Federal Subsidies for Passenger Transportation, 1960-2009

Focus on 2002-2009

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March 2, 2011

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Glossary

AATF	Airport and Airway Trust Fund
ACE	Army Corps of Engineers
ADAP	Airport Development Aid Program
ARRA	American Recovery and Reinvestment Act of 2009
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BR	Bureau of Reclamation
BTS	Bureau of Transportation Statistics
CAB	Civil Aeronautics Board
DHS	Department of Homeland Security
DOA	Department of Agriculture
DOD	Department of Defense
DOI	Department of the Interior
DOT	Department of Transportation
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HTF	Highway Trust Fund
HUD	Department of Housing and Urban Development

MMS	Mineral Management Services
NASA	National Aeronautics and Space Administration
NCIP	Northeast Corridor Improvement Program
NHWTSA	National Highway Traffic Safety Administration
NPS	National Park Service
NRPC	National Railroad Passenger Corporation
OS	Office of the Secretary
RRIP	Railroad Rehabilitation and Improvement Program
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
USFS	United States Forest Service
UTP	Urban Transportation Program
WMATA	Washington Metropolitan Area Transit Authority

1. Introduction

The U.S. passenger transportation infrastructure consists of airports, highways,[1] intercity rail,[2] and public transportation or mass transit systems. Federal legislation during the second half of the 20th century spurred development of the infrastructure.

- *Airports.* Federal government involvement in the development of private sector commercial air transportation can be traced back to the Air Mail Act of 1925, which authorized the postmaster general to contract for domestic airmail service with commercial air carriers. By doing so, the Federal government helped create the private sector commercial aviation industry.[3] However, Federal support for airport development began in earnest in 1970 with passage of the Airport and Airway Development Act, which established the Airport Development Aid Program (ADAP) and the Airport and Airway Trust Fund (AATF).[4] AATF provides Federal funding for development of the U.S. aviation system through aviation-related excise taxes, including airline passenger ticket taxes, head taxes on international passenger arrivals and departures, aviation fuel taxes, and air freight taxes.
- *Highways.* The Federal-Aid Highway Act of 1956 created the interstate highway system, the largest public works program in U.S. history.[5] The Act authorized $25 billion for fiscal years 1957 through 1969 for the construction of 41,000 miles of highway.[6] The Highway Revenue Act of 1956 created the Highway Trust Fund (HTF) to be the source of funding for the program. Prior to the HTF, the general fund of the U.S. Treasury was the source of federal funding for highway construction. Proceeds from motor fuel and vehicle taxes were credited to the general fund. There was no direct relationship between these tax revenues

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[1] Bus terminals are considered part of the highway transportation infrastructure.
[2] Rail stations are considered part of the intercity rail transportation infrastructure.
[3] "Airmail: The Airmail Act of 1925 through 1929," U.S. Centennial of Flight Commission, July 2009, available at http://www.centennialofflight.gov/essay/Government_Role/1925-29_airmail/POL5.htm.
[4] *Airport System Development,* Office of Technology Assessment, U.S. Congress, Washington, DC, OTA-STI-231, August 1984, available at http://www.princeton.edu/~ota/disk3/1984/8403/8403.PDF.
[5] Wendell Cox and Jean Love, "The Best Investment a Nation Every Made, A Tribute to the Dwight D. Eisenhower System of Interstate and Defense Highways," American Highway Users Alliance, June 1996, available at http://www.publicpurpose.com/freeway1.htm.
[6] Richard F. Weingroff, "Federal-Aid Highway Act of 1956: Creating the Interstate System," Federal Highway Administration, U.S. Department of Transportation, 1996, available at http://www.fhwa.dot.gov/infrastructure/rw96e.cfm.

and Federal funding of highway construction.[7] With creation of the HTF, highway-user taxes, including excise taxes on highway motor fuel and truck related taxes on truck tires, sales of trucks and trailers, and heavy vehicle use, were credited to the HTF and used to finance the interstate highway program.

- *Intercity Rail.* The National Railroad Passenger Corporation (Amtrak) was created by Congress in the Rail Passenger Services Act of 1970 as a for-profit government owned corporation to provide intercity passenger train service. Private railroad provision of passenger transportation service had become unprofitable as a result of competition from the interstate highway system as well as commercial air carriers. Amtrak began operations in 1972 with $40 million in direct federal aid and $100 million in federally insured loans.[8] Although Amtrak was originally envisioned to become self-sustaining, direct Federal aid continues to be required and provided.

- *Public Transportation or Mass Transit.* The Urban Mass Transportation Act of 1964 authorized $375 million in aid to the capital costs of transit projects.[9] The Urban Mass Transportation Assistance Act of 1970 provided $10 billion over 12-years to upgrade mass transit systems.[10] The National Mass Transportation Assistance Act of 1974 authorized $11.9 billion over a six-year span for capital *and* operating expenses of the nation's mass transit systems.[11] The Act of 1974 was the first time federal funds were authorized for mass transit operating costs as well as capital costs.

In this report, we analyze Federal government outlays on transportation and present estimates of Federal subsidies that take into account Federal revenues raised from aviation- and highway-related excise taxes. The modes included in our analysis are U.S. private sector commercial airlines, automobiles, private sector commercial buses, Amtrak, and mass transit, including transit buses, commuter rail, ferryboats, heavy rail, light rail, paratransit,[12] and vanpools.

We define a subsidy to be the difference between Federal outlays on each system (airports, highways, intercity rail, and mass transit) allocated, when necessary, to specific modes and Federal excise tax revenues collected from system users.[13] For example, if Federal government outlays on airports and related services totaled $100 million and aviation related excise tax

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[7] "Primer: Highway Trust Fund," Office of Policy Development, Federal Highway Administration, U.S. Department of Transportation, November 1998, available at https://www.fhwa.dot.gov/policy/primer98.pdf.

[8] See "A Brief History of Amtrak," Congressional Budget Office, September 2003, available at http://www.cbo.gov/doc.cfm?index=4571&type=0&sequence=3.

[9] See "Urban Mass Transit in the United States" by Zachary M. Schrag, Columbia University, available from the Economic History Association at http://eh.net/encyclopedia/article/schrag.mass.transit.us.

[10] "A Chronology of Dates Significant in the Background, History and Development of the Department of Transportation," Office of the Historian, U.S. Department of Transportation, available at http://dotlibrary.dot.gov/Historian/chronology.htm.

[11] *Ibid.*

[12] Includes providers of service for the elderly and persons with disabilities.

[13] With respect to public transportation and Amtrak, the subsidy is simply Federal outlays on each system.

revenue totaled $90 million, the aviation industry would have received a Federal subsidy of $10 million.

It is important to note that our definition of a subsidy does not take into account all economic and social costs of the use of a particular mode of transportation. More specifically, we do not attempt to account for externalities, such as environmental or congestion costs of using one mode of transportation versus another. We consider only Federal outlays and Federal excise tax revenues.

This study comes at an important time. The existing authorization for Federal surface transportation programs expired on September 30, 2009. Enacted on August 10, 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A legacy for Users (SAFETEA-LU), has survived via continuing resolutions. Surface transportation funding and spending authority were extended through December 31, 2010 at levels set in the fiscal 2010 Transportation Appropriations Act.

Our study reminds policymakers of inequities found in Federal support for passenger transportation that have effects on industry development and growth. Just as the Airmail Act of 1925 promoted the private aviation industry at the expense of railroads, uneven Federal support creates advantage for some industries and disadvantage for others.

This is not our first subsidy study. Our initial study was released in 1989.[14] Until then, no one had provided subsidy estimates for all modes in a single study at the level of detail we provided. Since then, we have updated our estimates, beginning with a July 1995 report, then an April 2003 report, and, most recently, a September 20, 2007 report. Along the way, the Bureau of Transportation Statistics (BTS) of the U.S. Department of Transportation (DOT) released a December 2004 report "Federal Subsidies to Passenger Transportation."[15] The BTS study was similar to those we had been producing since 1989. More important, the BTS study found subsidy disparities similar to those we had been estimating and documenting since 1989.

Our past studies have all reached a common conclusion: the private sector commercial bus industry has been disadvantaged by inequities in the distribution of Federal subsidies. Regardless of how the subsidy is expressed—total amount, amount per passenger trip, or amount per passenger mile—the bus subsidy is a minute fraction of the subsidy received by each of the other passenger transportation modes. In absolute terms and relative to other commercial modes of passenger transportation, the private sector commercial bus industry pays its fair share of the Federal cost of highways and related services.

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[14] "Federal Subsidies for Passenger Transportation, 1960-1988: Winners, Losers, and Implications for the Future," Robert R. Nathan Associates, Inc., Washington, DC, May 1989.

[15] Available at http://www.bts.gov/programs/federal_subsidies_to_passenger_transportation/pdf/entire.pdf.

This report consists of four sections and two appendixes. Following this introductory section, Section 2 presents the data we relied on to estimate subsidies and identifies data sources. Section 3 summarizes the methodology we employed to estimate subsidies. Section 4 presents our results. Appendix A presents our survey-based estimates of the Federal Transit Administration's Section 5311(f) annual spending by states on non-urban inter-city buses. Appendix B presents our estimates of annual subsidies for each mode.

2. Data

Data required for estimating subsidies include:

- Annual Federal government outlays on airports and related services, highways and related services, intercity rail, and mass transit;
- Cost responsibilities of each airport and highway mode; and
- Trust fund contributions (excise tax revenues) of each airport and highway mode.

We also collected data on passenger trips and passenger miles. Subsidies per passenger trip, as well as per passenger mile are useful ways to normalize estimates for the purpose of making intermodal comparisons. More important, subsidies per passenger trip can be measured against ticket prices or, with respect to travel by automobile, fuel costs of auto trips for better understanding of the significance of the subsidy to travelers.

Federal Outlays

Outlays are reported in the budget of the U.S. government. More specifically, the Appendix to the budget presents outlays by agency, program, and account.[16] All budget accounts are either Federal funds or trust funds. Federal funds are for all transactions not required by law to pass through trust funds. The largest of the Federal funds group is the general fund, but special and revolving funds, both of which can be earmarked for spending on specific purposes, are also part of the Federal funds group. The trust funds group consists of funds designated for spending on specific purposes, such as the HTF and the AATF.

Although most data we rely on are reported in the DOT budget, data for earlier years were sometimes found in budgets of entities no longer in existence, for example, air transportation system outlays that were made by the now defunct Civil Aeronautics Board (CAB). Moreover, other departments such as the newly created Department of Homeland Security (DHS) and

[16] See http://www.whitehouse.gov/omb/budget/Appendix for the fiscal 2011 budget.

the Department of Agriculture (DOA) through its U.S. Forest and National Park Services have financial responsibilities for various aspects of the U.S. transportation system.

Just as 9/11 had and still has effect on Federal transportation spending, so too did the 2008 recession. The American Recovery and Reinvestment Act of 2009 (ARRA) provided additional authorization for Federal outlays on transportation. However, funding was not distributed evenly among all systems. ARRA authorized $1.3 billion for airports and related services ($200 million for the Federal Aviation Administration's (FAA's) facilities and equipment account and $1.1 billion for grants-in-aid to airports), $27.5 billion of Federal funds for highway infrastructure investment ($2.4 billion of which was a fiscal 2009 outlay by DOT), $1.3 billion for Amtrak capital grants ($450 million for capital security grants and $850 million for projects that remediate system vulnerabilities), and $7.65 billion for mass transit.

The departments, administrations, and programs for which Federal outlays on the transportation system infrastructure are reported and considered in our analysis include:

- *Airports and Related Services.* DOT Office of the Secretary (OS), DOT FAA, the National Aeronautics and Space Administration (NASA), CAB (ending in fiscal 1985), and DHS (Table 1);
- *Highways and Related Services.* DOT Federal Highway Administration (FHWA), DOT National Highway Traffic Safety Administration (NHWTSA), DOT Federal Motor Carrier Safety Administration (FMCSA), DOT BTS, DOA U.S. Forest Service (USFS), Department of the Interior (DOI) National Park Service (NPS), DOI Bureau of Indian Affairs (BIA), DOI Bureau of Reclamation (BR), DOI Bureau of Land Management (BLM), DOI Mineral Management Services (MMS), Department of Defense (DOD) U.S. Army Corps of Engineers (ACE), Department of Housing and Urban Development (HUD), and DHS Federal Emergency Management Agency (FEMA) (Table 2).
- *Intercity Rail.* DOT Federal Railroad Administration (FRA) Northeast Corridor Improvement Program (NCIP), DOT FRA National Railroad Passenger Corporation (NRPC), DOT FRA Railroad Rehabilitation and Improvement Program (RRIP), DOT FRA High-speed Trainsets and Facilities, and DOT FRA Nest Generation High-speed Rail (Table 3).
- *Mass Transit.* DOT Federal Transit Administration (FTA), HUD Urban Transportation Program (ending in fiscal 1977) (UTP), and Washington Metropolitan Area Transit Authority (ending in fiscal 1996) (WMATA) (Table 4).

In addition to outlays on highways and related services, outlays earmarked for commercial bus service have been appropriated since 1992 (Table 5). Because these outlays are earmarked for buses, they are added directly to highway and related services outlays after highway and related services outlays have been allocated to buses on the basis of the costs buses impose on highways and related services.

Table 1

U.S. Federal Outlays on Airports and Related Services, 1960-2009 ($ million)

Fiscal Year	DOT, FAA	DOT, OS /a	NASA	CAB	DHS /e	Total
1960	508.0	-	-	67.2	-	575.2
1961	638.5	-	-	85.5	-	724.0
1962	698.4	-	-	90.8	-	789.2
1963	726.3	-	-	91.2	-	817.5
1964	750.6	-	-	94.1	-	844.7
1965	794.6	-	-	91.6	-	886.2
1966	803.9	-	-	85.5	-	889.4
1967	882.9	-	-	73.8	-	956.7
1968	895.8	-	-	64.0	-	959.8
1969	998.0	-	168.5 /b	53.6	-	1,220.1
1970	1,075.1	-	187.9 /b	47.6	-	1,310.6
1971	2,167.6	-	209.6 /b	67.4	-	2,444.6
1972	2,523.5	-	226.9 /b	76.1	-	2,826.5
1973	1,921.5	-	241.6 /b	86.4	-	2,249.5
1974	1,855.1	-	291.9 /b	88.5	-	2,235.5
1975	2,011.6	-	315.9 /b	80.9	-	2,408.4
1976	2,132.8	-	332.8 /b	90.9	-	2,556.5
1977	2,368.9	-	350.4 /b	102.7	-	2,822.0
1978	2,778.0	-	397.6 /b	101.4	-	3,277.0
1979	2,849.6	-	443.3 /b	99.3	-	3,392.2
1980	3,136.3	-	505.5 /b	116.7	-	3,758.5
1981	3,158.4	-	544.2 /b	147.2	-	3,849.8
1982	2,891.3	-	562.5 /b	110.0	-	3,563.8
1983	3,403.7	-	563.0 /b	77.5	-	4,044.2
1984	3,818.5	-	586.3 /b	21.4	-	4,426.3
1985	4,267.0	-	643.3 /b	3.5	-	4,913.8
1986	4,672.9	-	647.7 /b	-	-	5,320.6
1987	4,894.8	-	634.9 /b	-	-	5,529.6
1988	5,191.7	-	678.6 /b	-	-	5,870.2
1989	5,740.0	27.2	855.3 /b	-	-	6,622.5
1990	6,390.9	24.1	888.8 /b	-	-	7,303.8
1991	7,242.0	28.9	920.0 /b	-	-	8,190.9
1992	8,156.0	30.9	1,122.0 /b	-	-	9,308.9
1993	8,800.0	30.9	1,212.0 /b	-	-	10,042.9
1994	8,784.1	31.5	1,022.1 /b	-	-	9,837.7
1995	9,207.0	29.0	1,116.0 /b	-	-	10,352.0
1996	8,926.0	22.0	1,187.0 /c	-	-	10,135.0
1997	8,814.0	21.0	1,302.0 /c	-	-	10,137.0
1998	9,243.0	40.0	1,339.0 /c	-	-	10,622.0
1999	9,508.0	-5.0	1,217.0 /c	-	-	10,720.0
2000	9,562.0	-5.0	1,014.0 /c	-	-	10,571.0
2001	11,115.0	56.0	868.0 /c	-	-	12,039.0
2002	13,093.0	34.0	956.0 /c	-	58.0	14,141.0
2003	12,562.0	49.0	1,671.0 /c	-	8,684.0	22,966.0
2004	12,836.0	96.0	551.0 /d	-	3,221.0	16,704.0
2005	13,840.0	102.0	834.0 /d	-	4,048.0	18,824.0
2006	14,188.0	99.0	722.0 /d	-	3,894.0	18,905.0
2007	14,153.0	87.0	613.0 /d	-	3,598.0	18,451.0
2008	14,719.0	143.0	637.0 /d	-	4,455.0	19,955.0
2009	15,418.0 /f	123.0	492.0 /d	-	4,739.0	20,772.0

a. Outlays are for the Essential Air Service program, which was created in 1978 in the Airline Deregulation Act. Through 1997, program was funded from the Airport and Airway Trust Fund. Starting in 1998, FAA reauthorization funded it as a mandatory program supported by overflight fees. Outlay statistics were not available until 1989. 2008 also includes Compensation for General Aviation Operations from financial losses due to airport closures after 9/11/01.

b. Includes only air transportation R&D, construction of facilities, and research and program management.

c. Includes science, aeronautics, and technology, mission support, research and development, and construction of facilities.

d. Includes only spending on science, aeronautics, and exploration air transportation.

e. Outlays for aviation security, net of passenger and carrier security fee collections.

f. ARRA provided $200 million to FAA's Facilities & Equipment account and $1.1 billion for Grants-in-Aid for Airports.

SOURCE: Appendix, Budget of the United States Government, fiscal 1960-2011.

Table 2

U.S. Federal Outlays on Highways and Related Services, 1960-2009 ($ million)

Fiscal Year	DOT			DOA	DOI				DOD		DHS			
	FHWA /a	FMCSA	NHWTSA	USFS /b	BIA	BLM	BR	NPS	ACE	Other	FEMA	HUD	Other [c]	Total
1960	3,001.0	-	-	2.0	15.0	8.0	7.0	25.0	49.0	24.0	-	-	45.0	3,176.0
1961	2,681.0	-	-	3.0	16.0	9.0	2.0	30.0	51.0	22.0	-	-	45.0	2,859.0
1962	2,852.0	-	-	20.0	21.0	14.0	12.0	35.0	58.0	22.0	-	-	16.0	3,050.0
1963	3,108.0	-	-	23.0	21.0	14.0	8.0	36.0	92.0	-	-	-	22.0	3,324.0
1964	3,729.0	-	-	27.0	17.0	14.0	3.0	39.0	87.0	-	-	-	47.0	3,963.0
1965	4,101.0	-	-	32.0	21.0	16.0	3.0	39.0	79.0	-	-	-	26.0	4,317.0
1966	4,216.0	-	-	35.0	23.0	20.0	15.0	44.0	68.0	-	-	8.0	6.0	4,435.0
1967	4,166.0	-	-	134.0	20.0	16.0	9.0	28.0	89.0	-	-	15.0	10.0	4,487.0
1968	4,382.0	-	-	142.0	24.0	18.0	9.0	25.0	73.0	-	-	8.0	12.0	4,693.0
1969	4,423.0	-	-	146.0	23.0	15.0	8.0	24.0	63.0	-	-	2.0	21.0	4,725.0
1970	4,686.0	-	-	184.0	26.0	15.0	8.0	27.0	76.0	-	-	5.0	48.0	5,075.0
1971	5,008.0	-	-	198.0	26.0	21.0	4.0	28.0	76.0	-	-	4.0	67.0	5,432.0
1972	4,811.0	-	145.0	212.0	47.0	23.0	9.0	15.0	77.0	-	-	7.0	42.0	5,388.0
1973	4,934.0	-	157.0	207.0	47.0	22.0	13.0	18.0	78.0	-	-	7.0	359.0	5,842.0
1974	4,673.0	-	164.0	175.0	63.0	29.0	12.0	30.0	86.0	-	-	6.0	594.0	5,832.0
1975	4,900.0	-	156.0	204.0	76.0	39.0	16.0	40.0	83.0	-	-	9.0	702.0	6,225.0
1976	8,417.0	-	177.0	213.0	71.0	42.0	20.0	43.0	97.0	-	-	4.0	674.0	9,758.0
1977	6,266.0	-	197.0	346.0	76.0	49.0	19.0	41.0	82.0	-	-	8.0	791.0	7,875.0
1978	6,225.0	-	231.0	356.0	91.0	36.0	10.0	47.0	86.0	-	-	2.0	985.0	8,069.0
1979	7,608.0	-	272.0	402.0	98.0	25.0	15.0	45.0	156.0	-	-	-	1103.0	9,724.0
1980	9,642.0	-	280.0	401.0	83.0	50.0	15.0	42.0	52.0	-	-	410.0	588.0	11,563.0
1981	9,655.0	-	279.0	550.0	67.0	48.0	13.0	44.0	90.0	-	-	442.0	789.0	11,977.0
1982	8,606.0	-	223.0	417.0	77.0	71.0	8.0	50.0	77.0	-	-	350.0	554.0	10,433.0
1983	9,359.0	-	193.0	387.0	76.0	80.0	13.0	51.0	54.0	-	-	350.0	480.0	11,043.0
1984	10,760.0	-	201.0	396.0	120.0	81.0	21.0	54.0	27.0	-	-	308.0	686.0	12,654.0
1985	12,927.0	-	208.0	402.0	118.0	82.0	13.0	53.0	63.0	-	-	266.0	688.0	14,820.0
1986	14,314.0	-	227.0	360.0	18.0	65.0	14.0	51.0	57.0	-	-	307.0	662.0	16,075.0
1987	12,906.0	-	211.0	433.0	23.0	60.0	19.0	56.0	43.0	-	-	270.0	418.0	14,439.0
1988	14,136.0	-	205.0	418.0	22.0	73.0	79.0	59.0	17.0	-	-	203.0	317.0	15,529.0
1989	13,172.0	-	204.0	439.0	22.0	71.0	123.0	59.0	20.0	-	-	168.0	322.0	14,600.0
1990	14,636.0	-	209.0	183.0	33.0	86.0	58.0	60.0	26.0	-	-	171.0	125.0	15,587.0
1991	14,744.0	-	202.0	227.0	44.0	27.0	35.0	60.0	53.0	-	-	173.0	285.0	15,850.0
1992	15,767.0	-	216.0	209.0	48.0	14.0	30.0	24.0	41.0	-	-	179.0	381.0	16,909.0
1993	16,768.0	-	242.0	216.0	35.0	17.0	8.0	60.0	84.0	-	-	31.0	282.0	17,743.0
1994	19,053.0	-	261.0	216.0	38.0	19.0	12.0	53.0	52.0	-	59.0	28.0	184.0	19,975.0
1995	19,267.0	-	275.7	185.5	55.4	17.0	6.0	31.9	43.8	-	32.0	15.7	170.0	20,100.0
1996	19,698.6	-	258.7	169.1	28.6	27.1	5.5	28.5	43.7	-	100.6	19.8	256.3	20,636.5
1997	20,223.5	-	260.9	176.2	56.9	26.5	3.4	46.7	38.2	-	128.5	20.1	342.9	21,323.8
1998	19,385.9	-	306.2	215.6	201.2	5.4	4.2	42.4	65.8	-	108.9	18.9	315.3	20,669.8
1999	22,231.0	-	306.2	205.0	199.1	5.4	4.1	42.4	39.3	-	119.4	18.9	286.3	23,457.1
2000	26,227.5	-	461.6	301.6	250.4	18.7	2.0	54.2	23.9	-	69.3	26.0	322.6	27,757.8
2001	28,163.6	-	531.1	492.5	230.7	18.6	2.0	38.4	24.0	-	67.7	26.2	344.8	29,939.6
2002	31,130.8	-	394.5	481.3	227.7	18.4	2.3	27.4	22.3	-	158.6	34.8	423.0	32,921.1
2003	30,650.4	-	654.0	712.2	258.5	17.1	2.4	46.9	21.3	-	67.2	27.8	650.2	33,108.0
2004	30,933.7	41.3	406.1	533.3	228.0	40.1	2.5	58.7	22.7	-	156.9	18.2	796.3	33,237.8
2005	31,362.0	20.0	371.2	579.7	2.1	38.9	2.4	259.3	22.6	-	151.6	24.5	536.3	33,370.6
2006	33,251.2	404.9	478.3	383.2	279.8	45.6	3.2	126.7	21.1	-	280.3	29.3	661.6	35,965.2
2007	33,796.7	375.3	643.5	473.2	318.7	37.1	25.0	59.1	3.8	-	202.3	11.0	1,035.5	36,981.2
2008	35,970.7	506.4	729.9	593.6	799.6	36.7	33.5	200.0	33.1	-	188.4	18.2	954.6	40,064.7
2009	38,387.7 /d	506.4	729.9	593.6	799.6	36.7	33.5	200.0	33.1	-	188.4	18.2	954.6	42,481.7

a. Includes federal-aid account expenditures administered jointly with other agencies.

b. Excludes Forest Development Trails Program trails for timber access and forest management that do not provide full public access.

c. Includes the DOI Mineral Management Service and DOT Bureau of Transportation Statistics, among others.

d. ARRA provided $27.5 billion from the general fund to highway infrastructure investment, of which $26.6 billion was apportioned to states. 2009 actual outlays under the Act amounted to $2,417 million; FHWA outlays for 2009 have been estimated as 2008 outlays plus $2,417 million.

SOURCE: Appendix, Budget of the United States Government, fiscal 1960-2011.

Table 3

U.S. Federal Outlays on Intercity Rail Passenger Transportation (Amtrak), 1960-2009 ($ million)

	DOT, FRA						
Fiscal Year	NCIP	High-speed Trainsets and Facilities	NRPC	Next Generation High-speed Rail	RRIP	ARRA	Total
1960	-	-	-		-	-	-
1961	-	-	-		-	-	-
1962	-	-	-		-	-	-
1963	-	-	-		-	-	-
1964	-	-	-		-	-	-
1965	-	-	-		-	-	-
1966	-	-	-		-	-	-
1967	-	-	-		-	-	-
1968	-	-	-		-	-	-
1969	-	-	-		-	-	-
1970	-	-	-		-	-	-
1971	-	-	24.3		-	-	24.3
1972	-	-	77.9		-	-	77.9
1973	-	-	105.8		-	-	105.8
1974	-	-	128.6		-	-	128.6
1975	-	-	299.0	-	-	-	299.0
1976	-	-	354.5	-	-	-	354.5
1977	82.5	-	730.1	-	-	-	812.6
1978	203.8	-	716.0	-	-	-	919.8
1979	198.8	-	779.0	-	-	-	977.8
1980	240.9	-	823.4	-	-	-	1,064.3
1981	218.2	-	851.4	-	-	-	1,069.6
1982	333.8	-	717.7	-	-	-	1,051.5
1983	296.0	-	665.4	-	-	-	961.4
1984	241.1	-	1,957.1	-	-	-	2,198.2
1985	153.3	-	763.8	-	-	-	917.1
1986	97.1	-	680.3	-	-	-	777.4
1987	95.1	-	297.3	-	-	-	392.4
1988	55.3	-	591.1	-	-	-	646.4
1989	41.5	-	574.4	-	-	-	615.9
1990	23.9	-	560.7	-	-	-	584.6
1991	39.0	-	680.0	-	-	-	719.0
1992	173.0	-	658.2	-	-	-	831.2
1993	121.0	-	611.0	-	-	-	732.0
1994	117.0	-	628.2	-	-	-	745.2
1995	127.0	-	806.0	-	-	-	933.0
1996	265.0	-	627.0	7.0	-	-	899.0
1997	390.0	50.0	613.0	9.0	-	-	1,062.0
1998	448.0	30.0	478.0	9.0	-	-	965.0
1999	26.0	-	243.0	18.0	-	-	287.0
2000	-	-	594.0	23.0	-	-	617.0
2001	1.0	-	553.0	20.0	-	-	574.0
2002	-	-	1,067.0	37.0	-	-	1,104.0
2003	-	-	1,001.0	23.0	-	-	1,024.0
2004	-	-	1,282.0	35.0	-	-	1,317.0
2005	12.0	-	1,227.4 /a	22.0	-	-	1,261.4
2006	-	-	1,257.0	28.0	-	-	1,285.0
2007	-	-	1,274.0	15.0	3.0	-	1,292.0
2008	-	-	1,309.0	4.0	21.0	-	1,334.0
2009	-	-	1,667.0 /b	3.0	17.0	100.0 /c	1,787.0

a. Includes $6.4 million of DHS funding for Intercity Passenger Rail Security Grant Program. See "Fiscal Year 2006 Infrastructure Protection Program," September 25, 2006, U.S. Department of Homeland Security, p. 27.

b. Includes $2 million outlay on capital assistance for high speed rail corridors and intercity passenger rail service.

c. In 2009, ARRA authorized $1.3 billion to Amtrak for capital grants ($450 million for capital security grants and $850 million for projects that remediate vulnerabilities). Outlays under this authority totaled $100 million in fiscal 2009.

SOURCE: Appendix, Budget of the United States Government, fiscal 1960-2011.

Table 4

U.S. Federal Outlays on Mass Transit, 1960-2009 ($ million)

Fiscal Year	DOT FTA	HUD UTP	WMATA	Total
1960	-	-	-	-
1961	-	-	0.1 /d	0.1
1962	-	-	0.8 /d	0.8
1963	-	-	2.3 /d	2.3
1964	-	0.2	1.0 /d	1.2
1965	-	11.1	0.6 /d	11.7
1966	-	18.7	2.0 /d	20.7
1967	-	42.9	3.0 /d	45.9
1968	-	65.9	1.6	67.5
1969	140.1	2.0	6.1	148.2
1970	106.1	2.2	15.8	124.1
1971	176.0	1.6	34.8	212.4
1972	232.1	0.3	84.0	316.4
1973	415.0	0.6	75.8	491.4
1974	419.0	1.0	170.5	590.5
1975	753.2	0.3	175.3	928.8
1976	1,322.1	0.4	169.8	1,492.3
1977	1,708.9	1.5	289.8	2,000.2
1978	2,027.5	-	149.3	2,176.8
1979	2,458.0	-	84.3	2,542.3
1980	3,206.7	-	99.8	3,306.5
1981	3,855.4	-	61.3	3,916.7
1982	3,864.2	-	65.3	3,929.5
1983	3,708.5	-	50.2	3,758.7
1984	3,778.8	-	32.6	3,811.4
1985	3,356.3	-	70.6	3,426.9
1986	3,343.3	-	55.9	3,399.2
1987	3,299.4	-	51.7	3,351.1
1988	3,266.3	-	49.1	3,315.4
1989	3,541.5	-	51.7	3,593.2
1990	3,770.4	-	59.7	3,830.1
1991	3,857.0	-	55.0	3,912.0
1992	3,615.0	-	53.0	3,668.0
1993	3,457.0	-	53.0	3,510.0
1994	3,856.6	-	45.3	3,901.9
1995	4,436.0	-	702.0 /e	5,138.0
1996	4,372.0	-	1.0	4,373.0
1997	4,581.0	-	-	4,581.0
1998	4,297.0	-	-	4,297.0
1999	4,260.0	-	-	4,260.0
2000	5,331.0	-	-	5,331.0
2001	7,049.0	-	-	7,049.0
2002	7,694.0	-	-	7,694.0
2003	5,005.9 /b	-	-	5,005.9
2004	8,095.9 /b	-	-	8,095.9
2005	8,437.9 /b	-	-	8,437.9
2006	8,637.0	-	-	8,637.0
2007	9,199.0	-	-	9,199.0
2008	10,006.0	-	-	10,006.0
2009	11,336.0 /c	-	-	11,336.0

a. Prior to 1991, the Urban Mass Transportation Administration.

b. Includes mandatory authority for formula and bus grants, as well as DHS funding for the Transit Infrastructure Protection Program. DHS Transit Security Grant Program awards for transit bus, transit rail, and transit ferry totaled $251.7 million for FY03-FY05. Average annual award over this period was $83.9 million. See "Fiscal Year Infrastructure Protection Program," U.S. Department of Homeland Security,

c. Includes DOT outlays from ARRA appropriations. In fiscal 2009, DOT had outlays of $76 million from $750 million appropriation for fixed guideway infrastructure investment and outlays of $570 million from $7.188 billion appropriation for transit capital assistance.

d. National Capital Transportation Agency.

e. In 1993, DOT refinanced its share of WMATA bonds ($665 million) with a loan from the Federal Financing Bank (FFB) and is no longer making interest payments on those bonds. In 1995, DOT repaid the loan along with expenses and has no further obligation in this account.

SOURCE: Appendix, Budget of the United States Government, fiscal 1960-2011.

Table 5

Additional Outlays Earmarked for Intercity Buses ($ million)

Fiscal Year	DOT FTA Grants for Non-urban Intercity Buses /a	DOT Access for Disabled Passengers /e	DHS for Bus Safety and Security /g	Total
1992	3.8	-	-	3.8
1993	6.7	-	-	6.7
1994	3.1 /b	-	-	3.1
1995	14.9 /b	-	-	14.9
1996	11.6 /b	-	-	11.6
1997	8.5 /b	-	-	8.5
1998	12.6	-	-	12.6
1999	16.3	1.1	-	17.4
2000	19.4	0.8	-	20.2
2001	14.9	2.9	-	17.8
2002	18.5 /c	5.1	9.9 /h	23.6
2003	19.8 /c	6.6	9.9 /h	36.3
2004	17.7 /c	6.9	9.9	34.5
2005	20.4 /c	6.6	9.7	36.7
2006	44.4 /c	5.7	9.5	59.6
2007	35.9 /c	8.0 /f	11.6	55.5
2008	43.4 /c	8.0 /f	11.2	62.5
2009	43.4 /d	8.0 /d	11.7	63.0

a. Under ISTEA-LU and ISTEA-21, states are obligated to spend a percentage of non-urban transit grants on intercity bus service (see U.S. Code Title 49, 5311(f)). The percentage has varied over time, beginning with five percent in 1992, 10 percent in 1993, and 15 percent thereafter. See http://www.fta.dot.gov/funding/data/grants_financing_1090.html.

b. Estimated from available data on obligations after state certification.

c. See Appendix A.

d. Datum not available, so fiscal 2009 value assumed equal to fiscal 2008 value.

e. ISTEA-21, Section 3038 created the over-the-road bus accessibility program to encourage compliance with the Americans with Disabilities Act. Data provided by the American Bus Association.

f. Reported data are for 2007 and 2008 combined. We allocated the sum to each year equally.

g. Provided by the American Bus Association.

h. Reported data are for 2002 and 2003 combined. We allocated the sum to each year equally.

SOURCE: Appendix, Budget of the United States Government, fiscal 1960-2011, unless otherwise noted above.

Cost Responsibilities of Airport and Highway Modes

Airports and highways are used to move freight and people. Moreover, people travel by air in scheduled commercial airlines, military and other government aircraft, and general aviation aircraft. People travel by highway in autos, buses, trucks, and other vehicles.

Costs imposed on the air and highway transportation systems vary by mode and intensity of use. For example, a single trip by a heavy truck hauling freight will impose more wear and tear on a highway than a single auto trip. But the cost difference might be evened out as auto

trips become significantly more numerous than truck trips. A single jet carrying cargo will likely not impose a significantly greater cost on the air transport system than would a single jet carrying passengers, but the vast number of commercial airlines carrying passengers imposes a much greater cost on the air transportation system and its related services than does air freight or general aviation.

While these are common sense notions, they impose a hurdle that must be overcome to estimate transportation subsidies by mode. Why? Because Federal outlays on airports and related services, as well as highways and related services are not mode specific.

Fortunately, DOT periodically estimates the costs various types of traffic impose on the airport and highway transportation systems. We have relied on DOT estimates in all of our subsidy studies. Estimates are available for selected years between 1964 and 2005 (Table 6). For years before the years for which estimates are first available and for years following the years for which we have the most recent estimates, we used the first and most recent year's estimates, respectively. For years between those for which we have DOT estimates, we use a linear interpolation to calculate values.

Table 6

Cost Responsibilities of Commercial Passenger Airlines, Autos, and Buses, Selected Years

Fiscal Year	Private Sector Commercial Air Passenger Service /a	Automobiles	Buses
1964	not available	64.10% /g	0.56% /g
1969	not available	64.15% /h	0.43% /h
1977	not available	64.00% /i	0.26% /i
1978	55.73% /b	not available	not available
1985	57.50% /b	57.60% /i	0.26% /i
1986	58.20% /c	not available	not available
1987	57.50% /c	not available	not available
1988	57.83% /c	not available	not available
1991	59.61% /d	not available	not available
1995	72.21% /e	not available	not available
2000	not available	59.00% /j	0.16% /j, k
2005	70.06% /f	not available	not available

a. Includes domestic jet, charter, international, air taxi, and commuter. Excludes cargo, general aviation, and public sector (military, government, public interest, and overflights).

b. "Allocation of Federal Airport and Airway Costs for FY 1985," Federal Aviation Administration, U.S. Department of Transportation, December 1986.

c. "Allocation of Future Federal Airport and Airway Costs," Federal Aviation Administration, U.S. Department of Transportation, December 1986 and "Allocation and Recovery in the 1980s," Federal Aviation Administration, U.S. Department of Transportation, February 1987.

d. "Allocation and Recovery of Federal Airport and Airway Costs, 1991," Federal Aviation Administration, U.S. Department of Transportation, February 1992, Table 2.

e. "A Cost Allocation Study of FAA's 1995 Costs," GRA Incorporated, March 1996, Table 6-8.

f. "FY 2005 Cost Allocation Report," Federal Aviation Administration, U.S. Department of Transportation, January 2007. Value calculated as 1995 ratio of passenger subtotal to commercial total (passengers and cargo) multiplied by 2005 reported value for commercial total (passengers and cargo).

g. "Supplementary Report of the Highway Cost Allocation Study, House Document No. 124, 89th Congress, 1st Session, 1965, Table 4.

h. "Allocation of Highway Cost Responsibility and Tax Payments, 1969," Bureau of Public Roads, Federal Highway Administration, U.S. Department of Transportation, Table 25, May 1970.

i. "Final Report of the Federal Highway Cost Allocation Study" Federal Highway Administration, U.S. Department of Transportation, May 1982, Tables VI-10 and VI-13.

j. "Addendum to 1997 Federal Highway Cost Allocation Study, Federal Highway Administration, U.S. Department of Transportation, May 2000, Table 6.

k. Estimated by adjusting total bus cost responsibility share reported in Addendum cited above to account for historical (1977) relationship between intercity bust cost responsibility and total bus cost responsibility and intercity bus miles share of total bus miles.

SOURCE: See notes above.

Trust Fund Contributions of Airport and Highway Modes

Excise taxes are the source of revenue for the AATF and HTF. AATF tax receipts are reported for private sector commercial passenger transportation service. However, HTF tax receipts are not reported separately for automobiles and commercial bus service. Instead, HTF receipts must be estimated by mode. Again, fortunately, DOT periodically estimates contribution shares.

AATF EXCISE TAX RECEIPTS FROM PRIVATE SECTOR COMMERCIAL PASSENGER AIR TRANSPORTATION SERVICES

Listed below are the AATF excise taxes relevant to private sector commercial passenger transportation service, as well as a brief history of tax rates.

- The domestic commercial air transportation passenger ticket tax began at five percent in fiscal 1970, rose to eight percent in 1971, fell back to five percent in 1981, rose again to eight percent in 1983, and rose again to 10 percent in 1990 before declining to nine percent in 1998, eight percent in 1999, and 7.5 percent in 2000. Today's tax remains at 7.5 percent.
- The passenger segment fee began on October 1, 1997 and was set at a rate of $1.00 per domestic flight segment. The fee rose to $2.00 beginning October 1, 1998; $2.25 beginning October 1999; $2.50 beginning January 1, 2000; $2.75 beginning in 2001; and $3.00 beginning in 2003. Thereafter, the fee was adjusted by changes in the cost-of-living as determined under IRC Section 1(f)(3). In 2009, the fee was $3.60.
- A rural airports tax is levied at 7.5 percent of domestic ticket prices at qualified rural airports exempt from the segment tax.
- International passenger departure/arrival taxes began in fiscal 1971 at a rate of $3.00 per international departure only, doubled to $6.00 per international departure and arrival in 1990, doubled again to $12.00 in 1998, and has steadily increased since to reach $16.10 in fiscal 2009.
- An arrival/departure tax on flights between the continental United States and Hawaii or Alaska was levied at $8.00 in 2009 and lesser amounts in earlier years.
- Aviation fuel tax on commercial aviation.

Although there are other aviation related excise taxes, such as the tax on non-commercial fuel, tires, *etc.*, we do not include them in our analysis of excise tax revenue from private sector commercial passenger transportation. Total annual AATF excise tax revenues are presented in Table 7.

Table 7

AATF Receipts from Private Sector Commercial Air Passenger Transportation, 1960-2009 ($ million)

Fiscal Year	Receipts	Fiscal Year	Receipts
1960	-	1985	2,617.1 /c
1961	-	1986	2,495.0 /c
1962	-	1987	2,791.3 /c
1963	-	1988	2,909.8 /c
1964	-	1989	3,307.2 /c
1965	-	1990	3,399.6 /c
1966	-	1991	4,557.8 /c
1967	-	1992	4,243.0 /d
1968	-	1993	4,695.0 /d
1969	-	1994	4,746.0 /d
1970	-	1995	5,001.0 /d
1971	479.0 /a	1996	2,251.0 /d
1972	562.0 /a	1997	3,583.0 /d
1973	656.0 /a	1998	7,639.0 /d
1974	712.0 /a	1999	9,697.0 /d
1975	834.0 /a	2000	9,003.0 /d
1976	944.5 /a	2001	8,570.0 /d
1977	1,184.5 /a	2002	8,416.0 /d
1978	1,186.0 /a	2003	7,924.0 /d
1979	1,356.0 /a	2004	8,391.0 /d
1980	1,693.0 /a	2005	9,337.0 /d
1981	1,141.0 /a, b	2006	9,461.1 /d
1982	1,110.6 /a, b	2007	10,317.9 /e
1983	1,951.0 /a	2008	10,789.4 /e
1984	2,261.3 /c	2009	9,509.1 /e

a. "The Status of the Airport and Airway Trust Fund," Congressional Budget Office, U.S. Congress, December 1988.

b. Includes excise tax revenues that remained in the general fund and were not credited to the AATF.

c. "Allocation and Recovery of Federal Airport and Airway Costs, 1991," Federal Aviation Administration, U.S. Department of Transportation, February 1992.

d. "AATF Receipts by Tax Type, 1971-1997" available at http://www.faa.gov/about/office_org/headquarters_offices/aep/aatf.

e. "Budget of the United States Government," Executive Office of the President, Office of Management and Budget, fiscal 2009-2011. Estimated as net AATF income from excise taxes before interest minus an estimated percentage of freight excise tax revenue (based on freight percentage in 2005-2006).

SOURCES: See notes above.

HTF EXCISE TAX RECEIPTS FROM AUTOS AND COMMERCIAL BUS SERVICE

Since 1960, HTF receipts (Table 8) have been generated from Federal excise taxes on gasoline, gasohol, diesel fuel, special motor fuels, lubricating oil, tires, and tubes, as well as a federal use tax. However, from 1996-2005, receipts have been generated mostly by motor fuel excise taxes.[17] The gasoline tax has risen from 18.3¢ per gallon to 18.4¢. The gasohol tax has risen from 12.9¢ per gallon to 18.4¢. The diesel fuel tax has risen from 24.3¢ per gallon to 24.4¢. The excise tax on special fuels declined from 18.3¢ per gallon to 13.6¢.

Table 8

HTF Total Receipts, Highway Account, 1960-2009 ($ million)

Fiscal Year	Receipts	Fiscal Year	Receipts
1960	2,539.0	1985	12,906.4
1961	2,798.0	1986	13,305.6
1962	2,949.0	1987	12,727.4
1963	3,279.0	1988	13,645.4
1964	3,519.0	1989	15,134.4
1965	3,658.0	1990	13,453.1
1966	3,917.0	1991	15,303.5
1967	4,441.0	1992	16,572.0
1968	4,379.0	1993	16,863.8
1969	4,637.0	1994	17,004.9
1970	5,469.0	1995	19,376.6
1971	5,725.4	1996	22,691.7
1972	5,528.1	1997	21,314.1
1973	5,912.2	1998	24,306.6
1974	6,675.0	1999	33,823.2
1975	6,773.8	2000	30,347.1
1976	5,999.9	2001	26,916.5
1977	7,302.3	2002	27,982.9
1978	7,566.6	2003	28,964.0
1979	8,046.1	2004	29,785.0
1980	7,647.3	2005	32,908.6
1981	7,433.7	2006	33,701.6
1982	7,822.2	2007	34,899.3
1983	8,852.8	2008	31,341.7
1984	11,533.1	2009	32,171.3

SOURCE: Highway account from Federal Highway Administration, U.S. Department of Transportation. Data presented here for 1960-1969 are available at http://www.fhwa.dot.gov/ohim/onh00/chart3.htm. Data for 1970-2008 are available at http://www.fhwa.dot.gov/policyinformation/pubs/pl10023/fig6_2.cfm. Datum for 2009 is at http://www.fhwa.dot.gov/policyinformation/statistics/2008/fe10_2009.cfm.

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[17] *Highway Statistics 2005 Federal Tax Rates on Motor Fuels and Lubricating Oil,* FHWA, DOT, September 2006.

For the most part, fuel and other highway related excise taxes are not tracked by mode. For example, trucks, some autos, and buses use diesel fuel. Therefore, it is necessary to estimate HTF contribution shares of automobiles and buses.

The same DOT studies of cost responsibilities of autos and buses also analyzed and presented estimates of auto and bus HTF contributions (Table 9). We developed HTF contribution shares for 1960-2009 similar to the way we developed cost responsibility shares.

Table 9

Auto and Bus Contribution Shares of the HTF, Selected Years

Fiscal Year	Automobiles	Buses
1964	60.87% /a	0.45% /a
1969	60.36% /b	0.39% /b
1977	71.94% /c	0.31% /c
1978	not available	0.31% /g
1979	not available	0.00% /g
1980	not available	0.00% /g
1981	not available	0.00% /g
1982	not available	0.00% /g
1983	not available	0.00% /g
1984	71.50% /d	0.00% /g
1985	66.99% /d	0.06% /h
1986	64.30% /d	0.06% /h
1987	62.90% /d	0.06% /h
1988	62.40% /d	0.06% /h
1989	64.47% /d	0.11% /h
1990	67.09% /d	0.09% /h
1991	69.44% /d	0.08% /h
1994	64.41% /e	0.10% /e
2000	66.90% /f	0.15% /f, i

a. "Supplementary Report of the Highway Cost Allocation Study, House Document No. 124, 89th Congress, 1st Session, 1965, Table 4.

b. "Allocation of Highway Cost Responsibility and Tax Payments, 1969," Bureau of Public Roads, Federal Highway Administration, U.S. Department of Transportation, Table 25, May 1970.

c. "Final Report of the Federal Highway Cost Allocation Study" Federal Highway Administration, U.S. Department of Transportation, May 1982, Tables VI-10 and VI-13.

d. Calculated from unpublished Federal Highway Administration data.

e. "1997 Federal Highway Cost Allocation Study: Final Report, " Federal Highway Administration, U.S. Department of Transportation, August 1997, Table IV-5.

f. "Addendum to 1997 Federal Highway Cost Allocation Study, Federal Highway Administration, U.S. Department of Transportation, May 2000, Table 6.

g. By assumption.

h. Calculated from unpublished Federal Highway Administrations data.

i. Estimated by adjusting total bus cost responsibility share reported in Addendum cited above to account for historical (1977) relationship between intercity bust cost responsibility and total bus cost responsibility and intercity bus miles share of total bus miles.

SOURCE: See notes above.

Throughout our period of analysis, intercity buses have been exempt from the diesel fuel tax, initially fully and later only partly.[18] Beginning December 1, 1978, school buses and intercity and local buses used to transport the general public for compensation on scheduled routes were entirely exempt from the motor fuel tax. Effective August 1, 1984, intercity buses were only partly exempt.

The diesel fuel tax, which is currently 24.4¢ per gallon, consists of 24.3¢ per gallon for the fuel tax itself and an additional 0.1¢ per gallon for the leaking underground storage tax (LUST). After refunds, intercity bus operators pay 7.4¢ per gallon of diesel fuel.[19]

Passenger Trips and Miles Data

Normalizing subsidy estimates for comparisons across modes requires data on passenger trips (Table 10) and passenger miles (Table 11). Although one might think such measurements are straightforward and reported data are consistent across modes, in fact, they are not.

- *U.S. Commercial Air Carrier Service*. Passenger trips are counted as enplaned passengers by flight segment. Passenger miles are counted by summing the products of aircraft miles flown on each inter-airport flight stage and the number of enplaned passengers on that flight stage.[20]
- *Private Sector Commercial Bus Service*. The industry counts passengers and passenger trips on regularly scheduled service as ticket sales. A one-way ticket is counted as one passenger trip. A round trip ticket is counted as two passenger trips. Passenger trips are not counted as boardings on multi-segment trips, unless passengers use different carriers requiring separate ticketing for different segments. Charter service operators do not sell individual tickets. Instead, they sell the service of a bus, often estimating passenger counts.
- *Amtrak*. Amtrak passenger data are more straightforward than data for buses, but still not clearly consistent with commercial air carriers and mass transit. Passenger trips are counted as revenue passengers carried, which is apparently based on ticket sales. Passenger miles are computed as train miles and revenue passengers carried. It is not clear whether Amtrak counts revenue passengers carried by trip segment.

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[18] See *Highway Statistics 2005 Federal Tax Rates on Motor Fuels and Lubricating Oil*.

[19] See Title 26, Internal Revenue Code, Subtitle D, Miscellaneous Excise Taxes, Chapter 31, Retail Excise Taxes, Subchapter B, Special fuels, Section 4041 (a) (1) (C) (iii) (I) and Section 4081 (a) (2) (A) (iii) (B), as well as Subtitle F, Procedure and Administration, Chapter 65, Abatements, Credits, and Refunds, Subchapter B, Rules of Special Application, Section 6427 (b) (2) (A).

[20] See the Research and Innovative Technology Administration (RITA) at the Bureau of Transportation Statistics (BTS), U.S. Department of Transportaion T-100 Market (domestic and international) database which includes flights by all U.S. commercial airlines but for those with origins and destinations in a foreign country. Data are available at http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=308&DB_Short_Name=Air Carriers .

Table 10

Passenger Trips by Mode, 1960-2009 (millions)

Fiscal Year	U.S. Commercial Air Carriers /a	Private Commercial Buses /e	Amtrak	Mass Transit /k
1960	56.8 /b	366.0 /b	-	9,395.0
1961	64.0 /c	368.4 /c	-	8,883.0
1962	71.2 /c	370.8 /c	-	8,695.0
1963	78.3 /c	373.2 /c	-	8,400.0
1964	85.5 /c	375.6 /c	-	8,328.0
1965	92.7 /b	378.0 /b	-	8,253.0
1966	105.2 /c	382.6 /c	-	8,083.0
1967	117.6 /c	387.2 /c	-	8,172.0
1968	130.1 /c	391.8 /c	-	8,089.0
1969	142.5 /c	396.4 /c	-	7,803.0
1970	155.0 /b	401.0 /b	-	7,332.0
1971	158.1 /b	395.0 /b	na	6,847.0
1972	174.4 /b	393.0 /b	na	6,567.0
1973	185.4 /b	381.0 /b	na	6,660.0
1974	191.7 /b	386.0 /b	na	6,935.0
1975	191.1 /b	351.0 /b	na	6,972.0
1976	209.6 /b	340.0 /b	na	7,081.0
1977	225.9 /b	329.0 /b	na	7,286.0
1978	257.0 /b	336.0 /b	na	7,616.0
1979	295.2 /b	368.0 /b	na	8,130.0
1980	275.2 /b	370.0 /b	20.8 /b	8,567.0
1981	267.3 /b	375.0 /b	20.6 /b	8,284.0
1982	277.0 /b	370.0 /b	19.4 /b	8,052.0
1983	299.7 /b	365.0 /b	18.9 /b	8,203.0
1984	325.2 /b	352.0 /b	19.9 /b	8,829.0
1985	362.6 /b	348.0 /b	20.1 /b	8,636.0
1986	398.4 /b	336.0 /b	20.2 /b	8,777.0
1987	420.8 /b	333.0 /b	20.7 /b	8,735.0
1988	423.9 /b	334.0 /b	21.5 /b	8,666.0
1989	421.3 /b	337.0 /b	21.4 /b	8,931.0
1990	459.6 /d	435.3 /f	22.2 /f	8,799.0
1991	448.6 /d	513.8 /f	22.0 /f	8,575.0
1992	472.3 /d	500.3 /f	21.3 /f	8,501.0
1993	486.4 /d	516.1 /f	22.1 /f	8,217.0
1994	527.2 /d	502.6 /f	21.2 /f	7,949.0
1995	546.7 /d	518.3 /f	20.7 /f	7,763.0
1996	580.0 /d	531.8 /f	19.7 /f	7,948.0
1997	598.5 /d	601.3 /f	20.2 /f	8,374.0
1998	614.0 /d	592.3 /f	21.1 /f	8,750.0
1999	638.2 /d	578.9 /f	21.5 /f	9,168.0
2000	670.3 /d	610.3 /f	22.5 /f	9,363.0
2001	625.3 /d	594.6 /f	23.5 /f	9,653.0
2002	617.9 /d	585.6 /f	23.4 /f	9,623.0
2003	651.9 /d	547.5 /f	24.0 /f	9,436.0
2004	708.9 /d	534.0 /f	25.0 /f	9,575.0
2005	741.7 /d	606.3 /g	25.1 /i	9,815.0
2006	745.4 /d	678.7 /g	24.5 /i	10,017.0
2007	770.8 /d	751.0 /h	26.6 /i	10,247.0
2008	743.7 /d	762.0 /h	28.7 /i	10,521.0
2009	704.4 /d	723.0 /h	27.2 /j	10,802.3 /l

Note: na means not available.

a. Revenue passenger enplanements for both scheduled and non-scheduled air carriers.

b. From "Transportation in America," 12th edition, 1994, Eno Transportation Foundation, p. 48.

c. Estimated by linear interpolation.

d. From the Research and Innovative Technology Administration (RITA) at the Bureau of Transportation Statistics (BTS), U.S. DOT, T-100 Market (domestic and international) data for U.S. carriers only. Flights with both origin and destination in a foreign country are not included. URL (accessed on September 13, 2010) is http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=308&DB_Short_Name=Air Carriers.

e. Includes charter, tour, sightseeing, airport shuttle, contract and private commuters, and scheduled services.

f. From "Transportation in America," 20th edition, 2007, Eno Transportation Foundation and Upper Great Plains Transportation Institute, North Dakota State University, p. 45.

g. Estimated using linear interpolation between 2004 and 2007.

h. See Nathan Associates Inc. motorcoach census and census updates 2008, 2009, and 2010.

i. From National Railroad Passenger Corporation. See various editions of "Railroad Fact" available from the Association of American Railroads.

j. From Amtrak Annual Report FY 2009, p. 34.

k. "2010 Public Transportation Fact Book, Appendix A; historical Tables," American Public Transportation Association, available at http://www.apta.com/resources/statistics/Documents/FactBook/2010_Fact_Book_Appendix_A.pdf.

l. Estimated using annual percentage change between 2007 and 2008.

SOURCES: See above notes.

Table 11

Passenger Miles by Mode, 1960-2009 (millions)

Fiscal Year	U.S. Commercial Air Carriers /a	Passenger Cars	Commercial Buses	Amtrak	Mass Transit
1960	31,099	1,144,673	na	-	na
1961	35,524 /b	1,194,699 /b	na	-	na
1962	39,950 /b	1,244,725 /b	na	-	na
1963	44,375 /b	1,294,751 /b	na	-	na
1964	48,801 /b	1,344,777 /b	na	-	na
1965	53,226	1,394,803	na	-	na
1966	64,269 /b	1,466,022 /b	na	-	na
1967	75,312 /b	1,537,241 /b	na	-	na
1968	86,356 /b	1,608,460 /b	na	-	na
1969	97,399 /b	1,679,678 /b	na	-	na
1970	108,442	1,750,897	na	-	na
1971	113,954 /b	1,791,551 /b	na	na	na
1972	119,465 /b	1,832,204 /b	na	na	na
1973	124,977 /b	1,872,858 /b	na	na	na
1974	130,488 /b	1,913,512 /b	na	na	na
1975	136,000	1,954,166	na	3,931	na
1976	149,674 /b	1,965,730 /b	na	4,045 /b	na
1977	163,347 /b	1,977,295 /b	na	4,160 /b	na
1978	177,021 /b	1,988,859 /b	na	4,274 /b	na
1979	190,694 /b	2,000,424 /b	na	4,389 /b	na
1980	204,368	2,011,989	na	4,503	39,854
1981	219,062 /b	2,028,515 /b	na	4,567 /b	39,799 /b
1982	233,755 /b	2,045,042 /b	na	4,632 /b	39,745 /b
1983	248,449 /b	2,061,568 /b	na	4,696 /b	39,690 /b
1984	263,142 /b	2,078,094 /b	na	4,761 /b	39,636 /b
1985	277,836	2,094,621	73,400	4,825	39,581
1986	291,443 /b	2,131,975 /b	78,717 /b	5,071 /b	39,893 /b
1987	305,051 /b	2,169,329 /b	84,034 /b	5,318 /b	40,206 /b
1988	318,658 /b	2,206,683 /b	89,352 /b	5,564 /b	40,518 /b
1989	332,266 /b	2,244,037 /b	94,669 /b	5,811 /b	40,831 /b
1990	345,873	2,281,391	99,986	6,057	41,143
1991	338,085	2,200,260	100,362	6,273	40,703
1992	354,764	2,208,226	101,665	6,091	40,241
1993	362,230	2,213,281	109,043	6,199	39,384
1994	388,399	2,249,742	116,462	5,921	39,585
1995	403,888	2,286,887	116,679	5,545	39,808
1996	434,652	2,337,068	121,943	5,050	38,984
1997	450,612	2,389,065	127,020	5,166	40,180
1998	463,262	2,463,828	130,171	5,304	41,605
1999	488,357	2,494,870	143,202	5,330	43,279
2000	516,129	2,544,457	141,524	5,498	45,100
2001	486,506	2,556,481	129,833	5,559	46,508
2002	483,409	2,620,389	124,794	5,468	46,096
2003	505,226	2,641,885	123,934	5,680	45,677
2004	557,892	2,685,827	124,563	5,511	46,546
2005	583,758	2,699,305	127,829	5,381	47,125
2006	588,455	2,671,044	122,673	5,381	49,504
2007	607,546	2,642,498	126,819	5,784	51,873
2008	583,506	2,553,043	128,785	6,179	53,712
2009	553,451 /c	2,569,050 /d	130,781 /e	6,600 /e	55,616 /e

Note: na means not available.

a. Certificated, domestic, all services.

b. Data not reported. Values are estimated using linear interpolation.

c. Estimated using the 2009:2008 ratio of domestic passenger, revenue-passenger miles reported at https://1bts.rita.dot.gov/xml/air_traffic/src/datadisp.xml. Data for all other years were reported at the source cited below.

d. Estimated using compound annual growth rate between 1990 and 2008.

e. Estimated using perceentage change from 2007 to 2008.

SOURCE: Bureaus of Transportation Statistics, U.S. Department of Transportation, Table 1-37: U.S. Passenger Miles available at http://www.bts.gov/publications/national_transportation_statistics/html/table_01_37.html.

- *Mass Transit*. Transit passenger trips are measured and reported as the cumulative number of boardings by all passengers of a transit system.[21] A passenger who boards three times to get from origin to destination is counted as three passenger trips. Passenger miles measure the cumulative distance traveled by all passengers.[22] Ten passenger miles could be the equivalents of 10 passengers traveling one mile each or one passenger traveling 10 miles.

Although there are inconsistencies in reported passenger trip and mile data, expressing subsidies per passenger trip or mile for a given mode and comparing across modes is still a valid way of gaining perspective.

[21] See "Reassessing Passenger Mile Data for Transit Planning and Fund Allocation," Center for Urban Transportation Research, University of South Florida, Tampa, April 2005.
[22] *Ibid.*

3. Methodology

The methodology of our study rests on a few basic concepts implicit in the data requirements and development of data presented in the previous section. The two most important of these are the notions of mode-specific responsibilities for costs of airports and related services and highways and related services and user fees. Users of airports and highways contribute to system costs by paying aviation and highway related excise taxes.

With the databases of Section 2, annual subsidies can be calculated using the following simple mathematical equations:

- *Private Sector Commercial Passenger Air Carriers*
  Subsidy = (Outlays on airports and related services x Percentage of system cost attributable to private sector commercial air passenger service) – AATF receipts from private sector commercial air passenger service
- *Automobiles*
  Subsidy = (Outlays on highways and related services x Percentage of cost attributable to passenger cars) – (Total HTF receipts x Contribution share of passenger cars)
- *Private Sector Commercial Buses*
  Subsidy = (Outlay on highways and related services x Percentage of cost attributable to buses) + Outlays earmarked for the private sector commercial bus industry – (Total HTF receipts x Contribution share of buses)
- *Amtrak*
  Subsidy = Federal outlays for Amtrak capital and operating costs
- *Mass Transit*
  Subsidy = Federal outlays for mass transit

4. Results

Little has changed since release of our first subsidy study. From 2002-2009, private sector commercial air passenger carriers, Amtrak, and mass transit combined received 98.6 percent of the total federal subsidy. Automobiles and private sector commercial buses each received less than one percent (see Table 12 for a summary of estimated subsidies and Appendix B for estimated annual subsidies).

From 2002-2009, subsidies per passenger trip were significantly different across modes, with Amtrak and private sector commercial air passengers receiving subsidies as much as 400 times greater than passengers of less subsidized modes (Figure 1).

- Amtrak passengers received $57.04 per trip.
- Private sector commercial air passengers received $6.35 per trip.
- Mass transit riders received $0.95 per trip.
- Private sector commercial bus passengers received $0.10 per trip.

When considering subsidies per passenger mile, again Amtrak received most. However, because of the relatively short distances traveled by mass transit riders, on a per passenger mile basis, mass transit is the second most highly subsidized mode (Figure 2).

- Amtrak received a subsidy of $0.254 per passenger mile.
- Mass transit received a subsidy of $0.193 per passenger mile.
- Private sector commercial air passenger carriers received a subsidy of $0.008 per passenger mile.
- Private sector commercial buses received a subsidy of less than $0.001 per passenger mile.

Table 12

Federal Subsidies by Mode, 1960-2009 and Selected Sub-periods

Mode	1960-2001	2002-2009	1960-2009
Private sector commercial air passenger carriers			
Total subsidy (2009 $ million)	101,715	36,097	137,812
Share of grand total subsidy /a	28.55%	28.69%	28.66%
Average annual subsidy (2009 $ million)	2,422	4,512	2,756
Subsidy per passenger trip (2009 $)	7.75	6.35	7.33
Subsidy per passenger mile (2009 $)	0.01047	0.00809	0.00972
Automobiles			
Total subsidy (2009 $ million)	-4,897	1,231	-3,666
Share of grand total subsidy /a	-	0.98%	-
Average annual subsidy (2009 $ million)	-117	154	-73
Subsidy per passenger trip (2009 $)	na	na	na
Subsidy per passenger mile (2009 $)	-0.00006	0.00006	-0.00004
Private sector commercial buses			
Total subsidy (2009 $ million)	1,491	502	1,993
Share of grand total subsidy /a	0.42%	0.40%	0.41%
Average annual subsidy (2009 $ million)	35	63	40
Subsidy per passenger trip (2009 $)	0.09	0.10	0.09
Subsidy per passenger mile (2009 $)	0.00086 /b	0.00050	0.00042
Intercity rail (Amtrak)			
Total subsidy (2009 $ million)	48,826 /c	11,663	60,489 /h
Share of grand total subsidy /a	13.70%	9.27%	12.58%
Average annual subsidy (2009 $ million)	1,163	1,458	1,210
Subsidy per passenger trip (2009 $)	77.54 /d	57.04	71.24
Subsidy per passenger mile (2009 $)	0.35495 /e	0.25364	0.31901
Mass transit			
Total subsidy (2009 $ million)	204,243 /f	76,316	280,558 /i
Share of grand total subsidy /a	57.33%	60.66%	58.35%
Average annual subsidy (2009 $ million)	4,863	9,539	5,611
Subsidy per passenger trip (2009 $)	0.61 /f	0.95	0.68
Subsidy per passenger mile (2009 $)	0.18103 /g	0.19264	0.18459

Note: na indicates passenger trip data are not available for automobiles.

a. Grand total excludes any mode for which the cumulative subsidy over years was negative.

b. For 1985-2001.

c. For 1971-2001.

d. For 1980-2001.

e. For 1975-2001.

f. For 1961-2001.

g. For 1980-2001.

h. For 1971-2009.

i. For 1961-2009.

SOURCE: Nathan Associates Inc.

Figure 1

Subsidies per Passenger Trip, 1960-2001 and 2002-2009 (constant 2009 $)

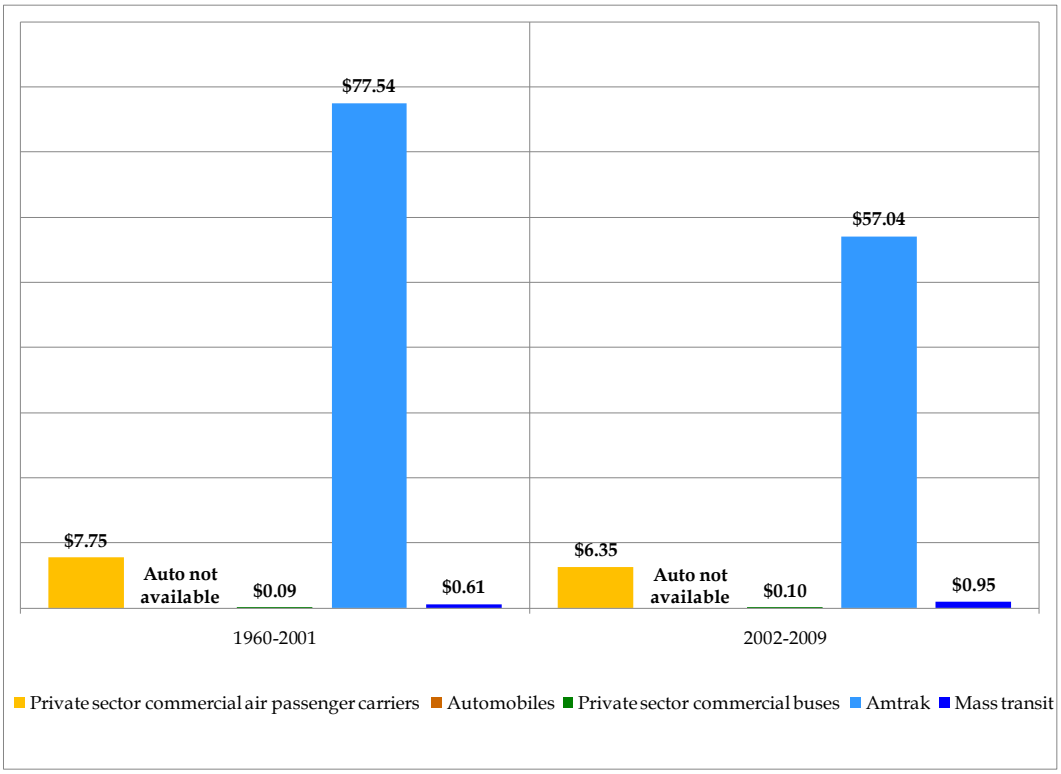
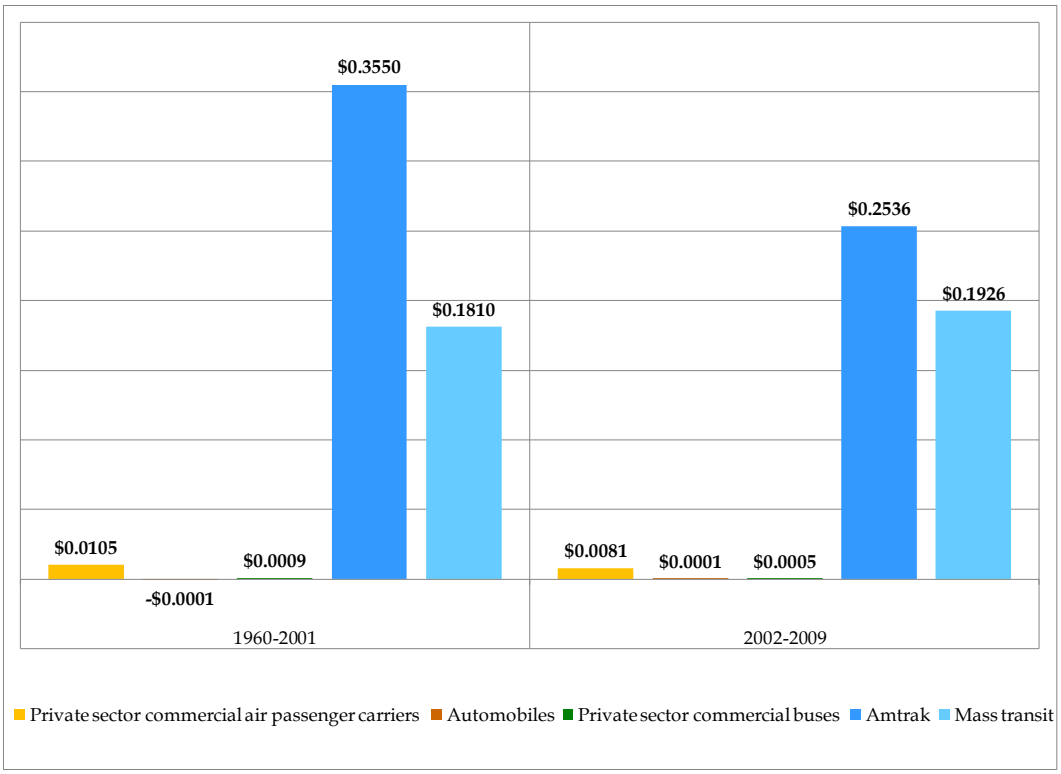


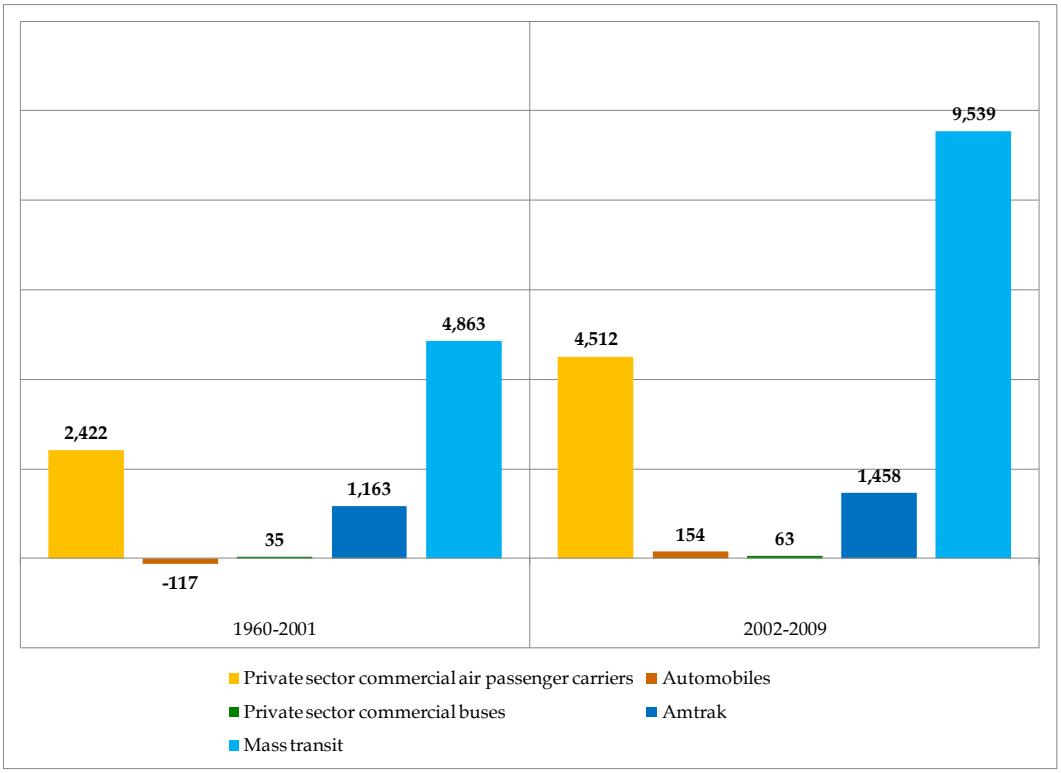
Figure 2

Subsidies per Passenger Mile, 1960-2001 and 2002-2009 (constant 2009 $)



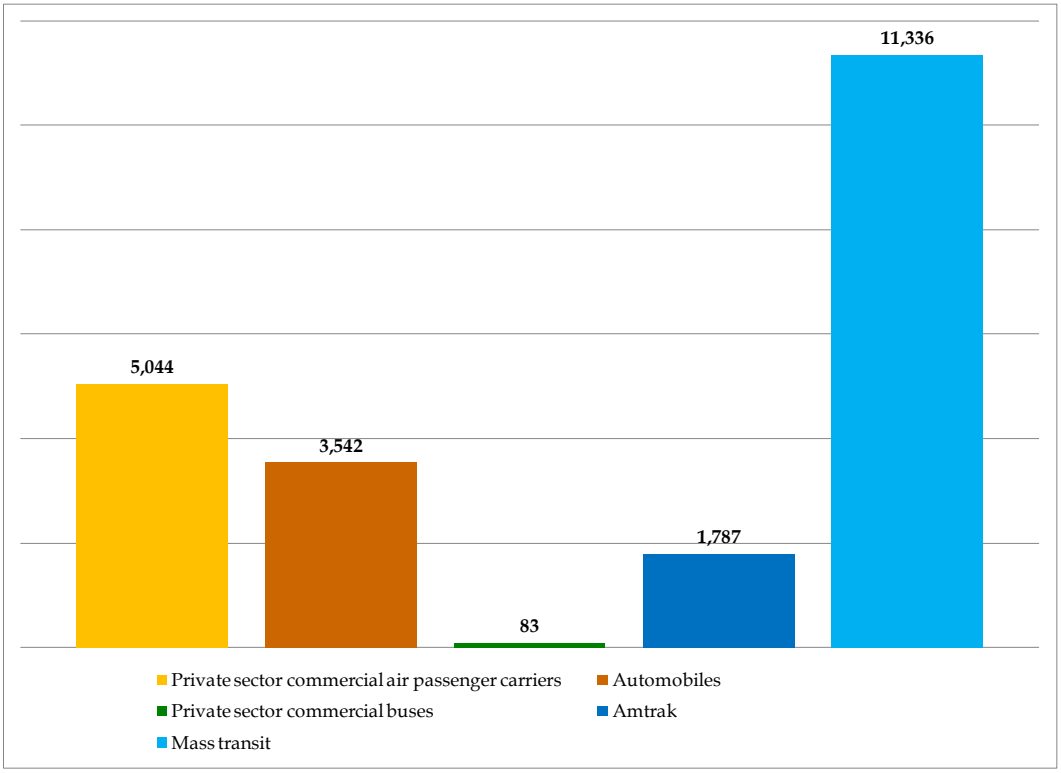
The effects of 9/11 and the recession of 2008 are apparent in subsidy differences across the two sub-periods of our analysis (1960-2001 and 2002-2009) (Figure 3). The average annual subsidy measured in constant 2009 dollars increased for each mode. For private sector commercial air passenger carriers, the average annual subsidy nearly doubled. For automobiles, a mode that has historically received little if any subsidy, the average annual subsidy reached $154 million in 2002-2009, an effect reflective of ARRA funding. Similarly, ARRA and safety and security concerns resulted in a doubling of the private sector commercial bus subsidy, although the mode remains virtually unsubsidized.

Figure 3
Average Annual Subsidy by Mode, Fiscal 1960-2001 and Fiscal 2002-2009 (constant 2009 $ million)



In 2009, the private sector commercial bus industry—the least subsidized mode—received a subsidy of $83 million, 3.75 percent more than the previous year's subsidy (Figure 4 and Appendix B, Table B-3). The subsidy was less than half of one percent of subsidies to other modes.

Figure 4
Subsidy by Mode in Fiscal 2009 ($ million)



The private sector commercial bus industry subsidy is nearly fully accounted for by its partial exemption from the diesel fuel tax. Even with the exemption, when taking into account the Federal costs buses impose on highways and related services and the excise tax revenues paid by the industry, the industry receives virtually no subsidy. Unlike the other modes of passenger transportation, bus industry tax revenue nearly offsets total Federal outlays on behalf of the industry.

Without the partial exemption, which is worth 17¢ per gallon of diesel fuel purchased by the industry, private sector commercial bus service would have contributed an additional $56.3 million to the HTF in 2009.[23] This additional amount would have cut the industry's already negligible subsidy of $83 million in 2009 by two-thirds. Considering the private sector commercial air passenger industry's subsidy of $5 billion, Amtrak's subsidy of $1.8 billion, and mass transit's subsidy of $11.3 billion in 2009, loss of the partial exemption would have insignificant effect on Federal outlays, but significant effect on the private sector commercial bus industry.

[23] According to the American Bus Association, the industry consumes approximately 331 million gallons of diesel fuel in a year. See "Motorcoach Census 2008: A Benchmarking Study of the Size and Activity of the Motorcoach Industry in the United States and Canada in 2007," Table 2-5, p. 10, available at http://www.buses.org/files/Motorcoach%20Census%202008%2012-18-2008.pdf.

Appendix A

Outlays under U.S. Code Title 49, Section 5311(f): FTA Grants for Non-urban Intercity Buses

Nathan Associates Inc. contacted state Departments of Transportation to request data on FTA Section 5311(f) amounts actually spent. Each state was provided annual obligated amounts for 2002 through 2008. They were asked to submit annual amounts spent.

From 2002 through 2008, $247.6 million were obligated under FTA Section 5311(f). No funds were obligated during the period in six states (Alabama, Connecticut, Hawaii, Oklahoma, Rhode Island, and South Carolina).

States that responded to our request by providing amounts spent accounted for 57.3 percent of the total obligated amount. For these states, when aggregating actual spending across states and years, spending equaled 81.3 percent of the aggregate obligated amount. For states with obligated amounts that did not respond (19), we estimated actual spending to equal 81.3 percent of their obligated amounts.

Table A-1

FTA Section 5311(f) Amounts Spent by State and Year, 2002-2008 ($)

State	2002	2003	2004	2005	2006	2007	2008
Alabama	0	0	0	0	0	0	0
Alaska /a	98,291	113,475	85,005	0	615,404	683,715	1,486,461
Arizona	267,628	311,292	422,054	526,281	724,098	1,130,187	1,379,079
Arkansas	19,615	93,053	70,000	469,289	355,166	798,822	128,680
California	1,582,891	1,540,314	1,537,391	1,609,162	2,890,933	2,999,801	3,228,472
Colorado /a	0	0	0	0	691,443	92,549	0
Connecticut	0	0	0	0	0	0	0
Delaware /a	81,305	462,037	153,140	249,689	128,177	0	345,702
Florida	1,017,552	1,004,593	1,002,686	1,049,495	1,710,305	1,802,662	1,939,252
Georgia	1,162,859	0	958,942	639,294	2,167,267	2,167,267	2,067,010
Hawaii	0	0	0	0	0	0	0
Idaho	555,295	312,269	275,447	288,306	598,673	769,536	829,948
Illinois /a	884,160	871,324	434,835	1,632,973	1,439,806	1,516,792	1,634,815
Indiana	381,188	468,143	841,404	489,267	139,747	207,333	227,227
Iowa /a	549,352	588,567	587,450	614,875	1,026,146	1,083,381	1,168,460
Kansas /a	436,992	481,043	171,505	232,443	-129,518	237,389	951,700
Kentucky /a	721,378	804,130	802,605	825,570	1,300,752	1,372,327	1,481,729
Louisiana /a	596,631	596,741	0	656,226	1,044,517	1,080,656	1,168,457
Maine	354,333	384,267	383,538	0	1,083,652	716,256	770,793
Maryland /a	0	0	0	0	0	533,408	573,995
Massachusetts /a	696,604	231,968	231,528	242,336	353,783	372,735	402,169
Michigan	1,283,898	1,314,652	961,474	1,387,208	1,833,160	1,889,214	0
Minnesota	786,856	738,811	882,813	889,669	922,272	1,461,763	1,793,157
Mississippi /a	585,804	1,087,982	0	734,758	1,172,361	2,405,252	1,329,881
Missouri	0	493,661	593,955	580,919	1,323,842	451,091	1,219,304
Montana	217,563	267,116	233,602	279,055	765,734	990,460	1,068,791
Nebraska /b	123,824	120,653	0	140,026	141,172	140,500	137,590
Nevada /a	0	261,374	111,976	110,177	474,400	0	1,726,600
New Hampshire	20,934	101,018	5,376	0	0	0	0
New Jersey /a	0	0	212,178	0	0	0	0
New Mexico /a	487,119	402,329	718,795	0	0	905,521	1,135,660
New York /a	1,350,593	1,128,000	0	1,125,860	1,178,418	0	3,655,145
North Carolina /a	203,127	0	0	0	812,506	609,380	2,550,947
North Dakota /b	155,250	147,362	155,486	198,264	500,935	566,000	582,661
Ohio	0	40,239	96,734	96,734	101,570	105,000	125,000
Oklahoma	0	0	0	0	0	0	0
Oregon /a	386,627	425,997	938,249	203,127	10,009,480	1,045,834	1,128,238
Pennsylvania	1,723,068	1,627,508	1,624,419	1,700,255	2,526,139	2,661,200	2,869,085
Rhode Island	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
South Dakota	0	0	0	0	93,911	158,528	110,937
Tennessee	0	0	0	0	93,911	1,821,183	276,018
Texas	1,069,631	2,421,619	2,417,023	2,529,858	4,214,390	1,189,898	1,933,094
Utah	0	0	0	0	0	285,150	0
Vermont	0	0	0	0	0	0	0
Virginia				110,276	128,914	139,224	136,905
Washington /a	494,794	516,695	515,714	539,789	968,420	1,022,808	1,103,080
West Virginia					484,178	166,384	190,000
Wisconsin	208,582	211,892	177,653	74,043	71,531	87,588	49,244
Wyoming /a	0	196,815	119,291	124,860	471,687	239,829	536,699
Total	18,503,742	19,766,939	17,722,266	20,350,083	44,429,283	35,906,624	43,441,986

a. Estimated from reported obligation and actual amounts spent as a share of obligation for those states that reported amounts spent. See Table A-2 for estimates and Table A-3 for reported amounts.

b. Estimated for 2002 through 2004 and reported for 2005 through 2008.

Table A-2

Estimated FTA Section 5311(f) Amounts Spent by State and Year for States that Did Not Report Amounts Spent, 2002-2008 ($)

State	2002		2003		2004		2005	
	Obligated	Estimated Spent /a	Obligated	Estimated Spent /a	Obligated	Estimated Spent /a	Obligated	Estimated Spent /a
Alabama	0	0	0	0	0	0	0	0
Alaska	120,972	98,291	139,661	113,475	104,621	85,005	0	0
Colorado	0	0	0	0	0	0	0	0
Connecticut	0	0	0	0	0	0	0	0
Delaware	100,067	81,305	568,657	462,037	188,479	153,140	307,307	249,689
Hawaii	0	0	0	0	0	0	0	0
Illinois	1,088,188	884,160	1,072,390	871,324	535,177	434,835	2,009,798	1,632,973
Iowa	676,120	549,352	724,385	588,567	723,010	587,450	756,763	614,875
Kansas	537,832	436,992	592,048	481,043	211,081	171,505	286,082	232,443
Kentucky	887,843	721,378	989,691	804,130	987,814	802,605	1,016,078	825,570
Louisiana	734,310	596,631	734,445	596,741	0	0	807,656	656,226
Maryland	0	0	0	0	0	0	0	0
Massachusetts	857,352	696,604	285,497	231,968	284,955	231,528	298,258	242,336
Mississippi	720,984	585,804	1,339,044	1,087,982	0	0	904,310	734,758
Nebraska /b	152,397	123,824	148,495	120,653	0	0		
Nevada	0	0	321,689	261,374	137,815	111,976	135,601	110,177
New Jersey	0	0	0	0	261,140	212,178	0	0
New Mexico	599,526	487,119	495,170	402,329	884,664	718,795	0	0
New York	1,662,256	1,350,593	1,388,297	1,128,000	0	0	1,385,663	1,125,860
North Carolina	250,000	203,127	0	0	0	0	0	0
North Dakota /b	191,075	155,250	181,367	147,362	191,366	155,486		
Oklahoma	0	0	0	0	0	0	0	0
Oregon	475,845	386,627	524,300	425,997	1,154,759	938,249	250,000	203,127
Rhode Island	0	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0	0
Washington	608,973	494,794	635,927	516,695	634,720	515,714	664,351	539,789
Wyoming	0	0	242,232	196,815	146,818	119,291	153,673	124,860
Total	9,663,740	7,851,849	10,383,295	8,436,492	6,446,419	5,237,756	8,975,540	7,292,682

(continued)

Table A-2 (continued)

State	2006		2007		2008		2002-2008	
	Obligated	Estimated Spent /a	Obligated	Estimated Spent /a	Obligated	Estimated Spent /a	Obligated	Estimated Spent /a
Alabama	0	0	0	0	0	0	0	0
Alaska	757,414	615,404	841,489	683,715	1,829,476	1,486,461	3,793,633	3,082,350
Colorado	851,000	691,443	113,906	92,549	0	0	964,906	783,992
Connecticut	0	0	0	0	0	0	0	0
Delaware	157,755	128,177	0	0	425,476	345,702	1,747,741	1,420,050
Hawaii	0	0	0	0	0	0	0	0
Illinois	1,772,055	1,439,806	1,866,807	1,516,792	2,012,064	1,634,815	10,356,479	8,414,704
Iowa	1,262,939	1,026,146	1,333,382	1,083,381	1,438,093	1,168,460	6,914,692	5,618,230
Kansas	-159,405	-129,518	292,169	237,389	1,171,314	951,700	2,931,121	2,381,554
Kentucky	1,600,913	1,300,752	1,689,005	1,372,327	1,823,653	1,481,729	8,994,997	7,308,491
Louisiana	1,285,550	1,044,517	1,330,028	1,080,656	1,438,090	1,168,457	6,330,079	5,143,229
Maryland	0	0	656,497	533,408	706,450	573,995	1,362,947	1,107,403
Massachusetts	435,422	353,783	458,747	372,735	494,974	402,169	3,115,205	2,531,123
Mississippi	1,442,895	1,172,361	2,960,288	2,405,252	1,636,764	1,329,881	9,004,285	7,316,038
Nebraska /b							300,892	244,477
Nevada	583,872	474,400	0	0	2,125,030	1,726,600	3,304,007	2,684,526
New Jersey	0	0	0	0	0	0	261,140	212,178
New Mexico	0	0	1,114,479	905,521	1,397,725	1,135,660	4,491,564	3,649,424
New York	1,450,350	1,178,418	0	0	4,498,606	3,655,145	10,385,172	8,438,017
North Carolina	1,000,000	812,506	750,000	609,380	3,139,603	2,550,947	5,139,603	4,175,959
North Dakota /b							563,808	458,098
Oklahoma	0	0	0	0	0	0	0	0
Oregon	12,319,266	10,009,480	1,287,170	1,045,834	1,388,590	1,128,238	17,399,930	14,137,552
Rhode Island	0	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0	0
Washington	1,191,892	968,420	1,258,831	1,022,808	1,357,627	1,103,080	6,352,321	5,161,300
Wyoming	580,534	471,687	295,172	239,829	660,548	536,699	2,078,977	1,689,182
Total	26,532,452	21,557,783	16,247,970	13,201,577	27,544,083	22,379,739	105,793,499	85,957,878

a. Estimated amount spent is based on cumulative amounts spent across states and years for states that reported amounts spent as a share of obligations for those states and years (spending was 81.3% of obligated amount).

b. Reported amounts spent beginning in 2005, but not for earlier years. Hence, here we estimated amounts spent for 2002 through 2004.

SOURCE: Obligated amounts are available at http://www.fta.dot.gov/funding/data/grants_financing_1090.html.

Table A-3

Reported FTA Section 5311(f) Amounts Spent by State and Year, 2002-2008 ($)

State	2002		2003		2004		2005	
	Obligated	Reported Spent	Obligated	Reported Spent	Obligated	Reported Spent	Obligated	Reported Spent
Arizona	319,623	267,628	481,156	311,292	470,363	422,054	663,055	526,281
Arkansas	46,001	19,615	158,710	93,053	70,000	70,000	469,289	469,289
California	1,582,891	1,582,891	1,540,314	1,540,314	1,537,391	1,537,391	1,609,162	1,609,162
Florida	1,017,552	1,017,552	1,004,593	1,004,593	1,002,686	1,002,686	1,049,495	1,049,495
Georgia	1,993,384	1,162,859	1,186,108	0	1,016,107	958,942	0	639,294
Idaho	268,571	555,295	275,970	312,269	275,447	275,447	288,306	288,306
Indiana	392,005	381,188	468,996	468,143	844,957	841,404	0	489,267
Maine	354,333	354,333	384,267	384,267	383,538	383,538	0	0
Michigan	1,283,901	1,283,898	1,343,523	1,314,652	1,340,973	961,474	1,403,575	1,387,208
Minnesota	785,994	786,856	738,811	738,811	882,813	882,813	881,138	889,669
Missouri	0	0	0	493,661	551,577	593,955	631,971	580,919
Montana	217,563	217,563	267,116	267,116	233,602	233,602	312,061	279,055
Nebraska /a							143,495	140,026
New Hampshire	69,142	20,934	99,526	101,018	32,805	5,376	21,344	0
North Dakota /a							130,577	198,264
Ohio	1,544,645	0	1,450,666	40,239	1,613,162	96,734	1,688,470	96,734
Pennsylvania	1,723,068	1,723,068	1,627,508	1,627,508	1,624,419	1,624,419	1,700,255	1,700,255
South Dakota	0	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0	0
Texas	1,878,362	1,069,631	-77,204	2,421,619	4,605,724	2,417,023	2,529,858	2,529,858
Utah	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	110,276	110,276
West Virginia	0	0	0	0	0	0	0	0
Wisconsin	225,694	208,582	229,610	211,892	232,100	177,653	87,731	74,043
Total	13,702,729	10,651,893	11,179,670	11,330,447	16,717,664	12,484,511	13,720,058	13,057,401

(continued)

Table A-3 (continued)

State	2006		2007		2008		2002-2008		
	Obligated	Reported Spent	Obligated	Reported Spent	Obligated	Reported Spent	Obligated	Reported Spent	Proportion
Arizona	-103,179	724,098	2,229,847	1,130,187	1,472,904	1,379,079	5,533,769	4,760,619	86.0%
Arkansas	576,395	355,166	900,888	798,822	647,693	128,680	2,868,976	1,934,625	67.4%
California	2,890,933	2,890,933	2,999,801	2,999,801	3,228,472	3,228,472	15,388,964	15,388,964	100.0%
Florida	1,710,305	1,710,305	1,802,662	1,802,662	1,939,252	1,939,252	9,526,545	9,526,545	100.0%
Georgia	1,326,905	2,167,267	4,218,693	2,167,267	2,441,514	2,067,010	12,182,711	9,162,639	75.2%
Idaho	726,855	598,673	769,017	769,536	829,948	829,948	3,434,114	3,629,474	105.7%
Indiana	0	139,747	0	207,333	0	227,227	1,705,958	2,754,309	161.5%
Maine	1,083,652	1,083,652	716,256	716,256	770,793	770,793	3,692,839	3,692,839	100.0%
Michigan	2,168,220	1,833,160	2,277,715	1,889,214	0	0	9,817,907	8,669,606	88.3%
Minnesota	922,272	922,272	1,592,960	1,461,763	1,676,769	1,793,157	7,480,757	7,475,341	99.9%
Missouri	352,475	1,323,842	265,000	451,091	1,299,850	1,219,304	3,100,873	4,662,772	150.4%
Montana	0	765,734	1,756,194	990,460	1,068,791	1,068,791	3,855,327	3,822,321	99.1%
Nebraska /a	144,002	141,172	144,002	140,500	146,813	137,590	578,312	559,288	96.7%
New Hampshire	0	0	0	0	0	0	222,817	127,327	57.1%
North Dakota /a	570,565	500,935	0	566,000	1,273,973	582,661	1,975,115	1,847,860	93.6%
Ohio	2,295,170	101,570	2,627,939	105,000	2,608,210	125,000	13,828,262	565,277	4.1%
Pennsylvania	2,526,139	2,526,139	2,661,200	2,661,200	2,869,085	2,869,085	14,731,674	14,731,674	100.0%
South Dakota	0	93,911	0	158,528	370,036	110,937	370,036	363,376	98.2%
Tennessee	1,759,227	1,178,682	1,858,350	1,821,183	2,123,216	276,018	5,740,793	3,275,883	57.1%
Texas	3,581,349	4,214,390	5,266,611	1,189,898	4,490,972	1,933,094	22,275,672	15,775,513	70.8%
Utah	0	0	500,000	285,150	686,652	0	1,186,652	285,150	24.0%
Vermont	0	0	0	0	0	0	0	0	0.0%
Virginia	128,914	128,914	139,224	139,224	136,905	136,905	515,319	515,319	100.0%
West Virginia	150,000	484,178	140,000	166,384	177,963	190,000	467,963	840,562	179.6%
Wisconsin	71,531	71,531	438,634	87,588	75,723	49,244	1,361,023	880,533	64.7%
Total	22,881,730	23,956,271	33,304,993	22,705,047	30,335,534	21,062,247	141,842,378	115,247,817	81.3%

a. Reported amounts spent beginning in 2005, but not for earlier years. Hence, we exclude obligated amounts in 2002 through 2004 in our calculation of amounts spent as a share of obligated amounts.

SOURCE: Obligated amounts are available at http://www.fta.dot.gov/funding/data/grants_financing_1090.html.

Appendix B

Estimated Annual Subsidies

Table B-1

Federal Subsidies for Private Sector Commercial Air Passenger Service, 1960-2009 ($ million, unless noted)

Fiscal Year	Outlays on Airports and Related Services	System Cost Attributable to Private Sector Commercial Air Passenger Transportation	AATF Receipts from Private Sector Commercial Air Passenger Transportation	Subsidy			
				Current Dollars	Constant 2009 Dollars	Constant 2009 Dollars	
						Per Passenger Trip ($)	Per Passenger Mile ($)
1960	575	321	-	321	2,869	50.52	0.0923
1961	724	403	-	403	3,541	55.35	0.0997
1962	789	440	-	440	3,764	52.90	0.0942
1963	818	456	-	456	3,816	48.71	0.0860
1964	845	471	-	471	3,836	44.86	0.0786
1965	886	494	-	494	3,921	42.29	0.0737
1966	889	496	-	496	3,778	35.93	0.0588
1967	957	533	-	533	3,901	33.17	0.0518
1968	960	535	-	535	3,712	28.54	0.0430
1969	1,220	680	-	680	4,451	31.22	0.0457
1970	1,311	730	-	730	4,421	28.52	0.0408
1971	2,445	1,362	479	883	4,960	31.37	0.0435
1972	2,827	1,575	562	1,013	5,283	30.29	0.0442
1973	2,250	1,254	656	598	2,904	15.67	0.0232
1974	2,236	1,246	712	534	2,356	12.29	0.0181
1975	2,408	1,342	834	508	2,038	10.67	0.0150
1976	2,557	1,425	945	480	1,807	8.62	0.0121
1977	2,822	1,573	1,185	388	1,366	6.05	0.0084
1978	3,277	1,826	1,186	640	2,118	8.24	0.0120
1979	3,392	1,890	1,356	534	1,631	5.52	0.0086
1980	3,759	2,106	1,693	413	1,136	4.13	0.0056
1981	3,850	2,168	1,141	1,027	2,573	9.63	0.0117
1982	3,564	2,018	1,111	907	2,132	7.70	0.0091
1983	4,044	2,302	1,951	351	793	2.64	0.0032
1984	4,426	2,532	2,261	271	582	1.79	0.0022
1985	4,914	2,825	2,617	208	435	1.20	0.0016
1986	5,321	3,097	2,495	602	1,232	3.09	0.0042
1987	5,530	3,180	2,791	388	774	1.84	0.0025
1988	5,870	3,395	2,910	485	941	2.22	0.0030
1989	6,623	3,869	3,307	562	1,058	2.51	0.0032
1990	7,304	4,310	3,400	911	1,647	3.58	0.0048
1991	8,191	4,883	4,558	325	568	1.27	0.0017
1992	9,309	5,842	4,243	1,599	2,726	5.77	0.0077
1993	10,043	6,619	4,695	1,924	3,200	6.58	0.0088
1994	9,838	6,794	4,746	2,048	3,316	6.29	0.0085
1995	10,352	7,475	5,001	2,474	3,899	7.13	0.0097
1996	10,135	7,297	2,251	5,046	7,767	13.39	0.0179
1997	10,137	7,276	3,583	3,693	5,582	9.33	0.0124
1998	10,622	7,602	7,639	-37	-56	-0.09	-0.0001
1999	10,720	7,649	9,697	-2,048	-2,960	-4.64	-0.0061
2000	10,571	7,520	9,003	-1,483	-2,061	-3.07	-0.0040
2001	12,039	8,538	8,570	-32	-43	-0.07	-0.0001
2002	14,141	9,998	8,416	1,582	2,085	3.37	0.0043
2003	22,966	16,189	7,924	8,265	10,452	16.03	0.0207
2004	16,704	11,739	8,391	3,348	4,060	5.73	0.0073
2005	18,824	13,188	9,337	3,851	4,415	5.95	0.0076
2006	18,905	13,245	9,461	3,784	4,137	5.55	0.0070
2007	18,451	12,927	10,318	2,609	2,722	3.53	0.0045
2008	19,955	13,980	10,789	3,191	3,181	4.28	0.0055
2009	20,772	14,553	9,509	5,044	5,044	7.16	0.0091
Total					137,812	7.33	0.0097
Subtotals							
1960-2001					101,715	7.75	0.0105
2002-2009					36,097	6.35	0.0081

SOURCE: Nathan Associates Inc.

Table B-2

Federal Subsidies for Automobiles, 1960-2009 ($ million, unless noted)

Fiscal Year	Outlays on Highways and Related Services	System Cost Attributable to Passenger Automobile Transportation	HTF Receipts Attributable to Auto Passenger Transportation	Subsidy			
				Current Dollars	Constant 2009 Dollars	Constant 2009 Dollars	
						Per Passenger Trip ($)	Per Passenger Mile ($)
1960	3,176	2,036	1,545	490	4,389	na	0.0038
1961	2,859	1,833	1,703	129	1,136	na	0.0010
1962	3,050	1,955	1,795	160	1,369	na	0.0011
1963	3,324	2,131	1,996	135	1,129	na	0.0009
1964	3,963	2,540	2,142	398	3,246	na	0.0024
1965	4,317	2,768	2,223	545	4,324	na	0.0031
1966	4,435	2,844	2,376	467	3,563	na	0.0024
1967	4,487	2,878	2,690	188	1,375	na	0.0009
1968	4,693	3,010	2,648	362	2,516	na	0.0016
1969	4,725	3,031	2,799	232	1,520	na	0.0009
1970	5,075	3,255	3,380	-126	-760	na	-0.0004
1971	5,432	3,483	3,622	-139	-781	na	-0.0004
1972	5,388	3,453	3,577	-123	-644	na	-0.0004
1973	5,842	3,743	3,911	-168	-815	na	-0.0004
1974	5,832	3,736	4,512	-776	-3,427	na	-0.0018
1975	6,225	3,986	4,677	-691	-2,770	na	-0.0014
1976	9,758	6,247	4,229	2,017	7,592	na	0.0039
1977	7,875	5,040	5,253	-213	-751	na	-0.0004
1978	8,069	5,100	5,439	-339	-1,121	na	-0.0006
1979	9,724	6,068	5,778	290	884	na	0.0004
1980	11,563	7,123	5,487	1,636	4,501	na	0.0022
1981	11,977	7,282	5,329	1,953	4,892	na	0.0024
1982	10,433	6,260	5,603	657	1,545	na	0.0008
1983	11,043	6,537	6,335	202	457	na	0.0002
1984	12,654	7,390	8,246	-856	-1,841	na	-0.0009
1985	14,820	8,536	8,646	-110	-229	na	-0.0001
1986	16,075	9,274	8,555	719	1,472	na	0.0007
1987	14,439	8,344	8,006	338	674	na	0.0003
1988	15,529	8,988	8,515	473	919	na	0.0004
1989	14,600	8,464	9,757	-1,293	-2,434	na	-0.0011
1990	15,587	9,051	9,026	25	45	na	0.0000
1991	15,850	9,218	10,627	-1,408	-2,461	na	-0.0011
1992	16,909	9,850	11,230	-1,380	-2,351	na	-0.0011
1993	17,743	10,352	11,145	-792	-1,318	na	-0.0006
1994	19,975	11,673	10,953	721	1,167	na	0.0005
1995	20,100	11,765	12,561	-796	-1,254	na	-0.0005
1996	20,637	12,098	14,804	-2,706	-4,165	na	-0.0018
1997	21,324	12,521	13,994	-1,472	-2,225	na	-0.0009
1998	20,670	12,157	16,059	-3,903	-5,820	na	-0.0024
1999	23,457	13,818	22,487	-8,670	-12,528	na	-0.0050
2000	27,758	16,377	20,302	-3,925	-5,454	na	-0.0021
2001	29,940	17,664	18,007	-343	-464	na	-0.0002
2002	32,921	19,423	18,721	703	926	na	0.0004
2003	33,108	19,534	19,377	157	198	na	0.0001
2004	33,238	19,610	19,926	-316	-383	na	-0.0001
2005	33,371	19,689	22,016	-2,327	-2,668	na	-0.0010
2006	35,965	21,219	22,546	-1,327	-1,451	na	-0.0005
2007	36,981	21,819	23,348	-1,529	-1,595	na	-0.0006
2008	40,065	23,638	20,968	2,671	2,662	na	0.0010
2009	42,482	25,064	21,523	3,542	3,542	na	0.0014
Total					-3,666	na	-0.00004
Subtotals							
1960-2001					-4,897	na	-0.0001
2002-2009					1,231	na	0.0001

Note: na means not available.

SOURCE: Nathan Associates Inc.

Table B-3

Federal Subsidies for Private Sector Commercial Buses, 1960-2009 ($ million, unless noted)

Fiscal Year	Outlays on Highways and Related Services	System Cost Attributable to Private Sector Commercial Bus Transportation Plus Outlays Earmarked for Commercial Buses	HTF Receipts Attributable to Private Sector Commercial Bus Transportation	Subsidy			
				Current Dollars	Constant 2009 Dollars	Constant 2009 Dollars	
						Per Passenger Trip ($)	Per Passenger Mile ($)
1960	3,176	18	11	6	57	0.16	na
1961	2,859	16	13	3	30	0.08	na
1962	3,050	17	13	4	33	0.09	na
1963	3,324	19	15	4	32	0.09	na
1964	3,963	22	16	6	52	0.14	na
1965	4,317	23	16	7	56	0.15	na
1966	4,435	23	17	6	45	0.12	na
1967	4,487	22	18	3	24	0.06	na
1968	4,693	21	18	4	26	0.07	na
1969	4,725	20	18	2	15	0.04	na
1970	5,075	21	21	0	0	0.00	na
1971	5,432	21	21	0	-1	0.00	na
1972	5,388	20	20	0	-1	0.00	na
1973	5,842	20	21	-1	-3	-0.01	na
1974	5,832	19	23	-4	-17	-0.04	na
1975	6,225	19	22	-4	-14	-0.04	na
1976	9,758	27	19	8	31	0.09	na
1977	7,875	20	23	-2	-8	-0.02	na
1978	8,069	21	23	-2	-8	-0.02	na
1979	9,724	25	0	25	77	0.21	na
1980	11,563	30	0	30	83	0.22	na
1981	11,977	31	0	31	78	0.21	na
1982	10,433	27	0	27	64	0.17	na
1983	11,043	29	0	29	65	0.18	na
1984	12,654	33	0	33	71	0.20	na
1985	14,820	39	8	31	64	0.18	0.0009
1986	16,075	41	8	33	67	0.20	0.0009
1987	14,439	36	8	28	56	0.17	0.0007
1988	15,529	37	8	29	56	0.17	0.0006
1989	14,600	34	17	17	33	0.10	0.0003
1990	15,587	35	12	23	42	0.10	0.0004
1991	15,850	35	12	23	40	0.08	0.0004
1992	16,909	40	14	26	43	0.09	0.0004
1993	17,743	43	16	28	46	0.09	0.0004
1994	19,975	43	17	26	42	0.08	0.0004
1995	20,100	54	21	33	52	0.10	0.0004
1996	20,637	50	26	24	36	0.07	0.0003
1997	21,324	47	27	20	31	0.05	0.0002
1998	20,670	48	32	16	24	0.04	0.0002
1999	23,457	57	48	9	12	0.02	0.0001
2000	27,758	65	46	19	27	0.04	0.0002
2001	29,940	66	40	25	34	0.06	0.0003
2002	32,921	76	42	34	45	0.08	0.0004
2003	33,108	89	43	46	58	0.11	0.0005
2004	33,238	88	45	43	52	0.10	0.0004
2005	33,371	90	49	41	47	0.08	0.0004
2006	35,965	117	51	67	73	0.11	0.0006
2007	36,981	115	52	62	65	0.09	0.0005
2008	40,065	127	47	80	79	0.10	0.0006
2009	42,482	131	48	83	83	0.11	0.0006
Total /a					1,993	0.09	0.0004
Subtotals /a							
1960-2001					1,491	0.09	0.0009
2002-2009					502	0.10	0.0005

Note: na means not available.

a. Subsidy per passenger mile total and subtotal considers only the period for which we have passenger mile data (1985-2009).

SOURCE: Nathan Associates Inc.

Table B-4

Federal Subsidies for Intercity Rail (Amtrak), 1960-2009 ($ million, unless noted)

Fiscal Year	Federal Outlays (Subsidy)			
	Current Dollars	Constant 2009 Dollars	Constant 2009 Dollars	
			Per Passenger Trip ($)	Per Passenger Mile ($)
1960	-	-	-	-
1961	-	-	-	-
1962	-	-	-	-
1963	-	-	-	-
1964	-	-	-	-
1965	-	-	-	-
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	24	136	na	na
1972	78	406	na	na
1973	106	514	na	na
1974	129	568	na	na
1975	299	1,199	na	0.3051
1976	355	1,334	na	0.3298
1977	813	2,860	na	0.6874
1978	920	3,042	na	0.7117
1979	978	2,984	na	0.6799
1980	1,064	2,929	140.80	0.6504
1981	1,070	2,680	130.08	0.5867
1982	1,052	2,472	127.42	0.5337
1983	961	2,174	115.00	0.4628
1984	2,198	4,727	237.55	0.9930
1985	917	1,913	95.17	0.3964
1986	777	1,592	78.83	0.3140
1987	392	782	37.77	0.1470
1988	646	1,255	58.36	0.2255
1989	616	1,159	54.18	0.1995
1990	585	1,057	47.62	0.1745
1991	719	1,257	57.12	0.2003
1992	831	1,417	66.51	0.2326
1993	732	1,217	55.08	0.1964
1994	745	1,206	56.91	0.2038
1995	933	1,470	71.04	0.2652
1996	899	1,384	70.25	0.2740
1997	1,062	1,605	79.46	0.3107
1998	965	1,439	68.20	0.2713
1999	287	415	19.29	0.0778
2000	617	857	38.10	0.1559
2001	574	776	33.04	0.1397
2002	1,104	1,455	62.17	0.2660
2003	1,024	1,295	53.96	0.2280
2004	1,317	1,597	63.89	0.2898
2005	1,261	1,446	57.67	0.2687
2006	1,285	1,405	57.24	0.2611
2007	1,292	1,348	50.78	0.2331
2008	1,334	1,330	46.33	0.2152
2009	1,787	1,787	65.70	0.2708
Total /a		60,489	71.24	0.3190
Subtotals /a				
1960-2001		48,826	77.54	0.3550
2002-2009		11,663	57.04	0.2536

Note: na means not available.

a. Subsidy totals per passenger trip and mile pertain only to the years for which we have passenger trip and mile data.

SOURCE: Nathan Associates Inc.

Table B-5

Federal Subsidies for Mass Transit, 1960-2009 ($ million, unless noted)

Fiscal Year	Federal Outlays (Subsidy)			
	Current Dollars	Constant 2009 Dollars	Constant 2009 Dollars	
			Per Passenger Trip ($)	Per Passenger Mile ($)
1960	-	-	-	-
1961	0	1	0.00	na
1962	1	7	0.00	na
1963	2	19	0.00	na
1964	1	10	0.00	na
1965	12	93	0.01	na
1966	21	158	0.02	na
1967	46	336	0.04	na
1968	68	468	0.06	na
1969	148	970	0.12	na
1970	124	751	0.10	na
1971	212	1,193	0.17	na
1972	316	1,650	0.25	na
1973	491	2,388	0.36	na
1974	591	2,606	0.38	na
1975	929	3,726	0.53	na
1976	1,492	5,616	0.79	na
1977	2,000	7,039	0.97	na
1978	2,177	7,199	0.95	na
1979	2,542	7,758	0.95	na
1980	3,307	9,098	1.06	0.2283
1981	3,917	9,812	1.18	0.2465
1982	3,930	9,237	1.15	0.2324
1983	3,759	8,498	1.04	0.2141
1984	3,811	8,196	0.93	0.2068
1985	3,427	7,148	0.83	0.1806
1986	3,399	6,963	0.79	0.1745
1987	3,351	6,678	0.76	0.1661
1988	3,315	6,435	0.74	0.1588
1989	3,593	6,763	0.76	0.1656
1990	3,830	6,926	0.79	0.1683
1991	3,912	6,837	0.80	0.1680
1992	3,668	6,252	0.74	0.1554
1993	3,510	5,837	0.71	0.1482
1994	3,902	6,318	0.79	0.1596
1995	5,138	8,098	1.04	0.2034
1996	4,373	6,731	0.85	0.1727
1997	4,581	6,924	0.83	0.1723
1998	4,297	6,408	0.73	0.1540
1999	4,260	6,156	0.67	0.1422
2000	5,331	7,407	0.79	0.1642
2001	7,049	9,534	0.99	0.2050
2002	7,694	10,138	1.05	0.2199
2003	5,006	6,331	0.67	0.1386
2004	8,096	9,819	1.03	0.2109
2005	8,438	9,674	0.99	0.2053
2006	8,637	9,444	0.94	0.1908
2007	9,199	9,599	0.94	0.1851
2008	10,006	9,974	0.95	0.1857
2009	11,336	11,336	1.05	0.2038
Total /a		280,558	0.68	0.1846
Subtotals /a				
1960-2001		204,243	0.61	0.1810
2002-2009		76,316	0.95	0.1926

Note: na means not available.

a. Subsidy totals per passenger trip and mile pertain only to the years for which we have passenger trip and mile data.

SOURCE: Nathan Associates Inc.