.81	$142.95	$187.08
2006	$82.40	$325.23	$132.22	$171.15
2007	$95.60	$371.19	$162.10	$187.35
2008	$96.83	$366.27	$159.34	$185.11
2009	$121.11	$472.04	$199.83	$246.33
2010	$123.34	$493.95	$204.65	$251.90
2011	$123.50	$489.11	$209.05	$244.32
2012	$123.52	$493.92	$213.06	$244.79
2013	$129.38	$524.51	$250.70	$245.27

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

Exhibit A25: Total Operating Expenses per Vehicle Revenue Hour (2004 – 2013)

Service Effectiveness

Service effectiveness is the relationship between service consumption and service output. Unlinked passenger trips per vehicle revenue hour decreased 42.1% over the past ten years.

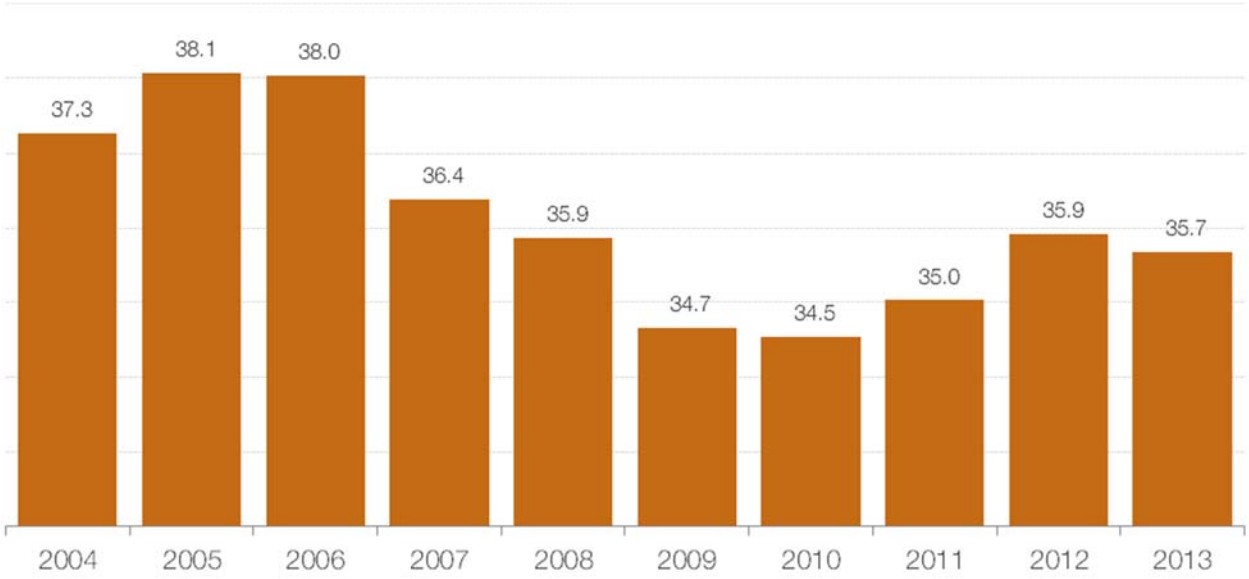


Exhibit A26: Unlinked Passenger Trips per Vehicle Revenue Hour (2004 – 2013)

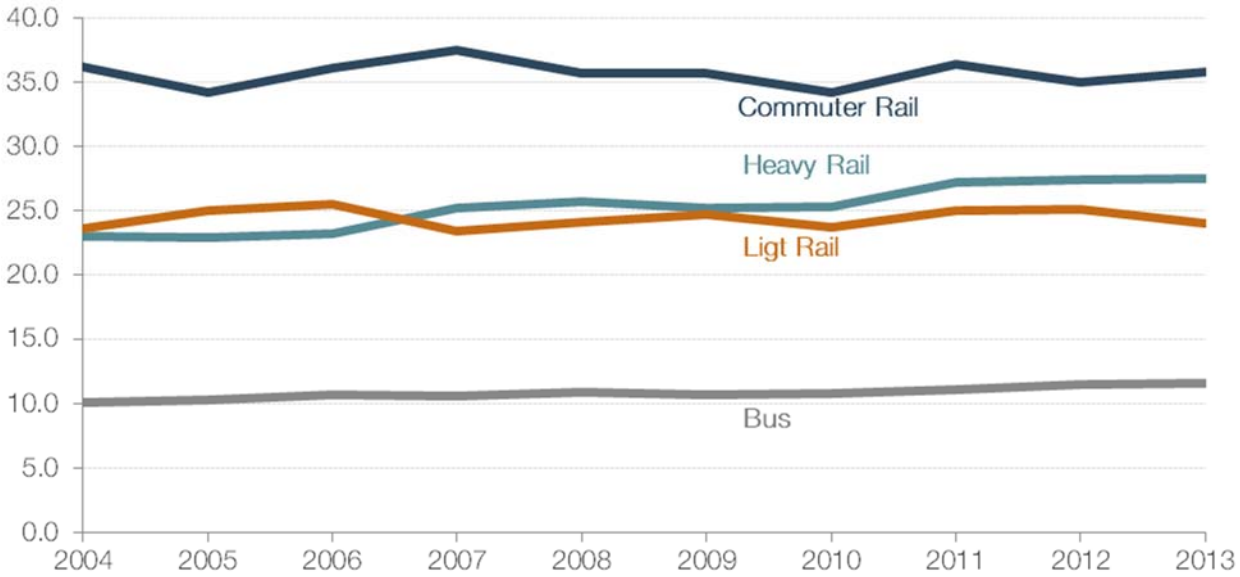
National Transit Summaries & Trends 2013

Year	Bus	Commuter Rail	Demand Response	Heavy Rail	Light Rail	Vanpool	Other	Total
2004	34.5	48.5	2.1	89.6	81.5	7.1	30.7	37.3
2005	35.2	48.2	2.2	89.6	83.6	7.0	44.7	38.1
2006	34.8	48.2	2.1	92.6	82.3	7.1	46.5	38.0
2007	33.4	48.5	2.4	108.8	77.0	7.2	47.5	36.4
2008	33.8	47.7	2.2	109.3	78.7	7.5	46.3	35.9
2009	33.2	46.4	2.2	106.2	79.0	7.5	33.6	34.7
2010	32.4	48.0	2.2	110.8	74.6	7.1	38.5	34.5
2011	32.9	48.5	2.2	114.9	76.8	6.9	40.2	35.0
2012	33.7	48.3	2.2	117.6	76.0	6.9	44.8	35.9
2013	33.1	47.1	2.2	117.1	71.5	6.9	43.3	35.7

Exhibit A27: Unlinked Passenger Trips per Vehicle Revenue Hour by Mode (2004 – 2013)

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. Hence, the NTST excludes data from agencies reporting a Small Systems Waiver in 2011, 2012, or 2013 in the following load factor exhibits.

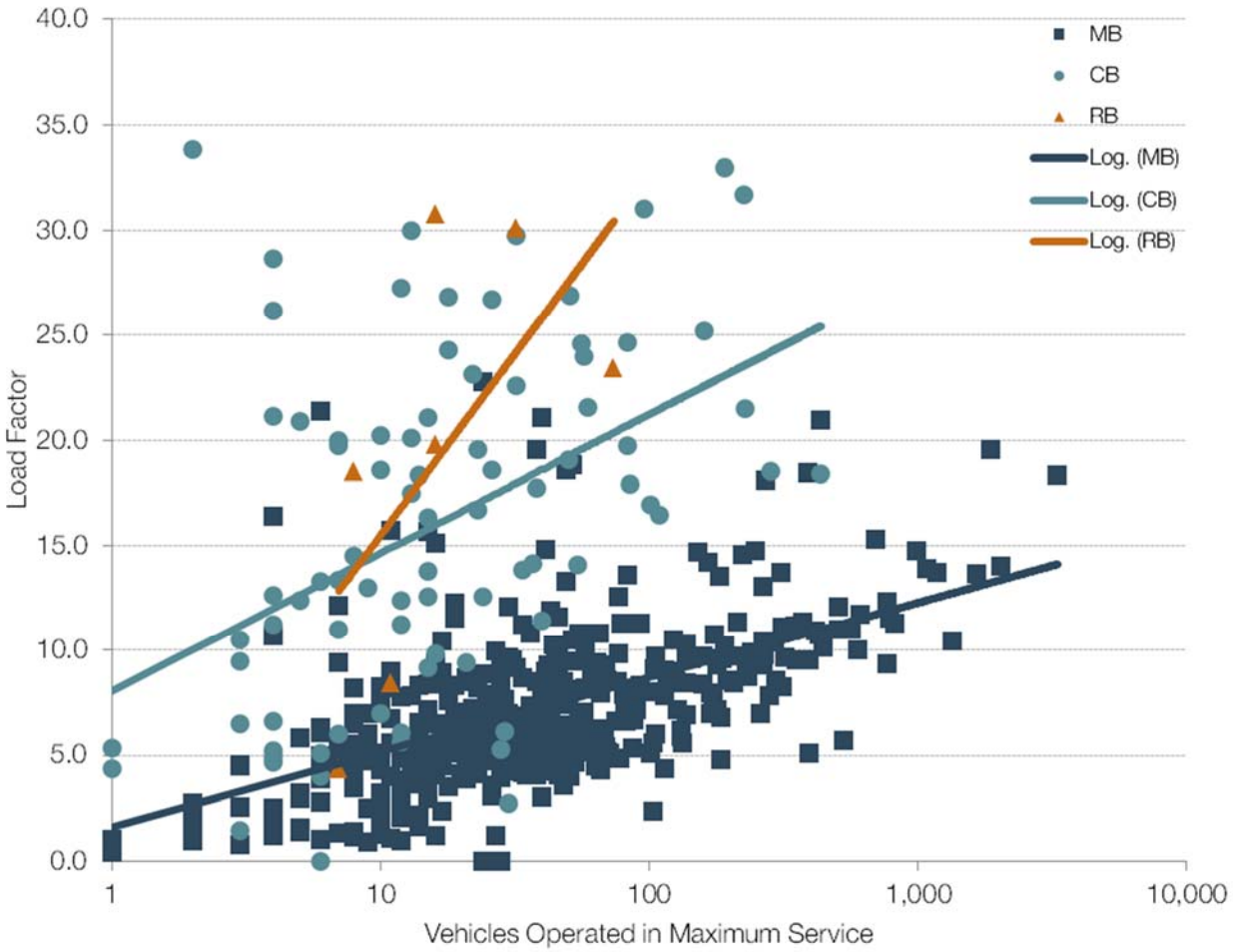


Data for agencies reporting a Small Systems Waiver in 2011, 2012, or 2013 have been excluded from this exhibit

Exhibit A28: Load Factor by Mode (2004 – 2013)

The load factor exhibits provide the following information:

- Commuter Rail average load factor decreased 4.1% over the past ten years, but increased 2.2% over the past three years.
- Heavy Rail average load factor increased 23.5% over the past ten years. In the past three years, the heavy rail average load factor increased 8.4%.
- Light Rail average load factor increased 8.3% in the past ten years. In the past three years, the light rail average load factor increased 6.1%.
- Bus average load factor increased 11.4% in the past ten years. In the past three years, the bus average load factor increased 5.6%.



Data for agencies reporting a Small Systems Waiver in 2011, 2012, or 2013 have been excluded from this exhibit

Exhibit A29: Load Factor by VOMS by Bus Mode (2004 – 2013)

Year	Bus	Commuter Rail	Heavy Rail	Light Rail
2004	10.0	36.1	23.0	23.7
2005	10.3	34.2	22.9	25.0
2006	10.7	36.1	23.2	25.6
2007	10.6	37.5	25.3	23.4
2008	10.8	35.7	25.7	24.1
2009	10.7	35.6	25.2	24.7
2010	10.7	34.2	25.3	23.7
2011	11.1	36.4	27.2	25.0
2012	11.5	35.0	27.5	25.2
2013	11.5	35.8	27.5	24.0

Data for agencies reporting a Small Systems Waiver in 2011, 2012, or 2013 have been excluded from this exhibit

Exhibit A30: Load Factor by Mode (2004 – 2013)

Service Utilization

The NTST defines the average service utilization as the ratio of vehicle revenue miles per directional route mile. 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 Waiver in 2011, 2012, or 2013 in the following service utilization exhibits.

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.

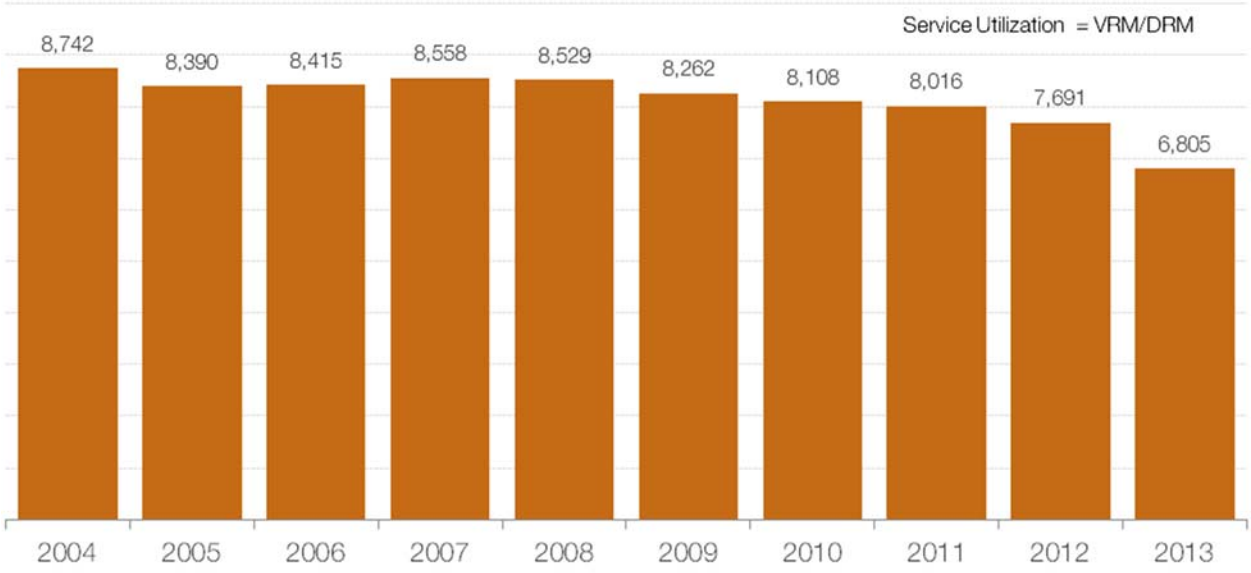


Exhibit A31: Bus Service Utilization (2004 – 2013)

For this section, *Bus* includes motor bus (MB), commuter bus (CB), and bus rapid transit (RB). In 2011, 2012, and 2013, fixed guideway directional route mile totals for *Bus* included segments defined as Fixed Guideway and High Intensity Bus. The bus-service use average decreased 22.2% over the past ten years and decreased 16.1% over the past three years. In the past ten years, 265 bus systems were added as new NTD reporters; 109 of these were added in the past three years.

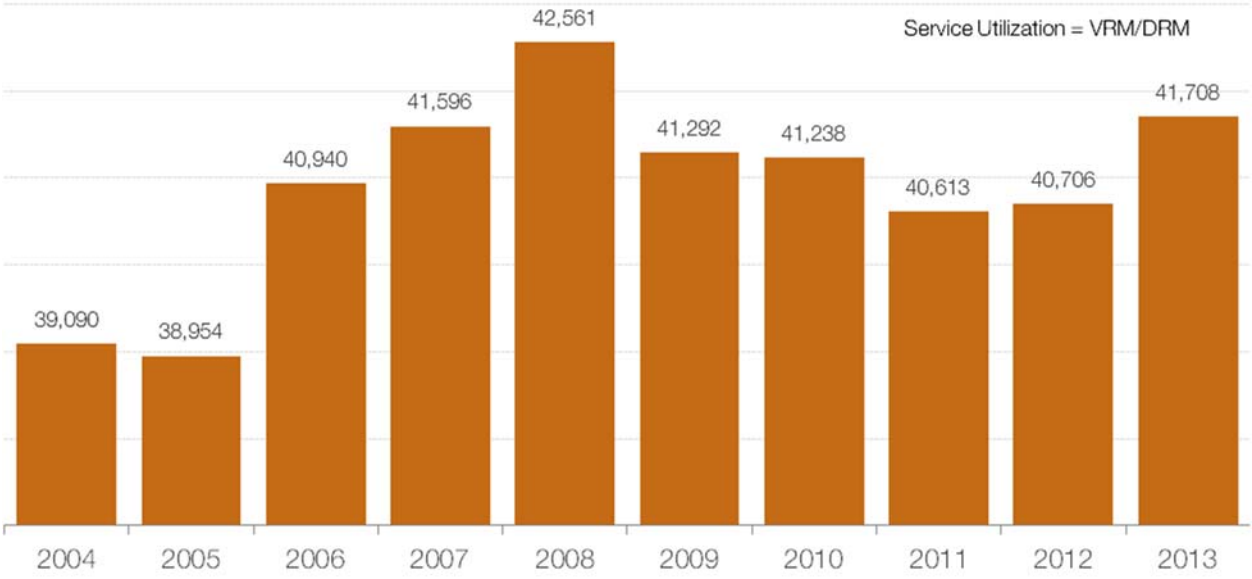


Exhibit A32: Commuter Rail Service Utilization (2004 – 2013)

Commuter rail use average increased 6.7% over the past ten years and increased 1.1% over the past three years**.** In the past ten years, seven new commuter rail systems were added with one commuter rail system added since 2010**;** this indicates an expansion in commuter rail markets combined with an increase in service to meet a higher demand for service.

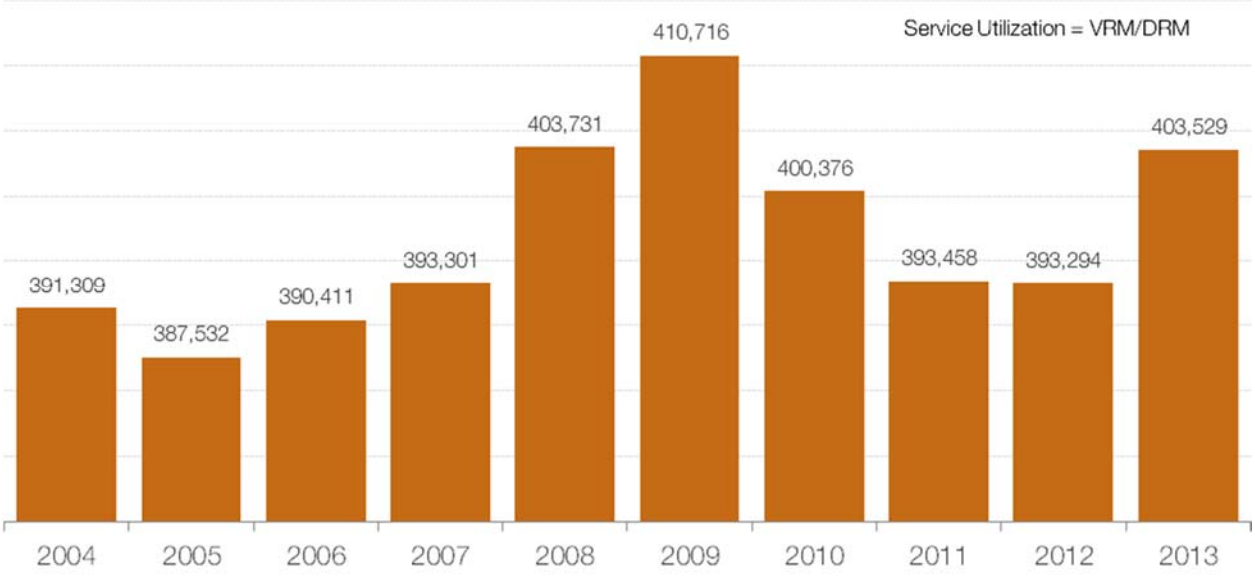


Exhibit A33: Heavy Rail Service Utilization (2004 – 2013)

Heavy rail average service utilization increased 3.1% over the past ten years and 0.8% over the past three years. Only one system was added in the past ten years.

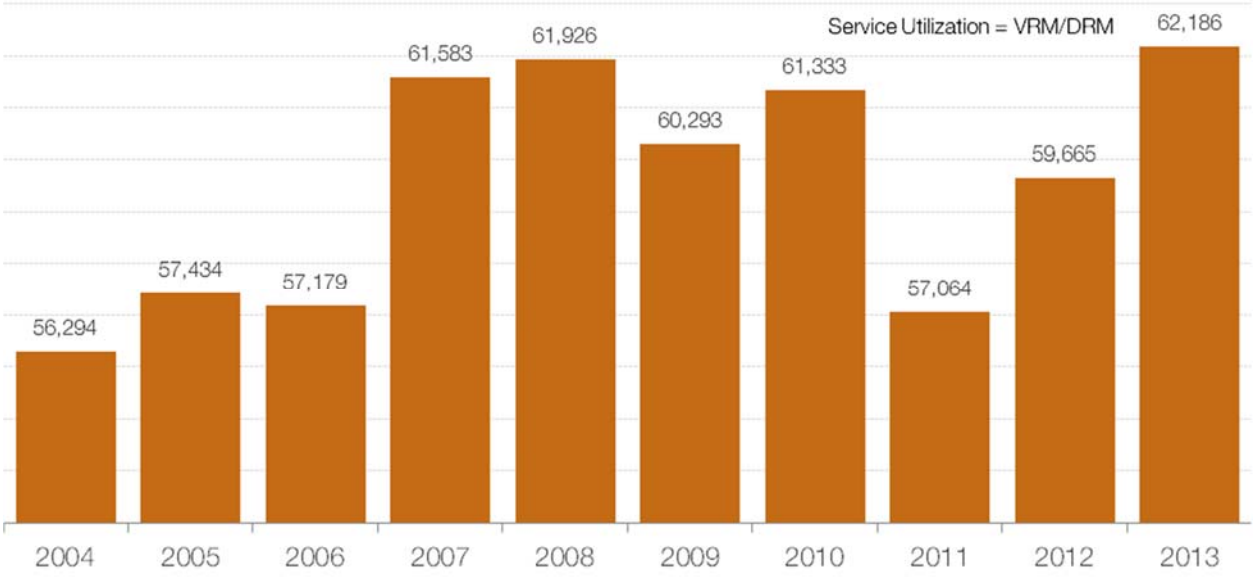


Exhibit A34: Light Rail Service (2004 – 2013)

Light rail average service utilization increased 10.5% over the past ten years and 1.4% over the past three years. Six new systems were added in the past ten years, and four new systems were added in the past three 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.

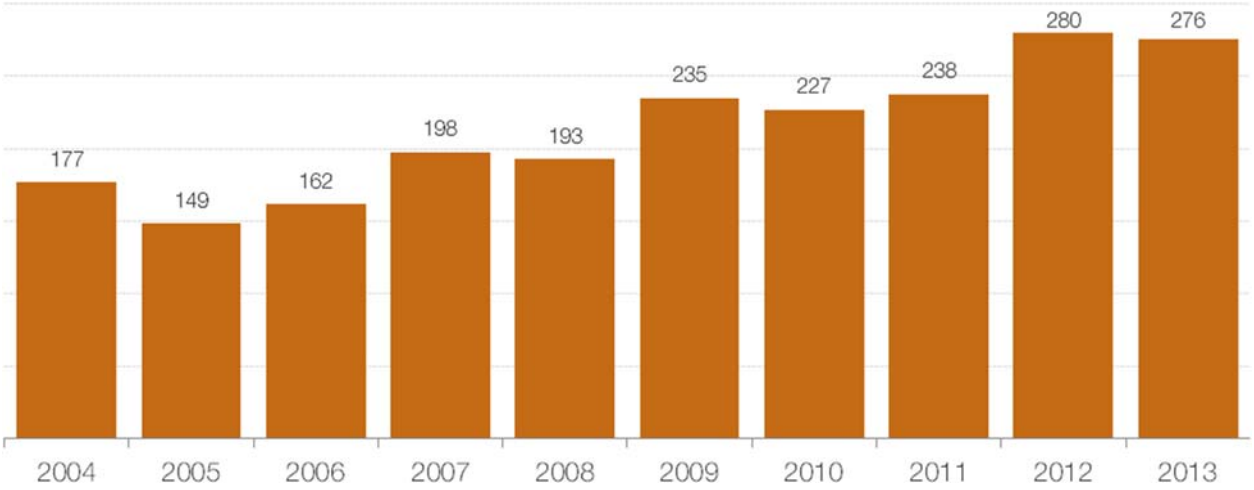


Exhibit A35: Total Fatalities (2004 – 2013)

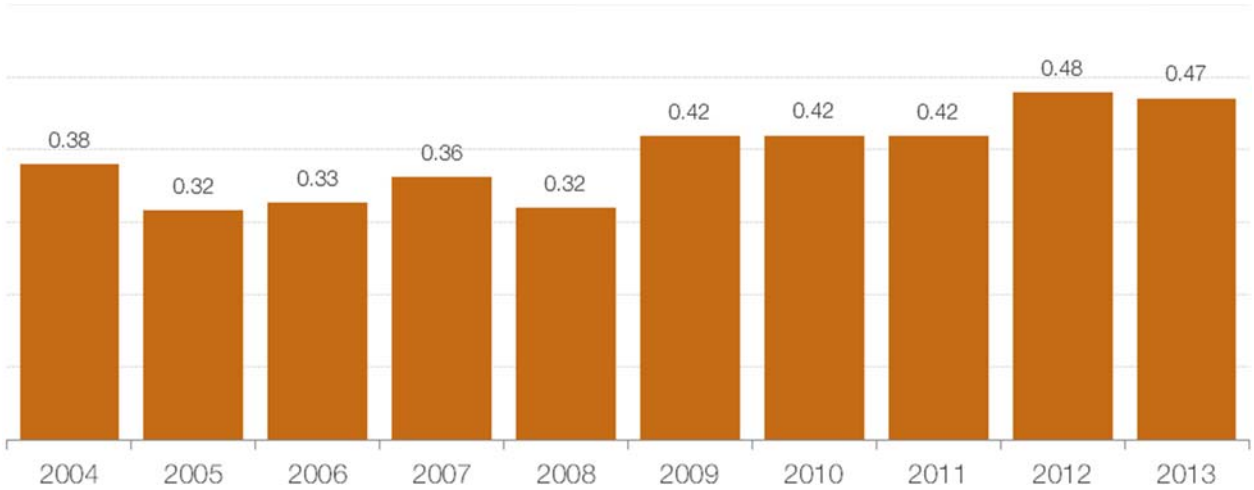


Exhibit A36: Fatalities per 100 Million Passenger Miles (2004 – 2013)

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.

Person Type	Fatalities	Percent of Total
Pedestrian	39	14.7%
Individuals Committing Suicide	64	24.1%
Revenue Facility Occupants	45	16.9%
Other Vehicle Occupants	52	19.5%
Others	41	15.4%
Passengers	15	5.6%
Employees	10	3.8%

Exhibit A37: Number of Fatalities by Person Type (2013)

Most victims in transit-related accidents are non-passengers. Passenger fatalities only accounted for 5.6% of all reportable fatalities in 2013.

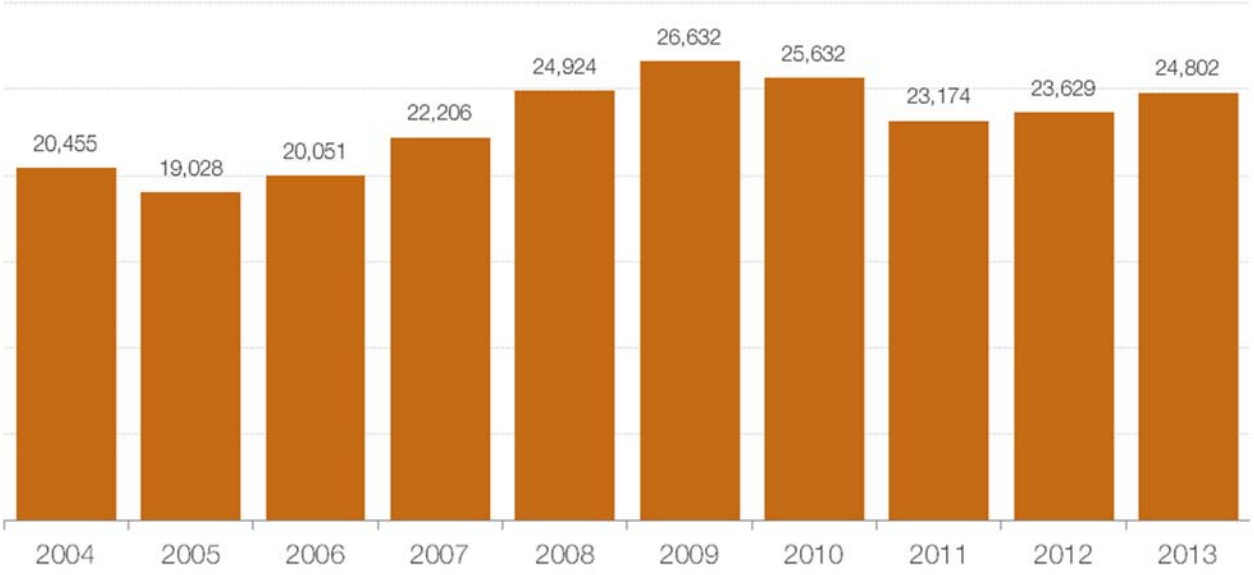


Exhibit A38: Total Injuries (2004 – 2013)

Year	Fatalities	Injuries
2004	177	20,455
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

Exhibit A39: Total Fatalities and Injuries (2004 – 2013)

Reliability

Miles between Major and Mechanical System Failures

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.

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.

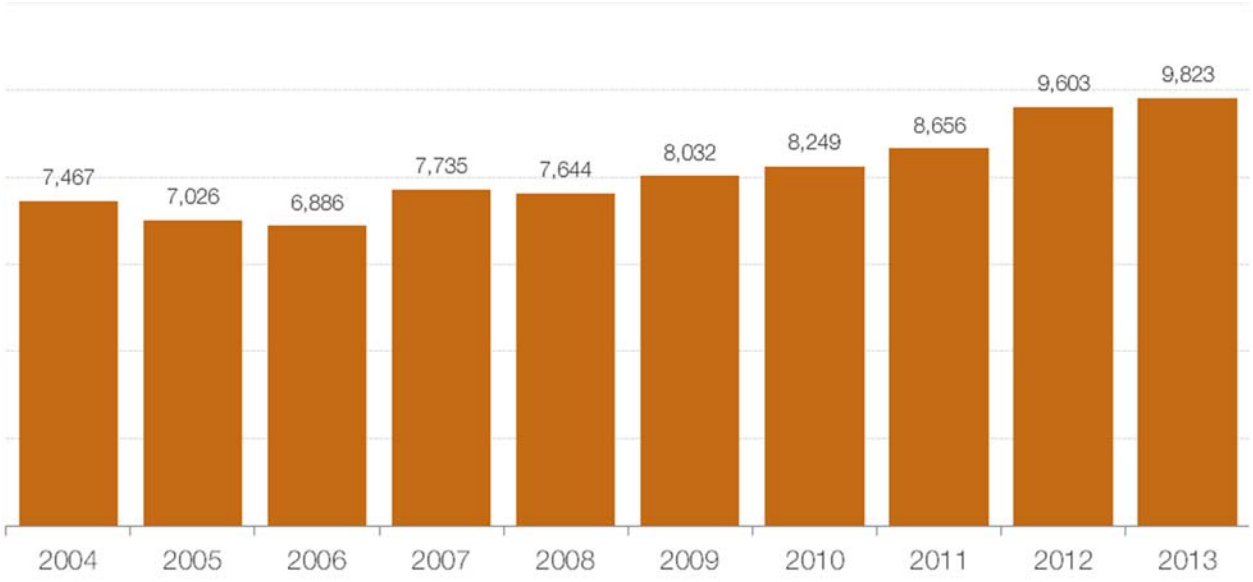


Exhibit A40: Miles between Major Mechanical System Failures for Directly Operated Service – Bus (2004 – 2013)

Year	Major System Failures	Vehicle Miles	Vehicle Miles Between Major System Failures
2004	247,676	1,849,401,441	7,467
2005	261,793	1,839,382,484	7,026
2006	266,745	1,836,935,454	6,886
2007	240,582	1,861,006,843	7,735
2008	247,933	1,895,111,629	7,644
2009	236,716	1,901,287,793	8,032
2010	223,983	1,847,684,484	8,249
2011	205,881	1,782,155,592	8,656
2012	181,032	1,738,525,514	9,603
2013	176,250	1,731,323,738	9,823

Exhibit A41: Miles between Major Mechanical System Failures for Directly Operated Service – Bus (2004 – 2013)

Major mechanical system failures have decreased 28.8% over the last ten years. Vehicle miles between major mechanical system failures have improved 31.6% over the same period.

ADA Compliance

ADA Lift or Ramp-equipped Vehicles

The Americans with Disabilities Act of 1990 requires that transit agencies are accessible to persons with disabilities. For the NTST, buses fall into the following categories:

- Type “A” buses are equipped with more than 35 seats
- Type “B” buses are equipped with 25 - 35 seats
- Type “C” buses are equipped with less than 25 seats
- Type “AB” buses are extra-long buses that measure between 54 and 60 feet.

Year	Type A	Type B	Type C	Type AB
2004	97.4%	100.2%	99.8%	99.8%
2013	99.2%	98.5%	97.4%	99.7%

Exhibit A42: ADA Compliance – Bus (2004 & 2013)

Historically, type “C” buses have comprised the largest percentage of lift or ramp-equipped vehicles; this is due to the class’s low average fleet age. Currently, however, Type “A” buses show a 99.2% level of compliance to the ADA.

Source of Funds

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 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.

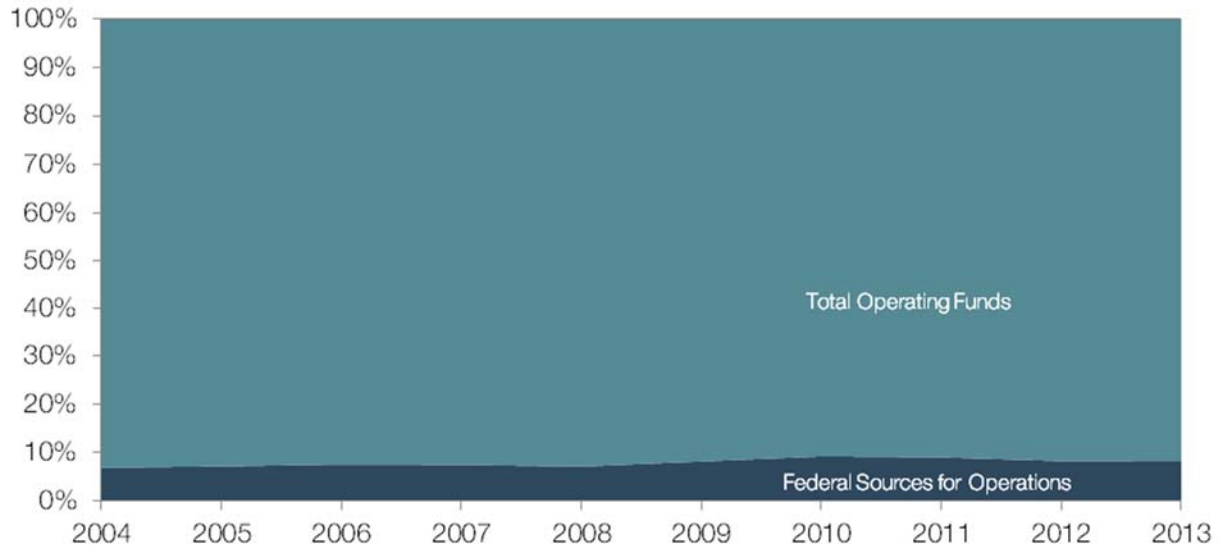


Exhibit A43: Total Operating Funds (2004 – 2013)

Year	Fares	Federal Funds	State Funds	Local Funds	Other	Total Funds
2004	$9,199,745,286	$2,008,816,529	$5,990,157,135	$7,827,019,905	$2,117,120,103	$27,142,858,958
2005	$8,475,858,338	$1,954,022,516	$5,839,023,993	$7,285,791,389	$1,783,779,909	$25,338,476,145
2006	$8,202,401,883	$1,995,210,244	$5,434,025,526	$7,011,268,661	$1,663,921,510	$24,306,827,824
2007	$9,347,476,845	$2,463,118,968	$7,120,870,272	$9,413,435,454	$2,103,189,366	$30,448,090,905
2008	$9,679,831,465	$2,428,557,524	$8,106,274,977	$9,318,626,738	$2,162,175,277	$31,695,465,981
2009	$12,387,256,397	$3,585,682,285	$10,089,833,520	$11,625,297,692	$2,487,245,327	$40,175,315,221
2010	$12,590,561,207	$4,093,953,264	$9,950,310,206	$11,278,251,737	$2,360,448,421	$40,273,524,835
2011	$13,158,691,040	$4,068,803,862	$9,934,230,639	$11,495,126,002	$2,271,743,969	$40,928,595,513
2012	$13,320,559,343	$3,760,981,119	$10,662,164,740	$11,663,464,859	$2,364,244,485	$41,771,414,546
2013	$14,633,208,798	$4,152,052,218	$11,901,071,016	$12,905,282,967	$2,022,333,010	$45,613,948,009

Exhibit A44: Total Operating Funds by Source (2004 – 2013)

When using 2013 constant dollars based on the NHCCI, the total operating funds applied to transit operations increased 68.1% over the past ten years.

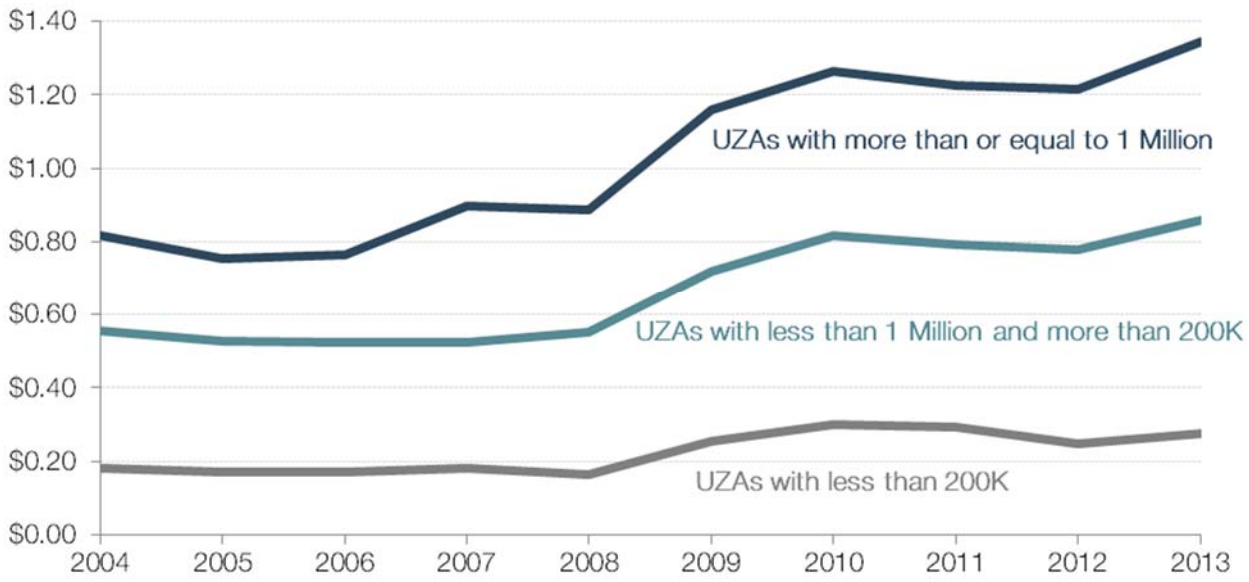


Exhibit A45: Federal Operating Assistance per Trip by Urbanized Area Size (2004 – 2013)

Farebox Recover 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.

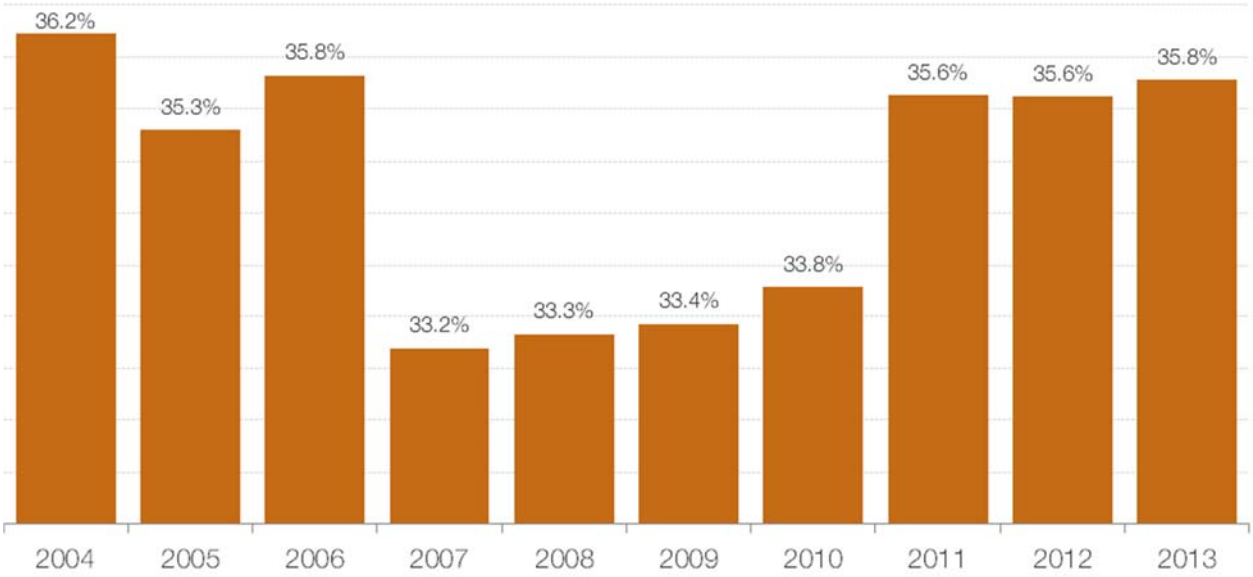
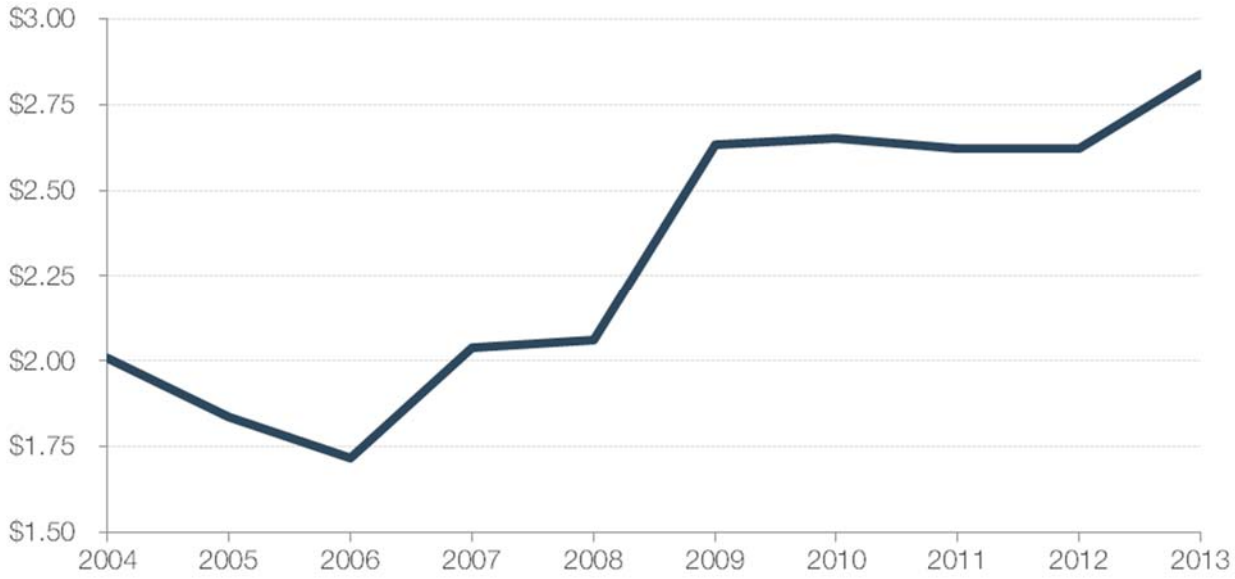


Exhibit A46: Recovery Ratio (2004 – 2013)

Many large transit agencies have shown a steady improvement in farebox recovery ratios following the 2007 implementation of the Government Accounting Standards Board. 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 agency farebox recovery ratios.

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.



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

Exhibit A47: Total Operating Subsidy per Trip (2004 – 2013)

Subsidy per trip has increased 54.4% 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.

Operating Funding Sources by UZA

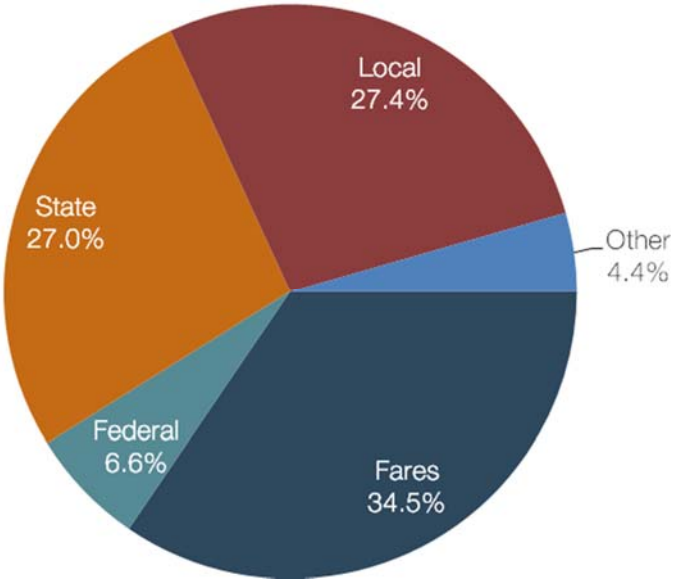


Exhibit A48: UZAs with More than 1 Million Population (2013)

For large urbanized areas, the share of fare revenues decreased from 2004 to 2013. Federal and state assistance compensated for a decrease in the share of fare revenues.

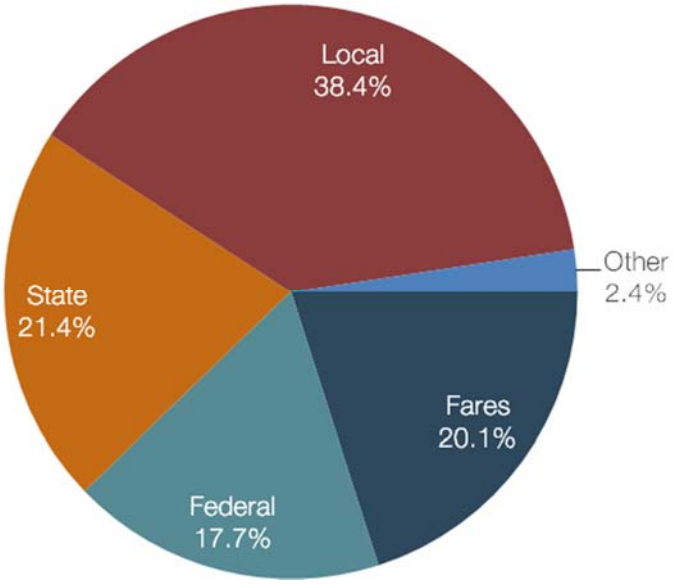


Exhibit A49: UZAs with Equal to or More than 200,000 and Less than 1 Million Population (2004 – 2013)

Small and medium urbanized areas are more dependent upon operating subsidies than large urbanized areas. Fare revenues account for 20.1% for these two areas in 2013.

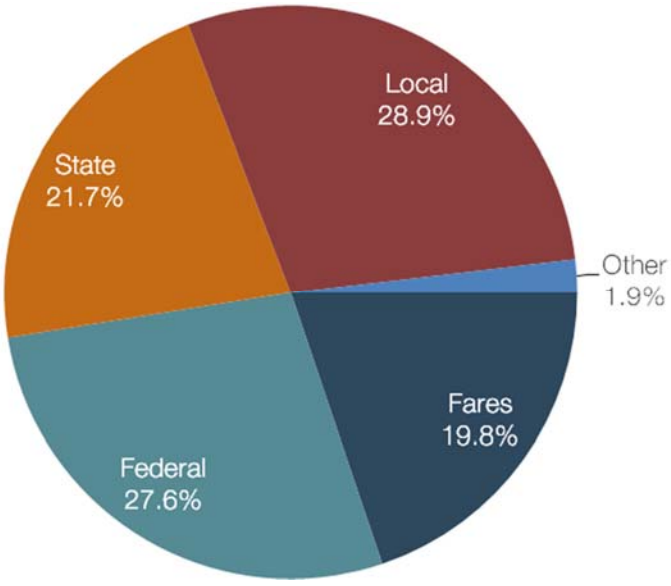


Exhibit A50: UZAs with Less than 200,000 Population (2013)

Capital Investment in Transit

Capital funds are funds from federal, state, and local governments and directly generated sources that transit agencies apply to capital projects. 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.

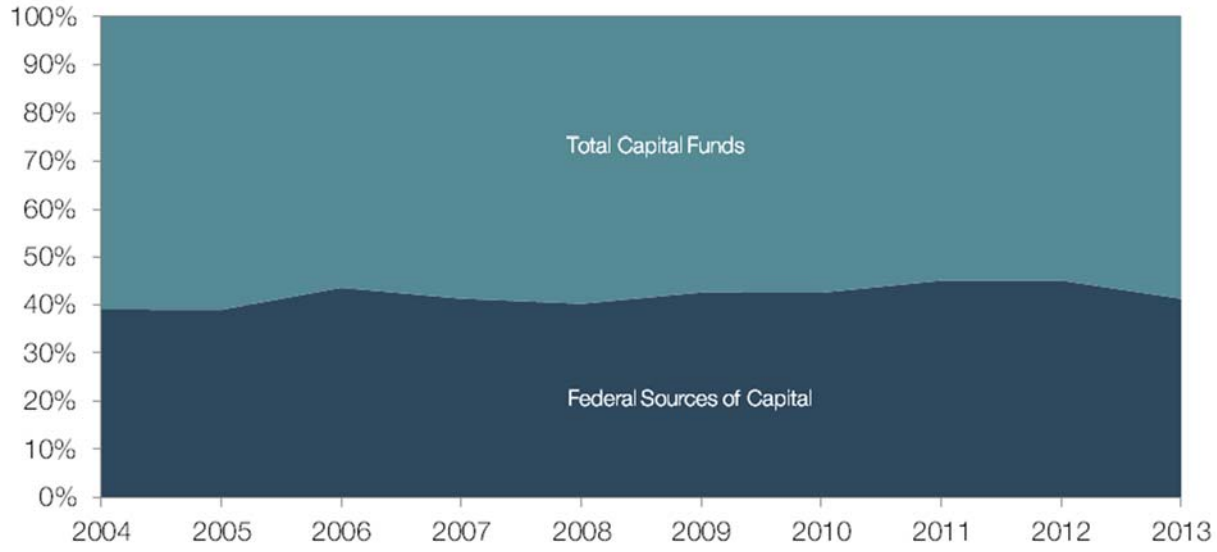


Exhibit A51: Total Capital Assistance (2004 – 2013)

Capital investment increased approximately 25.8% over the past ten years. Funds from the federal government accounted for 41.9% of capital invested in transit during the same period.

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.

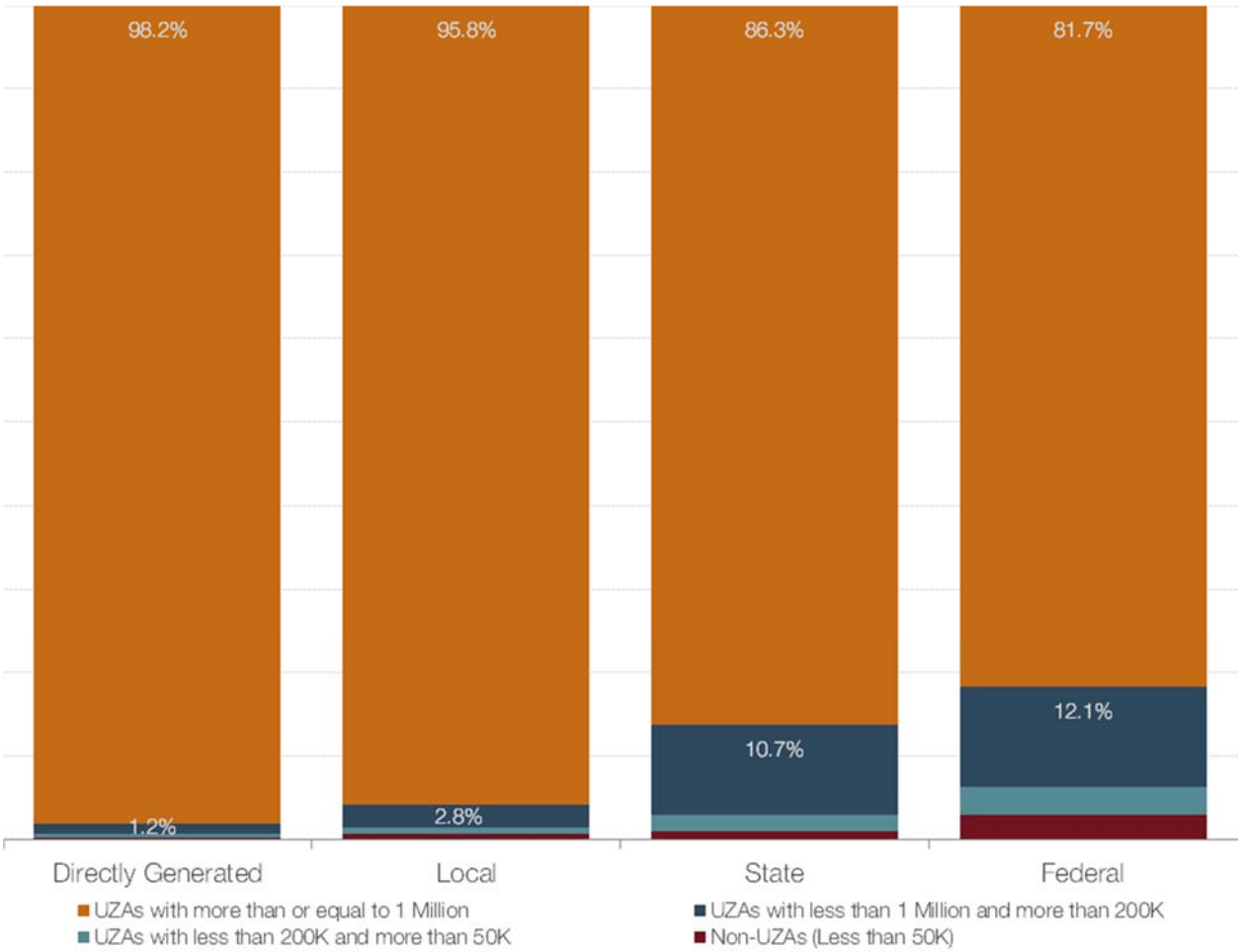


Exhibit A52: Sources of Capital Funding by UZA (2013)

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).

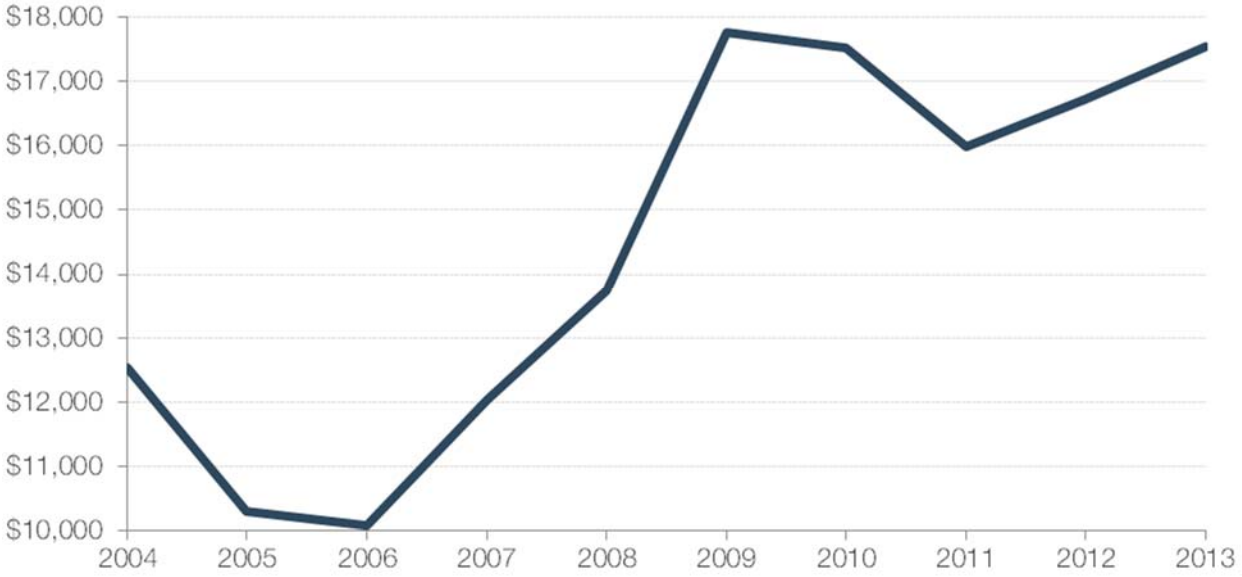
- **Maintenance facilities:** Central/overhaul maintenance facilities, light maintenance facilities, and storage facilities.

- **Passenger stations:** Boarding/alighting facilities with a platform, which may include stairs, elevators, escalators, passenger controls (e.g., faregates 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.



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

Exhibit A53: Capital Expenditures (2004 – 2013)

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.

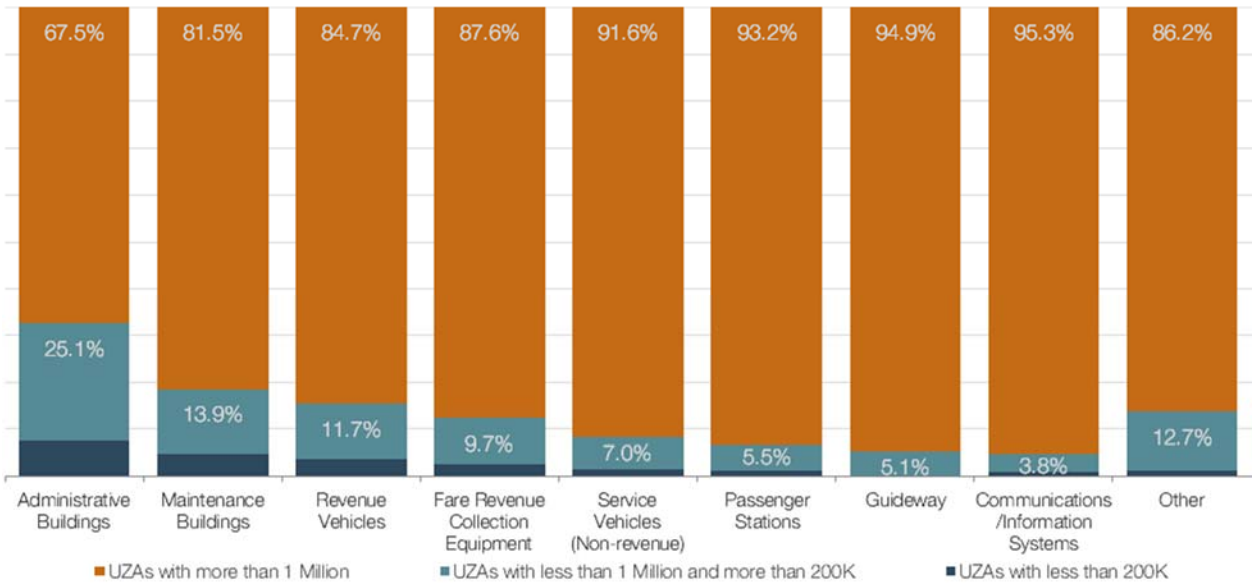


Exhibit A54: Capital by Urbanized Area Size (2013)

Distribution of Capital by Mode

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.

Year	Commuter Rail	Heavy Rail	Light Rail
2004	71.7%	90.8%	84.3%
2005	61.7%	85.7%	87.4%
2006	71.0%	87.6%	91.6%
2007	82.2%	82.8%	89.3%
2008	74.1%	79.8%	85.8%
2009	83.2%	72.9%	88.7%
2010	86.2%	84.0%	89.7%
2011	70.1%	91.6%	91.1%
2012	77.3%	95.3%	93.2%
2013	73.6%	92.8%	91.1%

Exhibit A55: Percent of Uses of Capital Expended on Non-Rolling Stock by Rail Mode (2004 – 2013)

Fleet Characteristics

Average Fleet Age by Vehicle Type

Large, medium, small, and articulated buses are rubber-tired passenger vehicles powered by diesel gasoline, electric battery, or other alternative fuel engines. The NTD defines bus types as:

- Type “A” buses are equipped with more than 35 seats
- Type “B” buses are equipped with 25 -35 seats
- Type “C” buses are equipped with less than 25 seats
- Type “AB” are extra-long buses that measure between 54 and 60 feet

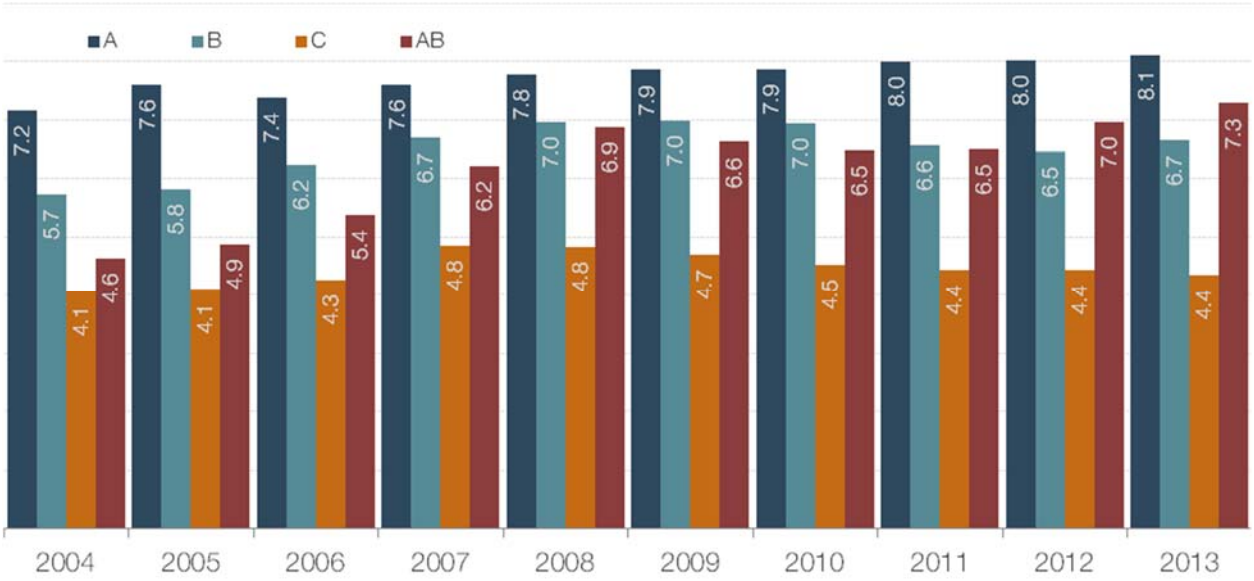


Exhibit A56: Average Bus Fleet by Vehicle Type (2004 – 2013)

The average fleet age of type “C” buses has been stable over the past ten years, while the average fleet age of large buses increased 13.3% and the average fleet age of medium-size buses increased 16.1% in the same period. The average fleet age of articulated buses increased slightly in the past 10 years, from 4.6 years in 2004 to 7.3 years in 2013.

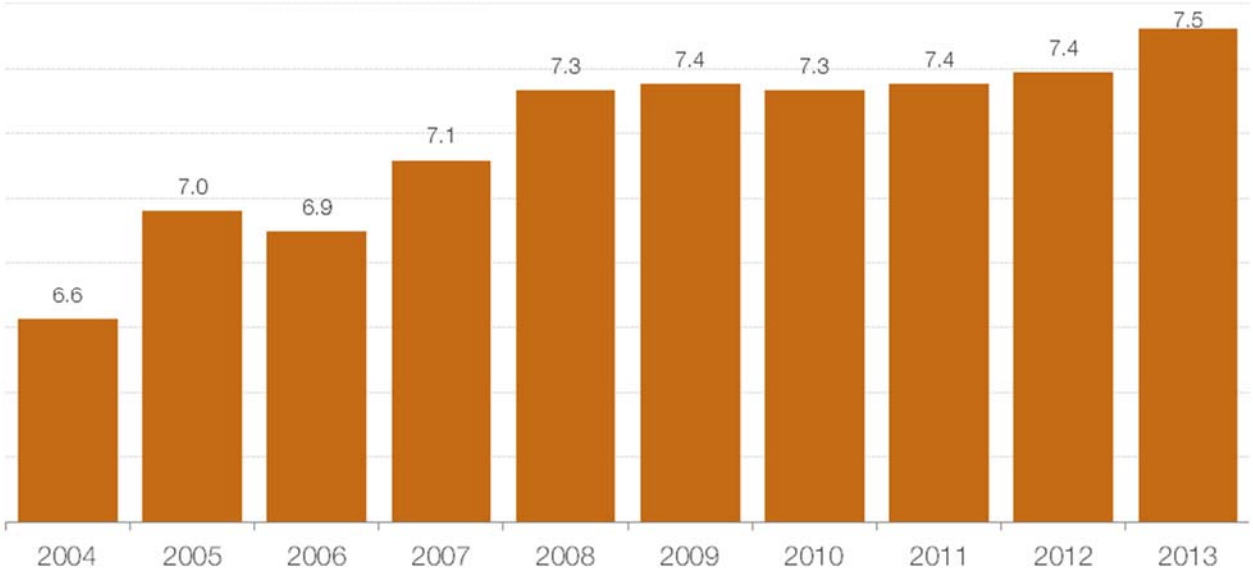


Exhibit A57: Average Bus Mode Fleet Age (2004 – 2013)

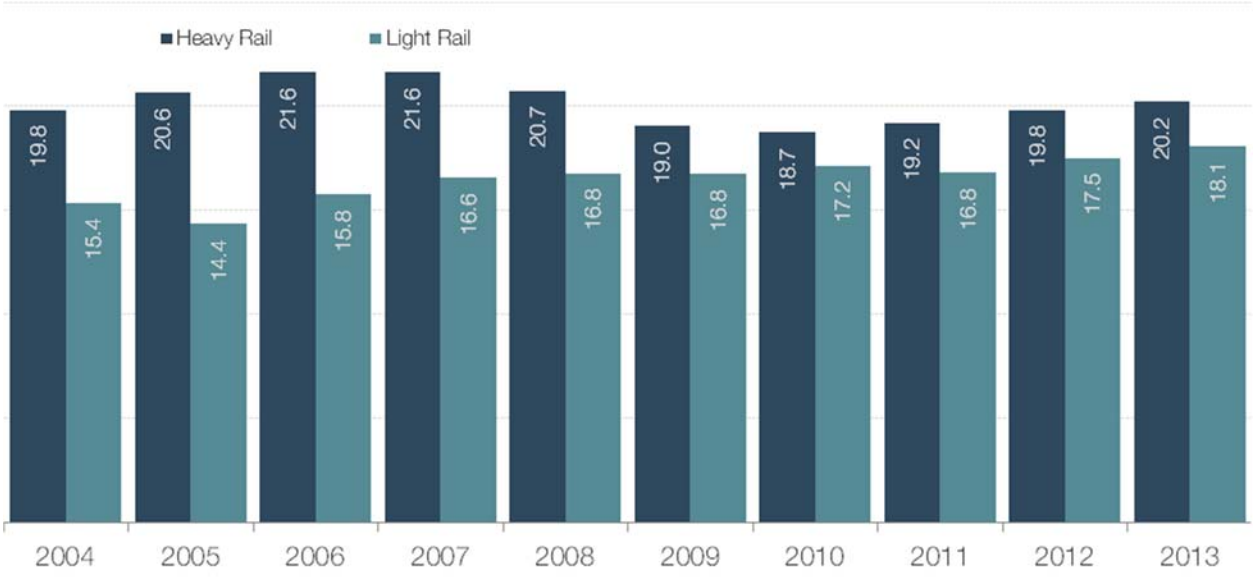


Exhibit A58: Average Rail Mode Fleet Age (2004 – 2013)

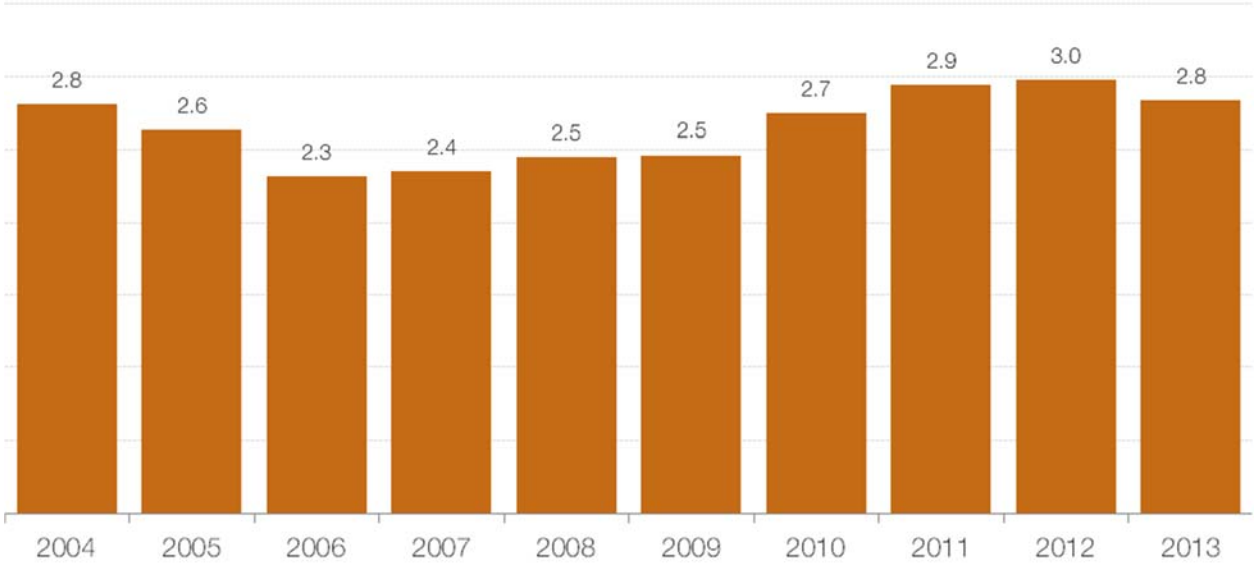


Exhibit A59: Average Vanpool Mode Fleet Age (2004 – 2013)

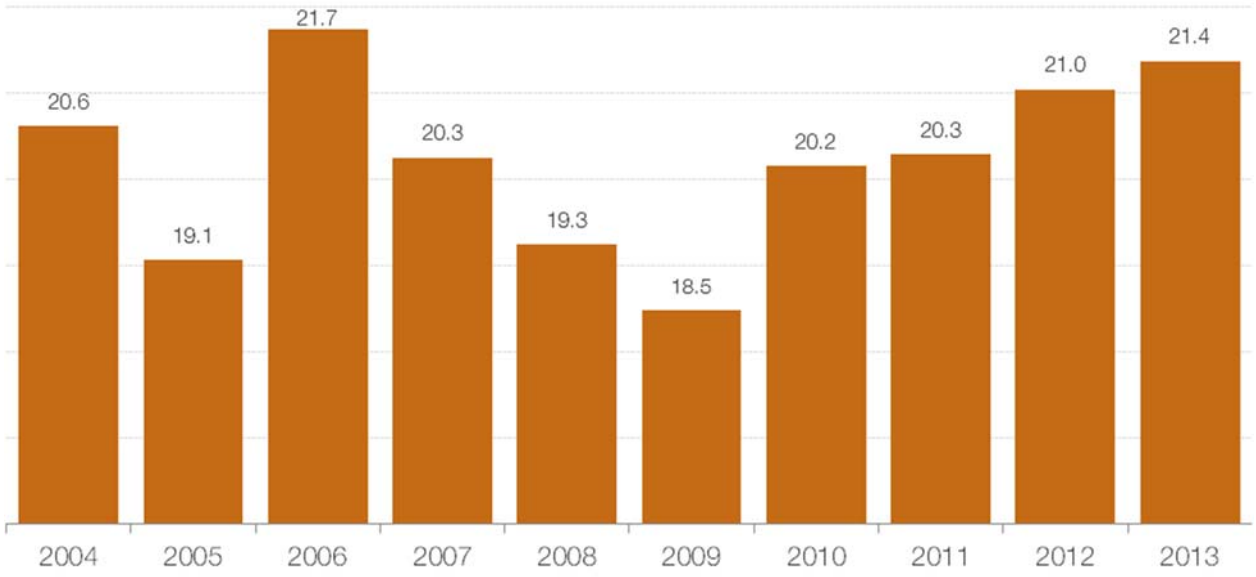


Exhibit A60: Average Ferry Boat Mode Fleet Age (2004 -2013)

Fixed Guideway Mileage

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.

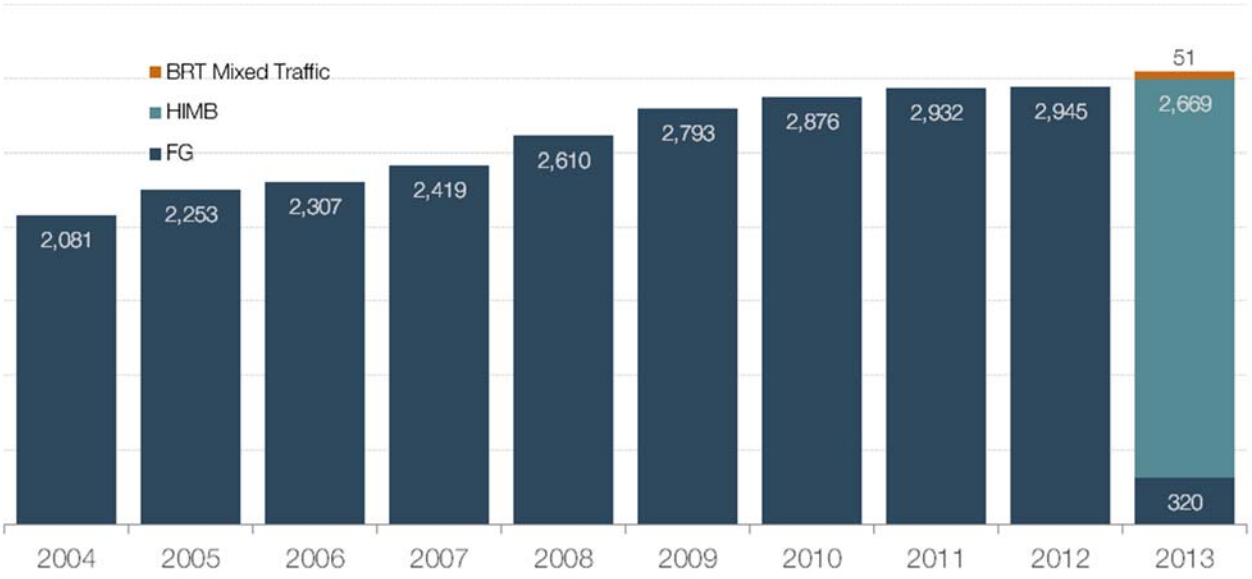


Exhibit A61: Fixed Guideway Mileage – Bus (2004 -2014)

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

- Segments that transit vehicles used exclusively were classified as fixed guideway.
- Other segments used by transit vehicles and the public, such as High Occupancy Vehicle or toll (HO/T) lanes, were reclassified as High Intensity Motorbus segments.
- Segments that were part of a Bus Rapid Transit (BRT) route, but were not used exclusively by transit vehicles, were classified as BRT Mixed Traffic segments.

As a result of the changes, fixed guideway segments decreased by 89.1%, but total controlled access segments increased by 3.2%, in the past year. Rail modes' fixed guideway directional route miles have increased by 24.1%.

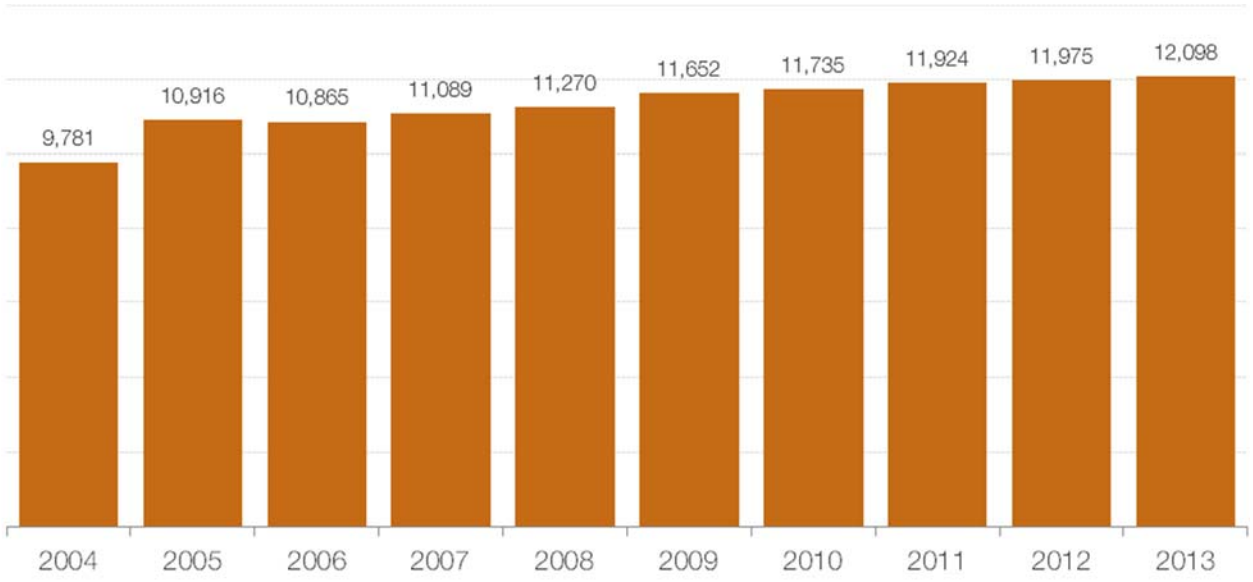


Exhibit A62: Fixed Guideway Mileage – Rail Modes (2004 -2013)

Rail modes' fixed guideway directional route miles have increased by 24.1%.

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.

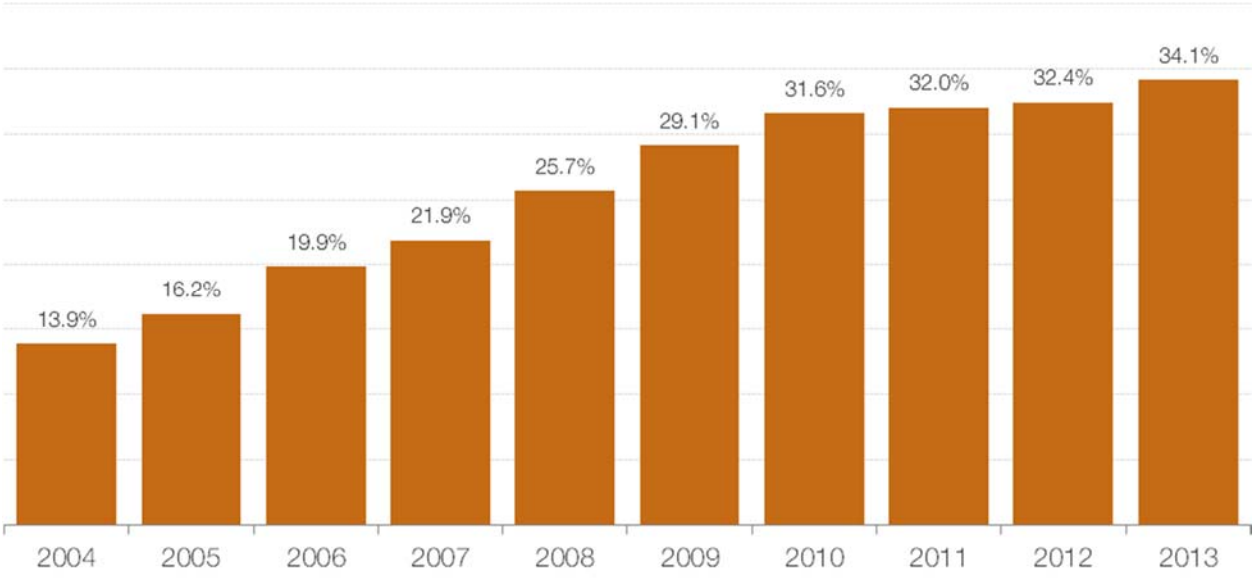


Exhibit A63: Percent of National Bus Fleet Using Alternative Fuels (2004 – 2013)

The share of the national bus fleet using alternative fuels rose from 13.9% in 2003 to 34.1% in 2013.

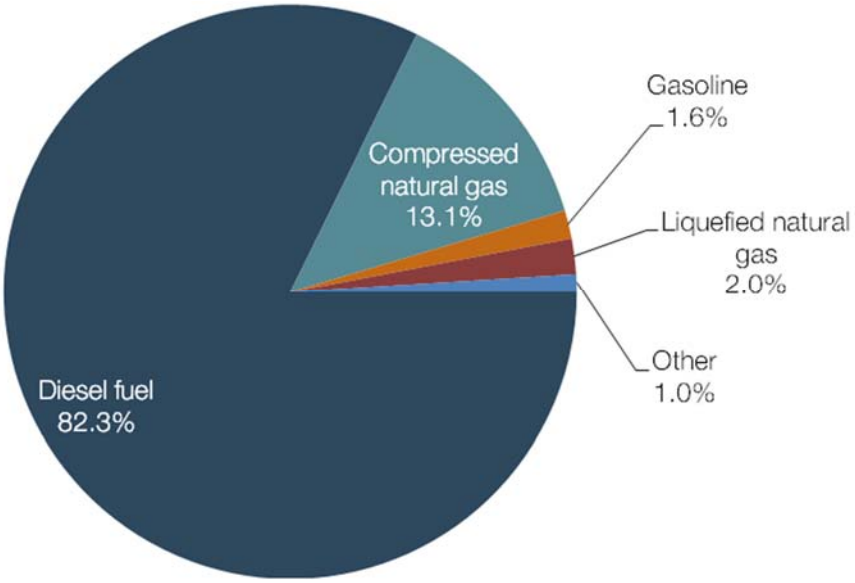


Exhibit A64: Percentage of Fuel Consumption for Non-Electric Modes (2004)

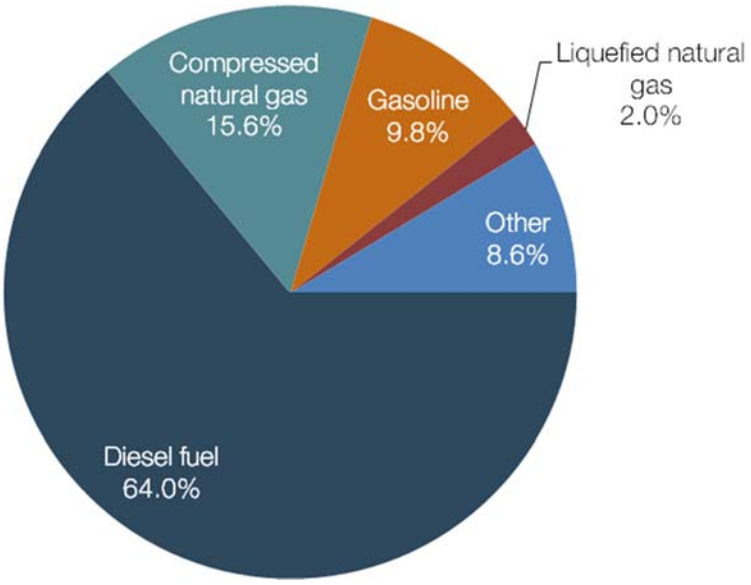


Exhibit A65: Percentage of Fuel Consumption for Non-Electric Modes (2013)