Public Transportation Investment Background Data

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11th Edition

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APTA's Vision Statement

Be the leading force in advancing public transportation.

APTA's Mission Statement

APTA serves and leads its diverse membership through advocacy, innovation, and information sharing to strengthen and expand public transportation.

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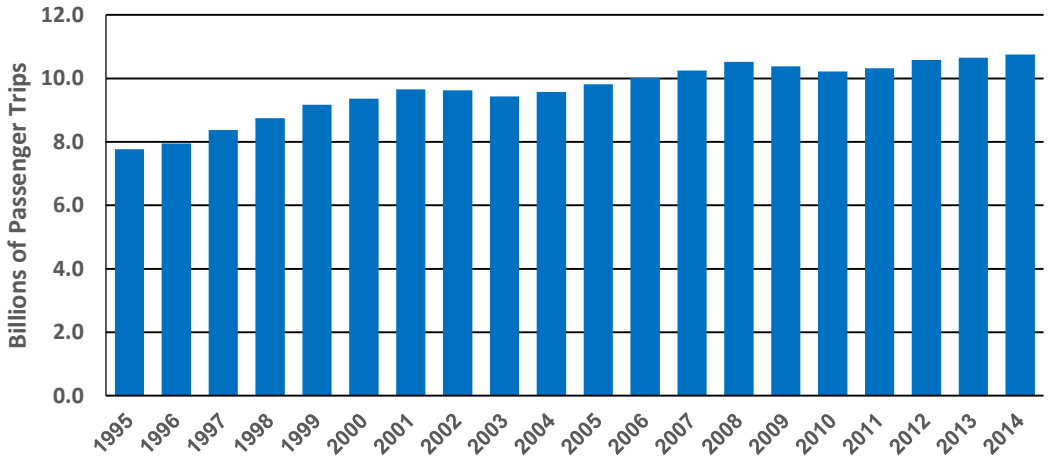
I. Introduction

This report assembles in one place brief answers for those questions which APTA is most frequently asked for background data about investment in transit, with references to sources with more detailed information. Investment questions focus on transit financing: where do transit funds come from, how does the funding process work, how dependable are the funding sources, and what do transit funds buy? This is the 11th edition of *Public Transportation Investment Background Data.* Earlier editions include data for prior years for many of the tables in this edition. Earlier editions are archived on the APTA web site at www.apta.com.

II. State of the Transit Industry

The transit industry has recently experienced sustained growth. In 2014 America's transit systems carried more than 10 billion passenger trips for the ninth consecutive year as shown on Figure 1. Transit ridership grew 39 percent from 1995 through 2014, compared to 20 percent growth in population and 24 percent growth in highway vehicle miles of travel over the same period.

Figure 1: Transit Has Carried Over 10 Billion Passenger Trips for 9 Straight Years

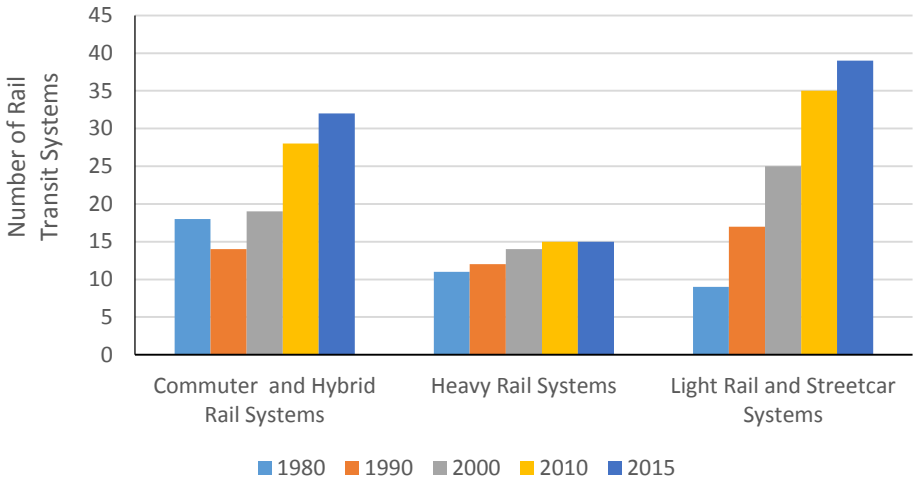


Source: APTA 2015 Fact Book Appendix A : Historical Tables and APTA Public Transportation Ridership Report

The rapid increase in the number of rail transit systems over the last three decades illustrates the increased investment in high quality transit services. In 1980 there were 10 commuter rail systems, 11 heavy rail systems, and 7 light rail systems in the U.S. for a total of 28 rail systems.[1] Over the next three and one-half decades, an average of 1.7 entirely new rail systems opened every year until, in 2015, there were 86 rail systems in the U.S. As shown on Figure 2, by 2015 there were 39 commuter rail and hybrid rail systems, 15 heavy rail systems, and 39 light rail and streetcar systems. Beginning in 2011 the National Transit Database disaggregated existing rail service into additional modes. On Figure 2 commuter rail systems include the newly designated mode hybrid rail as well as commuter rail and light rail includes the newly designated mode streetcar as well as light rail.

[1] Includes only what were categorized as commuter rail, hybrid rail, heavy rail, light rail, and streetcar systems in 2015. Excludes cable car, inclined plane, automated guideway, and other types of rail systems. A listing of commuter rail, hybrid rail, heavy rail, light rail, streetcar, and other rail mode systems with the year they opened can be found on Table 48 in the 2015 APTA Fact Book Appendix A: Historical Tables at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf

Figure 2: The Number of Rail Transit Systems Has Increased Steadily Over Three and One-Half Decades



Source: APTA 2015 Fact Book Appendix A: Historical Tables

III. Where Transit Funds Come From

Transit revenue is categorized into four source groups based on the original source of the funds: funds directly generated by transit agencies, local government financial assistance, state government financial assistance, and federal government financial assistance. The words "funds" and "revenues" are used interchangeably.

Transit funding is also classified by use, either for operations or for capital. The definition of operating and capital funds differs between accounting practice and federal transit law. Federal transit law, as codified in Title 49, Chapter 53 of the United States Code,[2] defines capital expenditures to include the purchase of capital items and the maintenance of rolling stock and facilities. The Federal Transit Administration's National Transit Database (NTD) defines a standard accounting system to meet the annual federal requirement for all transit agencies in urbanized areas receiving federal assistance to report financial and operating data. The NTD classifies maintenance expenditures as an operating expenditure, not a capital expenditure. Funds received for transit expenditures are classified in the NTD as operating or capital revenues based on their eventual use.

All funding data reported on the following Tables 1, 2, 3, and 5 and Figures 3 through 6 are accrued revenue based on data from the National Transit Database expanded by APTA using accepted statistical procedures to account for transit agencies that do not report revenue data to the NTD such as not for profit elderly and disabled service providers, small agencies in urbanized areas that obtain reporting waivers, and private systems that choose not to report to the NTD. The years for the data are NTD Report Years, which are flexible time periods that include the Fiscal Year for each reporting transit agency that ends in the identified Calendar Year.

III. A. Directly Generated Revenues are any funds acquired by the transit agency or its oversight agency by their own activity as a business or by taxing actions where the agency has been enabled by the state to collect a specific tax in a specific area.

[2] Chapter 53 of Title 49, as amended by MAP-21, The Moving Ahead for Progress in the 21st Century Act, Public Law 112-141, enacted July 6, 2012 at http://www.apta.com/gap/legissues/authorization/Documents/Ramseyer_Ch_53_Revisions_Final%20(2).pdf

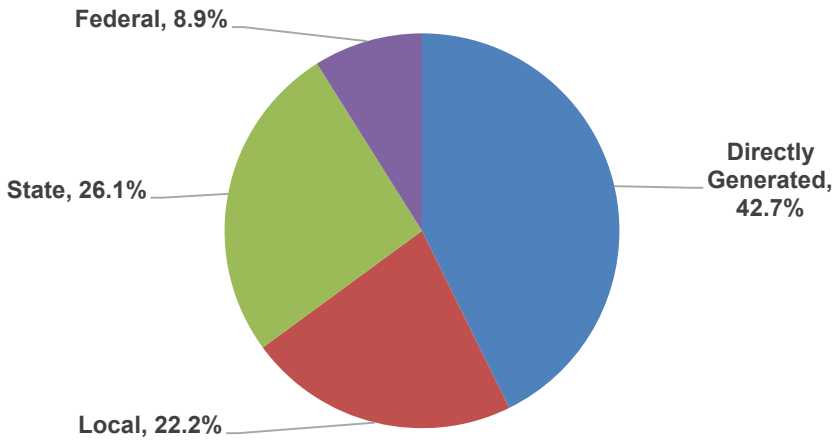
Directly Generated Funds account for 42.7 percent of all operating revenue and 23.7 percent of all capital revenue in 2013 as shown on Tables 1 and 2 and illustrated on Figures 3 and 4.[3] The largest portion of Directly Generated Revenue comes from Passenger Fares, 32.5 percent of all operating revenue, and smaller portions of operating revenue, as reported on Table 1, come from Directly Generated Other and Directly Generated Dedicated revenues. Directly Generated Other funds do not come from taxes and include advertising, concessions, parking revenues, and toll revenues from other sectors of operations. Directly Generated Dedicated funds are revenues that come from taxes controlled by the transit agency but enabled by a state government.

III. B. Local Revenues are any revenues where the tax or fee is assessed in a local or regional area and a local or regional government is enabled to implement the tax or fee. The actual collection of the tax or fee could be by another government, for example as an add-on to a state sales tax or income tax. Local revenue, also termed local financial assistance, in 2013 accounted for 22.2 percent of operating revenue and 18.4 percent of capital revenue. Both Directly Generated Revenues and Local Revenues are obtained in the transit agency's service area and should be combined when determining the funding that comes from "local" sources.

III. C. State Revenues, also called state financial assistance, are any revenue where the source tax or fee is imposed by a state government on the entire state. In 2013 state funds accounted for 26.1 percent of operating revenue and 16.3 percent of capital revenue.

III. D. Federal Revenues, also called federal financial assistance, are revenues that originated from federal government funds, even if they are transferred to other levels of government for final distribution. Federal funds in 2013 provided 8.9 percent of operating revenue and 41.7 percent of capital revenue.

Figure 3: Source of Operating Funds, 2013



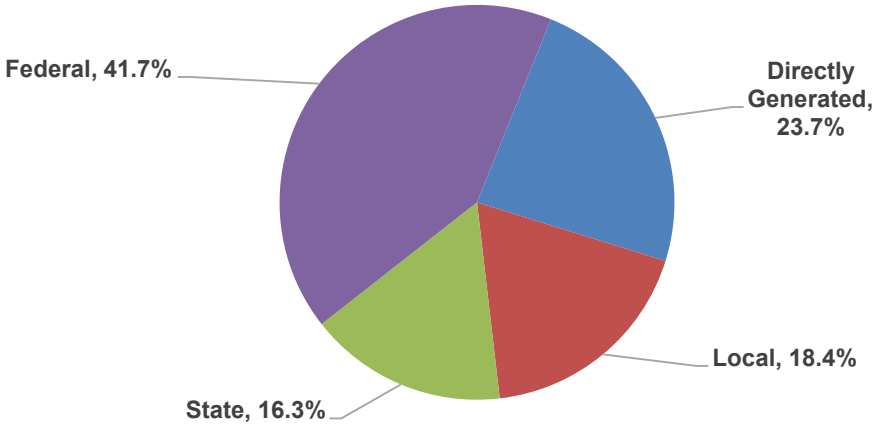
Source: APTA Public Transportation Fact Book 2015, Appendix A

[3] *APTA Fact Book Appendix A: Historical Tables.* Washington: American Public Transportation Association at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf

Table 1: Source of Operating Funds (Accrued Revenue)

Year	Directly Generated by Transit Agency			Government Funds					Total Funds
	Passen-ger Fares	Other	Total	Directly Generated	Local	State	Federal	Total Govern-ment Funds	
Amount of Funding (Millions of Dollars)									
2010	12,556.1	2,118.9	14,675.0	2,548.8	8,457.9	9,760.8	3,674.6	24,442.1	39,117.2
2011	13,557.6	2,044.0	15,601.6	2,563.2	9,068.9	10,048.0	4,028.4	25,708.5	41,310.1
2012	14,180.4	2,024.5	16,205.0	2,824.7	9,545.8	11,138.9	3,862.5	27,371.9	43,576.9
2013	14,984.1	1,749.	16,733.5	2,936.0	10,228.2	12,037.5	4,112.4	29,314.1	46,047.7
Percent of Annual Total									
2010	32.1%	5.4%	37.5%	6.5%	21.6%	25.0%	9.4%	62.5%	100.0%
2011	32.8%	4.9%	37.8%	6.2%	22.0%	24.3%	9.8%	62.2%	100.0%
2012	32.5%	4.6%	37.2%	6.5%	21.9%	25.6%	8.9%	62.8%	100.0%
2013	32.5%	3.8%	36.3%	6.4%	22.2%	26.1%	8.9%	63.7%	100.0%

Figure 4: Source of Capital Funds, 2013



Source: APTA Public Transportation Fact Book 2015, Appendix A

Table 2: Source of Capital Funds (Accrued Revenue)

Year	Directly Generated by Transit Agency			Government Funds					Total Funds
	Passen-ger Fares	Other	Total	Directly Gener-ated	Local	State	Federal	Total Govern-ment Funds	
Amount of Funding (Millions of Dollars)									
2010	---	---	---	5,852.5	2,099.0	2,536.9	7,336.1	17,824.4	17,824.4
2011	---	---	---	4,122.0	3,116.3	2,198.9	7,425.8	16,863.0	16,863.0
2012	---	---	---	4,210.3	3,559.9	2,122.8	7,907.1	17,800.2	17,800.2
2013	---	---	---	4,191.4	3,247.2	2,876.5	7,375.0	17,690.1	17,690.1
Percent of Annual Total									
2010	---	---	---	32.8%	11.8%	14.2%	41.2%	100.0%	100.0%
2011	---	---	---	24.4%	18.5%	13.0%	44.0%	100.0%	100.0%
2012	---		---	23.7%	20.0%	11.9%	44.4%	100.0%	100.0%
2013	---	---	---	23.7%	18.4%	16.3%	41.7%	100.0%	100.0%

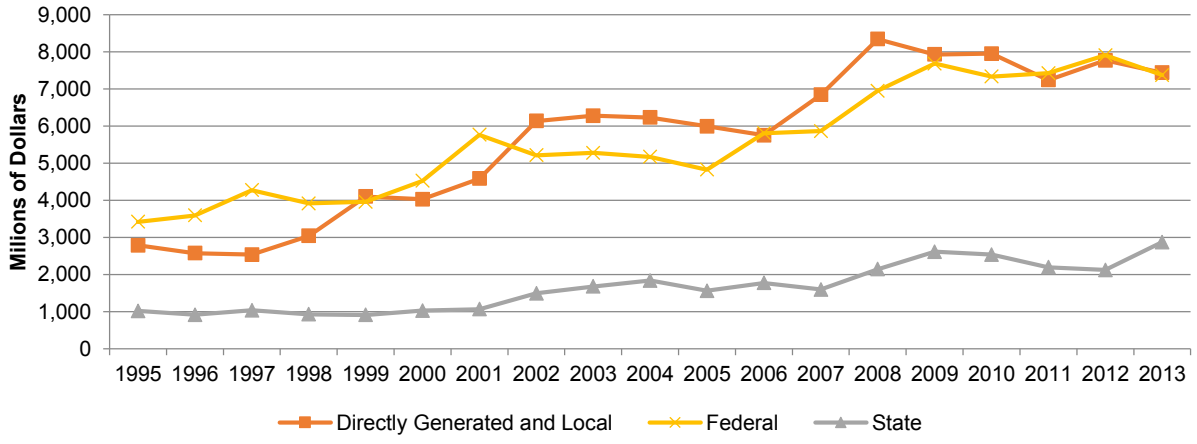
III. E. Overall Funding Sources for capital and operating revenue combined are shown on Table 3.[4] In 2013 all types of Directly Generated funds accounted for 37.5 percent of total revenue, Federal funds were 19.3 percent, State funds 23.4 percent, and Local funds 21.1 percent. Funds solely from the transit agency service areas, Directly Generated and Local combined, account for 58.6 percent of all revenue.

Table 3: Source of Total Funding, Operating and Capital Combined (Accrued Revenue)

Year	Directly Generated by Transit Agency			Government Funds					Total Funds
	Passenger Fares	Other	Total	Directly Generated	Local	State	Federal	Total Govern-ment Funds	
Amount of Funding (Millions of Dollars)									
2010	12,556.1	2,118.9	14,675.0	8,401.3	10,556.9	12,297.7	11,010.6	42,266.5	56,941.6
2011	13,557.6	2,044.0	15,601.6	6,685.2	12,185.2	12,246.9	11,454.2	42,571.5	58,173.1
2012	14,180.4	2,024.5	16,204.9	7,035.0	13,105.7	13,261.7	11,769.6	45,172.0	61,377.1
2013	14,984.1	1,749.4	16,733.5	7,127.4	13,475.4	14,914.0	11,487.4	47,004.2	63,737.7
Percent of Annual Total									
2010	22.1%	3.7%	25.8%	14.8%	18.5%	21.6%	19.3%	74.2%	100.0%
2011	23.3%	3.5%	26.8%	11.5%	20.9%	21.1%	19.7%	73.2%	100.0%
2012	23.1%	3.3%	26.4%	11.5%	21.4%	21.6%	19.2%	73.6%	100.0%
2013	23.5%	2.7%	26.3%	11.2%	21.1%	23.4%	18.0%	73.7%	100.0%

III. F. The Trend in Funding from different sources is shown on Figures 5 and 6.[5] Capital funding, on Figure 5, has seen significant growth from combined Directly Generated and Local Sources, 167 percent or $4.7 billion over the eighteen-year period from 1995 through 2013, while Federal funds have grown 116 percent or $4.0 billion and state funds 182 percent or $1.9 billion.

Figure 5: Growth in Capital Revenue by Source, 1995-2013



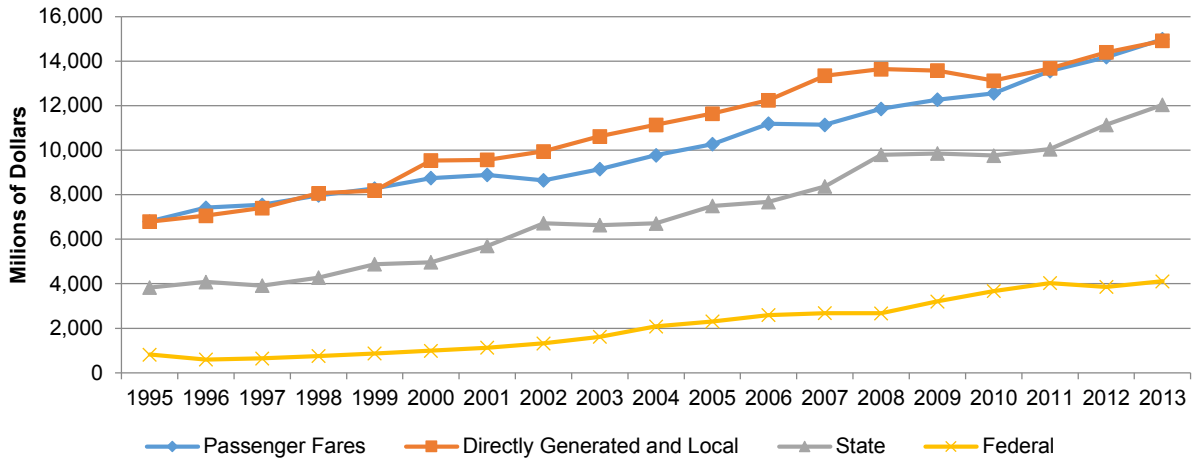
Federal operating revenue, on Figure 6, has increased 403 percent or $3.3 billion from 1995 through 2013 but remains the smallest source of funding at only 8.9 percent of operating funds. State operating funds

[4] *APTA Fact Book Appendix A: Historical Tables.* Washington: American Public Transportation Association at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf

[5] *APTA Fact Book Appendix A: Historical Tables.* Washington: American Public Transportation Association at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf

have increased 214 percent or $8.2 billion over the eighteen-year period, combined Directly Generated, except Passenger Fares, and Local Funds have increased 120 percent or $8.1 billion, and passenger fare revenue has increased 120 percent or $8.2 billion.

Figure 6: Growth in Operating Revenue by Source, 1995-2013



III. G. Federal transit funding programs have provided transit funding since 1964. Table 4 and Figure 7 report federal funding from the Federal Transit Administration from 2000 through 2014. Authorizations and appropriations for the federal transit program, Title 49, Chapter 53, of the U.S. Code, are shown in Columns B and C of Table 4. An authorization is a long-term law, typically six years, that permits an annual appropriation of funds up to the amount authorized. The authorization also makes permanent changes to how the law operates, such as how funds are distributed and what activities they can be used for. The law which currently authorizes annual appropriations is the Moving Ahead for Progress in the 21st Century Act of 2012 (MAP 21) which became law on July 6, 2012. MAP 21 authorizes the transit program for FY 2013 and FY 2014, a shorter period than the last three authorizations.

The annual appropriation determines the amount of money in each authorized program that will be given to the Federal Transit Administration in that year for distribution to transit systems and other recipients and to fund FTA operations. The determination of the amounts that are distributed to transit agencies or designated recipients is called an apportionment. Authorizations have grown from $5.8 billion in FY 2000 to $10.7 billion in FY 2014.

III. H. Other federal funds are provided for transit investment. The American Recovery and Reinvestment Act of 2009 (ARRA) was enacted in February, 2009 to stimulate the economy. The ARRA appropriated a total of $787 billion including $48 billion for transportation of which $8.4 billion was specifically for transit capital investment. Transit funds were directed to seven programs. Over $7.5 billion or nearly 90 percent of the ARRA funds were apportioned through existing Federal Transit Administration formula programs with amounts available to recipients published in the Federal Register in early March 2009. The remaining $867 million was distributed through discretionary grants by the FTA. ARRA funds were in addition to funds provided under the regular, on-going FTA program authorized by SAFETEA-LU. They did not replace or substitute for those funds. These amounts are reported on row "2009 ARRA" on Table 4.

The Disaster Relief Appropriations Act of 2013 (DRAA) appropriated $10.9 billion for use by the FTA to make grants "for relief efforts in the areas most affected by Hurricane Sandy." Of those funds, $5.383 billion could be used to "carry out projects related to reducing risk of damage from future disasters in areas impacted by Hurricane Sandy." These funds were authorized at the level of "such sums as are necessary" for use under 49 USC 5324 by MAP-21. These amounts are reported on row "2013 DRAA" on Table 4.

Table 4: Federal Transit Act Authorizations and Appropriations, 2000 to 2015 [6]

Fiscal Year	Federal Transit Program Authorization (Millions) (a)	All Transit Appropriation (Millions) (a)	Percent of Authorized Funds Appropriated (Millions) (a)	Flexed Funds (Millions)	Appropriation Plus Flexed Funds (Millions)
(Column A)	(Column B)	(Column C)	(Column D)	(Column E)	(Column F)
2000	5,797	5,786	99.8%	1,599	7,385
2001	6,271	6,261	99.8%	1,233	7,494
2002	6,747	6,747	100.0%	1,118	7,865
2003	7,226	7,179	99.3%	1,009	8,188
2004	7,309	7,266	99.4%	981	8,247
2005	7,646	7,646	100.0%	966	8,612
2006	8,623	8,505	98.6%	1,348	9,853
2007	8,975	8,975	100.0%	923	9,898
2008	9,731	9,492	97.5%	894	10,386
2009	10,338	10,231	99.0%	(b) 1,026	11,257
2009 ARRA (a,c)	8,400	8,400	100.0%	In '09 through '12	8,400
2010	10,529	10,508	99.8%	(b) 1,977	12,530
2011	10,529	10,098	95.9%	(b) 1,890	12,187
2012	10,458	10,458	100.0%	(b) 2,382	12,840
2013	10,578	10,455	98.8%	(b) 2,399	12,854
2013 DRAA (a,d)	ssaan (d)	10,900	---	---	10,900
2014	10,695	10,691	99.9%	NA	NA
2015	10,695	10,858	101.5%	NA	NA

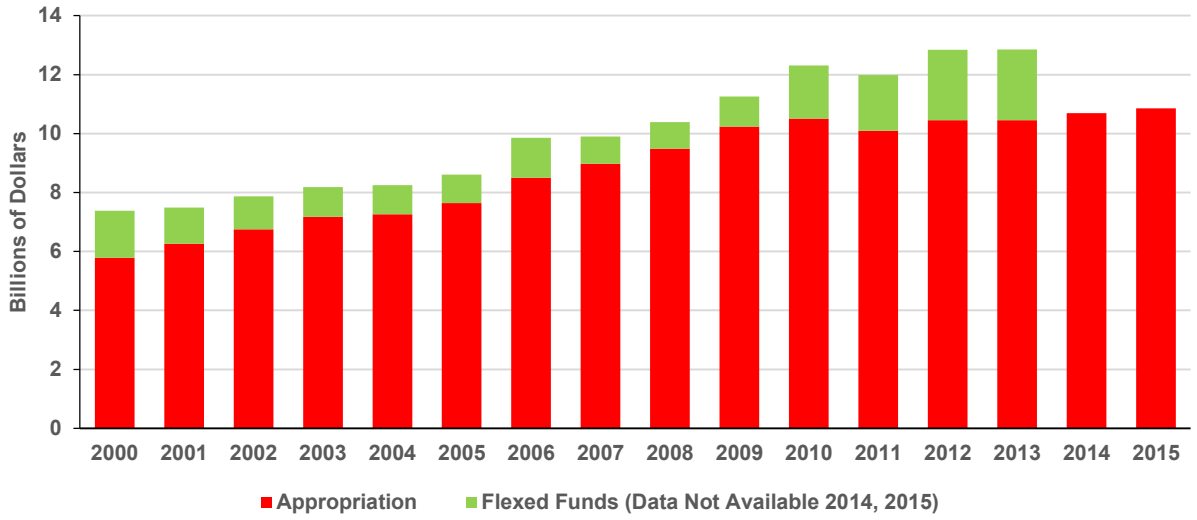
(a) Regular Fiscal Year amounts include only funds authorized by regular transit program under 49 USC 5300, amounts from other authorizing laws are not included except for the ARRA and DRAA.
(b) Includes funds flexed from the ARRA.
(c) American Recovery and Reinvestment Act of 2009 (ARRA) was a one-time funding program in addition to annual appropriations.
(d) Appropriated by the Disaster Relief Appropriations Act of 2013 from authorization in MAP-21 for 49 USC 5324 Public Transportation Emergency Relief Program in the amount of "such sums as are necessary."
NA = Not available until end of Fiscal Year.

Funds for specific uses have been authorized separately from MAP-21 and previous FTA authorizations. One such authorization currently in effect is Title VI – Capital and Preventive Maintenance Projects for Washington Metropolitan Area Transit Authority (WMATA) contained in the Federal Rail Safety Improvements Act of 2008. This Act provided $1.5 billion for WMATA in "increments" over 10 fiscal years beginning in FY 2009. Appropriations have been or near $150 million each year since then. These amounts, and amounts from other federal programs beyond regular FTA appropriation, the ARRA, and the DRAA, and not included in Table 4 or Figures 7 and 8.

In addition to funds appropriated to Federal Transit Administration programs, some funds appropriated to the Federal Highway Administration for highway programs may be transferred to transit uses at the request of states. These amounts are shown as "Flexed Funds" in Column E of Table 4 and also on Figure 7. No specific amounts of funds are appropriated or apportioned to be flexed, therefore, the amounts are not known until the end of the year after the flexing decisions have occurred. Column F of Table 4 and Figure 7 show the total amount appropriated and flexed for transit uses. Some transit agencies receive federal funds from special transportation programs and non-transportation programs that are not included in these descriptions.

[6] *APTA Primer on Transit Finding, The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015.* Washington: American Public Transportation Association at http://www.apta.com/gap/policyresearch/Documents/APTA-Primer-Map-21-Funding.pdf

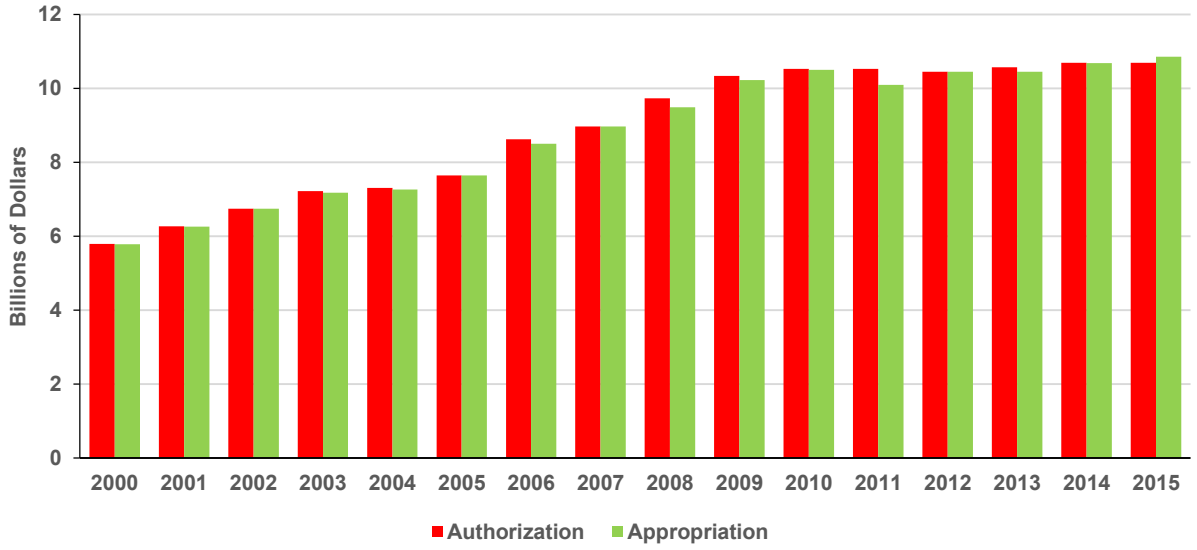
Figure 7: Federal Appropriations and Total Funding Including Flexed Funds



Source: APTA Primer on MAP-21 Funding Provisions,
excludes funds from the ARRA of 2009 and the DRAA of 2013.

III. I. A "Guarantee Provision" was included in the authorizing law passed in 1998. Before 1998, appropriations were often significantly lower than the authorization level. Since the introduction of the "Guarantee," the appropriation has nearly matched the authorization every year as shown in Column D of Table 4 and on Figure 8 Most of the shortfalls have resulted from across-the-board rescissions that affected most or nearly all federal programs. The on-going success of the "Guarantee," however, can only result from the on-going intent of Congress and from federal transit funds being primarily from dedicated sources; the mechanisms through which the guarantee had been enforced are no longer able to prevent a reduction in federal transit funding if that is the intent of Congress.

Figure 8: Federal Authroizations and Appropriations



(a) Excludes ARRA funds. (b) Excludes Hurricane Sandy Emergency Relief Funds.
Source: APTA Primer on MAP-21 Funding Provisions

III. J. Apportionments and Allocations. Federal assistance is distributed through a variety of programs that may be for specific uses such as state of good repair, elderly and disabled transportation, and bus capital programs; while funds from other programs can be used for any eligible expense such as urbanized area formula funds and rural formula funds. There are two distribution mechanisms, formulas and allocations. Formula programs distribute funds to all participants in a category. Formula distributions of funds are called apportionments. Urbanized Area Formula Funds, for example, are distributed to the designated recipients in all medium-size and large urbanized areas and to state Departments of Transportation for small urbanized areas by an apportionment. Formula programs typically fund needs that are on-going and evenly distributed over time such as vehicle or equipment purchases and vehicle and facility maintenance. Allocated programs typically fund "lumpy programs" where needs are large but not continuous such as fixed-guideway new starts and extensions or facility construction. Allocated programs usually have the recipients selected each year by Congress but Congress often defers allocating a portion or all of a program's funds, instructing the Federal Transit Administration to make allocations for those funds. In recent years Congress has not made allocations and the FTA has selected the recipients of allocated programs. The term "apportionment" is also used for the document that publishes both the apportionment of formula funds and allocation of discretionary funds each year.

A detailed history of the enactment of and descriptions of formulas and the allocation process and other provisions of federal funding laws can be found in the *APTA Primer on Transit Finding, The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015.*[7]

IV. What Transit Funds Are Spent For

IV. A. Capital expenditures are defined in two ways. In the National Transit Database capital expenditures are spending for acquisition of equipment and construction of facilities. In federal funding law, however, capital uses are any uses designated as eligible by the law and include capital expenditures as defined in the National Transit Database plus expenses for maintenance of vehicles and facilities and some planning activities considered to be operating expenditures in the National Transit Database.

Capital expenditures as defined by the National Transit Database, categorized by their use, are shown on Table 5. These amounts are expanded to include all transit systems, not just those reporting to the NTD. The larger part of capital expenditure goes for facility construction, in 2013 a total of 59.2 percent, including 35.2 percent for fixed-guideways, 16.3 percent for stations, and 7.7 percent for administration buildings and maintenance facilities.

Vehicles accounted for 24.9 percent of capital expenditures in 2013, 24.2 percent of which was for passenger vehicles and 0.7 percent for service vehicles. Fare revenue collection equipment accounted for 1.1 percent of capital expenditures in 2013, communication and information systems for 8.7 percent, and other capital uses for 6.1 percent.

[7] *APTA Primer on Transit Finding, The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015.* Washington: American Public Transportation Association at http://www.apta.com/gap/policyresearch/Documents/APTA-Primer-Map-21-Funding.pdf

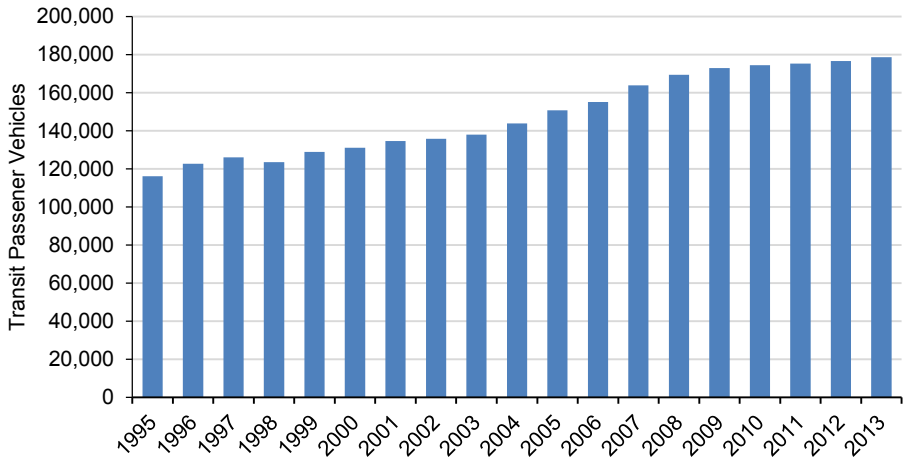
Table 5: Capital Expense by Mode and Type of Investment, Millions of Dollars, 2010-2013
(Funds from All Levels of Government, Accrued Expenditures)

Type	Bus (a)	Com-muter Rail (b)	Demand Re-sponse	Heavy Rail	Light Rail (c)	Trolley-bus	Other	Total	% of Annual Total
Guideway									
2010	143.7	1,841.2	0.0	2,014.0	2,284.1	1.3	2.9	6,287.1	35.27%
2011	228.8	979.4	0.0	1,927.9	2,232.1	16.9	2.9	5,388.1	31.59%
2012	285.7	1,510.1	0.0	1,902.8	2,531.8	14.5	3.6	6,248.5	34.39%
2013	215.6	1,276.9	0.0	2,344.4	2569.4	4.1	1.2	6,411.5	35.17%
Passenger Stations									
2010	410.2	434.3	1.7	1,578.6	342.2	0.8	59.5	2,827.3	15.86%
2011	451.0	418.1	5.0	1,815.8	429.8	0.6	115.3	3,235.5	18.97%
2012	396.4	304.5	4.1	2,103.3	407.7	0.8	136.5	3,353.2	18.46%
2013	443.8	339.2	22.4	1,718.5	307.7	0.4	145.4	2,977.5	16.33%
Buildings and Facilities									
2010	797.7	166.8	178.9	113.7	100.9	0.3	22.6	1,380.9	7.75%
2011	853.0	130.4	79.1	147.6	136.4	0.1	12.4	1,359.0	7.97%
2012	842.1	222.2	84.3	380.3	77.3	0.2	14.2	1,620.5	8.92%
2013	756.6	190.5	83.9	224.6	130.4	0.5	7.8	1,394.5	7.65%
Passenger Vehicles									
2010	2,598.3	409.0	694.5	881.3	328.4	0.6	197.3	5,109.5	28.67%
2011	2,543.9	741.1	506.4	442.2	270.2	4.4	235.6	4,743.7	27.81%
2012	2,689.3	631.5	392.6	248.5	232.3	4.0	185.5	4,383.7	24.13%
2013	2,325.0	763.9	410.9	378.1	306.4	2.8	231.8	4,418.9	24.24%
Service Vehicles									
2010	37.4	14.4	5.0	28.5	6.1	0.0	0.0	91.5	0.51%
2011	30.7	10.2	2.6	17.2	20.0	0.0	1.2	81.9	0.48%
2012	60.7	18.7	3.1	28.1	3.2	0.0	0.1	114.0	0.63%
2013	36.9	16.4	1.3	63.0	5.6	0.1	0.4	123.8	0.68%
Fare Revenue Collection Equipment									
2010	95.5	13.7	11.8	41.0	27.5	0.8	0.6	190.9	1.07%
2011	102.3	11.1	1.1	21.4	21.1	2.9	5.9	165.7	0.97%
2012	72.4	8.9	1.8	22.9	14.6	0.8	1.8	123.1	0.68%
2013	128.4	16.1	10.4	22.7	20.3	0.1	0.1	198.2	1.09%
Communication and Information Systems									
2010	257.8	120.3	74.3	593.8	139.5	1.1	8.2	1,195.0	6.70%
2011	290.4	169.9	64.8	670.6	140.4	1.5	13.6	1,351.2	7.92%
2012	410.7	186.1	63.4	799.7	137.7	1.5	4.8	1,603.9	8.83%
2013	395.4	330.0	58.0	709.2	92.6	3.7	3.2	1,592.1	8.73%
Other									
2010	172.8	75.0	36.2	420.4	20.9	0.4	16.7	742.3	4.16%
2011	185.4	50.2	34.9	431.6	12.8	0.4	16.7	732.0	4.29%
2012	200.0	72.9	29.3	391.1	23.3	0.2	4.1	720.8	3.97%
2013	222.5	91.7	13.0	696.5	82.2	0.1	6.5	1,112.5	6.10%
Total									
2010	4,513.4	3,074.7	1,002.4	5,671.3	3,249.6	5.3	307.8	17,824.5	100.00%
2011	4,685.5	2,510.2	693.9	5,474.3	3,262.9	26.8	403.7	17,057.1	100.00%
2012	4,957.2	2,954.9	578.5	5,876.6	3,427.9	21.9	350.7	18,167.8	100.00%
2013	4,524.4	3,024.6	600.0	6,156.9	3,514.7	11.9	396.4	18,228.9	100.00%
% of Total									
2010	25.32%	17.25%	5.62%	31.82%	18.23%	0.03%	1.73%	100.00%	---
2011	27.47%	14.72%	4.07%	32.09%	19.13%	0.16%	2.37%	100.00%	---
2012	27.29%	16.26%	3.18%	32.35%	18.87%	0.12%	1.93%	100.00%	---
2013	24.82%	16.59%	3.29%	33.78%	19.28%	0.07%	2.17%	100.00%	---

(a) Includes all types of bus service.
(b) Includes hybrid rail.
(c) Includes streetcar.
Note: All capital expense as defined by National Transit Database accounting system; but also includes amounts for all transit agencies not reporting in the NTD.
Source: APTA *Public Transportation Fact Book* and supporting data.

IV.B. Vehicle Fleet Size and Vehicle Purchases are reported for on Tables 6 and 7. These data are taken from the *2015 APTA Public Transportation Fact Book, Appendix A: Historical Data*.[8] These data have limitations. They are expansions estimated from sources that report vehicles by the mode of service in which they operate. For rail vehicles this is obvious, heavy rail service is operated by heavy rail vehicles, etc. For roadway service, however, this can be misleading. Bus service is fixed-route service and any variations of fixed-route service that offer variable destination or times. This service may be provided by the physical vehicle called a bus or it may be provided by vans or other vehicles not normally called buses. In the same way, demand response service is a variable origin and destination service. The service is normally provided by vans but some demand response service is operated by buses or larger vehicles that might be called buses. The growth in the entire transit fleet over the past 19 years is illustrated on Figure 9, also based on data in the *2015 APTA Public Transportation Fact Book, Appendix A: Historical Data*.

Figure 9: The Public Transportation Vehicle Fleet Has Expanded Steadily



Source: 2015 APTA Public Transportation Fact Book Historical Appendix

On Table 6 and Table 7 there is a discontinuity between 2006 and 2007 for roadway vehicles. This results from the availability of extensive data for rural transit service providers for the first time in 2007. Beginning during World War II, when the ATA (the American Transit Association, an APTA predecessor) first published data in the *Transit Fact Book*, data reported to the ATA by ATA members were expanded to the entire transit industry based on data that had been reported by the United States Census Bureau in, by then, discontinued surveys of transportation and from data from other available sources. The Federal Transit Administration's National Transit Database (NTD) replaced APTA surveys as the primary source for data expansion beginning in 1982 but the NTD only collected data for urbanized area transit agencies receiving federal financial assistance, not for rural agencies or agencies in urbanized areas not receiving federal assistance. Amounts for non-reporting agencies and rural agencies continued to be estimated by APTA from available data. The 1990 and 2000 Censuses expanded the number of urbanized areas and the size of urbanized areas, thus expanding the number of transit agencies included in NTD data. At the same time the number of agencies in areas that were still rural was believed to have grown.

For the 2007 report year, NTD data for rural transit agencies were made available on request but were not yet published on the NTD web site. Although a data set with a limited number of items, the number of vehicles by physical characteristics and the amount of service by mode were reported; but data for vehicles by mode were not included. This led to a change is the number of vehicles by mode for national data

[8] *APTA Fact Book Appendix A: Historical Tables.* Washington: American Public Transportation Association at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf

estimates in the *Fact Book.* Bear in mind that these data are for a mode of service and this data redistribution is based on service characteristics, not the physical type of vehicle providing that service. This redistribution applied only to roadway vehicles and was further refined in 2008 and 2009 data.

Table 6: Number of Transit Vehicles by Mode, 2004-2013

Year	Mode of Service							
	Bus (c)	Commuter Rail (d)	Demand Response	Heavy Rail	Light Rail (e)	Trolleybus	Other (a)	Total
2004	81,033	6,228	37,078	10,858	1,622	597	6,406	143,822
2005	82,027	6,392	41,958	11,110	1,645	615	7,080	150,827
2006	83,080	6,403	43,509	11,052	1,801	609	8,741	155,195
2007	(b) 65,249	6,391	(b) 64,865	11,222	1,810	559	(b) 13,877	163,973
2008	66,506	6,617	65,799	11,377	1,969	590	16,578	169,436
2009	64,832	6,941	68,957	11,461	2,068	531	18,103	172,893
2010	66,239	6,927	68,621	11,510	2,104	571	18,453	174,425
2011	69,175	7,237	65,336	11,342	2,257	479	19,432	175,258
2012	70,187	7,103	68,632	10,469	2,310	570	17,458	176,729
2013	71,139	7,369	68,559	10,380	2,387	560	18,218	178,612

(a) Ferry boat, aerial tramway, automated guideway transit, cable car, inclined plane, monorail, vanpool, and other; publico beginning 2007.
(b) Data not continuous for modes noted.
(c) Includes all bus modes.
(d) Includes hybrid rail.
(e) Includes streetcar.

Detailed data not completely categorized by mode of service and which show the subtypes of roadway and rail vehicles purchased each year and in the current fleet are available from several sources. Unfortunately, no single data source that provides detailed data on the composition of vehicle purchases is complete for the entire transit fleet and the data sources have different categories into which the data may be summarized. Each of the sources is, therefore, summarized separately in Tables 8 through 14 and 16 and 17 in order to present an overview of available data.

Table 7: Estimated Number of New Passenger Vehicles Delivered by Mode, 2004-2013

Year	Mode of Service							
	Bus (c)	Commuter Rail (d)	Demand Response	Heavy Rail	Light Rail (e)	Trolleybus	Other (a)	Total
2004	4,754	571	4,619	76	127	31	---	10,178
2005	4,527	476	5,867	50	129	23	---	11,072
2006	4,673	137	6,271	462	102	6	---	11,651
2007	(b) 3,590	118	(b) 11,500	394	91	2	754	16,449
2008	3,562	218	12,457	555	53	36	1,751	18,631
2009	3,912	150	9,792	69	87	0	1,619	15,629
2010	3,651	7	6,613	404	49	7	1,401	12,132
2011	4,546	116	5,710	0	140	0	1,533	12,045
2012	4,370	170	5,491	25	26	0	1,799	11,881
2013	4,509	276	8,726	517	31	0	2,982	17,041

(a) Ferry boat, aerial tramway, automated guideway transit, cable car, inclined plane, monorail, publico, vanpool, and other.
(b) Data not continuous for modes noted.
(c) Includes all bus modes.
(d) Includes hybrid rail.
(e) Includes streetcar.

Table 8 shows 2012 NTD vehicle data for urbanized areas by mode of service and physical type of vehicle.[9] These data include most vehicles operated in urbanized areas. APTA estimates that the NTD data include between 98 percent and 99 percent of all roadway vehicles operated by transit agencies in urbanized areas,

[9] Federal Transit Administration National Transit Database RY 2013 Database Revenue Vehicle Inventory downloadable at http://www.ntdprogram.gov/ntdprogram/datbase/2013_database/NTDdatabase.htm

but do not include demand response mode vehicles operated by non-profit elderly and disabled service providers which do not report to the NTD and do not include vehicles operated by agencies in rural areas.[10]

Table 8: Active Roadway Vehicles from 2013 National Transit Database Revenue Vehicle Inventory for Urbanized Areas (Not Expanded for Systems That Do Not Report to NTD)

Type of Vehicle (NTD Categories)	Mode of Service, All Vehicles							
	All Types of Bus Service		Demand Response and Demand Response Taxi		Vanpool and Publico		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Articulated Bus	4,523	6.8%	0	0.0%	0	0.0%	4,523	3.7%
Automobile	0	0.0%	2,861	7.5%	69	0.4%	2,930	2.4%
Bus	59,188	89.4%	14,392	37.9%	1	0.0%	73,581	60.9%
Double Decked Bus	136	0.2%	0	0.0%	0	0.0%	136	0.1%
Other Vehicle	87	0.1%	18	0.0%	1,114	6.7%	1,219	1.0%
Over the Road Bus	1,859	2.8%	0	0.0%	0	0.0%	1,859	1.5%
School Bus	7	0.0%	49	0.1%	0	0.0%	56	0.0%
Taxicab Sedan	0	0.0%	5,201	13.7%	0	0.0%	5,201	4.3%
Taxicab Station Wagon	0	0.0%	43	0.1%	0	0.0%	43	0.0%
Taxicab Van	0	0.0%	1,769	4.7%	0	0.0%	1,769	1.5%
Van	429	0.6%	13,608	35.9%	15,380	92.9%	29,417	24.4%
Total	66,229	100.0%	37,941	100.0%	16,564	100.0%	120,734	100.0%

(a) Publico vehicles reported as "other."
Source: 2013 *National Transit Database*.

Table 9 reports 2013 NTD data for bus vehicles only, showing the number of buses by various length categories in each mode of service.[11] Nearly all full sized buses over 35 feet long are operated in bus service. Most buses reported as being operated in demand response service are shorter than 30 feet and over half are shorter than 25 feet. Beginning in 2011, NTD bus service data have been reported for three type of service subcategories: bus, commuter bus, and bus rapid transit. These tables do not use those subcategories because the differentiation of data into three service types is voluntary until 2013 so the data may not be accurate, and the differentiation may not provide meaningful information.

NTD vehicle data for rural transit systems for 2013 present roadway vehicle data summarized by fleets in a different format compared to NTD urbanized area fleet data.[12] Vehicles are not identified by the mode of service in which they are operated. They are identified by physical type only, with classifications that differ from NTD urbanized area fleet physical type data. On Table 10 they are identified by physical type and length. Only 11 percent of all roadway vehicles operated by transit agencies in rural areas are 30 foot long or longer with 70 percent only 24 feet long or shorter. Two types of vehicles each represent a little less than one-quarter of rural area transit vehicles: buses and vans, while cutaways with bus bodies on truck frames are over one-third of rural area transit vehicles.

[10] Federal Transit Administration National Transit Database RY 2013 Database Revenue Vehicle Inventory downloadable at http://www.ntdprogram.gov/ntdprogram/datbase/2013_database/NTDdatabase.htm

[11] Federal Transit Administration National Transit Database RY 2013 Database Revenue Vehicle Inventory downloadable at http://www.ntdprogram.gov/ntdprogram/datbase/2013_database/NTDdatabase.htm

[12] National Transit Database 2013 Rural Area Data Table "Revenue Vehicle Inventory." Accessible from http://www.ntdprogram.gov/ntdprogram/rural/2013/2013%20Subrecipient%20Revenue%20Vehicle%20Inventory.xlsx

Table 9: Active Bus Vehicles by Length and Mode of Service from 2013 National Transit Database Revenue Vehicle Inventory for Urbanized Areas (Bus Vehicles Only in Urbanized Areas with All Modes of Service Combined)

Length of Vehicle	Mode of Service for Bus Vehicles Only							
	Bus Vehicles in All Types of Bus Service		Bus Vehicles in Demand Response and Demand Response Taxi Service		Bus Vehicles in Vanpool and Publico Service		Total Bus Vehicles	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
46 ft and Longer	4,807	7.4%	4	0.0%	0	0.0%	4,811	6.1%
42 ft to 45 ft	5,428	8.3%	3	0.0%	0	0.0%	5,431	6.9%
35 ft to 41 ft	46,060	70.7%	72	0.5%	0	0.0%	46,132	58.7%
30 ft to 34 ft	3,937	6.0%	317	2.4%	0	0.0%	4,254	5.4%
25 ft to 29 ft	3,695	5.7%	4,898	36.6%	1	100.0%	8,594	10.9%
24 ft and Shorter	1,227	1.9%	8,104	60.5%	0	0.0%	9,331	11.9%
Subtotal Length Reported	65,154	100.0%	13,398	100.0%	1	100.0%	78,553	100.0%
Length Not Reported	557	---	1,043	---	0	---	1,600	---
Total	65,711	---	14,441	---	0	---	80,152	---

Source: 2013 *National Transit Database*.

Table 10: Active Roadway Vehicles by Type of Vehicle and Length from 2013 National Transit Database Revenue Vehicle Inventory for Rural Areas (Rural Areas Only, All Modes of Service Combined)

Length of Vehicle	Type of Vehicle, Rural Areas Only						
	Bus, All Types	Cutaway	Van	Automobile, Minivan, and SUV	Other	Total	
	Number	Number	Number	Number	Number	Number	Percent
35 ft and Longer	1,142	37	0	0	0	1,179	5.4%
30 ft to 34 ft	802	338	4	0	0	1,144	5.2%
25 ft to 29 ft	1,198	3,061	11	0	0	4,270	19.5%
24 ft and Shorter	387	7,191	3,510	4,259	2	15,349	70.0%
Total, Number	3,529	10,627	3,525	4,259	2	21,942	100.0%
Total, Percent	16.1%	48.4%	16.1%	19.4%	0.0%	100.0%	---

Source: Calculated from *National Transit Database 2013* rural data.

The roadway vehicle fleet is also identified by year of manufacture in the NTD urbanized area vehicle inventory. The number of vehicles by year of manufacture for the past five years from both the 2013 NTD and the 2012 NTD[13] are shown on Table 11. The year of manufacture is a calendar year whereas the reporting year for each transit agency is that agency's fiscal year that ends during the calendar year. This results in the current year for each report being, therefore, significantly underreported. A comparison of the 2013 and 2012 report data shows some variations which indicate that the year for which a vehicle is identified may vary because of probable uncertainty over year of delivery compared to year of manufacture and model year.

[13] Federal Transit Administration National Transit Database RY 2013 Database Revenue Vehicle Inventory downloadable at and http://www.ntdprogram.gov/ntdprogram/datbase/2013_database/NTDdatabase.htm
Federal Transit Administration National Transit Database RY 2012 Database Revenue Vehicle Inventory downloadable at http://www.ntdprogram.gov/ntdprogram/datbase/2012_database/NTDdatabase.htm

Table 11: Roadway Vehicles Listed in 2013 and 2012 National Transit Database Revenue Vehicle Inventory for Urbanized Areas by Year Built (Urbanized Area Data Only)

Vehicle Type	From 2013 National Transit Database, Reported Year of Manufacture					From 2012 National Transit Database, Reported Year of Manufacture				
	2013	2012	2011	2010	2009	2012	2011	2010	2009	2008
Bus, 46 ft and Longer	163	553	305	420	219	317	303	386	180	405
Bus, 35 ft to 45 ft	1,532	3,236	2,937	3,502	3,633	1,613	2,900	3,307	3,004	4,360
Bus, 34 ft or Shorter	1,391	2,517	2,133	2,133	2,848	1,213	1,808	2,904	2,794	3,299
Vans and Other	3,200	4,370	3,649	2,887	2,960	2,672	3,702	3,052	3,393	3,460
Automobile Based	257	340	222	255	317	53	159	288	309	239
Total Roadway Vehicles	6,543	11,016	9,246	9,197	9,977	5,868	8,872	9,937	9,680	11,763

Data in shaded areas are only for that part of each agency's fiscal year which falls within that calendar year, therefore, the data are incomplete.

(a) Includes only buses for which both year built and length data were reported and other vehicles for which year built data were reported.
Source: National Transit Database, 2013 and 2012.

Data are also available about the number of rail vehicles manufactured. Table 12 reports rail vehicles by year of manufacture for the previous five years from the 2013 NTD and the 2012 NTD.[14] Once again agencies are reporting their fiscal year that ended during the Calendar Year 2013 or 2012. Because of this the current year for each report is significantly underreported. The rail data show the same phenomena as bus data where the year of manufacture for vehicles appears to vary between the two reports.

Table 12: Rail Vehicles Listed in 2013 and 2012 National Transit Database Revenue Vehicle Inventory for Urbanized Areas by Year Built (Urbanized Area Data Only)

Vehicle Type	From 2013 National Transit Database Reported Year of Manufacture					From 2012 National Transit Database Reported Year of Manufacture				
	2013	2012	2011	2010	2009	2012	2011	2010	2009	2008
Commuter Rail Car	193	249	114	179	63	125	96	196	44	65
Commuter Rail Locomotive	3	0	40	42	53	0	26	49	46	24
Heavy Rail Car	215	130	172	147	79	130	172	147	69	26
Light Rail Car	31	26	73	184	18	0	115	107	18	145
Other Rail Car	0	0	0	17	0	0	0	16	0	0
Total Rail Vehicles	442	405	399	569	213	255	409	515	177	260

Data in shaded areas are only for that part of each agency's fiscal year which falls within that calendar year, therefore, the data are incomplete.

Source: National Transit Database, 2013 and 2012.

The NTD Database Revenue Vehicle Inventory for urbanized areas also indicates which vehicle fleets were purchased with federal financial assistance. Data for vehicles from urbanized areas, reported on Table 13[15] identifies three funding source categories: vehicles purchased with federal financial assistance from the Urbanized Area Formula Program, vehicles purchased with assistance from other federal funding programs, and vehicles purchased without any federal assistance. When a vehicle is purchased with

[14] Federal Transit Administration National Transit Database RY 2013 Database Revenue Vehicle Inventory downloadable at and
http://www.ntdprogram.gov/ntdprogram/datbase/2013_database/NTDdatabase.htm
Federal Transit Administration National Transit Database RY 2012 Database Revenue Vehicle Inventory downloadable at http://www.ntdprogram.gov/ntdprogram/datbase/2012_database/NTDdatabase.htm

[15] Federal Transit Administration National Transit Database RY 2013 Database Revenue Vehicle Inventory downloadable at and
http://www.ntdprogram.gov/ntdprogram/datbase/2013_database/NTDdatabase.htm

federal financial assistance, under normal circumstances the state or local government pays a portion or "share" of the cost. The ratio can be up to 80 percent from the federal share and as low as 20 percent from the state and local share. For some vehicles, especially rail cars purchased for a new rail system, the federal share is lower than 80 percent. Details of federal funding laws can be found in the *APTA Primer on Transit Funding: The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015.*[16]

Of all vehicles reported in the 2013 NTD, regardless of the year in which they were manufactured, 64 percent of vehicles in use in urbanized areas were purchased with federal financial assistance including 82 percent of buses, 29 percent of vans and automobiles, 63 percent of rail vehicles, and 45 percent of ferry boats. In this table, buses and vans refer to physical types of vehicles, not to modes of service. Thirty-six percent of vehicles in urbanized areas had been purchased without federal assistance. The lower value of the percent using federal assistance for rail vehicles compared to buses may be due in part to the age of rail vehicles. As is shown on Table 16, over one-fifth of rail vehicles were purchased before 1980 when the federal financial program was relatively small.

Table 13: Active Transit Vehicles by Source of Federal Funding from 2013 National Transit Database Revenue Vehicle Inventory for Urbanized Areas (Vehicles Only in Urbanized Areas)

Funding Source	Type of Vehicle				
	All Bus	Vans and Automobile Based	All Rail	Ferry Boat	All Vehicles
Number of Vehicles					
Urbanized Area Formula Program	54,825	7,271	8,213	59	70,368
Other Federal Programs	13,375	4,638	5,928	12	23,953
Subtotal All Federal Programs	*68,200*	*11,909*	*14,141*	*71*	*94,321*
No Federal Funding	15,408	29,689	8,171	86	53,354
Total	83,608	41,598	22,312	157	147,675
Percent of Each Column					
Urbanized Area Formula Program	65.6%	17.5%	36.8%	37.6%	47.7%
Other Federal Programs	16.0%	11.1%	26.6%	7.6%	16.2%
Subtotal All Federal Programs	81.6%	28.6%	63.4%	45.2%	63.9%
No Federal Funding	18.4%	71.4%	36.6%	54.8%	36.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: National Transit Database, 2013

Table 14 reports the portion of vehicles in service, regardless of age, in rural areas purchased with federal financial assistance. [17] The categories of financial assistance are different from those in Table 13 for vehicles in urbanized areas. The categories are Federal Transit Administration Programs, Other Federal Agency's Programs, Private Funding, and State and Local Government Funding Only. The FTA funding programs are primarily Outside of Urbanized Areas [Rural] Assistance and Bus and Bus Capital Assistance. As with urbanized area programs, rural program federal funding also requires a state and local share or "match," with a maximum federal share of 80 percent under normal circumstances. Details of federal funding laws can be found in the *APTA Primer on Transit Finding, The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015.*[18]

A larger portion of rural vehicles, 85 percent overall, were purchased with federal assistance compared to urbanized area vehicles where the overall portion purchased with federal assistance was 64 percent. The

[16] *APTA Primer on Transit Funding: The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015*. Washington: American Public Transportation Association at http://www.apta.com/resources/reportsandpublications/Documents/APTA-Primer-MAP-21-Funding.pdf

[17] National Transit Database 2012 Rural Area Data Table "Revenue Vehicle Inventory." Accessible from http://www.ntdprogram.gov/ntdprogram/rural/2012/2012_Revenue%20Vehicle%20Inventory.xlsx

[18] *APTA Primer on Transit Finding, The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015.* Washington: American Public Transportation Association at http://www.apta.com/gap/policyresearch/Documents/APTA-Primer-Map-21-Funding.pdf

vehicles on Table 14 are differentiated by physical type of vehicle. The portions with federal funding are relatively similar across vehicle types unlike urbanized area purchases which varied significantly among vehicle types.

Table 14: Active Transit Vehicles by Source of Federal Funding from 2013 National Transit Database Revenue Vehicle Inventory for Rural Areas (Vehicles Only in Rural Areas)

Funding Source	Type of Vehicle				
	All Bus	All Cutaways	All Vans	Automobile, Minivan, and SUV	All Vehicles
Number of Vehicles					
Federal Transit Administration Programs	2,840	9,342	2,843	3,434	18,459
Other Federal Agency's Programs	122	207	50	73	452
Subtotal All Federal Programs	*2,962*	*9,549*	*2,893*	*3,507*	18,911
Private Funding	68	121	144	211	544
State and Local Government Funding Only	499	957	488	541	2,485
Total	3,529	10,627	3,525	4,259	21,940
Percent of Each Column					
Federal Transit Administration Programs	80.5%	87.9%	80.7%	80.6%	84.1%
Other Federal Agency's Programs	3.5%	1.9%	1.4%	1.7%	2.1%
Subtotal All Federal Programs	83.9%	89.9%	82.1%	82.3%	86.2%
Private Funding	1.9%	1.1%	4.1%	5.0%	2.5%
State and Local Government Funding Only	14.1%	9.0%	13.8%	12.7%	11.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: National Transit Database, 2013

The FTA prescribes economic service lives before which, under normal circumstances, a vehicle cannot be replaced using federal funds.[19] Those minimum useful lives are reported on Table 15.

Table 15: FTA Required Minimum Useful Vehicle Life before Replacement by Vehicle Type

Type of Vehicle	FTA Minimum Useful Life
Large, heavy-duty transit buses including over the road buses (approximately 35'–40', and articulated buses)	at least 12 years of service or an accumulation of at least 500,000 miles
Small size, heavy-duty transit buses (approximately 30')	at least ten years or an accumulation of at least 350,000 miles
Medium-size, medium-duty transit buses (approximately 25'–35')	at least seven years or an accumulation of at least 200,000 miles
Medium-size, light-duty transit buses (approximately 25'–35')	at least five years or an accumulation of at least 150,000 miles
Other light-duty vehicles used in transport of passengers (revenue service) such as regular and specialized vans, sedans, light-duty buses including all bus models exempt from testing in the current 49 CFR Part 665	at least four years or an accumulation of at least 100,000 miles
Fixed guideway electric trolley-bus with rubber tires obtaining power from overhead catenary	at least 15 years
Rail vehicle (all types)	reached or exceeded its 25-year minimum useful life

Source: Extracted from Federal Transit Administration Circular C 9300.1B, Capital Investment Program Guidance and Application, November 1, 2008.

[19] *FTA Circular C 9300.1B, Capital Investment Program Guidance and Application.* at http://www.fta.dot.gov/documents/Final_C_9300_1_Bpub.pdf

Both roadway and rail vehicles by year of manufacture and physical category are also found in the APTA *2015 Public Transportation Vehicle Database*.[20] Those data are reported on Table 16 for rail vehicles from 1980 through 2014 and Table 17 for roadway vehicles from 1990 through 2014. These time periods are chosen to exceed the FTA defined minimum life for replacement of a typical vehicle and show vehicles which might need replacement. Note that this data summary does not indicate how many vehicles have had mid-life overhauls which, especially for rail-cars, significantly extend their service lives.

APTA 2015 Public Transportation Vehicle Database data are as of January 1, 2015, hence many vehicles manufactured in 2014 may not yet have been delivered and accepted by agencies and hence, may not be included in 2014 numbers. The APTA *Public Transportation Vehicle Database* includes only data from APTA members which voluntarily report their data; the data are not expanded to include the entire transit industry.

The correct way to read Tables 16 and 17 is to pick a mode and year and read the data as the number of vehicles currently, on January 1, 2015, in active service which the agencies reporting to the *APTA Public Transportation Vehicle Database*. For example, on Table 17 under the columns "Buses, 35 Feet or Longer" and the row "2005" is "2,069" and "6.6%." This should be read as "On January 1, 2015, there were among the active buses 35 feet and longer in the fleets of the sample of systems reporting to the APTA database, 2,069 that were manufactured in 2003. This is 6.6% of all the active buses 35 feet or longer in those fleets on January 1, 2015."

Table 16: Rail Vehicles by Year of Manufacture from 2015 APTA Public Transportation Vehicle Database (Data are a sample from an APTA member survey, they are NOT expanded to national totals)

From 2015 APTA Public Transportation Vehicle Inventory (Sample Data Only) Reported Year of Manufacture of Vehicles In Active Service on January 1, 2015 by Physical Vehicle Type						
Year of Manufacture	Commuter Rail and Hybrid Rail Cars		Heavy Rail Cars		Light Rail Cars and Streetcars	
	Number	Percent	Number	Percent	Number	Percent
2014	104	2.14%	240	2.12%	18	1.08%
2013	276	5.68%	517	4.57%	0	0.00%
2012	162	3.33%	120	1.06%	0	0.00%
2011	117	2.41%	48	0.42%	152	9.10%
2010	48	0.99%	222	1.96%	116	6.94%
2009	32	0.66%	652	5.77%	1	0.06%
2008	20	0.41%	772	6.83%	87	5.21%
2007	57	1.17%	274	2.42%	132	7.90%
2006	359	7.39%	30	0.27%	59	3.53%
2005	416	8.56%	42	0.37%	24	1.44%
2004	442	9.10%	234	2.07%	94	5.63%
2003	297	6.11%	400	3.54%	81	4.85%
2002	62	1.28%	746	6.60%	9	0.54%
2001	37	0.76%	442	3.91%	25	1.50%
2000	110	2.26%	52	0.46%	47	2.81%
1999	129	2.66%	106	0.94%	79	4.73%
1998	126	2.59%	102	0.90%	18	1.08%

[20] *APTA Public Transportation Vehicle Database.* Available for free APTA member download or for purchase by non-members through the APTA Bookstore on the MyAPTA page following instructions at http://www.apta.com/resources/statistics/Pages/OtherAPTAStatistics.aspx

From 2015 APTA Public Transportation Vehicle Inventory (Sample Data Only) Reported Year of Manufacture of Vehicles In Active Service on January 1, 2015 by Physical Vehicle Type						
Year of Manufacture	Commuter Rail and Hybrid Rail Cars		Heavy Rail Cars		Light Rail Cars and Streetcars	
	Number	Percent	Number	Percent	Number	Percent
1997	139	2.86%	86	0.76%	25	1.50%
1996	72	1.48%	13	0.12%	46	2.75%
1995	27	0.56%	92	0.81%	92	5.51%
1994	40	0.82%	68	0.60%	0	0.00%
1993	10	0.21%	290	2.57%	87	5.21%
1992	17	0.35%	112	0.99%	46	2.75%
1991	126	2.59%	0	0.00%	0	0.00%
1990	55	1.13%	14	0.12%	0	0.00%
1989	61	1.26%	297	2.63%	54	3.23%
1988	90	1.85%	720	6.37%	37	2.21%
1987	141	2.90%	90	0.80%	9	0.54%
1986	168	3.46%	946	8.37%	97	5.80%
1985	143	2.94%	468	4.14%	0	0.00%
1984	144	2.96%	293	2.59%	0	0.00%
1983	7	0.14%	281	2.49%	0	0.00%
1982	34	0.70%	339	3.00%	0	0.00%
1981	0	0.00%	142	1.26%	188	11.25%
Before 1981	790	16.26%	2,052	18.16%	48	2.87%
Total	4,858	100.00%	11,302	100.00%	1,671	100.00%

Table 17: Roadway Vehicles by Year of Manufacture from 2015 APTA Public Transportation Vehicle Database (Data are a sample from an APTA member survey, they are NOT expanded to national totals)

From 2015 APTA Public Transportation Vehicle Inventory (Sample Data Only) Reported Year of Manufacture of Vehicles In Active Service on January 1, 2015 by Physical Vehicle Type						
Year of Manufacture	Buses, 35 Feet or Longer		Buses, 34 Feet or Shorter		Small Road Vehicles	
	Number	Percent	Number	Percent	Number	Percent
2014	2,487	7.9%	119	5.9%	2,115	14.3%
2013	1,944	6.2%	153	7.6%	2,055	13.9%
2012	2,188	6.9%	136	6.8%	1,924	13.0%
2011	1,865	5.9%	86	4.3%	1,473	10.0%
2010	1,653	5.2%	175	8.7%	1,376	9.3%
2009	2,109	6.7%	258	12.8%	1,660	11.2%
2008	2,254	7.1%	117	5.8%	1,696	11.5%
2007	1,791	5.7%	160	8.0%	877	5.9%
2006	1,983	6.3%	226	11.2%	749	5.1%
2005	2,069	6.6%	133	6.6%	364	2.5%
2004	2,096	6.6%	105	5.2%	205	1.4%
2003	2,469	7.8%	74	3.7%	130	0.9%

From 2015 APTA Public Transportation Vehicle Inventory (Sample Data Only) Reported Year of Manufacture of Vehicles In Active Service on January 1, 2015 by Physical Vehicle Type						
Year of Manufacture	Buses, 35 Feet or Longer		Buses, 34 Feet or Shorter		Small Road Vehicles	
	Number	Percent	Number	Percent	Number	Percent
2002	1,382	4.4%	57	2.8%	46	0.3%
2001	1,881	6.0%	38	1.9%	35	0.2%
2000	988	3.1%	80	4.0%	18	0.1%
1999	1,147	3.6%	44	2.2%	17	0.1%
1998	542	1.7%	12	0.6%	16	0.1%
1997	245	0.8%	9	0.4%	4	0.0%
1996	308	1.0%	1	0.0%	3	0.0%
1995	67	0.2%	0	0.0%	3	0.0%
1994	66	0.2%	4	0.2%	1	0.0%
1993	3	0.0%	2	0.1%	0	0.0%
1992	6	0.0%	1	0.0%	0	0.0%
1991	0	0.0%	0	0.0%	0	0.0%
Before 1991	28	0.1%	20	1.0%	0	0.0%
Total	31,571	100.0%	2,010	100.0%	14,767	100.0%

The average cost of vehicles is reported on Table 18 for one specific vehicle group for each of 6 service modes. For bus and demand response these data refer to the physical vehicles described, not to a mode of service. The data are calculated from costs reported in the annual *APTA Public Transportation Vehicle Database.*[21] Not all vehicles fleets reported for the APTA Database include cost data. To insure an adequate sample, data for two years are used in each estimate. Amounts are averages for vehicles with the specific characteristics in each heading, not for all vehicles in that mode. Some cost data are contract amounts and may not be final. Data include amounts paid to manufacturers only. Data should be considered indicative only, specifications of vehicles in the sample, including fuel type, vary between years. Historical cost data for these vehicle categories are reported in the *APTA Fact Book Appendix A: Historical Tables.*[22]

[21] *APTA Public Transportation Vehicle Database.* Available for free APTA member download or for purchase by non-members through the APTA Bookstore on the MyAPTA page following instructions at http://www.apta.com/resources/statistics/Pages/OtherAPTAStatistics.aspx

[22] *APTA Fact Book Appendix A: Historical Tables.* Washington: American Public Transportation Association at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf

Table 18: Average Vehicle Costs by Vehicle Type

Two-Year Period	Category	Standard Transit Bus (>=27'6", 2 Doors) (a)	Commuter Rail Car (Loco-motive Hauled, 2 Levels, 0 Cabs)	Demand response (Small Vehicle, <27'6", Minibus, Van, Car, SUV)	Heavy Rail Car (1 Level, 1 Cab)	Light Rail Car (Single Articulated, 1 Level, 2 Cabs)	Vanpool (Small Vehicle, <27'6", Minibus, Van, Car, SUV)
2007-2008	Sample Size	2,017	94	1,335	373	70	758
	Average Cost	$ 398,239	$ 1,799,796	$ 59,129	$ 1,453,324	$ 2,850,000	$ 22,872
2008-2009	Sample Size	3,031	314	1,911	394	---	739
	Average Cost	$ 420,721	$ 2,240,557	$ 63,298	$ 1,642,641	---	$ 23,185
2009-2010	Sample Size	3,388	92	1,235	318	77	403
	Average Cost	$ 469,928	$ 2,334,565	$ 73,825	$ 1,886,095	$ 3,600,000	$ 24,941
2010-2011	Sample Size	2,605	8	1,218	156	77	356
	Average Cost	$ 479,585	$ 2,176,350	$ 65,629	$ 1,975,793	$ 3,600,000	$ 24,563
2012-2013	Sample Size	2,475	85	890	16	57	467
	Average Cost	$486,653	$2,400,000	$71,593	2,300,804	$3,300,000	$24,665
2013-2014	Sample Size	3,400	10	879	4	---	177
	Average Cost	$486,986	$2,824,000	$83,698	$2,068,795	---	$26,462
2014-2015	Sample Size	4,335	---	708	---	78	360
	Average Cost	$504,464	---	$82,082	---	$3,374,510	$23,775

(a) Does not include articulated, double-deck, intercity, suburban, or trolley-replica buses of any length.
Source: *American Public Transportation Vehicle Database*, annual.

IV.C. Vehicle Fuel Types have steadily changed. Over the short eight-year period since 2007, the portion of bus service vehicles powered by diesel fuel engines has dropped from 80 percent to 52 percent as reported on Table 19. Natural gas, hybrid fuels, and biodiesel now power a significant and increasing portion of the transit buses.[23] The same trend, when comparing the sum of diesel and gasoline fueled vehicles, is not as strong for vehicles used in demand response service, most of which are smaller vehicles such as vans. The portion of demand response vehicles powered by diesel fuel or gasoline engines has declined more slowly, from 95 percent in 2007 to 83 percent in 2013. Self-propelled commuter rail cars are nearly all powered by electricity; unpowered cars are hauled by locomotives which are primarily diesel fueled. Other modes such are heavy rail, light rail, and trolleybus are either totally or approach totally electrically powered fleets. These data are based on the sample of agencies that participate in the APTA Public Transportation Vehicle Database. Some of the variation in these data may result from the changing set of participants in that annual sample.

[23] *APTA Public Transportation Vehicle Database.* Available for free APTA member download or for purchase by non-members through the APTA Bookstore on the MyAPTA page following instructions at http://www.apta.com/resources/statistics/Pages/OtherAPTAStatistics.aspx

Table 19: Percent of Bus, Demand Response, and Commuter Rail Vehicles by Type of Fuel from APTA Public Transportation Vehicle Database, 2007 through 2015 (Data are a sample from an APTA member survey, they are NOT adjusted to national totals)

Mode of Service: Type of Fuel	Percent of Vehicles by Type of Fuel						
	2015	2013	2011	2010	2009	2008	2007
Bus:							
CNG, LNG, and Blends	21.9%	20.0%	18.6%	18.6%	18.3%	18.5%	15.6%
Diesel	52.0%	58.4%	63.5%	65.8%	68.9%	70.2%	79.8%
Hybrid Electric and Other	17.4%	13.2%	8.8%	7.0%	4.9%	3.8%	2.3%
Gasoline	1.0%	1.1%	0.8%	0.7%	0.7%	0.5%	0.6%
Biodiesel	7.6%	7.0%	7.9%	7.7%	6.4%	6.6%	---
Other	0.0%	0.3%	0.4%	0.2%	0.8%	0.4%	1.7%
Demand Response:							
CNG, LNG, and Blends	7.3%	2.0%	1.9%	1.9%	2.5%	2.7%	2.1%
Diesel	28.1%	46.7%	49.3%	49.2%	50.5%	55.9%	64.6%
Hybrid Electric and Other	2.3%	1.4%	0.1%	0.5%	0.6%	1.3%	0.5%
Gasoline	54.9%	45.1%	43.0%	42.8%	39.0%	35.2%	30.7%
Biodiesel	5.1%	4.8%	5.6%	5.5%	7.2%	4.6%	1.6%
Other	2.3%	0.1%	0.1%	0.1%	0.2%	0.3%	0.5%
Commuter Rail Cars:							
Electricity	53.6%	46.5%	46.5%	46.1%	45.6%	53.4%	49.1%
Diesel	0.2%	0.3%	0.2%	0.2%	0.2%	0.4%	0.4%
Unpowered	46.2%	53.2%	53.3%	53.7%	54.2%	46.2%	50.5%
Commuter Rail Locomotives:							
Electricity	3.2%	16.7%	11.8%	11.3%	10.0%	10.7%	11.3%
Diesel	96.8%	83.3%	88.2%	88.7%	90.0%	89.3%	88.7%

Source: *American Public Transportation Vehicle Database*, annual.

IV.D. Fixed-Guideway Infrastructure growth is described in the following tables. The NTD reports miles of track beginning in 2002. These data are shown on Table 20. Miles of track reported in the NTD include main line, siding, and yard trackage.[24] From RY 2002 to RY 2013, miles of track for all modes increased 20 percent, from 10,590 miles to 12,746 miles. These data include only systems reporting to the NTD, they are not expanded to include non-reporting systems.

Tables 20 and 22 recognize the new modes of service categories for the NTD beginning in 2011. For rail modes, what had been commuter railroad is now divided into commuter railroad and hybrid railroad, and what had been light rail is now divided into light rail and streetcar. Two systems formerly listed as light rail were also reclassified as hybrid rail. These modes are combined for this report because the data are not required to be reported separately until data are submitted for the 2013 NTD report. Data reported in voluntary divisions in 2011 and 2012 might be inaccurate and summing them into their former categories maintains comparability. Data for the new individual modes is available reported in the *APTA Fact Book Appendix A: Historical Tables.*[25]

Table 21 lists all entirely new fixed-guideway transit systems opened from 2004 through summer 2015. New extensions to existing fixed-route systems are not included.

Ten entirely new light rail and streetcar systems have been opened in Houston, TX; Minneapolis, MN; Little Rock, AR; Charlotte, NC; Seattle, WA (2 systems); Phoenix, AZ; Virginia Beach, VA; Salt Lake City, UT; Tucson, AZ, and Dallas, TX. Entirely new commuter and hybrid rail systems opened in Trenton, NJ;

[24] Federal Transit Administration National Transit Database, annual. See Table 23 at http://www.apta.com/resources/statistics/Pages/NTDDataTables.aspx

[25] *APTA Fact Book Appendix A: Historical Tables.* Washington: American Public Transportation Association at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf

Albuquerque, NM; Nashville, TN; San Diego, CA; Salt Lake City, UT; Portland, OR; Minneapolis, MN; Austin, TX; Denton, TX; and Orlando, FL.

Table 20: Miles of Track by Mode, 2002-2013 (Agencies Reporting to the NTD Only)

Report Year	Commuter Rail and Hybrid Rail Track Miles	Heavy Rail Track Miles	Light Rail and Streetcar Track Miles	Other Rail Track Miles	Total Rail Track Miles
2002	7,267.1	2,179.2	1,113.6	29.7	10,589.5
2003	7,433.9	2,209.5	1,147.2	30.0	10,820.6
2004	7,284.1	2,209.5	1,321.2	30.3	10,845.1
2005	7,947.5	2,277.3	1,385.1	30.3	11,640.2
2006	8,016.7	2,277.3	1,463.8	38.3	11,796.1
2007	8,058.9	2,277.3	1,493.0	38.3	11,867.5
2008	8,017.9	2,277.3	1,538.5	30.3	11,864.0
2009	8,424.3	2,272.2	1,636.4	30.1	12,363.0
2010	8,471.5	2,272.2	1,664.3	30.1	12,438.1
2011	8,468.7	2,271.2	1,674.1	30.1	12,444.1
2012	8,596.7	2,273.6	1,704.2	42.7	12,617.2
2013	8,641.0	2,273.6	1,784.8	46.2	12,745.6

Source: National Transit Database

A variety of systems in other rail modes have also opened from 2004 to now. A monorail system began operation in Las Vegas, NV; a heavy rail system in San Juan, PR; and an aerial tramway in Portland, OR. These new system openings are in addition to extensions of existing routes or new routes added to existing fixed-guideway systems over the same time period.

Table 21: Openings of Entirely New Rail Systems, 2004-October 2015

Location	System	Mode	Year
Houston, TX	Metropolitan Transit Authority of Harris County Metro Rail	Light Rail	2004
Trenton, NJ	New Jersey Transit Corporation River Line	Hybrid Rail	2004
Minneapolis, MN	Metro Transit Hiawatha Line	Light Rail	2004
Las Vegas, NV	Las Vegas Monorail	Monorail	2004
Little Rock, AR	Central Arkansas Transit Authority River Rail	Streetcar	2004
San Juan, PR	Alternativa de Transporte Integrado Tren Urbano	Heavy Rail	2005
Albuquerque, NM	New Mexico Rail Runner Express	Commuter Rail	2006
Nashville, TN	Regional Transportation Authority Music City Star	Commuter Rail	2006
Portland, OR	Portland Aerial Tram	Aerial Tramway	2006
Charlotte, NC	Charlotte Area Transit System LYNX Blue Line	Light Rail	2007
Seattle, WA	Seattle Department of Transportation South Lake Union Streetcar	Streetcar	2007
San Diego, CA	North County Transit District Sprinter	Hybrid Rail	2008
Salt Lake, City UT	Utah Transit Authority FrontRunner	Commuter Rail	2008
Phoenix, AZ	Valley Metro Rail	Light Rail	2008
Portland, OR	Tri-Met Westside Express Service	Hybrid Rail	2009
Seattle, WA	Sound Transit Central Link Light Rail	Light Rail	2009
Minneapolis, MN	Metro Transit Northstar Commuter Rail	Commuter Rail	2009
Austin, TX	Capital Metro Rail Red Line	Hybrid Rail	2010
Denton, TX	Denton County Transportation Authority A Train	Commuter Rail	2011
Virginia Beach, VA	Hampton Roads Transit TIDE	Light Rail	2011
Salt Lake City, UT	Utah Transit Authority Sugar House Streetcar	Streetcar	2013
Orlando, FL	SunRail	Commuter Rail	2014
Tucson, AZ	Sun Link Tucson Streetcar	Streetcar	2014
Dallas, TX	Dallas Streetcar	Streetcar	2015

Table 22 reports the number of stations and maintenance facilities reported in the NTD for urbanized areas only. Stations are defined as significant structures on transit rights-of-way.[26] They do not include street stops or shelters at street stops for bus, light rail, trolley bus, or cable car modes. NTD reporting instructions describe bus or trolley bus stations to be facilities "in a separate ROW that have an enclosed structure (building) for passengers for such items as ticketing, information, restrooms, concessions, and telephones." NTD reporting instructions describe maintenance facilities as "garages and buildings where routine maintenance and repairs are performed (general purpose maintenance facility) and, in larger transit agencies, where engine and other major unit rebuilds are performed (heavy maintenance facility). General purpose maintenance facilities generally also serve as operating garages where vehicles are stored and dispatched daily for revenue service. In some transit agencies, the same facility is used for both general purpose and heavy maintenance." A joint general purpose/heavy maintenance facility is reported as a general purpose maintenance facility.

Table 22: Stations and Maintenance Facilities by Mode, 2013 (Agencies Reporting to the NTD for Urbanized Areas Only)

Mode	Passenger Stations	General Maintenance Facilities	Heavy Maintenance Facilities
All Bus	1,627	896.9	36.4
Commuter Rail/Hybrid Rail	1,296	79.0	15.9
Demand Response	0	518.3	3.4
Ferryboat	92	15.0	1.0
Heavy Rail	1,044	48.6	11.3
Light Rail/Streetcar	887	45.7	6.8
Other Rail	66	9.0	0.0
Trolleybus	5	5.0	0.0
Vanpool	0	25.6	0.0
Total	5,017	1.643.1	74.8

Source: 2013 National Transit Database

IV. E. The Federal New Starts "Pipeline" lists projects be considered for funding from the New Starts program. New Start and Extension projects go through an extended approval process. The FTA produces an *Annual Report on New Starts* which provides Congress with detailed descriptions of all projects in the new starts "pipeline" that have reached the status of preliminary engineering or higher.[27] The purpose of the *Annual Report on New Starts* is to provide Congress with up-to-date information and recommendations for which New Starts projects to fund at what level in the next appropriation law. Table 23 summarizes the amount of federal funds requested for all projects disaggregated by mode of service. A total of 53 projects are listed. For those reporting proposed funding plans, total project costs are $43.7 billion. A total of $19.2 billion is requested from all types of federal government programs. Of that amount $18.3 billion would be from Capital Investment Grants formerly titled new Start and Extension grants.

Table 24 reports the projects, by stage in the funding process, currently in the New Starts "Pipeline." These projects are described in individual profiles on the FTA web site that may have been updated since the last annual New Starts report was released.[28] The New Starts Reports are dated for the year in which funds would be granted. The 2015 report is intended to aid Congress in decisions concerning FY 2015 funding, was written in 2014, and is based on 2013 data.

[26] Federal Transit Administration National Transit Database, annual. See Table 21 and Table 22 at http://www.apta.com/resources/statistics/Pages/NTDDataTables.aspx

[27] *Annual Report on New Starts.* Washington: Federal Transit Administration, annual. Available on-line at http://www.fta.dot.gov/12304_15872.html

[28] Capital Investment Program Projects Profiles: FY 2014. Washington, Federal Transit Administration. at http://www.fta.dot.gov/12304_14366.html

Table 23: Summary of Federal Capital Investment Grant Proposal Financial Plans as of February 3, 2015

Mode	Number of Projects	Proposed Total Amount of Funding (Millions) (b)	Proposed Federal Capital Investment Grant Funds Only (Millions) (b,c)	Total Proposed Federal Funds (Millions) (b,c)	Miles of Line (b)	Vehicles (b)	Stations (b)
Bus Rapid Transit	19	1,698.38	798.11	937.55	188.1	237	281
Commuter Rail	5	3,231.13	1,625.71	1,728.76	88.7	61	27
Heavy Rail	5	9,526.42	3,337.0	3,518.17	36.4	94	11
High Capacity Rail	1	5,121.69	1,550.0	1,763.90	20.0	80	21
Light Rail	16	23,284.57	10,563.19	10,883.33	136.4	304	195
Streetcar	7	870.11	396.25	453.85	22.9	33	93
Total All Modes	53	43,732.30	18,270.26	19,285.56	492.5	809	628

(a) As reported in Federal Transit Administration Annual Report on Funding Recommendation Fiscal Year 2016.
(b) Includes amounts reported only; amounts are not expanded to account for projects not reporting data.
(c) Includes federals funds that have already been appropriated.

Table 24: FTA New Starts Capital Investment Program Project Profiles as of February 3, 2015 (Includes Completed Projects Reported in Profile Listing)

Status (a)	State	Urban Area	Project Name	Date of Newest Profile	Planned Date of Opening	Mode (b)	Proposed Financial Plan				Miles of Line	Vehicles	Stations
							Total Cost (Millions)	Federal CIG (c) Only Funds (Millions)	Federal CIG (c) Only Share (Percent)	Total Federal Funds (d) (Millions)			
SSPD	AZ	Tempe	Tempe Streetcar	Apr 2013	Late 2017	SC	$129.34	$56.00	43.3%	$88.10	2.7	5	18
SSPD	CA	Fresno	Fresno Area Express Blackstone/Kings Canyon BRT	Nov 2014	Late 2015	BRT	$48.53	$38.82	80.0%	$38.82	15.7	17	27
FFGA	CA	Los Angeles	Regional Connector Transit Corridor	Jan 2015	2021	LR	$1,402.93	$669.90	47.8%	$733.90	1.9	4	3
FFGA	CA	Los Angeles	Westside Purple Line Extension Section 1	Jan 2015	Oct 2024	HR	$2,821.96	$1,250.0	44.3%	$1,262.17	3.9	34	3
NSE	CA	Los Angeles	Westside Purple Line Extension section 2	Nov 2014	Oct 2024	HR	$2,374.44	$1,187.00	49.9%	$1,356.00	2.6	20	2
SSPD	CA	Los Angeles	Downtown Los Angeles Streetcar	Feb 2014	---	SC	$153.00 to $162.00	$74.99	---	$74.99	3.8	8	24
SSPD	CA	Sacramento	Downtown Riverfront Streetcar Project	Nov 2014	Jan 2018	SC	$165.93	$74.99	45.2%	$79.99	4.0	8	25
NSPD	CA	San Diego	Mid-Coast Corridor Transit Project	Nov 2014	May 2019	LR	$2,112.11	$1,043.38	49.4%	$1,043.38	10.9	36	9
FFGA	CA	San Francisco	Third Street Light Rail Phase 2 - Central Subway	Jan 2015	Dec 2018	LR	$1,578.30	$942.2	59.7%	$983.22	1.7	4	4

Table 24: FTA New Starts Capital Investment Program Project Profiles as of February 3, 2015 (Includes Completed Projects Reported in Profile Listing)

Status (a)	State	Urban Area	Project Name	Date of Newest Profile	Planned Date of Opening	Mode (b)	Proposed Financial Plan				Miles of Line	Vehi-cles	Sta-tions
							Total Cost (Millions)	Federal CIG (c) Only Funds (Millions)	Federal CIG (c) Only Share (Percent)	Total Federal Funds (d) (Millions)			
SSPD	CA	San Francisco	Van Ness Avenue BRT	Nov 2014	Mid 2018	BRT	$162.07	$74.99	46.3%	$74.99	2.0	38	9
SSPD	CA	San Jose	El Camino Real Corridor BRT Project	Jul 2013	Late 2018	BRT	$188.00	$74.99	39.9%	$74.99	17.4	---	16
FFGA	CA	San Jose	Silicon Valley Berryessa Extension Project (BART)	Jan 2015	2018	HR	$2,330.02	$900.00	38.6%	$900.00	10.2	40	2
SSPD	CA	San Rafael	San Rafael to Larkspur Regional Connection	Nov 2014	Late 2016	CR	$42.53	$22.53	53.0%	$22.53	2.1	---	1
FFGA	CO	Denver	Eagle Commuter Rail	Jan 2015	Dec 2016	CR	$2,043.14	$1,030.45	50.4%	$1,092.55	30.2	44	13
NSPD	CO	Denver	Southeast Extension	Nov 2014	Spring 2019	LR	$224.29	$92.00	41.0%	$99.50	2.3	8	3
SSPD	FL	Fort Lauderdale	Wave Streetcar	Nov 2014	Dec 2017	SC	$161.85	$59.28	36.6%	$80.78	2.8	5	10
SSPD	FL	Jacksonville	JTA BRT Southeast Corridor	Nov 2014	Early 2017	BRT	$23.88	$19.10	80.0%	$19.10	11.1	8	7
SSPD	FL	Orlando	SunRail Phase 2 North	Nov 2014	2017	CR	$68.68	$34.34	50.0%	$34.34	12.0	3	1
NSE	FL	Orlando	SunRail Phase 2 South	Nov 2014	2017	CR	$184.88	$92.44	50.0%	$92.44	17.2	6	4
FFGA	HI	Honolulu	High Capacity Transit Corridor Project	Jan 2015	Jan 2020	HCR	$5,121.69	$1,550.00	30.3%	$1,763.90	20.0	80	21
SSPD	IL	Chicago	Ashland Avenue BRT Phase I Project	Jan 2014	---	BRT	$116.90	$58.3	49.9%	$58.30	5.4	50	14
CCPD	IL	Chicago	Red and Purple Line Modernization Project	Nov 2014	2020/ 2021	HR	$1,700.00	---	---	---	9.6	---	4
FFGA	MA	Boston	Cambridge to Medford Green Line Extension	Jan 2015	Jun 2021	LR	$2,297.62	$996.12	43.4%	$996.12	4.7	24	7
NSPD	MD	Baltimore	Baltimore Red Line	Nov 2014	Late 2023	LR	$2,997.75	$900.00	30.0%	$955.20	14.1	26	19
NSE	MD	Washington	Maryland National Capital Purple Line	Nov 2014	Late 2020	LR	$2,448.22	$900.00	36.8%	$900.00	16.2	58	21
SSPD	MI	Lansing	Michigan/Grand River BRT	Apr 2013	Jul 2016	BRT	$215.36	$74.99	34.8%	$164.46	8.5	17	28
NSPD	MN	Minneapolis	METRO Blue Line Extension	Aug 2014	2020	LR	$1,002.00	$501.00	50.0%	$501.0	13	26	10/11
SSPD	MN	Minneapolis	METRO Orange Line Bus Rapid Transit	Nov 2014	2019	BRT	$150.70	$64.63	$42.9%	$64.63	17	11	11

Table 24: FTA New Starts Capital Investment Program Project Profiles as of February 3, 2015 (Includes Completed Projects Reported in Profile Listing)

Status (a)	State	Urban Area	Project Name	Date of Newest Profile	Planned Date of Opening	Mode (b)	Proposed Financial Plan				Miles of Line	Vehi-cles	Sta-tions
							Total Cost (Millions)	Federal CIG (c) Only Funds (Millions)	Federal CIG (c) Only Share (Percent)	Total Federal Funds (d) (Millions)			
NSPD	MN	Minneapolis	Southwest Light Rail Transit	Nov 2014	Dec 2019	LR	$1,653.45	$826.72	50.0%	$826.72	15.7	29	17
SSPD	NC	Charlotte	CityLYNX Gold Line Phase 2 Streetcar	Nov 2014	2019	SC	$149.99	$75.99	50.0%	$74.99	2.5	7	11
FFGA	NC	Charlotte	LYNX Blue Line Extension - Northeast Corridor	Jan 2015	Mar 2018	LR	$1,160.08	$580.04	50%	$580.04	9.3	22	11
NSPD	NC	Durham	Durham-Orange LRT Project	Feb 2014	2026	LR	$1,800.00	$910.13	50.6%	$910.30	17.1	12	17
SSPD	NM	Albuquerque	Central Avenue Corridor BRT Project	Feb 2014	2017	BRT	---	---	---	---	17.0	---	---
SSPD	NV	Reno	4th Street/Prater Way BRT Project	Nov 2014	Late 2017	BRT	$52.57	$6.47	12.3%	$39.57	3.1	4	8
SSPD	NV	Reno	Virginia Street BRT Extension Project	Sep 2014	2018	BRT	$27.30	---	---	---	1.8	3	4
SSPD	NY	Albany	Washington/Western Bus Rapid Transit Line	Jul 2014	---	BRT	$64.00	---	---	---	---	---	15
CCPD	NY	New York	Canarsie Line Power Improvements	Nov 2014	---	HR	$300.00	---	---	---	10.1	---	---
SSPD	OH	Columbus	Cleveland Avenue Bus Rapid Transit	Nov 2014	Late 2017	BRT	$47.67	$38.13	80.0%	$31.54	15.6	14	32
SSPD	OR	Eugene	West Eugene EmX Extension	Nov 2014	Early 2017	BRT	$96.73	$74.99	77.5%	$76.06	9.2	7	13
FFGA	OR	Portland	Portland-Milwaukie Light Rail Project	Jan 2015	Mar 2016	LR	$1,490.35	$745.18	50.0%	$885.83	7.3	18	10
SSPD	TN	Nashville	East-West Connector BRT Project (The Amp)	Jan 2014	2016	BRT	$174.00	$74.99	43.1%	$78.99	7.1	11	16
CCPD	TX	Dallas	Red and Blue Line Platform Extensions	Nov 2014	Dec 2017	LR	$188.40	---	---	---	---	---	38
SSPD	TX	El Paso	Dyer Corridor BRT	Nov 2014	Mar 2017	BRT	$34.23	$19.35	56.5%	$25.98	12.0	10	12
SSPD	TX	El Paso	Montana Corridor BRT	Nov 2014	Jul 2019	BRT	$45.52	$26.97	59.3%	$34.73	16.8	12	15
NSPD	TX	Fort Worth	TEX Rail	Nov 2014	Sep 2018	CR	$891.90	$445.95	50.0%	$486.90	27.2	8	8
NSE	TX	Houston	University Corridor LRT	Nov 2010	---	LR	$1,563.07	$781.53	50.0%	$781.53	11.3	32	19

Table 24: FTA New Starts Capital Investment Program Project Profiles as of February 3, 2015 (Includes Completed Projects Reported in Profile Listing)

Status (a)	State	Urban Area	Project Name	Date of Newest Profile	Planned Date of Opening	Mode (b)	Proposed Financial Plan				Miles of Line	Vehi-cles	Sta-tions
							Total Cost (Millions)	Federal CIG (c) Only Funds (Millions)	Federal CIG (c) Only Share (Percent)	Total Federal Funds (d) (Millions)			
SSPD	TX	San Antonio	Downtown Modern Streetcar	Dec 2014	---	SC	---	---	---	----	5.9	---	---
SSPD	UT	Provo-Orem	Provo-Orem Bus Rapid Transit	Nov 2014	2017	BRT	$149.92	$74.99	50.0%	$74.99	10.5	25	18
SSPD	WA	Everett	Swift II BRT	Dec 2014	2018	BRT	$48.0	$38.0	79.2%	$38.0	12.0	---	18
SSPD	WA	Seattle	City Center Connector Streetcar	Jul 2014	Early 2018	SC	$110.00	$55.00 to $75.00	---	$55.00 to $75.00	1.2	---	5
NSPD	WA	Seattle/ Lynnwood	Lynnwood Link Extension	Nov 2013	2023	LR	$1,200.00 to $1,700.00	$600.00 to $850.00	50.0%	$600.00 to $850.00	8.5	---	---
SSPD	WA	Tacoma	Tacoma Link Light Rail Expansion	Nov 2014	2021	LR	$166.00	$74.99	45.2%	$86.59	2.4	5	6
SSPD	WA	Vancouver	C-TRAN Fourth Plain Bus Rapid Transit	Jan 2014	Jul 2016	BRT	$53.00	$38.40	72.5%	$42.40	5.9	10	18

(a) CCE = Core Capacity Engineering
CCPD = Core Capacity Project Development
FFGA = New Starts Full Funding Grant Agreement
NSE = New Starts Engineering
NSPD = New Starts Project Development
SSGA = Small Starts Construction Grant Agreement
SSPD = Small Starts Project Development

(b) BRT = Bus Rapid Transit
CR = Commuter Rail
HCR = High Capacity Rail
HR = Heavy Rail
LR = Light Rail
SC = Street Car

(C) CIG = Capital Investment Grant, formally titled New Start Grant
(d) Amount from all federal Sources; not limited to new starts funds.

IV. F. Operating expenditures are the major portion of transit agency expenditures. In 2013, 69.8 percent of all transit expenditures were for operations compared to 30.2 percent for capital. Table 25 reports operating expenditures for the past four years classified by function.[29] Operating functions describe expenditures by their output rather than inputs. Each category includes all inputs such as labor, materials and supplies, utilities, insurance and other costs used for each activity. The largest cost function in 2013 is vehicle operations at 44.1 percent of total operating costs, followed by vehicle maintenance at 15.9 percent, general administration at 15.7 percent, purchased transportation at 13.7 percent, and non-vehicle maintenance at 10.5 percent. Purchased transportation costs would include the operations, maintenance, and administrative cost of transportation services that are purchased under contract from a private provider or another public agency. Federal funding law considers vehicle maintenance and non-vehicle maintenance to be eligible for capital funding from federal assistance programs. Data on Table 25 are totals for the entire transit industry, not just for agencies reporting data to the NTD.

Table 25: Operating Expenditures by Function Class, 2010-2013 (All Public Transportation Agencies)

Year	Vehicle Operations	Vehicle Maintenance	Non-Vehicle Maintenance	General Administration	Purchased Transportation	Total
Amount (Millions of Dollars)						
2010	17,008.7	6,373.9	3,422.6	5,731.2	5,218.4	37,754.9
2011	17,589.8	6481.0	3,534.2	5,674.1	5,083.0	38,362.1
2012	17,987.9	6,650.8	3,781.7	5,786.5	5,493.9	39,700.9
2013	18,625.2	6,724.7	4,412.0	6,637.2	5,789.0	42,188.1
Percent of Total						
2010	45.1%	16.9%	9.1%	15.2%	13.8%	100.0%
2011	45.9%	16.9%	9.2%	14.8%	13.3%	100.0%
2012	45.3%	16.8%	9.5%	14.6%	13.8%	100.0%
2013	44.1%	15.9%	10.5%	15.7%	13.7%	100.0%

Source: *2015 APTA Public Transportation Fact Book Appendix A: Historical Tables*

V. Are Voters Willing to Support Transit Investment?

Voters consistently approve ballot measures that include transit funding. Table 26 reports annual ballot measure approval rates from data collected by the Center for Transportation Excellence (CFTE).[30]

Table 26: Local Referenda Approvals

Year	Measures on Ballots	Measures Approved	Percentage Approved
2003	17	12	71%
2004	50	40	80%
2005	25	21	84%
2006	45	34	76%
2007	18	12	67%
2008	47	35	74%
2009	11	8	73%
2010	56	43	77%
2011	28	22	79%
2012	62	49	79%
2013	15	11	73%
2014	61	42	69%
2015 (a)	32	23	72%

(a) Referenda decided through November 18, 2015. Two referenda remained pending on that date.
Source: Center for Transportation Excellence

[29] *APTA Fact Book Appendix A: Historical Tables.* Washington: American Public Transportation Association at http://www.apta.com/resources/statistics/Documents/FactBook/2015-APTA-Fact-Book-Appendix-A.pdf
[30] Center for Transportation Excellence at http://www.cfte.org/

The CFTE tracks the outcomes of transit ballot measures throughout the United States. From 2003 through 2015, between 67 percent and 84 percent of all transit referenda were approved by voters each year, with an average approval rate of 75 percent over the thirteen-year period.

VI. References

The following references provide detailed explanations and extended data to expand on the material in this report.

VI. A. American Public Transportation Association Publications:

Public Transportation Fact Book: The Fact Book is a summary of national total data for the entire transit industry for a single year. Operating statistics and financial data are included. A supplemental volume, *Public Transportation Fact Book, Appendix A: Historical Data*, lists basic national total statistics for every year since they were first collected, as far back as 1902. *Public Transportation Fact Book, Appendix B: Agency and Urbanized Area Operating Statistics*, ranks for one year transit agencies and urbanized areas by size for six operating statistics by mode and for total amounts. The *Fact Book* is on-line at http://www.apta.com/resources/statistics/Pages/transitstats.aspx.

APTA Primer on Transit Finding, The Moving Ahead for Progress in the 21st Century Act and Other Related Laws, FY 2013 Through FY 2015. The Primer describes distribution and uses of federal transit funds. The report summarizes where federal funds come from, where they go and why, and what they can be used for in detail. A history of federal authorizing and appropriation laws is included along with a legislative terms glossary and a description of highway funds that can be used for transit investments. The Primer is on-line at http://www.apta.com/resources/reportsandpublications/Documents/APTA-Primer-MAP-21-Funding.pdf

Public Transportation Vehicle Database: The Vehicle Database lists transit vehicles by fleet of vehicles with the same characteristics manufactured in the same year. Vehicle characteristics such as model, power source, year built, seats, length, and various types of equipment are quantified. Pricing data for new vehicles are also included. Based on voluntary survey of APTA members. Available for free APTA member download or for purchase by non-members through the APTA Bookstore on the MyAPTA page following instructions at http://www.apta.com/resources/statistics/Pages/OtherAPTAStatistics.aspx

Public Transportation Infrastructure Database: The Infrastructure Database provides data on transit agency physical infrastructure. Lengths and termini are provided for all fixed-guideway route segments in operation, under construction, or projected. Data included by agency for number of and characteristics of passenger stations and non-station stops including parking, ADA access, information display, security cameras, and many other types of equipment. Based on voluntary survey of APTA members. Available for free APTA member download or for purchase by non-members through the APTA Bookstore on the MyAPTA page following instructions at http://www.apta.com/resources/statistics/Pages/OtherAPTAStatistics.aspx

Public Transportation Fare Database: The Fare Database provides details on transit agency fare structures including base fares, passes, zones, transfers, special fares for students and elderly, and other variations in individual agency fare structures. Fixed-route and demand response fare structures are presented separately. Details on fare media sale equipment and fare collection equipment are also included. Based on voluntary survey of APTA members. Available for free APTA member download or for purchase by non-members through the APTA Bookstore on the MyAPTA page following instructions at http://www.apta.com/resources/statistics/Pages/OtherAPTAStatistics.aspx

VI. B. Federal Transit Administration Publications:

Annual Report on New Starts: The New Starts Report details the status, financing, and characteristics of new start and extension projects in the federal funding "pipeline" that have reached at least the preliminary

engineering stage in the funding application process. Prepared as background material for the Congress to make funding allocation decisions, the report is highly detailed. Available on-line at http://www.fta.dot.gov/grants/12868.html Updated profiles of projects can be found at http://www.fta.dot.gov/12304_14366.html

Statistical Summaries: The Statistical Summaries provide extensive detail concerning federal financial assistance expenditures. Tables detail in cross tabulations where programs funds are taken from, what they are used to buy, and which state and local jurisdictions they go to. Available on-line at http://www.fta.dot.gov/grants/13473.html

Apportionment Notices: Apportionment Notices, printed in the *Federal Register*, advise transit agencies on the amount of funding available to each urbanized area or state from each Federal Transit Administration funding program. Available on-line at http://www.fta.dot.gov/grants/12853.html

National Transit Database: The National Transit Database (NTD) is an extensive assemblage of financial, operating, and asset data for transit agencies in urbanized areas that receive federal funding either directly or indirectly. Separate data sets describe revenues by source government or transit agency activity, and capital and operating expenditures by function class, object class, or material purchased. Details are provided on vehicles and fixed-guideway infrastructure. Available on-line at www.ntdprogram.gov/ntdprogram/ and copies of the NTD Tables with urbanized area names and populations added by APTA can be found at the APTA U.S. Government Statistics web page, annual, at http://www.apta.com/resources/statistics/Pages/NTDDataTables.aspx

FTA Circular C 9300.1B, Capital Investment Program Guidance and Application: This circular provides guidance about submitting grants for federal capital funding programs including minimum useful requirements for replacing transit passenger vehicles. Available on-line at http://www.fta.dot.gov/documents/Final_C_9300_1_Bpub.pdf