STATISTICS

1993 Transit Fact Book

American Bublic Transit

TRANSIT FACT BOOK

November 1993

published by

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TRANSIT FACT BOOK

International Standard Serial Number: ISSN 0149-3132

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SUGGESTED IDENTIFICATION

American Public Transit Association, 1993 Transit Fact Book, Washington, DC, 1993.

Statistics and Information Systems Division

November 1993

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Transit Fact Book

TECHNICAL NOTES

The American Public Transit Association (APTA) and its predecessor has published the **Transit Fact Book** since 1942. APTA obtains data from member transit systems in the United States and uses these figures to estimate trends for all United States transit systems. The **Transit Fact Book** also contains data for Canadian transit systems provided by the Canadian Urban Transit Association (CUTA).

This book includes aggregate information for all transit systems in the United States. Non-transit services such as taxicab, school bus, unregulated jitney, sightseeing bus, intercity bus, and special application mass transportation systems (e.g., amusement parks, airports, and international, rural, rural interstate, island, and urban park ferries) are excluded from all tables.

Except as noted, prior-to-1984 data exclude commuter railroad, automated guideway, urban ferry boat, and demand response, as well as most transit systems outside of urbanized areas. Data for these systems were not available prior to that date; accordingly, all data tables are non-continuous between 1983 and 1984.

Federal government funding data are based on reports prepared by the United States Department of Transportation.

Data reported in the section on Canadian Statistics are taken from **Urban Transit Facts in Canada** published by the Canadian Urban Transit Association. The data are for all regular transit service provided by CUTA transit system members. This section is the only place where Canadian data appear.

Prior to 1984, data are based on information voluntarily provided by APTA member transit systems. All data are expanded by standard statistical methods to provide estimates of statistical trends for all transit systems.

Beginning in 1984, data are also based on the annual Section 15 report published by the Federal Transit Administration (FTA). This document is the annual summary of reports submitted to FTA to comply with requirements of the Federal Transit Act.

Beginning in 1984, motor bus and demand response data are calculated based on 1980 U.S. Census Bureau urbanized area population categories to allow for variances in data by size of area. Beginning in 1990, urbanized areas designated by the 1990 census are used.

Beginning in 1984, only active vehicles are counted in vehicle tables to conform with data reported to FTA.

The initial adoption of the Section 15 requirements effective in 1979 resulted in several alterations to previous transit recordkeeping practices. Passenger data are collected for Section 15 by a sample survey technique not normally used by transit systems prior to Section 15 implementation. This has resulted in a break in the continuity of APTA Passenger Trip data between 1980 and earlier years. Passenger Trip data reported are Total Passenger Rides before 1980 and Unlinked Transit Passenger Trips beginning in 1980.

Salaries and Wages data prior to 1977 include employee compensation in the form of paid sick leave, paid vacation time, and paid holidays. Beginning in 1977 these compensation types are included in Fringe Benefit costs. Prior to 1980, the Number of Employees is the average number of persons during the year. Beginning in 1980, the Number of Employees is based on the concept of Employee Equivalents where each Employee Equivalent is equal to 2,080 labor hours.

Because of the time required for transit systems to compile and report the large amount of data for this book, data for the last two calendar years reported are preliminary and will be refined when additional data become available. Changes in data reported for prior years, evident when comparing this book to previous editions, were made from subsequent availability of additional or updated data.

APTA is the recognized source for statistical data and information about transit in the United States. It is an international organization of transit systems and related organizations in the United States, Canada, and other countries. APTA members serve the public interest by providing safe, efficient, and economical transit services, and by improving those services to meet national energy, environmental, and financial concerns. Over ninety percent of persons using urban public transit in the United States are carried by APTA members.

APTA members total over 1,000 and include motor bus and

rapid transit systems, organizations responsible for planning, designing, constructing, financing, and operating transit systems, business organizations which supply products and services to transit, academic institutions, and state associations and departments of transportation.

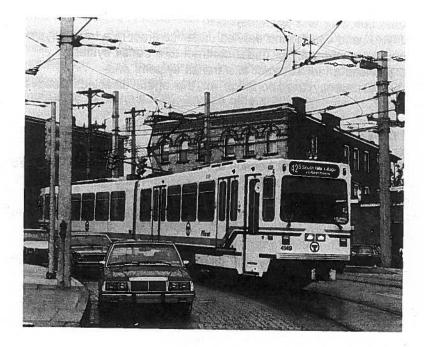
Formed on a cooperative, nonprofit basis, APTA's objectives are:

- to represent the public interest in improving transit for all persons;
- to represent the interests, common policies, requirements, and purposes of the operators of public transit;
- to provide a medium for exchange of experiences, discussion, and comparative study of public transit affairs;
- to promote research and investigation to the end of improving public transit;
- · to aid members in dealing with special issues;
- to encourage cooperation among its members, their employees, and the general public;
- to encourage compliance with the letter and spirit of equal opportunity principles;
- to collect, compile, and make available to members data and information relative to public transit;
- to assist in the training, education, and professional development of all persons involved in public transit; and,
- to engage in any other activities which will serve the members and promote public transit.

APTA is organized to function on behalf of all of transit's diversified interests. It is governed by a Board of Directors with voting control and authority vested in transit policy board members, transit operating officials, and associate members who are elected by the membership.

SECTION I

Overview of Transit Facts and Issues



OVERVIEW OF TRANSIT FACTS AND ISSUES

1. TRANSIT DEFINED

Transit includes all multiple-occupancy-vehicle passenger services of a local and regional nature provided for general public use such as:

public bus, rail, and water services; private bus, rail, and water services; AMTRAK and Greyhound service under contract to a transit system; vanpools operated by or under contract to a transit system; taxi services under contract to a transit system; and, non-profit agency transportation for the aged, disabled, disadvantaged.

2. TYPES OF TRANSIT SERVICE

Different types of transit service are called modes, which are defined on page 118. All operate on a specific route except demand response.

Road modes include motorbus, trolleybus, vanpool, jitney, and demand response.

Rail modes include heavy rail, light rail, commuter rail, automated guideway, inclined plane, cable car, and aerial tramway.

Water modes include ferryboat.

3. NUMBER OF TRANSIT SYSTEMS

There are over 5,000 transit systems in the U.S. About 2,700 operate motorbus service, 3,900 operate demand response service, and 100 operate other modes. About 1,500 operate more than one mode. Almost two-thirds are non-profit elderly and disabled service providers. The number of providers actually operating transit service is several thousand higher since many systems have several contractors: one system in the Chicago area has over 80.

4. VEHICLES

Transit fleets contain about 100,000 active vehicles. About 62,000 motorbuses, 19,500 demand response vehicles, 10,000 heavy rail cars, and 4,500 commuter rail cars comprise the bulk.

5. EMPLOYEES

It takes over 266,000 employees to operate, maintain, and administer transit service. About 163,000 of those are employed in motorbus service, 47,000 in heavy rail, 27,000 in demand response, 21,000 in commuter rail, and the balance in other modes. Of the total, operators and conductors on board the vehicles comprise 49%, maintenance personnel 28%, and all others 23%.

In addition, there are 9,000 capital employees. Perhaps 10,000 to 20,000 other persons are employed by manufacturers of transit equipment, consultants, engineering firms, local governments, and other transit-related businesses.

6. RIDERS

About 8.5 billion trips were taken on transit in 1992. Of these, 5.5 billion were motorbus trips, about 2.8 billion were on the various rail modes, and the remainder on other road and water modes. An estimated 6.8 million people use transit each weekday. Fifty-four percent of transit trips are worktrips, 52 percent of riders are women, 45 percent are white, 31 percent are black, 18 percent are Hispanic, 6 percent are Asian or Native American, and 1.5 percent are disabled, according to an APTA report (Americans in Transit: A Profile of U.S. Transit Passengers, October 1992).

Transit serves two markets:

People in the <u>transit-dependent market</u> have no personal transportation, no access to such transportation, or are unable to drive. Included are those with low incomes, the disabled, elderly, children, families whose travel needs cannot be met with only one car, and

those who opt not to own personal transportation. In 1988, the U.S. Energy Department estimated that 13% of the 91.6 million U.S. households did not own a car, truck, van, motorcycle, or motor scooter, and that another 34% owned only one vehicle.

People in the <u>transit-choice market</u> are workers, environmentalists, travelers, and people on recreational, social, medical, or other journeys who do not have to use transit, but do so for reasons of speed, comfort, convenience, traffic avoidance, or environmental principle.

7. REVENUES

About 75% of transit <u>operating revenues</u> come from the area in which the service is provided: 38% comes from the passengers, 28% from local governments, and 5% from non-government sources. State and federal governments contribute 23% and 6%, respectively.

The mean adult base fare in 1992 was 86 cents, but most passengers pay \$1.00 or more when zone and other charges are included.

Governmental aid comes in two forms: general appropriations taken from all revenues received, and revenue specifically dedicated to transit by law such as a one-half cent sales tax or a one cent gas tax.

<u>Capital revenue</u> is used to fund transit infrastructure. Federal law provides for federal funding to be a maximum of 80% of the project cost, with the remainder to be provided by state and local governments. However, some projects are entirely funded at the local or state level, and many areas provide more than the minimum requirement. Thus, only about 50% of transit capital revenue comes from the federal government.

8. EFFECTS OF FARE INCREASES ON RIDERSHIP

There is a direct relationship between transit fares and ridership. An APTA study, "Effects of Fare Changes on Bus Ridershp" (May 1991), found that on the average, a 10% increase in bus fares would result in a 4% decrease in ridership (elasticity = -0.40). This shows that today's transit users react more strongly to fare changes than previously believed.

The study also found that bus riders in small cities are more responsive to fare increases than those in large cities, and peak-hour commuters are much less responsive to fare changes than other passengers.

9. TRANSIT VS. AUTOMOBILE COSTS

For many persons, transit is much more economical than driving to work alone, especially those commuting to central business districts, as illustrated by the following examples for a ten-mile trip*:

Daily Cost (Dollars)

Walking to transit stop and taking transit Fares

\$ 2.00

*Examples are based on American Automobile Association 1990 gasoline and oil cost estimates of \$0.054/mile and maintenance and tire costs of \$0.03/mile. APTA estimates central business district parking costs to be \$5.00/day and the average transit commuting fare to be \$2.00 per day. (Purchase of a monthly pass could reduce the \$2.00 by 10% to 30% or more.) In many large cities, bridge, tunnel, and/or highway tolls could add \$2.00 to \$6.00 per day.

These amounts do not include the fixed cost to own an intermediate-size automobile that AAA estimates at \$3,256 per year or \$8.92 per day. This includes insurance, license and registration, depreciation, and finance charges.

Also excluded from the costs listed above are costs to build, maintain, and operate highways, parking facilities, and transit systems. These costs are mostly paid by all citizens through taxes and are not directly related to use of an automobile or transit.

Driving alone Gasoline & oil Maintenance & tires

 Maintenance & tires
 0.60

 Parking
 5.00

 Total
 6.68

Driving 3 miles to a park-and-ride lot and using transit for the remainder of the trip

\$ 1.08

tettialitidet of the trip	
Fares	\$ 2.00
Gasoline & oil	0.32
Fares Gasoline & oil Maintenance & tires	_0.18
Total	2.50

10. EXPENSES

Operating expense in 1992 was about \$16.6 billion. Motorbus accounted for \$9.9 billion, heavy rail for \$3.3 billion, light rail for \$0.3 billion, commuter rail for \$2.0 billion, trolleybus for \$0.1 billion, demand response for \$0.7 billion and the remaining modes for \$0.2 billion.

The largest types of expenses were salaries and wages (47%), fringe benefits (26%), purchased transportation (9%), and fuel and supplies (9%). Services, utilities, insurance, and other costs made up the remaining 9%.

About 45% of expenses are devoted to scheduling and operation of revenue vehicles, 19% to their maintenance, 10% to facilities maintenance, 9% to purchased transportation, and 17% to administration.

<u>Capital expenses</u> are monies paid for transit infrastructure (facilities, vehicles, and major equipment). In 1992, 36% of federal funds went for bus facilities, vehicles, and equipment, 44% for modernization of existing rail systems, and 19% for new rail systems.

TABLE 1

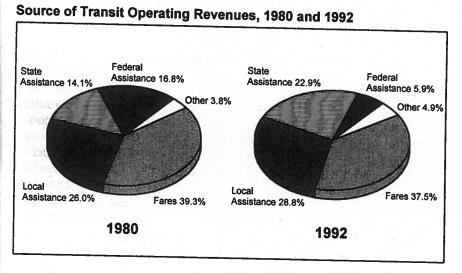
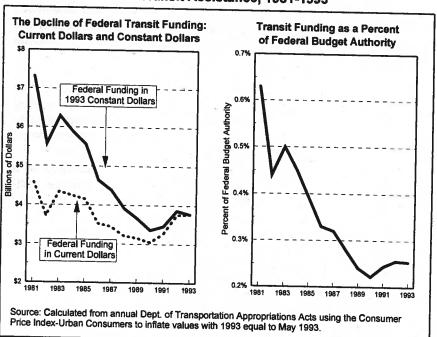


TABLE 2

Real Value of Federal Transit Assistance, 1981-1993



11. GOVERNMENTAL FINANCIAL ASSISTANCE

Transit, like all public services and many private segments of the U.S. economy, receives governmental financial assistance. While transit assistance is explicitly identified in government budgets and appropriations, governmental assistance to many other segments, such as automobile owners, is largely indirect and not identified as such. Examples are the large tax write-offs that may total several thousand dollars a year for employer-provided or paid free parking and the hidden costs of highways (parking lots and garages, maintenance, police, insurance, licensing, etc.) that are paid by virtually all taxpayers rather than just the users of the highways.

Part of the governmental assistance to transit is required to cover a government-induced gap between expenses and revenues. Numerous federal regulations and court decisions require the provision of services for the aged and disabled. Most of these are operated as expensive demand response service and wheelchair-accessible buses and rail vehicles. Regardless of these requirements, the regulations require reduced fares for the aged and disabled during off-peak periods.

Additional regulations regarding low-polluting bus engines, safety features, etc. also lead to more expensive vehicles and operating practices. Large transit systems also require extensive security forces because of the huge numbers of people that patronize them.

Another reason for public assistance is that transit is considered a necessary public service. Transit systems must operate non-profitable routes, sometimes even during late-night hours.

12. BENEFITS OF TRANSIT

Transit use has many benefits to society:

1. Reduced energy consumption

Public transit's energy efficiency and conservation potential are considerable:

Based on U.S. Department of Energy data, APTA estimates fuel efficiency of transit compared to the average commuter auto:

- 1 bus with 7 passengers equals 1 auto.
- 1 full bus equals 6 autos.
- 1 full rail car equals 15 autos.

Annual gasoline savings possible from transit use are:

200 gallons for each person switching from driving alone;

85 million gallons for a 10% increase in transit ridership in the five largest U.S. cities; and,

135 million gallons for a 10% nationwide increase in transit ridership.

In 1989, 21% of this country's energy and 49% of its petroleum consumption was by motor vehicles, according to the U.S. Departments of Energy and Transportation. However, transit vehicles are more efficient than automobiles when passenger miles are considered. The Energy Department estimated the following 1989 energy consumption rates:

	BTU/Passenger Mile
Automobile	4,063
Transit bus	3,711
Transit rail	3,397
Commuter rail	3,102

A BTU (British Thermal Unit) is a measure of energy consumption regardless of whether it is fossil-fuel, nuclear, electric, water power, or some other type. Passenger miles are the number of passengers times the miles they travel.

2. Rational development

One only has to look at the development patterns of a metropolitan area from the air to see the relationship between development and transit. Office buildings, residential complexes or buildings, hospitals, universities, shopping areas, and large manufacturing plants all generate large amounts of traffic. High-capacity vehicle access (i.e., transit) is the only way such areas can avoid gridlock due to the limited capacity of streets, highways, and parking facilities. In the most highly developed areas such as New York City and Chicago, 75% or more of all people arrive on transit: street and parking capacity cannot handle more than a small fraction of the vehicles that would be needed to convey the numbers of people involved.

3. Mobility

The ability to travel freely is one of the hallmarks of a free society. Yet millions of people have restricted mobility because they do not own a motor vehicle, cannot afford to drive, or are physically unable to drive. Transit is the only means of mobility for most of these people—to jobs, medical services, recreation, and shopping.

4. Greater retail sales

Numerous estimates have been made around the country that retail sales--especially in central business districts--are enhanced by the presence of good transit service. There are several reasons:

- a. A high proportion of commuters in large cities use transit to shop near work, before or after work, or during their lunch hours.
- b. The transit-dependent shop in locations they can get to by transit.
- c. Many department stores, urban malls, and commercial areas are located in congested areas adjacent to rail stations, bus terminals, and transit routes.

An APTA study, "National Impacts of Transit Capital and Operating Expenditures on Business Revenues," estimates that a dollar invested

in transit would result in a \$3 to \$3.50 increase in business revenues nationwide.

5. Less traffic congestion

One full 40-foot bus is equivalent to a line of moving automobiles stretching*:

6 city blocks (if traffic operates at 25 mph)

4.5 blocks (if traffic operates at 15 mph)

One full six-car heavy rail train is equivalent to a line of moving automobiles stretching*:

95 city blocks (if traffic operates at 25 mph)

68 blocks (if traffic operates at 15 mph)

6. Creation of jobs

In addition to the 282,000 or so people directly employed by transit, hundreds of thousands of others are dependent on transit for their livelihood. These include engineering and construction workers planning and building transit facilities, transit consultants.

A full heavy rail car accomodates about 180 people including standees; a train of six cars carries 1,080 people, thus replacing 900 automobiles.

There are normally ten city blocks per mile. Average automobile length is estimated at 16 feet, and a one-car-length-per-each-ten-mile-per-hour following length is assumed.

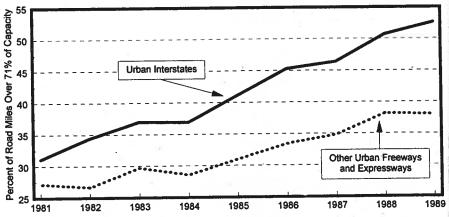
It is estimated that 2,400 direct and 5,800 total jobs are created by each \$100 million transit capital investment. Operating expenditures of \$100 million would generate 3,100 direct and 7,300 total jobs.

^{*}A full 40-foot bus holds about 70 people including standees. At the estimated national average of 1.2 persons per automobile, one bus is equivalent to 58 automobiles.

TABLE 3

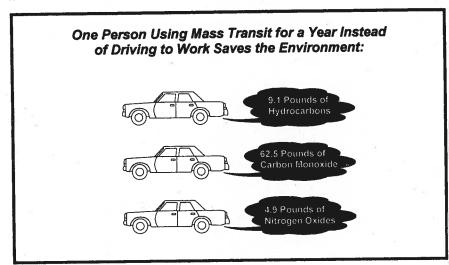
Congestion and Adverse Environmental Impact of Automobiles





Source: APTA, Issue Paper, June 1991 (from FHWA data).

TABLE 4



Source: APTA, Mass Transit - The Clean Air Alternative, 1991.

manufacturers of transit vehicles, equipment and parts, retail employees serving transit passengers, and employees in all sectors of the U.S. economy indirectly supporting transit activities.

7. Mobility during crises

During snow and ice storms, transit patronage often rises as numerous people avoid driving under such conditions.

After the 1989 San Francisco earthquake the entire city was paralyzed, but the BART rail system resumed operations after just a few hours to check for damage. Service was expanded to 24-hours-perday since the bridge connecting San Francisco and Oakland was closed for several weeks.

8. Less air pollution

Transit vehicles contribute far less pollution to the atmosphere than automobiles. The following is derived from U.S. Department of Energy data.

Pollution by Mode of Travel

For typical work trips based on national average vehicle occupancy rates, pollutant emissions in grams per passenger mile are:

Mode	Hydrocarbons	Carbon Monoxide	Nitrogen Oxides
Electric Rail	0.01	0.02	0.47
Motorbus	0.20	3.05	1.54
Vanpool	0.36	2.42	0.38
Carpool	0.70	5.02	0.69
Single-person Auto	2.09	15.06	2.06

Reduction in pollution when riding transit instead of driving

		Carbon	Nitrogen
<u>Mode</u>	Hydrocarbons	Monoxide	Oxides
Electric Rail	99%	99%	60%
Motorbus	90%	75%	10-15%
Vanpool	80%	80%	80%

9. Safety

Transit is one of the safest methods of passenger travel, according to the National Safety Council. The 1989-1991 average death rates in terms of 100 million passenger miles are as follows:

	Death Rate
Automobiles	1.05
Intercity & commuter railroads	0.05
Airlines	0.02
Intercity buses	0.01
School buses	0.02
Transit buses	0.01
Heavy & light rail vehicles	Not reported

10. Increased Productivity

Investment in transit is estimated to improve worker output of about \$520 billion over the next 10 years, assuming an investment of \$100 billion. The better facilities and services provided by the investment result in more efficient movement of people and goods which saves time, reduces costs and increases productivity. This finding is from "Transportation Spending and Economic Growth," a 1991 study by Professor David A. Aschauer.

13. TRANSIT PRICE INDEX

Traditionally, analysts use the Consumer Price Index (CPI) or the GNP Deflator to adjust for monetary inflation when estimating changes in the *real* cost of providing transit services. Using these

very general inflation measures is misleading, since transit systems do not buy the same items that consumers or national businesses do. The Transit Price Index (TPI) has been created to properly account for the changing costs of items purchased by the transit industry, which typically include construction materials, industrial supplies, labor services, insurance, and other services.

From 1980 to 1992, transit inflation, measured by the TPI, increased 93.9 percent, compared to 70.3 percent for the CPI and 65.6 percent for the GNP Deflator. The costs of transit items grew 34 percent faster than the costs of consumer goods during this period.

CPI

(1982-84=100)

82.4

90.9

96.5

99.6

103.9

107.6

109.6

113.6

118.3

124.0

130.7

136.2

140.2

GNP Deflator

(1982=100)

85.7

94.0

100.0

103.9

107.7

110.9

113.8

117.4

121.3

126.3

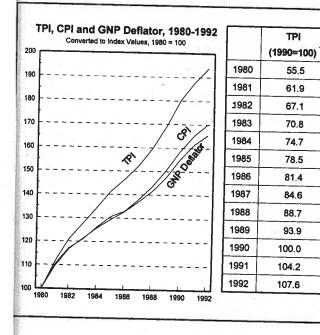
132.9

138.3

141.9*

*Estimated

TABLE 5



14. TRANSIT PRODUCTIVITY AND EFFICIENCY

There are several means to gauge transit productivity and efficiency. The most common indicators of productivity include various measures of output per worker, and the most common measures of efficiency include the real operating expense per unit of transit service. Using the TPI to adjust for transit inflation, these measures indicate that in the latest five-year period for which final data are available, both transit productivity and efficiency have improved significantly.

Change in Transit Productivity and Operational Efficiency, 1985-90

1985	1990	<u>'85-90</u> *
10,355	11,881	14.9%
730	834	14.2%
31,983	32,250	0.8%
146,585	150,691	2.8%
	10,355 730 31,983	10,355 11,881 730 834

Efficiency:

Real Operating Expense/Vehicle Hour	\$79.99	\$69.20	-13.5%
Real Operating Expense/Vehicle Mile	5.65	4.86	-14.0%
Real Operating Expense/Passenger Trip	1.83	1.79	-2.2%
Real Operating Expense/Passenger Mile	0.40	0.38	-5.0%

Note: Real Operating Expense values are computed using the TPI.

SECTION II

Profile of U.S. Transit



^{*} Positive growth in transit output per employee indicates improved productivity. Negative growth in expense per unit of output indicates improved efficiency.

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TABLE 6 Transit Modal Statistics at a Glance

	NUM O Syst		ACTIVE VEHICLES		OPERATING EMPLOYEES	
MODE	1992	1991	1992	1991	1992	1991
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Vanpool Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Cable Car Inclined Plane Aerial Tramway Automated Guideway	2,691 1,174 1,517 3,894 32 13 19 5 14 26 1 4 1 7	2,689 1,172 1,517 3,894 28 13 18 5 14 27 1 4 1 7	61,959 55,102 6,857 19,566 1,868 10,245 1,058 907 4,413 98 44 10 2 104 100,274	60,377 53,642 6,735 17,879 1,336 10,331 1,095 752 4,370 99 44 10 2 104 96,399	162,509 148,665 13,844 26,940 148 47,075 3,742 1,686 20,888 2,574 268 35 20 607 266,492	163,555 149,247 14,308 24,196 88 47,423 4,175 1,826 21,083 2,567 268 30 20 626 265,857

All data are preliminary.

(a) Total is not sum of all modes since many systems operate more than one mode.
(b) Excludes international, rural, rural interstate, island, and urban park ferries.

TABLE 6 (continued)

Transit Modal Statistics at a Glance

	OP	LE MILES ERATED LLIONS)	UNLINKED PASSENGER TRIPS (MILLIONS)		PASSENGER MILES (MILLIONS)	
MODE	1992	1991	1992	1991	1992	1991
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Other (a) Total Motor Bus Mile Equivalents (c)	2,185.0 2,007.2 177.8 381.6 525.4 28.7 14.0 218.7 2.3 28.3 3,384.0	2,166.6 1,994.2 172.4 335.0 527.2 27.6 13.6 214.9 2.4 19.1 3,306.4	5,525 5,263 262 79 2,207 189 127 314 47 31 8,519	5,624 5,356 268 71 2,172 184 125 318 50 31 8,575	20,404 19,533 871 511 10,737 704 197 7,342 271 219 40,385	21,090 20,219 871 454 10,528 662 195 7,344 282 148 40,703

All data are preliminary.

(a) Includes cable car, inclined plane, aerial tramway, vanpool, and automated guideway.

(b) Excludes international, rural, rural interstate, island, and urban park ferries.

(c) Estimate based on average seating plus standing capacity of vehicle compared to that of a motor bus (70 passengers): light rail = 1.7, heavy rail = 2.6, commuter rail = 2.2, trolleybus = 1.0, demand response = 0.2, other = 1.0.

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TABLE 6 (continued)

Transit Modal Statistics at a Glance

			II W		ENERGY CONSUMPTION	
	RE	REVENUE		TING NSE IONS)	GALLONS (MILLIONS)	KWH (MILLIONS)
MODE	1992	1991	1992	1991	1992	1992
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Other (a) Total	\$3,074.4 3,027.0 47.4 91.0 1,830.8 97.8 52.5 970.3 41.0 21.5 6,179.3	\$3,098.4 3,039.1 59.3 68.9 1,700.6 97.8 51.6 958.0 42.1 19.8 6,037.2	\$9,945.2 9,288.8 656.4 719.0 3,301.3 309.6 123.0 2,012.0 178.7 56.9 16,645.7	\$9,501.4 8,875.9 625.5 608.5 3,858.6 291.1 113.5 1,942.4 176.1 49.8 16,541.4	578.7 541.3 37.4 58.0 0.0 0.0 0.0 55.6 20.8 43.4 714.9	0.1 0.0 0.0 3,193.3 287.3 72.6 1,217.4 0.0 19.3 4,790.0

All data are preliminary.
-- = Not available.

(a) Includes cable car, inclined plane, aerial tramway, vanpool, and automated guideway.
(b) Excludes international, rural, rural interstate, island, and urban park ferries.

TABLE 7 **Number of Transit Service Providers By State**

STATE	URBANIZED AREA TRANSIT SYSTEMS(a)	SMALL URBAN AND RURAL TRANSIT SYSTEMS(b)	NON-PROFIT ELDERLY AND DISABLED SERVICE PROVIDERS(c)	TOTAL SERVICE PROVIDERS
Alabama	15	26	21	62
Alaska	1	8	32	41
Arizona	13	11	62	86 82
Arkansas	5	6	71	82
California	120	64	177	361
Colorado	11	18	1 22	51
Connecticut	26	4	76	106
Delaware	2	1 1	30 20	33 21
District of Columbia	1	0	20	21
Florida	28	29 53	1 98	155
Georgia	12	53	50	115
Hawaii	1	3	30	34
Idaho	5	5	31	34 41
Illinois	20	31	30 31 57	108
Indiana	20 31	31 28 24	71	130
Iowa	17	24	1 1	42
Kansas	4	120	50	174
Kentucky	6	21	46	73
Louisiana	15	42	61	118
Maine	8	11	i o l	19
Maryland	13	14	49	76
Massachusetts	18	3	59	80

(a), (b), (c) See footnotes Page 31.

(continued on Page 30)

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TABLE 7 (continued)

Number of Transit Service Providers By State

STATE	URBANIZED AREA TRANSIT SYSTEMS(a)	SMALL URBAN AND RURAL TRANSIT SYSTEMS(b)	NON-PROFIT ELDERLY AND DISABLED SERVICE PROVIDERS(c)	TOTAL SERVICE PROVIDERS
lichigan	19	45	44	108
finnesota	10	35	115	160
dississippi -	5	17	56	78
1issouri .	8	27	67	102
lontana	4	10	34	48
lebraska	2	50	56	108
levada	4	7	48 21	59 27
ew Hampshire	3	3	21	27
ew Jersey	25 5 73	14	91	130
lew Mexico	5	17	51	73
lew York	73	29	260	362
orth Carolina	22	19	52	93
orth Dakota	22 2	22	52 23	93 47
hio	40	1 33	113	186
)klahoma	40	33 15	173	191
regon	5	21	60	86
Pennsylvania	44	15	118	177
thode Island	77	'1	23	25
outh Carolina	10	6	23 65 47	25 81
South Dakota	2	13	47	62
		12	132	157
iennessee iexas	13 39	12 33	166	238

(a), (b), (c) See footnotes Page 31.

(continued on Page 31)

TABLE 7 (continued)

Number of Transit Service Providers By State

STATE	URBANIZED AREA TRANSIT SYSTEMS(a)	SMALL URBAN AND RURAL TRANSIT SYSTEMS(b)	NON-PROFIT ELDERLY AND DISABLED SERVICE PROVIDERS(c)	TOTAL SERVICE PROVIDERS
Utah	3	4	43	50
Vermont	1	6	28	35
Virginia	26	11	42	79
Washington	20	25	7	52
West Virginia	6	12	83	101
Wisconsin	18	32	71	121
Wyoming	1	21	20	. 42
United States Total	786	1,077	3,223	5.086

- (a) Transit systems reporting data for U.S. Federal Transit Administration Annual Section 15 Report and other known public and private transit systems. Systems operating in two or more states are counted in the state in which they operate the largest portion of their service.
- (b) Transit systems receiving funds under the provisions of the Federal Transit Act, Section 18. Includes service providers operating fixed-route only, demand-response only, and combined fixed-route and demand-response service. Excludes providers also providing urbanized area service.
- (c) Transit service providers receiving funds under the provisions of the Federal Transit Act, Section 16(b)2. Excludes service providers also providing urbanized area or small urban and rural service.

Data estimate for Small Urban and Rural Transit Systems and Non-Profit Elderly and Disabled Service Providers based on A Directory of UMTA-Funded Rural and Specialized Transit Systems, U.S. Department of Transportation, December 1989.

TABLE 8

Transit Systems Classified by Vehicle Type and Population Group

POPULATION OF URBANIZED AREA	ALL-RAIL SYSTEMS	MULTI-MODE SYSTEMS	MOTOR BUS/ DEMAND RESPONSE/ VANPOOL SYSTEMS	ALL-FERRY SYSTEMS	TOTAL SYSTEMS(b)
2,000,000 and greater 500,000 to 2,000,000 250,000 to 500,000 100,000 to 250,000 50,000 to 100,000 Less than 50,000(a)	14 3 0 0 1	20 14 1 1 2 0	622 540 234 332 321 2,959	10 7 1 1 1	666 564 236 334 325 2,961
otal U.S. Transit Systems	19	38	5,008	21	5,086

(a) Rural areas and urban places with less than 50,000 population outside of urbanized areas.

(b) As of July 1, 1992. Excludes bus service operated by Intercity Bus Carriers.

TABLE 9
Public Transit as a Portion of All Transit*

T 1 T 1 T 1 T 1 T 1						···		
CALENDAR YEAR	NUMBER OF TRANSIT SYSTEMS	PERCENT OF ALL TRANSIT	TOTAL TRANSIT VEHICLES OWNED AND LEASED	PERCENT OF ALL TRANSIT	VEHICLE MILES OPERATED	PERCENT OF ALL TRANSIT	UNLINKED PASSENGER TRIPS	PERCENT OF ALL TRANSIT
	Ŷ.			T= 12-4,1	(MILLIONS)		(MILLIONS)	
1945 1950 1955 1960	29 36 39 58	2% 3 3 5	14,609 24,570 22,011 23,738	16% 28 30 36			-:-	
1965 1970 1975 1980	88 159 333 576	8 15 35 55	29,592 40,778 51,964 64,128	48 66 83 90	1,280 1,706 1,939	68% 86 93	5,646 6,275 7,741	 77% 90 94
1985 1990	1,435 1,580	29 31	79,443 86,430	81 86	2,496 3,057	89 94	8,335 8,493	96 94

P = Preliminary

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-- Data not available

^{*}Public transit systems include all transit systems owned or subsidized by municipalities, counties, regional authorities, states, or other governmental agencies and transit systems operated or managed by private firms under contract to governmental agency owners. Series not continuous between 1980 and 1985. Data prior to 1985 exclude commuter railroads, urban ferry boats, demand response, and some transit systems in non-urbanized areas.

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TABLE 10
Major High Occupancy Vehicle (HOV) Facilities*

URBANIZED AREA	HOV FACILITY	LENGTH (miles)
Dallas, TX Denver, CO Denver, CO (under construction) Hartford, CT Honolulu, HI Honolulu, HI Houston, TX Houston, TX Houston, TX Houston, TX Los Angeles, CA Los Angeles, CA Los Angeles, CA Los Angeles, CA Miami, FL Minneapolis, MN New Orleans, LA New York, NY Norfolk, VA Orlando, FL Phoenix, AZ Phoenix, AZ Pittsburgh, PA Pittsburgh, PA	I-30 East U.S. 36-Boulder Turnpike I-25 I-84 Kalanianaole Highway I-H-1 I-10 (Katy) I-45 (North) I-45 (Gulf) U.S. 59 (Southwest) U.S. 290 (Northwest) I-10 (El Monte) CA Route 91 CA Route 55 I-405 I-95 I-394 Canal Street Long Island Expressway NJ Route 495 (Lincoln Tunnel) U.S. 9 Gowanus Expressway I-64/VA Route 44 I-4 I-10 West I-10 East East (MLK, Jr.) Busway South Busway I-279/I-579	5.2 west, 3.3 east 3.9 1-way 11.0 1-way 9.5 2-way 2.1 1-way 8.9 east, 7.8 west 13.0 reversible 13.5 reversible 11.6 reversible 11.5 2-way 8.0 east 11.0 2-way 10.0 2-way 14.5 2-way 9.1 2-way 2.2 l-way 2.2 west 2.9 east 2.0 reversible 2.1 north 13.3 west, 14.1 east 30.0 2-way 16.2 2-way 22.0 2-way 7.8 2-way 4.3 2-way 6.9 reversible

TABLE 10 (continued)

Major High Occupancy Vehicle (HOV) Facilities*

URBANIZED AREA	TRANSITWAY	LENGTH (miles)
Saint Louis, MO San Diego, CA San Francisco, CA San Francisco, CA San Jose, CA Seattle, WA Washington, DC Washington, DC Washington, DC	Hodiamont Right-of-Way I-15 U.S. 101 North U.S. 101 South CA Route 237 San Tomas Expressway Montague Expressway U.S. 101 CA Route 85 I-280 I-5 I-405 North WA Route 520 WA Route 522 I-90 Transit Tunnel & South Busway I-5/I-90 I-395/I-95 (Shirley) I-95 (Shirley) I-06 Dulles Access Road	3.2 2-way 7.5 reversible 10.3 north, 10.2 south 3.2 north, 2.0 south 4.9 2-way 8.3 2-way 5.9 2-way 15.8 2-way 10.6 2-way 20.2 south, 15.9 north 13.0 2-way 2.6 west 3.1 south 4.6 west 2.8 2-way 4.4 2-way 10.1 reversible 6.8 1-way 9.6 1-way 9.6 1-way

^{*}Includes exclusive, stand-alone, and freeway priority lanes at least two miles long used in transit service. Facility may include additional mileage not used by transit.

Source: Transportation Research Board, 1990 HOV Facilities Conference Proceedings, Federal Transit Administration Fiscal Year 1991 Section 15 reports, press reports.

Milestones in U.S. Transit History

Year		Event
1630		Bostonreputed first publicly operated ferry boat
1740		New Yorkreputed first use of ox carts for carrying of passengers
1811		New Yorkfirst mechanically operated (steam-powered) ferry boat
1827		New Yorkfirst horse-drawn urban stagecoach line (Dry Dock & East Broadway)
1830		Baltimorefirst railroad (Baltimore & Ohio Railroad Co.)
1832		New Yorkfirst horse-drawn street railway line (New York & Harlem Railroad Co.)
1835		New Orleansoldest street railway line still operating (New Orleans & Carrollton line)
1838		Bostonfirst commuter fares on a railroad (Boston & West Worcester Railroad)
1850		New Yorkfirst use of exterior advertising on street railways
1856		Boston-first fare-free promotion
1861		New Yorkfirst failed attempt to form street railway labor organization
1868		New Yorkfirst cable-powered (& first elevated) line (West Side & Yonkers Patent Railway)
1870		New Yorkfirst pneumatic-powered (& first underground) line (Beach Pneumatic Railroad Co.)
1870		Pittsburghfirst inclined plane
1871	H	New Yorkfirst steam-powered elevated line (New York Elevated Railroad Co.)
1872		Great Epizootic horse influenza epidemic in eastern states kills thousands of horses (the motive power for most street railways
1873		San Franciscofirst successful cable-powered line (Clay St. Hill Railroad)
1882		Boston-American Street Railway Association (APTA's original predecessor) formed
1883		New York-first surviving street railway labor organization (Knights of Labor Local 2878)
1884		Clevelandfirst electric street railway line (East Cleveland Street Railway)
1884		first transit-only publication (The Street Railway Journal)
1885		New Yorkfirst recorded strike by street railway workers (Third Avenue & Sixth Avenue Elevateds)
1886		Montgomery, ALfirst semi-successful citywide street railway system (Capital City Street Railway Co.)
1888		Richmond, VAfirst successful electric street railway line (Union Passenger Railway)
1889		New Yorkfirst major strike by street railway workers

TABLE 11 (continued)

Milestones in U.S. Transit History

Үеаг	Event
1892	Indianapolisfirst national street railway labor union founded (Amalgamated Association of Street Railway Employees of America now called the Amalgamated Transit Union)
1893	Portland, ORfirst interurban rail line (East Side Railway Co.)
1894	Boston-first public transit commission (Boston Transit Commission)
1895	Chicagofirst electric elevated rail line (Metropolitan West Side Elevated Railway)
1897	Bostonfirst electric underground (& first publicly-financed) street railway line (West End Street Railway)
1898	Chicago-first electric multiple-unit controlled rail line (Chicago & South Side Rapid Transit Railroad Co.)
1904	New York-first electric underground (& first 4-track express) heavy rail line (Interborough Rapid Transit Co.)
1905	New York-first public takeover of a private transit company (Staten Island Ferry)
1905	New Yorkfirst motor bus line (Fifth Avenue Coach Co.)
1906	Monroe, LAfirst public takeover of a street railway
1908	New Yorkfirst interstate underground heavy rail line (Hudson & Manhattan Railroad to New Jersey)
1910	Hollywood, CAfirst trolleybus line (Laure! Canyon Utilities Co.)
1912	San Franciscofirst publicly operated street railway in a large city (San FranciscoMunicipal Railway)
1912	Clevelandfirst street railway to operate motor buses (Cleveland Railway)
1914	Los Angelesfirst jitney
1917	New York-last horse-drawn street railway line closed
1918	New YorkAPTA's predecessor organization first calls for public takeover of transit
1920	first motor bus not based on truck chassis (Fageol Safety Coach)
1921	New Yorkfirst successful trolleybus line
1923	Bay City, MI, Everett, WA, Newburgh, NYfirst cities to replace all streetcars with motor buses
1926	highest peacetime transit ridership before World War II (17.2 billion)
1927	Detroitfirst motor bus without cowl-type engine
1927	Philadelphiafirst automobile park and ride lot and first bus-rail transfer facility for a non-commuterrail line
1932	New Yorkfirst publicly operated heavy rail line (Independent Subway)

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Milestones in U.S. Transit History

Year	Event
1933	San Antoniofirst large city to replace all streetcars with motor buses
1934	New YorkTransport Workers Union of America founded
1935	Washington—Public Utility Holding Company Act of 1935 enacted requiring most power companies to divest themselves of transit operations and eliminating much private transit financing
1936	motor bus manufacturers began to assume control of or influence street railways, leading to rapid replacement of streetcars with motor buses
1936	New Yorkfirst industry-developed standardized street railway car (P.C.C. car) (Brooklyn & Queens Transit System)
1938	Chicago-first use of federal capital funding to build a transit rail line
1939	Chicagofirst street with designated bus lane
1940	first time motor bus ridership exceeded street railway ridership
1940	San Francisco becomes last surviving cable car system
1945	Los Angelesfirst rail line in expressway median (Pacific Electric Railway)
1946	highest-ever transit ridership (23.4 billion)
1952	San Franciscolast new PCC car for U.S. transit system placed in service
1961	Washington—first significant federal transit legislation (Housing & Urban Development Act of 1961)
1962	Seattlefirst monorail (Seattle World's Fair)
1962	New Yorkfirst automated heavy rail line (Grand Central Shuttle)
1963	Chicago becomes last surviving city with interurban line (Chicago, South Shore, & South Bend Railroad)
1964	Washington-creation of Urban Mass Transportation Administration (Urban Mass Transportation Act of 1964)
1966	New York-first public takeover of commuter railroad (Long Island Rail Road Co.)
1966	Providencefirst statewide transit system (Rhode Island Public Transit Authority)
1966	WashingtonUrban Mass Transportation Administration moved to new Department of Transportation
1968	Minneapolisfirst downtown transit mall (Nicollet Mall)
1968	Clevelandfirst rail station at an airport opened
1969	Washingtonfirst transitway (Shirley Highway)

TABLE 11 (continued)

Milestones in U.S. Transit History

Year	Event
1969	Philadelphia–first modern heavy rail system replacing former rail line (Port AuthorityTransit Corporation)
1970	Fort Walton Beach, FLfirst dial-a-ride demand response bus
1971	Washingtonfirst federally subsidized intercity railroad providing commuter service (AMTRAK)
1972	San Franciscofirst computer-controlled heavy rail system (Bay Area Rapid Transit District)
1972	transit ridership hits all-time low (5.3 billion)
1973	Washingtonsome transit service required to be accessible to disabled (Rehabilitation Act of 1973)
1973	Boston, Dayton, OH, Philadelphia, San Francisco, & Seattle become last surviving trolleybus systems
1974	Boston, Cleveland, Newark, New Orleans, Philadelphia, Pittsburgh, & San Francisco become the last surviving street railway systems
1974	Washington-first federal transit operating assistance legislation (National Mass Transportation Assistance Act of 1974)
1974	American Public Transit Association formed from merger of 2 organizations
1975	Morgantown, WVfirst automated guideway peoplemover (West Virginia University)
1977	San Diegofirst wheelchair-lift-equipped fixed-route bus
1979	Seattlefirst successful wheelchair-lift-equipped fixed-route bus service
1979	Washingtonfirst standardized transit data accounting system (Section 15)
1980	San Diegofirst completely new light rail system (San Diego Trolley)
1982	Washingtontransit trust fund for capital projects created thru dedication of one centof federal gas tax
1990	Washingtonvirtually all transit service required to be accessible to disabled (Americans with Disabilities Act of 1990)
1991	Washingtontransit buses subject to strict pollution controls (Clean Air Act of 1990)
1991	Washingtonfederal government allowed to subsidize its employees' commuting costs
1991	Washington-first general authorization of use of highway funds for transit (Intermodal Surface Transp. Efficiency Act of 1991)
1992	Washington-first limitation on amount of tax-free employer-paid automobile parking benefits and tripling of value of tax-free benefit for transit use (National Energy Policy Strategy Act)

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TABLE 12

Public Cost of Highway Transportation in 1989, Billions of Dollars (a)

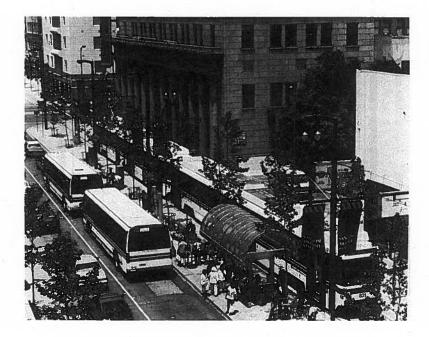
Costs recovered from drivers through taxes and tolls Highway construction and repair Highway maintenance	\$20.0 11.8
Highway services, administration, interest, and debt retirement Total	12.5 44.3
Market costs not recovered from drivers Highway construction and repair Highway maintenance Highway services Free parking Total	13.3 7.9 68.0 85.0 174.2
External costs not recovered from drivers Health costs from air pollution Reductions of motor vehicle CO2 emissions Strategic petroleum reserve Military expenditures Accidents Noise Total	10.0 27.0 0.3 25.0 55.0 9.0
Total Public Cost	344.8
Miles traveled	2,000.0
Public Cost per mile traveled Covered by user fees Not covered by user fees	17¢ 2¢ 15¢

(a) Public costs do <u>not</u> include costs paid directly by motor vehicle owners such as vehicle purchase price, gasoline, parking, insurance, maintenance, and registration. These costs totaled an estimated \$500 billion for passenger and \$254 billion for freight transportation in 1989, according to the ENO Foundation for Transportation, *Transportation in America*.

Source: The Going Rate: What It Really Costs to Drive, World Resources Institute, 1992.

SECTION III

Finance



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	REVI	ENUES
V C	1991	1992
Passenger Revenue Other Operating Revenue Total Operating Revenue	\$ 6,037,200,000	\$ 6,179,300,000 <u>806,300,000</u> \$ 6,985,600,000
Local Operating Assistance State Operating Assistance Federal Operating Assistance Total Operating Assistance	\$ 5,573,400,000 3,199,500,000 955,900,000 \$ 9,728,800,000	\$ 4,747,800,000 3,775,600,000 964,300,000 \$ 9,487,700,000
Total Revenue	\$16,532,800,000	\$16,473,300,000

All data are preliminary.

TABLE 13 (continued)

Transit Financial Statement for 1991 and 1992

	EXPENSE	S
II A	1991	1992
Vehicle Operations Expense	\$ 6,726,600,000	\$ 7,547,200,000
Vehicle Maintenance Expense	2,992,400,000	3,096,300,000
Non-Vehicle Maintenance Expense	1,604,700,000	1,761,100,000
General Administration Expense	3,584,500,000	2,767,200,000
Purchased Transportation Expense	1,633,200,000	1,473,900,000
Total Operating Expense	\$16,541,400,000	\$16,645,700,000
Depreciation and Amortization	\$ 1,763,300,000	\$ 2,017,500,000
Other Reconciling Items	1,027,200,000	1,208,500,000
Total Reconciling Items	\$ 2,790,500,000	\$ 3,226,000,000
Total Expense	\$19,331,900,000	\$19,871,700,000

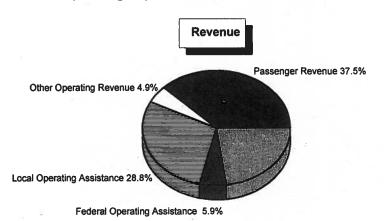
All data are preliminary.

NOTE: The difference between Total Revenue and Total Expense is due to several factors including (1) use of the accrual system of accounting rather than the cash system of accounting, (2) amalgamation of accounts of transit systems recording revenue and expense is a variety of fiscal or calendar years, (3) inclusion of State and Local Financial Assistance classified as operating assistance for income accounting purposes but subsequently

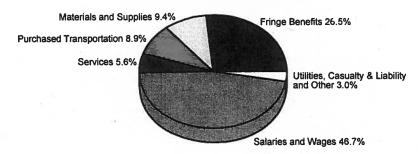
transferred to capital accounts for expenditure, (4) inclusion of Depreciation and Amortization costs in Total Expense that are met from revenue sources not included in Total Revenue, (5) exclusion of extraordinary revenues and extraordinary expenses, (6) actual profit or loss of privately owned transit systems, and (7) actual surplus or deficit of publicly owned transit systems.

TABLE 14

Transit Operating Expense and Revenue in 1992







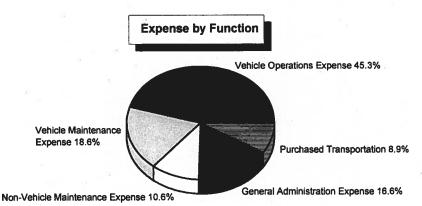


TABLE 15

Transit Operating Expense for 1992 Classified By Function and Object Class

FUNCTION AND	VEHICLE OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	GENERAL ADMINISTRATION	PURCHASED TRANSPORTATION	TOTAL
OBJECT CLASS			(DOLLARS	(DOLLARS IN MILLIONS)		
Salaries and Wages Fringe Benefits	4,088.82	1,451.50	1,082.23	1,155.05	0.00	7,777.60
Services Fuels and Lubricants	78.23	154.81	124.84	576.92	888	934.80
Materials and Supplies	84.89	677.48	153.84	193.09	000	1 100 30
Utilities		49.25	289.64	174.77	0.00	615.20
Casualty & Liability Costs Purchased Transportation		99.6	8.6	514.58	0.00	556.20
Other	452.25	08.76-	-502.31	725.04	0.5/4/	1,475.90
Total	7,547.20	3,096.30	1,761.10	2,767.20	1,473.90	16,645.70
		(PER	(PERCENT OF TOTAL)		П	
Salaries and Wages	24.56	8.72	6.50	6.94	00.0	22 97
Fringe Benefits	13.77	76.7	3.61	4.13	0.00	26.46
Services	0.47	0.93	0.75	3.47	0.00	2,62
Fuels and Lubricants	2.55	0.17	0.01	0.00	00.00	, c
Materials and Supplies	0.51	4.07	0.92	1.16	0.00	6.66
Utilities	0.61	0.30	1.74	1.05	0.00	3.70
Casualty & Liability Costs	0.15	0.04	90.0	3.09	0.00	3.34
Purchased Transportation	9.6	0.0	0.0	0.0	8.85	8.85
Total	45.34	18.60	10.58	-3.21 16.62	000	-4-08
			2	30.0	6.0	100-00

		3	OPERATING E	EXPENSE					
CAL ENDAR	VEHICLE	MAIN'	TENANCE	GENERAL ADMINIS-	PURCHASED TRANSPOR-		DEPRECIATION	OTHER RECONCILING	TOTAL
CALENDAR YEAR	VEHICLE OPERATIONS	VEHICLE	NON-VEHICLE	TRATION	TATION	TOTAL	AMORTIZATION	ITEMS	TOTAL EXPENSE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS
1979 1980	\$2,735.0 3,248.2	\$1,070.2 1,274.3	\$ 398.8 499.7	\$1,02 1,22	27.7(a) 24.3(a)	\$5,231.7 6,246.5	\$ 253.4 277.6	\$126.3 186.5	\$ 5,611.4 6,710.6
1981 1982 1983	3,596.5 3,882.3 3,930.8	1,397.8 1,555.8 1,696.6	547.9 611.8 694.9	1,50	82.1(a) 03.0(a) 83.7(a)	7,024.3 7,552.9 7,956.0	386.3 507.1 472.5	211.1 254.3 307.2	7,621.7 8,314.3 8,735.7
1984 1985 1986 1987 1988 1989 1990 1991 P 1992(b)	5,141.9 5,654.7 5,690.6 5,790.3 6,052.3 6,255.3 6,726.6 7,547.2	2,149.4 2,522.6 2,733.6 2,730.2 2,865.1 2,942.3 3,038.8 2,992.4 3,096.3	912.3 1,149.6 1,295.2 1,363.5 1,447.6 1,550.5 1,592.0 1,604.7 1,761.1	2,914.7 2,505.3 2,748.0 2,869.4 3,077.8 3,251.0 3,449.9 3,584.5 2,767.2	455.7 548.7 484.3 718.7 844.5 953.2 1,008.1 1,633.2 1,473.9	11,574.0 12,380.9 12,951.7 13,472.1 14,287.3 14,972.3 15,742.1 16,541.4 16,645.7	885.5 1,097.6 1,148.2 1,212.5 1,377.6 1,502.5 1,593.1 1,763.3 2,017.5	497.6 598.6 626.2 720.7 776.9 693.9 643.9 1,027.2 1,208.5	12,957.1 14,077.1 14,726.1 15,405.3 16,441.8 17,168.7 17,979.1 19,331.9 19,871.7

P = Preliminary

(a) General Administration and Purchased Transportation combined.

TABLE 17

Trend of Transit Operating Expenses by Object Class, Dollars*

CALENDAR YEAR	SALARIES & WAGES	FRINGE BENEFITS	SERVICES	MATERIALS AND SUPPLIES	UTILITIES	LIABILITY	PURCHASED TRANS- PORTATION	OTHER	TOTAL OPERATING EXPENSE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS
1979	\$3,025.0	\$1,090.4	\$136.3	\$ 508.3	\$188.7	\$183.4	\$ 99.	.6(a)	\$ 5,231.
1980	3,280.9	1,353.1	237.6	759.4	231.3	237.8		4(a)	6,246.
1981	3,493.5	1,649.1	266.8	940.8	280.9	252.8		4(a)	7,024.
1982	3,731.4	1,756.5	298.3	1,129.9	322.5	188.1		1(a)	7,552.
1983	3,921.3	1,977.3	309.4	1,023.9	431.2	192.6		3(a)	7,956.
1984	5,487.8	2,716.7	469.2	1,462.2	465.7	328.5	\$ 455.7	\$188.2	11,574.
1985	5,843.1	2,868.3	491.9	1,561.2	494.7	347.1	548.7	225.9	12,380.
1986	6,119.2	3,125.9	583.8	1,524.3	497.1	491.4	484.3	125.7	12,951.
1987	6,324.1	3,266.9	655.5	1,421.0	509.2	536.1	718.7	40.6	13,472.
1988	6,675.0	3,528.9	715.3	1,446.2	503.9	527.8	844.5	45.7	14,287.
1989	6,897.7	3,737.3	765.0	1,507.6	540.2	559.4	953.2	11.9	14,972.
1990	7,226.3	3,986.0	794.3	1,608.4	552.9	640.5	1,008.1	-74.4	15,742.
1991	7,394.5	3,998.4	818.0	1,559.7	575.9	625.6	1,633.2	-63.9	16,541.
P 1992(b)	7,777.6	4,404.7	934.8	1,563.2	615.2	556.2	1,473.9	-679.9	16,645.

P = Preliminary

⁻⁻ Data not available

^{*}Excludes commuter railroad, automated guideway, urban ferry boat, demand response, and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984.

⁽b) Beginning 1992, total operating expense declined over \$650 million due to change in accounting procedures at New York City Transit Authority.

^{*}Excludes commuter railroad, automated guideway, urban ferry boat, demand response, and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984.

⁽a) Purchased Transportation and Other combined.

⁽b) Beginning 1992, total operating expense declined over \$650 million due to change in accounting procedures at New York City Transit Authority.

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TABLE 18 Trend of Transit Operating Expenses by Mode, Dollars

		RAILWAY	Art C	#1		1 1 10		TOTAL
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL OPERATING EXPENSE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1988 1989 1990 1991 P 1992(a)	\$198.4 210.8 237.1 291.1 309.6	\$3,521.7 3,701.0 3,825.0 3,858.6 3,301.3	\$1,675.3 1,841.4 1,938.5 1,942.4 2,012.0	\$101.7 105.5 108.6 113.5 123.0	\$8,136.4 8,415.1 8,903.1 9,501.4 9,945.2	\$462.6 481.1 517.8 608.5 719.0	\$191.2 217.4 212.0 225.9 235.6	\$14,287.3 14,972.3 15,742.1 16,541.4 16,645.7

TABLE 19 Operating Expense by Transit System Vehicle Mode and Population of Area Served

VEHICLE MODE,		10.	,	. Р	ERCENT OF OPER	ATING EXPENSE FOR	- SE
POPULATION SIZE OF SERVICE DATA	CALENDAR YEAR	SAMPLE SIZE(a)	VEHICLE OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	GENERAL ADMINISTRATION	PURCHASED TRANSPORTATION
Multi-Mode, All Areas (b)(c)	1987 1988 1989 1990 1991 P 1992	33 33 44 33 34 32	38.9 38.3 37.9 37.7 36.9 41.7	20.9 20.2 19.2 18.7 18.3 18.6	14.1 13.0 13.2 13.5 12.7 14.8	23.1 22.5 23.5 24.0 24.5 17.4	3.0 6.0 6.2 6.1 7.6 7.4
Motor Bus Only, 1,000,000 or More	1987 1988 1989 1990 1991 P 1992	54 61 51 65 83 74	52.1 53.4 51.8 48.4 47.6 49.5	20.9 20.8 21.5 20.3 17.6 18.8	3.0 2.8 2.9 3.2 3.1 3.1	19.6 18.8 19.9 18.8 16.8 15.3	4.4 4.2 3.9 9.3 14.9
Motor Bus Only, 500,000 - 1,000,000	1987 1988 1989 1990 1991 P 1992	23 22 24 27 28 26	56.3 56.3 55.1 54.0 54.6 54.4	19.1 19.4 19.1 18.1 18.2 18.1	2.8 2.9 2.9 2.7 2.8 2.7	18.1 17.8 18.2 17.6 16.4 17.0	3.7 3.6 4.7 7.6 8.0 7.7

⁽a), (b), (c) See footnotes Page 50.

P = Preliminary
(a) Beginning 1992 total operating expense declined over \$650 million due to change in accounting procedures at New York City Transit Authority.

r at			2	Pi	ERCENT OF OPERA	ATING EXPENSE FOR	
VEHICLE MODE, POPULATION SIZE OF SERVICE AREA	CALENDAR YEAR	SAMPLE SIZE(a)	VEHICLE OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	GENERAL ADMINISTRATION	PURCHASED TRANSPORTATION
Motor Bus Only, 200,000 to 500,000	1987 1988 1989 1990 1991 P 1992	55 50 55 59 62 58	55.6 56.5 57.2 56.2 56.0 54.8	20.2 19.6 18.9 18.4 18.5 17.9	2.3 2.4 2.4 3.0 2.6 2.9	18.7 17.8 17.4 17.1 16.7 17.4	3.2 3.7 4.1 5.3 6.2 7.1
Motor Bus Only, 200,000 or Fewer	1986 1987 1988 1989 1990 1991 P 1992	97 99 102 111 103 93 76	56.0 54.7 56.6 55.2 53.2 52.8 55.1	19.2 18.8 18.5 18.0 18.2 16.9	2.0 2.0 2.2 2.2 2.3 2.2 1.8	17.9 18.8 18.2 18.1 18.2 17.0	4.9 5.7 4.5 6.5 8.1 11.1 10.9

NOTE: Excludes automated guideway and commuter railroad data and transit systems operating only heavy rail or light rail.

- (a) Number of transit systems reporting data for category and year. Percentages are for the sample only; not expanded to include all transit systems. A part of the variation in percentage values from year to year may result from changes in which transit systems comprise the sample groups rather than from actual changes in values for all transit systems.
- (b) Systems directly operating two or more of the following modes: motor bus, heavy rail, light rail, trolleybus, urban ferry boat, or inclined plane.
- (c) Beginning 1992, data not comparable to prior years due to change in accounting procedures at New York City Transit Authority.

TABLE 20

Trend of Transit Revenues, Dollars*

CALENDAR	OF	PERATING REVE	NUE		OPERATING	G ASSISTANCE	-12-7-1-1	
YEAR	PASSENGER(a)	OTHER	TOTAL	LOCAL	& STATE	FEDERAL	TOTAL	TOTAL REVENUE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MIL	LIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1979	\$2,436.3	\$211.5	\$2,647.8		054.6	\$ 855.8	\$2,910.4	\$ 5,558.2
1980	2,556.8	248.3	2,805.1		611.2	1,093.9	3,705.1	6,510.2
1981	2,701.4	343.8	3,045.2	3,	225.7	1,095.1	4,320.8	7,366.0
1982	3,077.0	380.0	3,457.0		582.0	1,005.4	4,587.4	8,044.3
1983	3,171.6	332.5	3,504.1		194.6	827.0	5,021.6	8,525.7
1984	4,447.7	780.5	5,228.2		399.1	995.8	6,394.9	11,623.1
1985	4,574.7	701.8	5,276.5		978.5	939.6	6,918.1	12,194.6
				LOCAL(b)	STATE			*
1986	5,113.1	737.3	5,850.4	4,244.5	2,305.6	941.2	7,491.3	13,341.7
1987	5,114.1	776.6	5,890.7	4,680.6	2,564.6	955.1	8,200.3	14,091.0
1988	5,224.6	840.7	6,065.3	4,893.1	2,677.1	901.1	8,471.3	14,536.6
1989	5,419.9	836.7	6,256.6	4,995.4	2,796.3	936.6	8,728.3	14,984.9
1990	5,890.8	895.0	6,785.8	5,326.8	2,970.6	970.0	9,267.4	16,053.2
1991	6,037.2	766.8	6,804.0	5,573.4	3,199.5	955.9	9,728.8	16,532.8
P 1992(c)	6,179.3	806.3	6,985.6	4,747.8	3,775.6	964.3	9,487.7	16,473.3

P = Preliminary

^{*}Excludes commuter railroad, automated guideway, urban ferry boat, demand response and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984.

⁽a) Beginning 1984 includes fare revenue retained by contractors; beginning 1991 includes fare subsidies formerly included in "Other".

⁽b) Local operating assistance includes taxes levied directly by transit system and other subsidies from local government such as bridge and tunnel tolls and non-transit parking lot revenue.

⁽c) Beginning 1992, local operating assistance declined by about \$500 million due to change in accounting procedures at New York City Transit Authority.

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Trend of Transit Operating Revenue

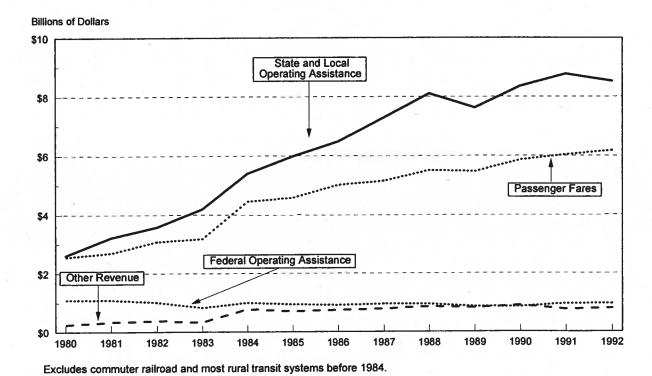


TABLE 22
Source of Revenue by Transit System Vehicle Mode and Population of Area Served

			PERCE	NT OF REVENUE	FOR OPERATIONS	FROM
VEHICLE MODE POPULATION SIZE OF SERVICE AREA	CALENDAR YEAR	SAMPLE SIZE(a)	PASSENGER FARES	OTHER EARNINGS(b)	STATE AND LOCAL ASSIST- ANCE(d)	FEDERAL ASSISTANCE
Multi-Mode, All Areas (c)	1987 1988 1989 1990 1991 P 1992	33 33 44 33 34 32	37.8 36.1 37.0 41.2 40.4 42.9	4.9 5.0 5.0 4.2 3.8 3.2	52.7 54.5 53.4 50.6 51.7 49.7	4.6 4.4 4.6 4.0 4.1 4.2
Motor Bus Only, 1,000,000 or More	1987 1988 1989 1990 1991 P 1992	54 61 51 65 83 74	33.9 33.5 32.7 26.8 27.6 28.9	4.1 5.4 3.5 6.6 8.2 11.9	54.4 53.8 55.2 60.5 59.6 54.4	7.6 7.3 8.6 6.1 4.6 4.8
Motor Bus Only, 500,000 - 1,000,000	1986 1987 1988 1989 1990 1991 P 1992	22 23 22 24 27 28 26	27.3 25.9 25.1 24.6 25.8 26.3 26.0	4.8 7.1 6.6 6.8 5.0 4.8 4.2	47.1 47.4 50.7 52.8 56.6 57.5 58.9	20.8 19.6 17.6 15.8 12.6 11.4 10.9

(a), (b), (c), (d) See footnotes Page 54.

Source of Revenue by Transit System Vehicle Mode and Population of Area Served

	*		PERCE	NT OF REVENUE	FOR OPERATIONS	FROM
VEHICLE MODE POPULATION SIZE OF SERVICE AREA	CALENDAR YEAR	SAMPLE SIZE(a)	PASSENGER FARES	OTHER Earnings(b)	STATE AND LOCAL ASSIST- ANCE(d)	FEDERAL ASSISTANCE
Motor Bus Only, 200,000 to 500,000	1987 1988 1989 1990 1991 P 1992	55 50 55 59 62 58	24.8 24.6 23.5 21.0 21.1 22.8	4.8 5.5 5.2 5.5 5.5 3.8	52.2 53.2 54.7 57.4 57.9 59.8	18.2 16.7 16.6 16.1 15.5 13.6
Motor Bus Only, 200,000 or Fewer	1987 1988 1989 1990 1991 P 1992	99 -102 111 103 93 76	20.1 19.3 18.7 19.4 19.2 22.7	6.2 6.2 6.6 6.4 7.1 4.9	53.0 54.6 54.5 54.4 54.5 53.4	20.7 19.9 20.2 19.8 19.2 19.0

NOTE: Excludes automated guideway and commuter railroad data and transit systems operating only heavy rail or light rail.

(b) Other operating revenue, non-operating income, and net auxiliary operating revenue.

(d) includes directly generated dedicated tax and toll revenue.

TABLE 23

Trend of Transit Passenger Revenue by Mode, Dollars*

		RAILWAY			Б			
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL PASSENGER REVENUE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS:
1990 1991 (a) P 1992	\$82.6 97.8 97.8	\$1,740.8 1,700.6 1,830.8	\$952.2 958.0 970.3	\$45.8 51.6 52.5	\$2,966.8 3,098.4 3,074.4	\$40.9 68.9 91.0	\$61.7 61.9 62.5	\$5,890.8 6,037.2 6,179.3

P = Preliminary

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(a) Beginning in 1991 includes fare subsidies formerly classified as Other Operating Revenues.

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⁽a) Number of transit systems reporting data for category and year. Percentages are for the sample only; not expanded to include all transit systems. A part of the variation in percentage values from year to year may result from changes in which transit systems comprise the sample groups rather than from actual changes in values for all transit systems.

⁽c) Systems directly operating two or more of the following modes: motor bus, heavy rail, light rail, trolleybus, urban ferry boat, or inclined plane.

^{*}This data is not available from the Federal Transit Administration Section 15 reports. Estimates made by APTA from transit system estimates, which are made according to each transit system's procedures.

TABLE 24 **Trend of Transit Fares**

	AVERAGE REVENUE PER UNLINKED TRANSIT	ADULT CAS	H FARE (BA	SE PERIOD)	PERCENT OF	TRANSIT SYST	EMS WITH (c)
CALENDAR YEAR	PASSENGER TRIP(a)(d) (cents)	HIGH	LOW	MEAN(b)	PEAK PERIOD SURCHARGES	TRANSFER CHARGES	ZONE FARES
1979 1980 1981 1982 1983	28.8 29.8 32.6 38.2 38.7	75 75 100 100 100	Free Free Free Free	35.7 40.3 47.3 52.8 54.9	5.4 5.1 4.2 9.0 8.9	29.6% 23.7 28.4 37.1	31.4% 31.6 38.9 35.9
1984 1985 1986 1987 1988 1989 1990 1991	50.3 53.0 58.3 58.5 60.3 60.7 66.9 70.4 72.5	150 150 210 275 275 275 275 275 275 600 600	Free Free Free Free Free Free Free	56.9 58.4 61.7 63.4 66.2 67.0 73.0 82.3 86.0	9.5 8.6 8.8 8.4 7.8 6.4 5.5	36.6 37.0 30.7 29.5 30.2 27.7 28.8 24.2 26.6	34.0 33.1 27.9 33.1 33.2 31.5 38.9 39.4 39.0

P = Preliminary

- Data not available

(a) Includes transfer charges and zone charges; includes reduced-fare trips, free-fare trips, and free-transfer trips.

(b) Unweighted average of adult cash fares, fixed-route service; excludes transfer, premium, or zone charges; each transit system counted equally. Beginning in 1984, calculation based on basic Adult Cash Fare only.

(c) Percents represent a 300-transit-system sample, not estimated for all transit systems.
(d) Excludes commuter railroad, automated guideway, urban ferry boat, demand response, and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984.

TABLE 25 United States Government Appropriations for Transit, Fiscal Years 1986-1993, Millions of Dollars

PROGRAM	1986 -	1987	1988	1989	1990	1991	1992	1993
Major Capital Investment Program:	\$ 918.7	\$ 915.0	\$ 980.3	\$ 985.0	\$ 982.0	\$1,115.0	\$1,342.2	\$1,725.0
Sec. 3 New Starts/Extensions	368.4	365.0	407.8	402.0	419.2	440.0	536.9	721.8
Sec. 3 Rail Modernization	411.5	410.0	427.0	439.0	430.7	455.0	536.9	666.
Sec. 3 Bus	138.8	140.0	145.5	144.0	132.1	220.0	268.4	336.9
Formula Program:	2,086.8	2,035.0	1,832.0	1,705.0	1,724.8	1,835.0	1,983.7	1,700.0
Sec. 5/9 Urbanized Area Operating Limit	868.8	860.9	804.7	804.7	802.3	802.3	802.3	802.
Sec. 5/9 Urbanized Area Capital Only	1,128.8	1,064.1	927.7	798.9	822.0	932.3	1,020.5	758.
Sec. 18 Rural Capital and Operating	60.0	75.0	64.6	66.4	65.6	65.4	106.1	90.
Sec. 16(b) Elderly and Disabled	29.2	35.0	35.0	35.0	34.9	35.0	54.9	48.
Planning and Research:	64.5	62.4	62.0	60.0	59.9	58.0	109.1	85.
Sec. 8 Planning	47.9	45.0	45.0	45.0	44.9	45.0	43.7	38.
Sec. 18(h) RTAP			4.8	5.0	5.0	5.0	5.0	4.
All Other Research and Training	16.6	17.4	12.2	10.0	10.0	8.0	60.4	42.
University Research Centers			5.0	5.0	5.0	5.0	7.0	6.
Interstate Transfer	210.2	200.0	123.5	200.0	159.5	160.0	160.0	75.
Washington DC Metro	217.2	201.1	180.5	168.0	84.7	64.1	124.0	170.
FTA Administration	28.7	31.0	31.9	31.9	31.8	32.6	37.0	38.
Other	4.8	7.5						30.
TOTAL	3,530.9	3,452.0	3,215.2	3,154.9	3,047.7	3,269.7	3,763.0	3,799.

Source: U.S. Department of Transportation, Federal Transit Administration.

TABLE 26 United States Government Operating Grant Approvals for **Mass Transportation**

	GRANT APPROVALS FOR OPERATING ASSISTANCE(a)
FISCAL YEAR	TOTAL APPROVALS
V	(MILLIONS)
1977	\$ 571.8
1978	685.3
1979	868.5
1980	1,120.7
1981	1,129.5
1982	1,055.5
1983	887.9
1984	922.4
1985	881.1
1986	872.5
1987	820.4
1988	780.0
1989	779.1
1990	765.4
1991	779.4

(a) Federal Transit Act.

Source: U.S. Department of Transportation, Federal Transit Administration.

United States Government Capital Grant Approvals for Mass Transportation by Use*

TABLE 27

ISCAL		4.6			
AR	BUS (a)	TRANSIT	COMMUTER	OTHER (c)	TOTAL
	(MITTIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MITTIONS)
1979	\$ 544.6	\$1,318.7	\$ 232.6	\$ 5.7	\$ 101 6
200	935.8	1,474.3	340.4	36.6	2,787 1
	994.3	1,546.1	373.5	31.8	2 576 2
2 !	854.4	1,307.1	323.0	59.6	1 775 6
55	1,138.4	1,455.5	4.65.4	102.3	3,161.6
	BUS	MODERNIZATION	NEW STARTS	OTHER (d)	TOTAL
1984	1,039.6	1,110.0	709.9	16.5	2 876 0
6	921.2	1,080.2	490.2	180	2,510.5
2	1,023.6	869.1	1.228.3	17.2	7 178 2
287	862.8	975.5	617.6	3 8 8	2,77,7
88	820.0	1.145.7	538.2	5.07	2,474.7
86	789.9	1,105.1	671.0	22.50	2,50.0
2	760.9	6.866	603.7	7.57	2,707.3
<u>~</u>	826.0	1 029 2	515 2	2,50	2,300.0
26	941.8	1,153.8	3.00%	20.02	4,396.4

Net amounts; excludes cancelled and reduced projects. Includes funding from Section 3 and Section 16(b)(2) of the Federal Transit Act, Urban Systems and Interstate Transfers Sections of the Federal-Aid Highway Act of 1973, as amended, and funding from Section 14 of the National Capital Transportation Act of 1969, as amended.

(a) Motor bus and trolleybus.(b) Heavy rail and light rail.(c) Urban ferry boat, cable car, inclined plane, and automated guideway transit.(d) Planning grants from Section 9A, Section 9 and Interstate Transfer.

Source: U.S. Department of Transportation, Federal Transit Administration.

TABLE 28

United States Government Capital Grant Approvals for Mass Transportation by Program*

DISCRETIONARY (a)	FORMULA (b)	OTHER (c)	TOTAL
(MILLIONS)	(MILLIONS)	(WITTIONS)	(MILLIONS)
\$1,225.0	\$ 255.6	\$ 620.9	\$2,101.6
1,655.0	431.2	701.0	2,787.1
1,925.0	361.1	659.6	2,945.7
1,634.5	297.7	611.8	2,544.1
1,640.9	863.1	657.7	3,161.6
1,096.0	1,339.2	8.044	2,876.0
727.7	1,491.6	291.1	2,510.3
1,132.3	1,324.8	681.1	3,138.2
694.5	1,376.5	403.7	2,474.7
875.4	1,380.6	264.8	2,520.8
1,199.7	2.296	422.1	2,589.5
1,169.4	962.6	248.0	2,380.0
1,108.4	1,035.0	253.0	2,396.4
1,027.3	1,207.7	377.9	2,612.9
	A COLUMN TO THE PARTY OF THE PA		

*Net amounts, excludes

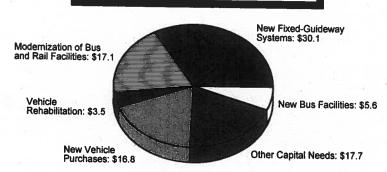
Section 3 and Section 16(b) 2. Section 5, Section 9A, Section 9, and Section 18. Act of 1973, as amended; Federal Aid Urban Systems and Interstate Transfer; and National Capital Transportation (a) Federal Transit Act: Sectiv (b) Federal Transit Act: Sectiv (c) Federal Aid Highway Act of 1969, as amended.

U.S. Department of Transportation, Federal Transit Administration

Source:

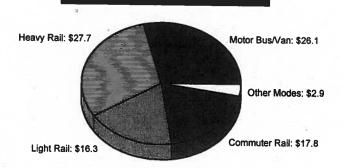
TABLE 29 **Transit Capital Needs 1992-1997**

Capital Needs by Project Class, 1992-1997 (Billions of Dollars)



Total Needs: \$90.8 Billion

Capital Needs by Mode, 1992-1997 (Billions of Dollars)



Total Needs: \$90.8 Billion

Source: APTA, Public Transit - Sound Investment For The 21th Century, 1991.

Trend of Transit Capital Revenues, Dollars

ASSISTANCE (MILLIONS) \$489.6 665.5 695.4 770.2
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P = Preliminary

(a) Beginning in 1991, taxes levied directly by a transit system and bridge and tunnel tolls are considered directly generated revenue by the Federal Transit Administration.

SECTION IV

Ridership and Transit Usage



TABLE 31 Trend of Transit Passenger Trips (a)

		RAILWAY	F 18-1 120					70741
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL PASSENGER RIDES/TRIPS
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1979 1980 1981 1982 1983	107 133 123 136 137	1,777 2,108 2,094 2,115 2,167	279 280 268 259 262	75 142 138 151 160	6,156 5,837 5,594 5,324 5,422		67 67 67 67 55	8,461 8,567 8,284 8,052 8,203
1984 1985 1986 1987 1988 1989 1990 1991 P 1992	135 132 130 133 154 162 175 184 189	2,231 2,290 2,333 2,402 2,308 2,542 2,346 2,172 2,207	267 275 306 311 325 330 328 318 314	165 142 139 141 136 130 126 125	5,908 5,675 5,753 5,614 5,590 5,620 5,677 5,624 5,525	62 59 63 64 73 70 68 71 79	61 63 53 70 80 77 79 81 78	8,829 8,636 8,777 8,735 8,666 8,931 8,799 8,575 8,519

P = Preliminary

- Data not available

(a) Total Passenger Rides for 1979 based on individual transit data collection procedures. Unlinked Transit Passenger Trips beginning in 1980 based on data collection procedures defined by Federal Transit Act, Section 15. Prior to 1984, excludes demand response and most rural and smaller systems. Series not continuous between 1983 and 1984.

TABLE 32 Trend of Motor Bus Unlinked Passenger Trips Classified by Population Groups (a)

CALENDAR YEAR	2,000,000 AND OVER	500,000- 2,000,000	250,000- 500,000	100,000- 250,000	50,000- 100,000	LESS THAN 50,000	TOTAL PASSENGER RIDES/TRIPS
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1980 1981(b) 1982 1983	3,324 3,300 3,130 3,210	1,550 1,539 1,459 1,497	408 300 286 276	309 242 237 230	91 92 91 90	155 121 121 119	5,837 5,594 5,324 5,422
1984 1985 1986 1987 1988 1989 1990(c) 1991	3,488 3,338 3,297 3,197 3,178 3,185 3,604 3,537 3,435	1,627 1,557 1,586 1,504 1,519 1,519 1,270 1,270 1,261 1,267	294 295 333 312 306 322 230 233 226	210 214 239 221 222 226 227 230 240	90 86 99 96 92 95 89 95	199 185 199 284 273 280 257 268 262	5,908 5,675 5,753 5,614 5,590 5,620 5,627 5,624 5,525

P = Preliminary

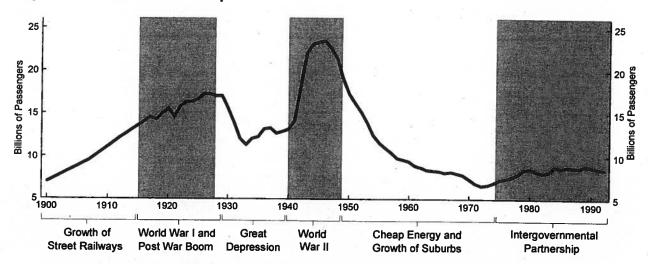
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(a) Prior to 1984, excludes most rural and smaller systems. Series not continuous between 1983 and 1984.

(b) From 1981 through 1989 transit systems assigned by population of urbanized area based on 1980 United States Census of Population.

(c) Beginning in 1990 transit systems assigned by population of urbanized area based on 1990 United States Census of Population.

TABLE 33
Major Trends of Transit Ridership



Transit ridership has gone through six major cycles of growth and decline during the Twentieth Century influenced by social and economic forces external to transit. From 1900 to 1929 transit ridership grew steadily; first due to technical innovation and investment opportunities during the early development of street railways and then due to the economic boom of World War I and the post-war period. The Great Depression caused a steep decline in ridership between 1929 and 1939 as people made fewer work trips and often could not afford to take pleasure trips. A new federal law limiting utilities' ability to subsidize transit, as had been normal practice, led to a decline in transit capital facilities. World War II caused motor fuel rationing and an economic boom that led to a new rapid growth cycle in transit ridership. Ridership quickly declined from artificially high war levels as people fled to suburbs spurred on by cheap fuel and government policy favoring low-density suburban growth. In 1973 the ridership cycle reversed again and transit began a modest growth based on a partnership of local, state, and federal government committed to improving America's transportation infrastructure.

TABLE 34
Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1992 (a)

RANK	TRANSIT SYSTEM	LARGEST CITY	NO. TRIPS (MILLIONS)	% NAT TOTAL
8	SYSTEM TOTAL (30 LARGEST	SYSTEMS)		
1	Metropolitan Transportation Authority (b)	New York, NY	2,201.4	25.8
2	Regional Transportation Authority (b)	Chicago, IL	614.1	7.2
3	Los Angeles County Metropolitan Transp. Auth.	Los Angeles, CA	419.8	4.9
4	Washington Metropolitan Area Transit Authority	Washington, DC	353.9	4.2
5	Massachusetts Bay Transportation Authority	Boston, MA	323.7	0/ 3.8
6	Southeastern Pennsylvania Transportation Authority	Philadelphia, PA	323.5	3.8
7	San Francisco Municipal Railway	San Francisco, CA	240.4	2.8
8 9	New Jersey Transit Corporation (b)	New York, NY	219.7	2.6
9	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	141.1	1.7
10	Mass Transit Administration, Maryland DOT	Baltimore, MD	106.0	1.2
11	New York City Department of Transportation	New York, NY	98.1	1.2
12	Metropolitan Transit Authority of Harris County	Houston, TX	85.0	1.0
13	Municipality of Metropolitan Seattle	Seattle, WA	83.7	1.0
14 15	San Francisco Bay Area Rapid Transit District	San Francisco, CA	79.4	0.9
15	Port Authority of Allegheny County	Pittsburgh, PA	77.8	0.9
16 17	City of Detroit Department of Transportation	Detroit, MI	75.8	0.9
.17	City & County of Honolulu Dept. of Transp. Services	Honolulu, HI	73.5	0.9
18	Metro-Dade Transit Agency	Miami, FL	73.4	0.9
19	Alameda-Contra Costa Transit District	San Francisco, CA	69.7	0.8
19 20 21 22	Regional Transit Authority of Orleans & Jefferson	New Orleans, LA	68.0	0.8
21	Metropolitan Transit Commission	Minneapolis, MN	66.3	0.8
22	Port Authority of New York and New Jersey	New York, NY	62.0	0.7
23	Tri-County Metropolitan Transp. Dist. of Oregon	Portland, OR	61.4	0.7

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Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1992 (a)

RANK	TRANSIT SYSTEM	LARGEST CITY	NO. TRIPS (MILLIONS)	% NATI
	SYSTEM TOTAL (30 LARGEST SYSTEM	EMS), continued.		1
24	Regional Transportation District	Denver, CO	59.1	0.7
25	Milwaukee County Department of Transportation	Milwaukee, WI	58.6	0.7
26	Greater Cleveland Regional Transit Authority	Cleveland, OH	58.5	0.7
27	Dallas Area Rapid Transit	Oallas, TX	57.5	0.7
28 29	San Diego Metropolitan Transit System (b)	San Diego, CA	53.0	0.6
30	Santa Clara County Transportation Agency	San Jose, CA	49.4	0.6
	VIA Metropolitan Transit	San Antonio, TX	46.3	0.5
	MOTOR BUS (25 LARGEST	SYSTEMS)		
1	Metropolitan Transportation Authority (b)	New York, NY	675.0	12.2
2	Regional Transportation Authority (b)	Chicago, IL	407.9	7.4
3	Los Angeles County Metropolitan Transp. Auth.	Los Angeles, CA	406.1	7.4
4	New Jersey Transit Corporation (b)	New York, NY	174.9	3.2
5	Southeastern Pennsylvania Transportation Authority	Philadelphia, PA	168.6	3.1
6	Washington Metropolitan Area Transit Authority	Washington, DC	167.2	3.0
(San Francisco Municipal Railway	San Francisco, CA	102.6	1.9
Ö	Massachusetts Bay Transportation Authority	Boston, MA	94.0	1.7
9	Mass Transit Administration, Maryland DOT	Baltimore, MD	89.1	1.6
10 11	Metropolitan Transit Authority of Harris County	Houston, TX	84.4	1.5
12	New York City Department of Transportation	New York, NY	80.0	1.4
13	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	76.9	1.4
כו	City of Detroit Department of Transportation	Detroit, MI	75.8	1.4

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1992 (a)

RANK	TRANSIT SYSTEM	LARGEST CITY	NO. TRIPS (MILLIONS)	% NATI
	MOTOR BUS (25 LARGEST SYSTEMS	S), continued.		
14	City & County of Honolulu Dept. of Transp. Services	Honolulu, HI	73.0	1.3
15	Alameda-Contra Costa Transit District	San Francisco, CA	69.7	1.3
16	Metropolitan Transit Commission	Minneapolis, MN	66.3	1.2
17	Port Authority of Allegheny County	Pittsburgh, PA	65.6	1.2
18	Regional Transit Authority of Orleans and Jefferson	New Orleans, LA	61.0	1.1
19	Regional Transportation District	Denver, CO	58.9	1.1
20 21 22 23	Municipality of Metropolitan Seattle	Seattle, WA	58.0	1.0
21	Milwaukee County Department of Transportation	Milwaukee, WI	57.9	1.0
22	Dallas Area Rapid Transit	Dallas, TX	56.6 55.9	1.0
23 24	Metro-Dade Transit Agency	Miami, FL Portland, OR	53.3	1.0 1.0
25	Tri-County Metropolitan Transp. Dist. of Oregon Greater Cleveland Regional Transit Authority	Cleveland, OH	47.5	0.9
	HEAVY RAIL	oteverand, on	415	0.7
.1	Metropolitan Transportation Authority (b)	New York, NY	1,378.7	62.5
2	Washington Metropolitan Area Transit Authority	Washington, DC	186.8	8.5
3	Massachusetts Bay Transportation Authority	Boston, MA	180.7	8.2
4	Regional Transportation Authority	Chicago, IL	137.4	6.2
>	Southeastern Pennsylvania Transportation Authority	Philadelphia, PA	79.8	3.6
9	San Francisco Bay Area Rapid Transit District	San Francisco, CA	77.2	3.5
8	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	64.1 60.1	2.9 2.7
8	Port Authority of New York and New Jersey	New York, NY	60.1	

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Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1992 (a)

RANK	TRANSIT SYSTEM	LARGEST CITY	NO. TRIPS (MILLIONS)	% NATL TOTAL	
	HEAVY RAIL, contin	nued.			
9 10 11 12	Metro-Dade Transit Agency Mass Transit Administration, Maryland DOT Port Authority Transit Corp. of PA & NJ Greater Cleveland Regional Transit Authority Los Angeles County Metropolitan Transp. Auth. (c)	Miami, FL Baltimore, MD Philadelphia, PA Cleveland, OH Los Angeles, CA	13.7 12.0 11.2 5.6 NA	0.6 0.5 0.5 0.3 NA	
	LIGHT RAIL				
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Southeastern Pennsylvania Transportation Authority San Francisco Municipal Railway Massachusetts Bay Transportation Authority San Diego Metropolitan Transit System Los Angeles County Metropolitan Transp. Auth. Port Authority of Allegheny County Niagara Frontier Transit Metro System Tri-County Metropolitan Transp. Dist. of Oregon Regional Transit Authority of Orleans and Jefferson Sacramento Regional Transit District Santa Clara County Transportation Agency Greater Cleveland Regional Transit Authority New Jersey Transit Corporation Tandy Corporation/Dillard's Department Store Mass Transit Administration, Maryland DOT Municipality of Metropolitan Seattle	Philadelphia, PA San Francisco, CA Boston, MA San Diego, CA Los Angeles, CA Pittsburgh, PA Buffalo, NY Portland, OR New Orleans, LA Sacramento, CA San Jose, CA Cleveland, OH Newark, NJ Fort Worth, TX Baltimore, MD Seattle, WA	41.6 40.0 24.9 17.2 11.3 8.7 8.6 7.7 6.9 6.8 6.1 5.0 3.1 1.6 0.2	22.0 21.2 13.2 9.1 6.0 4.6 4.6 4.1 3.7 3.6 3.2 2.6 1.6 0.8	

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1992 (a)

RANK	TRANSIT SYSTEM	TRANSIT SYSTEM LARGEST CITY (MI					
	LIGHT RAIL, contin	ued.					
17 18 19	McKinney Avenue Transit Authority Island Transit City of Detroit Department of Transportation Bi-State Development Agency (d) Memphis Area Transit Authority (d) Dallas Area Rapid Transit Regional Transportation District	Dallas, TX Galveston, TX Detroit, Mi Saint Louis, MO Memphis, TN Dallas, TX Denver, CO	0.2 0.1 0.0 NA NA UC UC	0.1 0.1 0.0 NA NA UC UC			
	COMMUTER RAIL (c)	Đ				
1 2 3 4 5 6 7 8 9 10 11 12 13	Metropolitan Transportation Authority (b) Regional Transportation Authority New Jersey Transit Corporation Southeastern Pennsylvania Transportation Authority Massachusetts Bay Transportation Authority San Mateo County Transit District Mass Transit Administration, Maryland DOT Northern Indiana Commuter Transportation District Tri-County Commuter Rail Authority Connecticut Department of Transportation California Department of Transportation Pennsylvania Department of Transportation Orange County Transportation Authority Southern California Regional Rail Authority (d) Virginia Railway Express (d) Dallas Area Rapid Transit	New York, NY Chicago, IL New York, NY Philadelphia, PA Boston, MA San Francisco, CA Baltimore, MD Chicago, IL Miami, FL New Haven, CT Los Angeles, CA Philadelphia, PA Los Angeles, CA Washington, DC Dallas, TX	147.7 66.1 41.7 22.0 19.9 6.9 4.5 3.3 2.3 0.2 0.2 0.1 NA NA	47.0 21.1 13.3 7.0 6.3 2.2 1.4 1.1 0.7 0.1 0.1 0.0 NA NA			

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1992 (a)

RANK	TRANSIT SYSTEM	LARGEST CITY	NO. TRIPS (MILLIONS)	% NATE
	TROLLEYBUS	71	1	10.7
1 2 3 4 5	San Francisco Municipal Railway Municipality of Metropolitan Seattle Southeastern Pennsylvania Transportation Authority Massachusetts Bay Transportation Authority Miami Valley Regional Transit Authority Los Angeles County Metropolitan Transp. Auth.	San Francisco, CA Seattle, WA Philadelphia, PA Boston, MA Dayton, OH Los Angeles, CA	86.9 23.4 11.1 3.2 2.1 UC	68.4 18.4 8.7 2.5 1.7 UC
	PUBLICLY SUPPORTED URBAN FER	RY BOAT (e)	=	
1 2 3 4 5 6 7 8 9 10 11 11 12 13 14	New York City Dept. of Transport. Staten Island Ferry Washington State Department of Transportation Texas State Department of Transportation and Highways Mississippi River Bridge Authority Port Authority of New York and New Jersey Golden Gate Bridge, Highway and Transportation Dist. Plaquemines Parish Casco Bay Transit District Tidewater Transportation District Commission Massachusetts Bay Transportation Authority Connecticut Department of Transportation Vallejo Transit System Pierce County Ferry Kitsap Transit	New York, NY Seattle WA Galveston, TX New Orleans, LA New York, NY San Francisco, CA New Orleans, LA Portland, ME Norfolk, VA Boston, MA Hartford, CT Vallejo, CA Tacoma, WA Bremerton, WA	17.9 13.2 5.7 3.3 1.8 1.5 1.0 0.7 0.5 0.4 0.4 0.3	38.1 28.1 12.1 7.0 3.8 3.2 2.1 1.5 1.1 0.9 0.6 0.2

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1992 (a)

RANK	TRANSIT SYSTEM	LARGEST CITY	NO. TRIPS (MILLIONS)	% NATE
	OTHER PUBLICLY SUPPORTED F	RAIL MODES	v iã	196
1	San Francisco Municipal Railway (Cable car)	San Francisco, CA	10.7 3.1	42.8 12.4
2	Detroit Transit Corporation (Automated guideway)	Detroit, MI Miami, FL	2.7	10.8
3	Metro-Dade Transit Agency (Automated guideway) West Virginia University (Automated guideway)	Morgantown, WV	2.4	9.6
5	Municipality of Metropolitan Seattle (Monorail)	Seattle, WA	2.2	8.8
·6	Roosevelt Island Aerial Tramway (Aerial tramway)	New York, NY	1.6	6.4
7	Port Authority of Allegheny County (Inclined plane)	Pittsburgh, PA	1.4	5.6
8	Cambria County Transit Authority (Inclined plane)	Johnstown, PA	0.9	3.6
9	Harbour Island People Mover (Automated guideway)	Tampa, FL	0.5	2.0
10	Las Colinas Area Pers. Tr. Sys. (Auto. guideway)	Las Colinas, TX	0.5	2.0
11	Chattanooga Area Reg. Transp. Auth. (Inclined plane)	Chattanooga, TN	0.4	1.6
12	Jacksonville Transport. Auth. (Automated guideway)	Jacksonville, FL	0.3	1.3
13	Fenelon Place Elevator (Inclined plane)	Dubuque, IA	0.1	0.4

NA = Not available.

UC = Under construction.

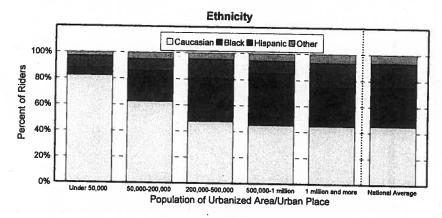
- (a) Data includes both directly operated and purchased service; some numbers are estimates.
 (b) Includes all operating subsidiaries.
 (c) Excludes commuter-type services operated independently by Amtrak.

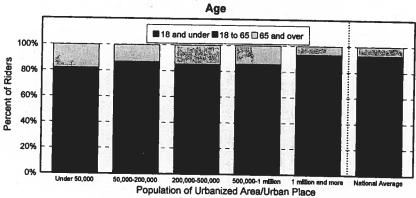
- (d) Opened in fiscal year 1993 or fiscal year 1994.(e) Excludes 13 private urban ferry companies and over 200 international, rural, island, and urban park ferries.

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TABLE 35
Profiles of Transit Riders





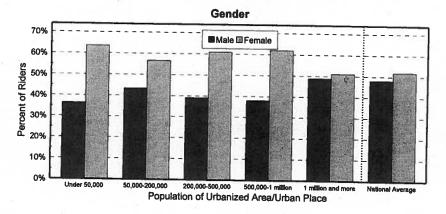
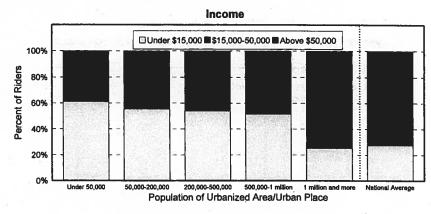
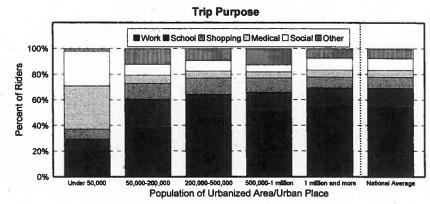


TABLE 35
Profiles of Transit Riders (continued)





Riders with Disabilities

Population of Urbanized Area/Urban Place	Percent with Disabilities
National Average	1.2%
1 million and more	1.1%
500,000-1 million	1.4%
200,000-500,000	2.5%
50,000-200,000	6.0%
Under 50,000	5.2%

Source: APTA, Americans in Transit, 1992.

TABLE 36

Means of Transportation to Work, 1990

Means	Percent
Automobiles/Vans/Motorcycles	
Single-occupant	73.4
2-person carpool	10.5
3-or-more person carpool/vanpool	2.8
Transit	5.1
Walked	3.9
Worked at home	3.0
Bicyle	0.4
Taxi	0.4
All other	
Total	0.7

Source: New Perspectives in Commuting, Federal Highway Administration, 1992.

TABLE 37
U.S. Cities with Highest Percentage of Workers Using Public Transportation, 1990

CITY	PER CENT USING PUBLIC TRANSPORTATION
New York, NY Hoboken, NJ	53.4% 51.0
Jersey City, NJ	36.7
Washington, DC	36.6
San Francisco, CA	33.5
Boston, MA	31.5 29.7
Chicago, IL	29.7
Philadelphia, PA Atlantic City, NJ	28.7
Arlington, VA	26.2 25.4
Newark, NJ	24.6
Cambridge, MA	23.5
Pittsburgh, PA	22.2
Baltimore, MD	22.0
Evanston, IL	20.9
Atlanta, GA White Plains, NY	20.0
Camden, NJ	19.1 18.1
Oakland, CA	17.9
Hartford, CT	17.1
New Orleans, LA	16.9
Idaho Falls, ID	16.5
Minneapolis, MN	16.0
Seattle, WA Berkeley, CA	15.9
Albany, NY	15.2 15.1

Source: U.S. Census Bureau, 1990 Census, Journey to Work, Characteristics of Workers in Metropolitan Areas

TABLE 38 **Trend of Passenger Miles**

		RAILWAY						
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL PASSENGER MILES(a)
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1979 1980 1981 1982 1983	407 381 346 379 391	10,760 10,558 10,244 10,049 10,350	6,492 6,516 6,236 6,027 6,097	204 219 254 295 325	21,393 21,790 21,012 19,987 20,047		390 390 390 387 392	39,646 39,854 38,482 37,124 37,602
1984 1985 1986 1987 1988 1989 1990 1991 P 1992	416 350 361 405 477 509 571 662 704	10,111 10,427 10,649 11,198 11,300 12,030 11,475 10,528 10,737	6,207 6,534 6,723 6,818 6,964 7,211 7,082 7,344 7,342	364 306 305 223 211 199 193 195 197	21,595 21,161 21,395 20,970 20,753 20,768 20,981 21,090 20,404	349 364 402 374 441 428 431 454 511	382 439 369 360 434 458 410 430 490	39,424 39,581 40,204 40,348 40,580 41,603 41,143 40,703 40,385

P = Preliminary

(a) Prior to 1984 excludes demand response and most rural and smaller systems funded via Sections 18 and 16(b)2, Federal Transit Act. Series not continuous between 1983 and 1984.

TABLE 39 **Trend of Vehicle Miles Operated**

		RAILWAY		4				TOTAL VEHICLE	
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	VEHICLE MILES OPERATED(a)	TOTAL MOTOR BUS MILE EQUIVALENTS(b)
100	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1979 1980 1981 1982 1983	19.1 17.5 16.5 16.1 16.0	380.5 384.7 420.1 429.1 407.5	176.0 179.0 176.0 175.0 177.0	11.7 13.0 11.9 13.7 15.0	1,633.6 1,677.2 1,684.6 1,668.8 1,677.8		15.4 15.4 15.4 15.4 12.6	2,236.3 2,286.8 2,324.5 2,318.1 2,305.9	
1984 1985 1986 1987 1988 1989 1990 1991	16.8 16.5 17.0 18.4 20.8 21.3 24.2 27.6 28.7	435.8 450.8 475.8 490.2 517.4 532.1 536.7 527.2 525.4	167.9 182.7 188.6 188.9 202.2 209.6 212.7 214.9 218.7	15.3 15.5 14.7 15.0 14.7 14.5 13.8 13.6	1,844.7 1,862.9 2,002.3 2,079.4 2,097.3 2,109.3 2,129.9 2,166.6 2,185.0	256.1 247.4 274.5 250.0 288.9 300.4 305.9 335.0 381.6	13.0 14.9 12.9 13.3 16.0 15.7 18.3 21.5	2,749.5 2,790.7 2,985.8 3,055.2 3,157.3 3,202.9 3,241.5 3,306.4 3,384.0	3,461.9 3,552.1 3,765.7 3,879.1 4,011.2 4,080.4 4,127.5 4,159.1 4,201.8

P = Preliminary

79

-- Data not available

⁽a) Prior to 1984 excludes demand response and most rural and smaller systems funded via Sections 18 and 16(b)2, Federal Transit Act. Series not continuous

between 1983 and 1984.

(b) Estimate based on average seating plus standing capacity of vehicle compared to that of a motor bus (70 passengers): light rail = 1.7, heavy rail = 2.6, commuter rail = 2.2, trolleybus = 1.0, demand response = 0.2, other = 1.0.

TABLE 40

Trend of Vehicle Hours Operated

	7	RAILWAY				N			П
CALENDAR	LIGHT RAIL	HEAVY	COMMUTER	TROLLEY BUS	MOTOR	DEMAND RESPONSE	OTHER	TOTAL VEHICLE HOURS	
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	ı
1986 1987 1988 1990 1991 P 1992	222222	28.2 27.0 27.4 28.2 27.4 3.5 5.6	ww.0,0,0,0,0 884,0,0,0,0	<u>ဝဝဝ</u> စော်ဆိုဆိုဆို	153.7 160.5 160.5 161.4 163.0 163.8	21.7 23.5 24.0 24.4 26.3	0.1.1.1.2 4.4.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7	211.0 218.6 222.7 224.9 227.5 226.5 233.1	,
P = Prefiminary	26						Ę		

SECTION V

Vehicles and Equipment



Transit Passenger Vehicles

TABLE 41

	2	RAILWAY		2				
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL(a)	TROLLEY BUS	MOTOR BUS(a)	DEMAND RESPONSE	OTHER(a)	TOTAL PASSENGER VEHICLES(a)(b)
			PASSENGER	VEHICLES OWN	ED AND LEAS	ED		
1979 1980 1981 1982 1983	959 1,013 1,075 1,016 1,013	9,470 9,641 9,749 9,815 9,891	4,402 4,500 4,465 4,497 4,423	725 823 751 763 686	54,490 59,411 60,393 62,114 62,093		= ^=	70,046 75,388 76,433 78,205 78,106
			ACTIVE	PASSENGER V	EHICLES			
1984 1985 1986 1987 1988 1989 1990 1991 P 1992	733 717 697 766 831 755 913 1,095 1,058	9,083 9,326 10,386 10,168 10,539 10,506 10,419 10,331 10,245	4,075 4,035 4,440 4,686 4,649 4,472 4,415 4,370 4,413	664 676 680 671 710 725 832 752 907	67,294 64,258 66,218 63,017 62,572 58,919 58,714 60,377 61,959	14,164 14,490 15,346 15,944 16,812 15,856 16,471 17,879 19,566	888 867 942 875 1,096 1,060 1,197 1,595 2,126	96,901 94,368 98,709 96,127 97,209 92,293 92,961 96,399 100,274

P = Preliminary

TABLE 42

New Transit Passenger Vehicles Delivered

15	RAII	LWAY CARS	d)		MOTOR BUSES & DEMAND RESPONSE(a)				
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUSES	29 SEATS OR FEWER	30-39 SEATS	40 SEATS OR MORE	TOTAL	TOTAL PASSENGER VEHICLES(b)
1975-79(c) 1980 1981 1982 1983	171 32 188 10 30	1,371 130 276 126 88	%	600 98 0 0	2,381 287 153 67 151	1,039 143 171 138 74	16,268 4,142 3,735 2,757 3,856	19,688 4,572 4,059 2,962 4,081	21,830 4,832 4,523 3,098 4,199
1984 1985 1986 1987 1988 1989 1990 1991	59 63 149 51 24 52 55 17	521 441 854 758 311 207 10 6	128 179 140 198 74 56 83 187	0 0 0 47 4 0 118 149	393 353 739 1,091 767 1,353 1,389 1,781 1,200	509 220 240 429 474 771 489 411 526	2,992 2,794 2,400 2,704 2,308 2,836 2,901 2,530 1,634	3,894 3,367 3,379 4,224 3,548 4,960 4,779 4,722 3,360	4,602 4,050 4,522 5,278 3,961 5,275 5,045 5,081 3,668

P = Preliminary

83

⁻⁻ Data not available

⁽a) Demand response and other mode data not available prior to 1984.

⁽b) Prior to 1984 includes total vehicles owned and leased. Also prior to 1984 excludes most rural and smaller systems funded via Sections 18 and 16(b)(2), Federal Transit Act. Series not continuous between 1983 and 1984.

⁻ Data not available

⁽a) Motor buses and demand response only; excludes vanpool vans. Excludes most demand response, rural and smaller systems prior to 1984. Series not continuous for motor buses and demand response between 1983 and 1984.

⁽b) Excludes vanpool vans, ferry boats, and other modes not listed.

⁽c) Five-year totals.

⁽d) Source for railway modes after 1983; Railway Age, January issue.

TABLE 43

New Motor Buses & Demand Response Vehicles Delivered by Length

CALENDAR	27/5" &	27′6" -	32′6" -	37′6" -	ARTICULATED/	TOTAL
YEAR	BELOW	32′5"	37′5"	45′0"	DOUBLE DECK	
1988	599	250	518	2,181	0	3,548
1989	1,151	320	810	2,635	44	4,960
1990	932	450	567	2,782	48	4,779
1991	1,430	395	357	2,460	80	4,722
P 1992	926	267	554	1,579	35	3,360

P = Preliminary

84

R = Revised

TABLE 44
Characteristics of the Transit Fleet

CHARACTERISTIC	YEAR*	MOTOR BUS	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	COMMUTER RAILROAD
Vehicles Owned and Leased	1988 1989 1990 1991 P 1992	66,139 61,276 61,063 63,154 65,082	10,925 10,649 10,562 10,410 10,393	967 1,034 1,062 1,304 1,264	729 729 847 817 963	4,714 4,490 4,574 4,473 4,538
Vehicles in Active Service	1988 1989 1990 1991 P 1992	62,572 58,919 58,714 60,377 61,959	10,539 10,506 10,419 10,331 10,245	831 755 913 1,095 1,058	710 725 832 752 907	4,649 4,472 4,415 4,370 4,413
Vehicles with Major Rehabilitation	1988 1989 1990 1991 P 1992	6,614 6,740 6,228 6,063 9,111	2,373 3,576 3,918 4,889 5,172	155 155 272 363 308	0 0 0 0	2,037 2,290 2,093 2,111 2,196

*As of December 31.

- Data not available

P = Preliminary

Characteristics of the Transit Fleet

CHARACTERISTIC	YEAR*	MOTOR BUS	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	COMMUTER RAILROAD
Average Age (Years)	1988 1989 1990 1991 P 1992	8.3 8.2 8.1 8.0 8.7	16.0 15.2 17.3 18.1 18.5	20.2 19.6 20.1 20.9 20.8	11.0 12.0 11.2 10.5 11.9	16.3 16.8 17.2 17.6 18.1
Average Length	1988	38'2"	61/1"	59'3"	41/2"	84'8"
	1989	38'1"	60/9"	61'2"	41/2"	84'8"
	1990	37'8"	61/1"	64'6"	43/11"	84'10"
	1991	37'7"	61/1"	64'9"	46/4"	84'10"
	P 1992	39'4"	61/4"	65'10"	45/10"	84'10"
Average Number of Seats	1988	43.2	55.4	56.5	49.1	120.3
	1989	42.7	55.6	57.4	49.1	122.5
	1990	41.7	55.7	57.3	50.7	125.6
	1991	41.2	55.7	57.6	52.1	126.7
	P 1992	43.8	55.7	58.4	52.2	127.0

^{*}As of December 31.

P = Preliminary

TABLE 44 (continued)

Characteristics of the Transit Fleet

CHARACTERISTIC	YEAR*	MOTOR BUS	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	COMMUTER RAILROAD
Vehicles Equipped with Air Conditioning	1988 1989 1990 1991 P 1992	51,522 48,040 49,156 52,607 53,953	9,214 9,725 9,749 9,749 9,853	350 396 600 756 751	174 174 174 174 174 172	4,692 4,366 4,574 4,473 4,538
Vehicles Equipped with Two-Way Radios	1988 1989 1990 1991 P 1992	57,541 54,536 55,384 56,775 61,177	8,810 8,530 8,407 8,158 8,003	636 619 765 954 918	725 725 783 765 957	3,117 2,903 2,982 2,858 2,873
Vehicles with Wheelchair Accessibility	1988 1989 1990 1991 P 1992	23,876 24,633 26,562 31,261 33,062	(a) (a) (a) (a) 8,605	(a) (a) (a) (a) 514	229 229 279 350 453	(a) (a) (a) (a) 1,470

^{*}As of December 31.

P = Preliminary

⁻ Data not available

⁻ Data not available

⁽a) Wheelchair accessibility for high-platform-boarding railcars is provided by station modifications; beginning in 1992 data reported includes lift and ramp-equipped railcars and high-platform accessibility.

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TABLE 45

Motor Buses by Manufacturer (a)

MANUFACTURER	NUMBER OWNED AND LEASED	PERCENT
General Motors Truck & Coach Division (after 1987: Truck only)	13,900	26.9%
Jeoplan USA Corporation	12,080 4,118	23.4 8.0
ransportation Manufacturing Corporation	4,016	7.8
illig Corporation	3,634	7.0
us Industries of America (Ontario Bus Industries)	2,677	5.2
otor Coach Industries	2,279	4.4
.A.N. Truck and Bus Corporation	2,185	4.2
ew Flyer Industries and New Flyer of America (Flyer)	2,012	3.9 2.1
iesel Division, General Motors of Canada	1,096	
M General Corporation	557	1. <u>1</u>
merica Ikarus (Ikarus USA) agle Coach Corporation	356	.7
lue Bird Corporation	318 310	.6
hance Coach	255	.6 .5
rown Coach Corporation	238	.5
olvo of America Corporation	227	.4
Saab-Scania	223	

TABLE 45 (continued)

Motor Buses by Manufacturer (a)

MANUFACTURER	NUMBER OWNED AND LEASED	PERCENT
Stewart & Stevenson Services	157	.3
National Coach Corporation	121	.2
Thomas Built Buses	90	.2
Boyertown Auto Body Works	76	
New Goshen Coach Corporation (Goshen)	66	.1
Champion Motor Coach	62	1
Transportation Vehicles	56	.1
Collins Bus Corporation	52	. 1
Carpenter Manufacturing	50	. 1
ElDorado Bus Corporation (El Dorado Motor Corporation)	48	. 1
MCR Technology & Walter Vetter Gmbh & Company	41	. 1
Skillcraft Industries	39	i
Supreme Corporation	34	i i
Others	252	
Total	51,625	100.0

⁽a) Data as of January 1, 1993 from APTA survey of 300 major transit systems. Understates shares of small vehicle manufacturers since most smaller transit systems not reporting data to survey only purchase small vehicles.

TABLE 46

Motor Buses by Year Built (a)

	NUMB	BER	PE	RCENT
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE
1993 (model year built in 1992)	20	19	NA NA	NA
1992	2,130	2,058	4.1	4.2
1991	3,059	3,042	5.9	6.2
1990	3,856	3,829	7.5	7.8
1989	3,714	3,698	7.2	7.5
1988	2,867	2,862	5.6	5.8
987	2,859	2,848	5.5	5.8
986	3,032	3,021	5.9	
985	3,428	3,381	6.6	6.1
984	2,937	2,878	5.7	6.9
983	4,107	4,013	8.0	5.9
982	2,868	2,739		8.2
981	3,991	3,864	5.6 7.7	5.6
977-1980	7,943			7.9
1976 and earlier	4,814	6,919 3,975	15.4 9.3	14.1
	7,014	3,713	9.3	8.1
otal	51,625	49,146	100.0%	100.0%
verage Age in Years**	8.7	8.4		

^{**1992 = 0.5} years old; 1991 = 1.5 years old; 1990 = 2.5 years old; etc.

TABLE 47

Trolleybuses by Year Built (a)

	NUME	BER	PE	RCENT
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE
1992 1991 1990 1989 1988 1987 1980-1986 1979 1978 1977 1976 1971-1975 1945-1970	0 114 118 0 4 46 0 219 0 62 391 3 0 6	0 102 118 0 4 46 0 202 0 32 384 2 0	11.8 12.3 	11.5 13.3 .4 5.2 .22.7 .3.6 43.1 .2
otal	963	890	100.0%	100.0%
verage Age in Years**	11.9	11.6		

^{**1992 = 0.5} years old; 1991 = 1.5 years old; 1990 = 2.5 years old; etc.

⁽a) Data as of January 1, 1993 from APTA survey of 300 major transit systems. Understates shares of eight most recent years since most smaller transit systems not reporting data to survey purchase primarily vehicles that last less than eight years.

⁽a) Data as of January 1, 1993 from APTA survey of all 5 trolleybus systems.

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TABLE 48
Heavy Rail Cars by Year Built (a)

	NUMI	BER	PERCENT	
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE
1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1978-1982 1973-1977 1968-1972	227 8 14 97 345 206 664 248 1,116 534 867 680 1,872 3,451	208 8 14 96 343 206 664 248 1,116 534 864 655 1,861 3,421	2.2 .1 .9 3.3 2.0 6.4 2.4 10.8 5.2 8.4 6.6 18.1	2.0 .1 .9 3.4 2.0 6.5 2.4 10.9 5.2 8.4 6.4 18.2 33.4
Total	10,329	10,238	100.0%	100.0%
verage Age in Years**	18.5	18.5		

^{**1992 = 0.5} years old; 1991 = 1.5 years old; 1990 = 2.5 years old; etc.

TABLE 49

Light Rail Cars by Year Built (a)

	NUM	NUMBER		RCENT
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE
1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1982 1981 1977-1980	35 16 30 47 20 100 132 32 26 0 10 188 262	25 16 30 47 20 98 130 32 26 0 10 188 236	2.8 1.3 2.4 3.8 1.6 8.0 10.6 2.6 2.1 .8 15.1 21.1	2.5 1.6 3.0 4.7 2.0 9.8 13.0 3.2 2.6 1.0 18.9 23.7
953 and earlier	346	139	27.8	13.9
otal	1,244	997	100.0%	100.0%
verage Age in Years**	20.8	15.5		

^{**1992 = 0.5} years old; 1991 = 1.5 years old; 1990 = 2.5 years old; etc.

⁽a) Data as of January 1, 1993 from APTA survey of all 13 heavy rail systems.

⁽a) Data as of January 1, 1993 from APTA survey of 15 of 19 light rail systems. Most missing vehicles are over 50 years old.

TABLE 50

Commuter Rail Cars by Year Built (a)

	NUMBER	BER	14	PERCENT
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE
1992	119	119	2.6	2.7
066	88	88	2.0	2.0
989	53	53		1.2
987	145	138	3.0	2.5
986	89	88	1.5	1.5
985	252	252	5.5	9.6
784 283	142	142	3.1	3.2
978-1982	687	417	10.6	6
973-1977	767	739	16.6	16.5
967 and earlier	832	808	18.0	18.0
Total	4,613	7,486	100.0%	100.0%
Average Age in Years**	18.1	18.1		

**1992 = 0.5 years old; 1991 = 1.5 years old; 1990 = 2.5 years old; etc.

Vehicles missing are owned by (a) Data as of January 1, 1993 from APTA survey of 14 of 16 commuter rail systems. AMTRAK and are about 15 years old.

SECTION VI

Employment

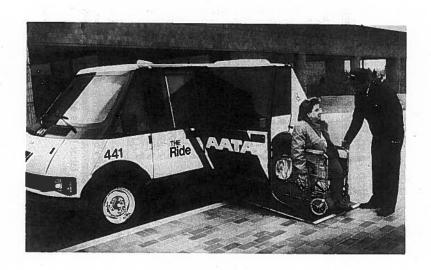


TABLE 51

Trend of Transit Employment, Compensation, and Labor Costs*

			프	
CALENDAR	NUMBER	SALARIES	FRINGE	TOTAL
YEAR	OF EMPLOYEES(a)	AND WAGES	BENEFIT COSTS	LABOR COSTS
		(MILLIONS)	(MILLIONS)	(MILLIONS)
1979	177,900	\$3,025.0	\$1,090.4	\$ 4,115.4
1980	187,000	3,280.9	1,353.1	4,634.0
1981	191,600	3,493.5	1,649.1	5,142.6
1982	193,500	3,731.4	1,756.5	5,487.9
1983	194,960	3,921.3	1,977.3	5,898.6
1984	263,197	5,487.8	2,716.7	8,204.5
1985	270,020	5,843.1	2,868.3	8,711.4
1986	277,854	6,119.2	3,125.9	9,245.1
1987	276,610	6,324.1	3,266.9	9,591.0
1988	275,583	6,675.0	3,528.9	10,203.9
1989	272,487	6,897.7	3,737.3	10,635.0
1990	272,839	7,226.3	3,986.0	11,212.3
1991	276,145	7,394.5	3,998.4	11,392.9
P 1992	275,594	7,777.6	4,404.7	12,182.3

P = Preliminary

-- Data not available

(a) Beginning 1980 equals employee equivalents of 2,080 labor hours each.

TABLE 52

Trend of Transit Employees by Job Category*

		-	NUM	BER OF EMPLOY	ES(a)(b)		100	
CALENDAR YEAR	VEHICLE OPERATORS(c)	OTHER OPERATIONS	VEHICLE MAINTENANCE	OTHER MAINTENANCE	ALL OTHER	TOTAL OPERATING	CAPITAL	TOTAL
1979	90,760	23,360	20,650	31,360	11,770	177,900		177,900
1980	95,690	22,830	22,220	32,350	13,910	187,000		187,000
1981	96,930	22,740	23,640	33,190	15,100	191,600		191,600
1982	95,800	22,580	24,830	33,240	17,500	193,950		193,950
1983	94,170	22,400	25,030	33,980	19,380	194,960		194,960
1984	122, 843	32,397	31,420	43,227	25,522	255,409	7,788	263, 197
1985	127, 065	25,277	30,514	45,400	33,781	262,037	7,983	270,020
1986	129, 263	24,543	33,621	45,629	36,052	269,108	8,746	277,854
1987	126, 765	25,269	33,467	46,453	36,124	268,083	8,527	276,610
1988	126, 565	25,149	33,743	44,054	35,971	265,482	10,101	275,583
1989	126, 154	25,613	32,464	43,800	34,886	262,917	9,570	272,487
1990	127, 039	23,517	31,424	44,282	35,914	262,176	10,663	272,839
1991	129, 145	24,136	31,861	42,708	38,007	265,857	10,288	276,145
P 1992	129, 462	24,197	31,926	42,799	38,108	266,492	9,102	275,594

P = Preliminary

-- Data not available

(a) Beginning 1980 equals employee equivalents of 2,080 labor hours each.

(c) Includes conductors.

^{*}Excludes commuter railroad, automated guideway, urban ferry boat, demand response, and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984.

^{*}Excludes commuter railroad, automated guideway, urban ferry boat, demand response, and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984.

⁽b) Excludes an estimated 10,000-20,000 individuals not employed by transit systems whose compensation is classified as "services."

Trend of Transit Operating Employees by Mode (a)(b)

	34	RAILWAY		(8)		1	1)	
CALENDAR	LIGHT	HEAVY RAIL	COMMUTER	TROLLEY	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL
1984 1985 1986 1987 1989 1990	3,242 2,980 3,511 3,922 3,952 4,066 4,175	47,047 49,670 51,028 51,333 46,212 46,690 46,102	21,88, 22,229 23,270 23,188 21,445 21,445	2, 140 2, 140 2, 090 2, 039 2, 013 1, 925	154, 326 157, 581 165, 839 165, 407 162, 407 162, 189 163, 555	23,798 23,767 20,664 19,068 21,391 22,740 24,196	3,100 3,217 3,512 3,523 3,723 3,710 3,799	255, 409 262, 037 269, 108 268, 083 265, 482 262, 176 265, 857
P 1992	5,742		20,888	1,686	- 1	26,940	3,652	266,492

P = Preliminary

(a) Based on employee equivalents of 2,080 labor hours equals one employee.
 (b) Excludes capital employees and an estimated 10,000-20,000 individuals not employed by transit systems and whose compensation is classified as "services" —e.g. boiler repairman, marketing consultant, independent auditor.

SECTION VII

Energy and Environment



TABLE 54 Trend of Fossil Fuel Consumption by Transit Passenger Vehicles*

CALENDAR				(GALLONS IN	THOUSANDS	•		(POUNDS:
YEAR				DIESEL			OTHER (a)	CNG #
1979		П		423,212		1	8,973	
1980				431,400			11,400	
1981 1982	6.11			445,950			13,950	
1983	111			455,590			11,670	
1703				450,260			9,460	
=	COMMUTER RAIL	FERRY BOAT(b)	MOTOR BUS	DEMAND RESPONSE	ALL OTHER	TOTAL		
1984	58,320	21,624	505,049	15,3	371	600,364	49,907	
1985	55,372	20,747	518,137	14,		608,738	45,704	
1986	54,608	22,655	546,892	15,868	21	640,044	38,156	
1987	51,594	19,901	543,314	15,393	71	630,273	34,220	
1988 1989	53,054	19,202	552,658	15,090	65	640,069	40,055	
1990	52,516 52,681	19,402 19,627	551,156 563,151	14,824	118	638,016	39,389	
1991	54,315	20,465	572,861	15,497 17,422	74 95	651,030	33,906	
P 1992	55,556	20,782	575,337	19,975	223	665,158 671,873	34,467 43,061	7,531

P = Preliminary

-- Data not available

*Excludes commuter railroad, automated guideway, urban ferry boat, demand response, and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984. # 1992 will be first year data is available.

(a) Includes gasoline, propane, LPG, LNG, kerosene, and others.(b) Excludes international, rural, rural interstate, island, and urban park ferries.

TABLE 55 Trend of Electric Power Consumption by Transit Passenger Vehicles*

CALENDAR YEAR		(KILO	WATT HOURS	IN MILLIONS)	
1979 1980 1981 1982 1983		,	2 2 2	,473 ,446 ,655 ,722 ,930		
	COMMUTER RAIL	HEAVY RAIL	LIGHT RAIL	TROLLEY	ALL OTHER	TOTAL
1984 1985	901 1,043	3,092 2,928		245 245		4,238 4,216
1986 1987 1988 1989 1990 1991 P 1992	1,170 1,155 1,195 1,293 1,226 1,239 1,217	3,066 3,219 3,256 3,286 3,284 3,248 3,193	173 191 243 242 239 274 287	70 70 68 68 69 72 73	10 21 23 23 19 20 20	4,489 4,656 4,785 4,912 4,837 4,853 4,790

*Excludes commuter railroad and automated guideway prior to 1984. Series not continuous between 1983 and 1984.

TABLE 56

Energy Efficiency of Transit

- A bus with as few as seven passengers is more fuel efficient than the average auto used for commuting.
- The fuel efficiency of a fully-occupied bus is six times greater than that of the average commuter auto.
- The fuel efficiency of a fully-occupied rail car is 15 times greater than that of the average commuter auto.
- A single person commuting via transit instead of driving alone will save 200 gallons of gasoline in a year.
- A 10 percent increase in transit ridership in the five largest U.S. cities would save 85 million gallons of gasoline a year.
- A 10 percent nationwide increase in transit ridership would save 135 million gallons of gasoline a year.

Every Commuter Who Switches From Driving Alone to Transit Saves 200 Gallons of Gasoline Per Year!





Source: APTA, Public Transit - The Vehicle For Conserving Energy, 1991.

TABLE 57

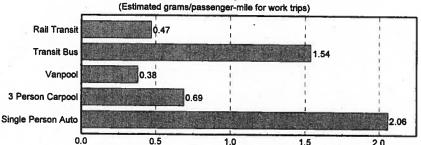
fransportation Energy Use by Mode, 1990

v T	il Ta	FUEL CONSUMPTION (TRILLION BTUS)	TARE TO SERVICE STATE OF THE S	PERCENT OF TOTAL
Automobiles	n	9,066.3	 	39.1
Transit Buses Other Buses	1	78.9 83.9		0.0
Trucks		7,543.6		32.5
Total Highway		16,796.6		72.4
Off-highway		665.2		2.9
Water		1,486.9		6.4
Pipeline		927.6		0.4
iransit Kail Commuter Rail		21.7		0.1
Intercity Rail		17.4		0.1
Freight Rail		425.2		8.
Military		7.727		3.3
Total	8	23,200.3		100.0

TABLE 58

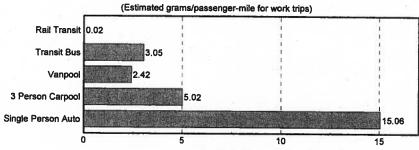
Pollution Reduction Resulting From Transit Use

Emissions of Nitrogen Oxides*



*Damages lung tissues. Also precursor of ozone which irritates respiratory tract and eyes, decreases the lungs' working ability and causes both cough and chest pain.

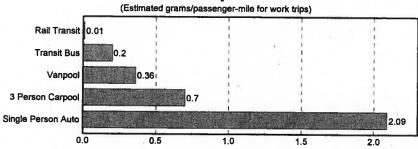
Emissions of Carbon Monoxide*



*Limits blood's ability to transport oxygen to body tissues.

Can cause dizziness, headaches, impaired coordination and death.

Emissions of Hydrocarbons*



*Precursor of ozone which irritates respiratory tract and eyes, decreases the lungs' working ability and causes both cough and chest pain.

Source: APTA, Mass Transit - The Clean Air Alternative, 1991.

SECTION VIII

The Federal Transit Act



History and Provisions of the Federal Transit Act

In 1964 the United States Congress found that "the welfare and vitality of urban areas, the satisfactory movement of people and goods within such areas, and the effectiveness of housing, urban renewal, highway, and other federally aided programs were being jeopardized by the deterioration or inadequate provision of urban transportation facilities and services. . . . " To remedy this situation, Congress enacted the Federal Transit Act, known as the Urban Mass Transportation Act of 1964 until 1991, which provided a program for transit systems to purchase capital equipment.

Continuing this commitment through its third decade, Congress enacted the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The ISTEA not only authorizes higher levels of funding for transit than any previous law, it also provides for flexible use of additional funds for either highway or transit purposes and requires greater coordination of highway and transit planning to provide for the most efficient surface transportation system to meet local needs.

The federal transit assistance program has evolved over the years due to changing transit needs and changing federal objectives. Landmarks in this evolution include:

- o 1961: The Housing and Urban Development Act of 1961 provided funding for transit demonstrations and loans for mass transportation projects.
- o 1964: The Urban Mass Transportation Act of 1964 established the Urban Mass Transportation Administration (UMTA, now named the Federal Transit Administration) within the Department of Housing and Urban Development to administer a program of capital grants to transit systems.
- o 1966: The Urban Mass Transportation Act of 1966 expanded funding for capital purchases and allowed funding for research, planning, and training.
- o 1966: The Urban Mass Transportation Administration was moved to the newly created Department of Transportation (DOT).
- o 1970: The Urban Mass Transportation Assistance Act of 1970 provided increased levels of federal funding by authorizing a \$3.1 billion program of capital grants.
- o 1973: The Federal-Aid Highway Act of 1973 increased the federally funded portion of transit capital projects from two-thirds to

80% and authorized expenditure of Federal-Aid Urban Systems highway funds and Interstate Highway Transfers for qualifying transit projects.

- o 1974: The National Mass Transportation Assistance Act of 1974 increased authorizations for discretionary capital funding and created a formula grant program to allocate funding directly to urbanized areas that could be used for either operations or capital projects.
- o 1978: The Federal Public Transportation Act of 1978, Title III of the Surface Transportation Assistance Act of 1978 expanded the formula grant program and divided it into categorical programs that included additional operating grants for fixed guideway systems, capital grants for bus purchases, and operating grants for places outside of urbanized areas.
- o 1982: The Federal Public Transportation Act of 1982, Title III of the Surface Transportation Assistance Act of 1982 provided that 1ϕ of a 5ϕ increase in the Highway Trust Fund tax on motor fuels would be placed into a Mass Transit Account for capital projects, increased the portion of all funding allocated through the formula grant program, and altered the formula grant program allocation formula to include transit service data as well as population data.
- o 1987: The Federal Mass Transportation Act of 1987, Title III of the Surface Transportation and Uniform Relocation Assistance Act of 1987, authorized the federal transit program through Fiscal Year 1991 and provided that a portion of the Mass Transit Account of the Highway Trust Fund would be allocated for capital purposes on a formula basis.
- o 1991: The Federal Transit Act Amendments of 1991, Title III of the Intermodal Surface Transportation Efficiency Act of 1991, extended the authorization of transit assistance through FY 1997 at levels higher than any previous authorizations, changed the name of the transit law to the Federal Transit Act and changed the name of the Urban Mass Transportation Administration to the Federal Transit Administration, and continued a shift in funding distribution to formulas by distributing the rail modernization portion of Section 3 major capital funds by formula for the first time.

Surface Transportation, Title I of the Intermodal Surface Transportation Efficiency Act of 1991, provided that specific funds authorized through Federal-Aid Highways programs are intended for use for either transit or highway projects. Called flexible funds, these monies are to be used for the mode of transportation best suited to meeting the needs of individual areas and states.

Funds for federal transit assistance come from two sources. Money from the General Revenue of the Treasury is appropriated each year by Congress. During the appropriation process Congress will also set a limit on the amount of money from the Mass Transit Account of the Highway Trust Fund that can be used to fund transit projects during the next year.

Transit systems receive their funding through several programs identified by the section of the Federal Transit Act which defines how the program works. These sections allocate funding to urbanized areas or states by formula or through discretionary processes. The largest programs are:

Section 3 Original grant program, begun in FY 1964, provides capital assistance to eligible transit projects in three categories: (1) construction of new fixed-guideway systems or extensions of existing systems called "New Starts," (2) modernization of existing fixed-guideway systems called "Rail Modernization," and (3) major bus related construction projects or equipment acquisition called "Bus Capital."

Status: Authorized through FY 1997.

Recipients of Funds: State or local public bodies and agencies.

Eligible Expenditures: For capital projects only.

Method of Allocation: Rail Modernization funds are distributed to urbanized areas with fixed-guideway systems in operation for at least seven years on a formula basis. New Start and Bus Capital funds are distributed by discretion of the Federal Transit Administration or may have amounts "earmarked" by Congress during the legislative process. Authorizing legislation designates 40% of the funds for New Starts, 40% for Rail Modernization, and 20% for Bus Capital.

Matching Ratio: 80% federal, 20% state and local.

Section 9 This program apportions operating and capital assistance on a formula basis to urbanized areas.

Status: Authorized through FY 1997.

Recipients of Funds: Directly to urbanized areas over 200,000 population, through state governors to urbanized areas under 200,000 population.

Eligible Expenditures: For operations or capital projects by local decision up to a specific amount called the "operating limit" or "operating cap." Any apportioned funds in excess of each urbanized area's operating limit may be used only for capital

projects. The operating limit is calculated separately from each area's apportionment and is a limit on the use of apportioned funds, it is not an apportionment of additional money.

Method of Allocation: By six formulas based on urbanized area population and mode of transit service. These formulas are:

- (1) Fixed guideway operations in urbanized areas over 200,000 population, basic formula, 28.87% of Section 9. The formula is 60% fixed guideway revenue vehicle miles operated and 40% fixed guideway route miles. Urbanized areas over 750,000 population that have commuter rail operations receive a minimum of 0.75% of this formula.
- (2) Fixed guideway operations in urbanized areas over 200,000 population, incentive formula, 1.32% of Section 9. The formula is the number of fixed guideway passenger miles traveled multiplied by the number of fixed guideway passenger miles traveled per dollar of operating cost. Urbanized areas over 750,000 population that have commuter railroad operations receive a minimum of 0.75% of this formula.
- (3) Bus operations in urbanized areas over 1,000,000 population, basic formula, 40.31% of Section 9. The formula is 50% bus revenue vehicle miles operated, 25% urbanized area population, and 25% urbanized area population density weighted by population.
- (4) Bus operations in urbanized areas from 200,000 to 1,000,000 population, basic formula, 14.61% of Section 9. The formula is 50% bus revenue vehicle miles operated, 25% urbanized area population, and 25% urbanized area population density weighted by population.
- (5) Bus operations in urbanized areas over 200,000 population, incentive formula, 5.57% of Section 9. The formula is the number of bus passenger miles traveled multiplied by the number of bus passenger miles traveled per dollar of operating cost.
- (6) Mass transportation operations in urbanized areas less than 200,000 population, 9.32% of Section 9. The formula is 50% urbanized area population and 50% urbanized area population density weighted by population.

Matching Ratios: Operating assistance: 50% federal, 50% state and local. Capital assistance: 80% federal, 20% state and local.

Section 16(b)2 Established by the Urban Mass Transportation Act of 1970 to assure the availability of mass transportation to elderly and disabled persons.

Status: Authorized through FY 1997.

Recipients of Funds: Private, non-profit corporations and assoc-iations providing mass transportation services for the elderly and disabled or public bodies coordinating such service or providing service where no non-profit service is available, through state governors.

Eligible Expenditures: For capital equipment, contracted service, and state administrative costs.

Method of Allocation: By formula. Funds are allocated to states based on population of elderly and disabled individuals with a fixed minimum amount for each state.

Matching Ratio: 80% federal, 20% state and local.

Section 18 Established by the Surface Transportation Assistance Act of 1978 to allocate funds for mass transportation in rural areas outside of urbanized areas.

Status: Authorized through FY 1997.

Recipients of Funds: Mass transportation providers outside of urbanized areas through state governors.

Eligible Expenditures: For operations or capital projects.

Method of Allocation: By formula. Authorized amount is 5.5% of total funds available for Sections 9 and 18. Formula is non-urbanized area population of each state.

Matching Ratio: Operating assistance: 50% federal, 50% state and local. Capital assistance: 80% federal, 20% state and local.

Section 18(h) Established by the Federal Mass Transportation Act of 1987 to carry out a rural transit assistance program in non-urbanized areas. Grants are available for research, technical assistance, training and related support services.

SECTION IX

Canadian Statistics



TABLE 59

Canadian Transit: Summary Statistics

CALENDAR YEAR	NUMBER OF Systems	REVENUE PASSENGER TRIPS	TOTAL VEHICLE MILES	OPERATING REVENUE(a)	OPERATING EXPENSE(a)
		(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1960	34	973.2	184.3	133.0	116.4
1965	39	941.5	198.1	154.8	140.0
1970	49	979.7	242.0	239.5	231.1
1975	61	1,158.9	329.2	326.8	495.6
1976	64	1,214.0	352.9	402.6	607.5
1977	64	1,222.7	366.1	422.7	687.0
1978	65	1,218.1	383.6	448.8	806.5
1979	66	1,205.3	391.5	492.6	882.3
1980	73	1,315.4	426.3	581.0	1,082.5
1981	76	1,381.3	447.4	688.2	1,307.8
1982	74	1,355.8	450.0	763.6	1,482.0
1983	74	1,385.7	445.6	839.4	1,573.4
1984	78	1,371.6	446.6	871.8	1,630.9
1985	70	1,434.1	446.9	932.0	1,680.4
1986	73	1,521.3	480.2	1,060.7	1,853.2
1987	72	1,500.0	446.2	1,085.5	1,969.8
1988	74	1,538.4	482.4	1,163.2	2,114.0
1989	76	1,519.3	471.1	1,241.3	2,260.6
1990	77	1,529.2	487.9	1,311.1	2,445.0

NOTE: Table includes all regular service on motor bus, trolleybus, heavy rail, light rail, commuter rail, and ferry boat. (a) Monetary data are Canadian Dollars.

Source: Urban Transit Facts in Canada, Canadian Urban Transit Association.

TABLE 60

Canadian Transit: Active Passenger Vehicles

	1 8 72	RAILWAY CAR	S			TOTAL
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL (a)	TROLLEY BUSES	MOTOR BUSES	OTHER	TOTAL PASSENGER VEHICLES
1960 1965 1970 1975	870 738 439 388	134 334 703 826	1,185 1,110 782 664	4,470 5,224 5,913 8,160	0 0 0	6,659 7,406 7,837 10,038
1976 1977 1978 1979 1980	360 356 363 375 418	851 1,005 1,325 1,377 1,627	608 588 549 559 539	8,326 8,828 9,049 9,554 10,013	0 0 0 0	10,145 10,777 11,286 11,865 12,597
1981 1982 1983 1984 1985	485 415 392 405 398	1,630 1,638 1,619 1,619 1,574	540 649 649 600 552	10,231 10,500 10,396 10,538 10,114	0 2 2 75	12,886 13,202 13,058 13,164 12,713
1986 1987 1988 1989 1990	507 516 524 593 532	1,558 1,449 1,439 1,652 1,381	551 513 523 488 472	10,284 10,434 10,492 9,961 10,560	80 77 76 235 445	12,980 12,989 13,054 12,929 13,390

NOTE: Data for regular transit service only.

(a) Includes Commuter Rail Vehicles as of 1980.

Source: Urban Transit Facts in Canada, Canadian Urban Transit Association.

TABLE 61

Canadian Transit: New Passenger Vehicle Purchases

	RAILWA	Y CARS		·* II		
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	TROLLEY BUSES	MOTOR BUSES	OTHER	TOTAL VEHICLES PURCHASED
1975 1976 1977	0 0	0 21 154	27 21 0	1,005 746 826	0 0 0	1,032 788 980
1978 1979 1980	20 11 75	320 52 14	16 0 5	607 650 771	0 0 0	963 713 865
1981 1982 1983 1984 1985	126 8 44 29 0	2 10 71 0	1 120 224 24 0	557 813 469 340 407	0 0 0 0	686 951 808 393 407
1986 1987 1988 1989 1990	0 0 0 20 0	0 0 0 77 0	0 0 0 0	326 500 354 641 482	0 0 0 0 38	326 500 354 738 520

NOTE: Data for regular transit service only.

- Data not available.

Source: Urban Transit Facts in Canada, Canadian Urban Transit Association.

TABLE 62

Canadian Transit: Fares

	AVERAGE REVENUE	ADULT CAS	SH FARE (BASE PERIOD)(cents) (a)
CALENDAR YEAR	AVERAGE REVENUE PER REVENUE PASSENGER TRIP(a) (cents)	HIGH	LOW	AVERAGE
1960	14	20	10	15
1965	16	25	15	
1970	25	35	15	
1975	28	50	15	29
1976 1977 1978 1979 1980	33 35 37 41 44	50 50 60 60 65	20 25 25 25 25 03	32 35 39 43 47
1981	50	75	35	53
1982	56	85	40	62
1983	61	100	40	69
1984	64	100	50	74
1985	65	150	50	79
1986	70	150	50	86
1987	72	150	60	90
1988	76	150	50	95
1989	82	190	50	101
1990	86	175	50	106

- Data not available.

(a) Monetary data are Canadian dollars.

NOTE: Data for regular transit service only.

Source: Urban Transit Facts in Canada, Canadian Urban Transit Association.

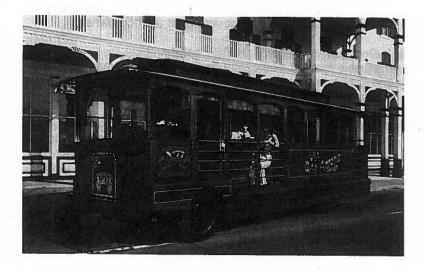
TABLE 63

Canadian Transit: Employees

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YEAR	OPERATIONS	REVENUE VEHICLE	NON-REVENUE VEHICLE	AND OTHER	EMPLOYEES
1970	:	:		15	22,023
1975	16, 152	12	054	3,993	27,199
1970	17,670		595 060	4,6/4	28, 128
1978	18,048	2	6,540 7,559	5,353	29,941 30,275
1980	19,689	5,567	2,071	5,504	32,831
1982	20,653	5,576	2,303	6,680	35,252
1983	20,259	3,799	067,4	6,224	34,772
1985	20,505	5,976	2,782	5,550	34,813
1986	22,046	6,824	3,174	3,952	35,996
1987	22,853	6,939	3,165	4,061	37,018
1989	23,609	7,374	3,262	5,061	39,306
1990	24,124	7,313	3,563	4,535	39,535

SECTION X

Glossary and Index



GENERAL DEFINITIONS

Transit System

An organization providing local or regional multiple-occupancy-vehicle passenger service. Organizations that provide service under contract to another agency are not counted as separate systems.

Multi-Mode Transit System

A system operating more than one mode of service.

Public Transit System

A system owned, controlled, or subsidized by any municipality, county, regional authority, state, or other governmental agency, including those operated or managed by a private management firm under contract to the government agency owner.

High-Occupancy Vehicle (HOV) Facility

Exclusive road or traffic lane limited to buses, vanpools, carpools, and emergency vehicles. Also called busways, transitways, or bus/carpool/commuter lanes.

Urbanized Area

A United States Bureau of the Census-designated area consisting of a central city of 50,000 inhabitants or more, or two adjacent cities constituting for general social and economic purposes a single community with a population of at least 50,000, plus surrounding closely settled territory, but excluding the rural portion of cities.

Urban Place

A U.S. Census Bureau-designated area consisting of incorporated political units or closely settled unincorporated areas outside an urbanized area.

MODE AND VEHICLE DEFINITIONS

Mode

Transit service operated in a particular format. There are two types: fixed-route and non-fixed-route.

Fixed-Route

Service provided on a repetitive, scheduled basis along a specific route with vehicles stopping to pick up and discharge passengers at specific locations. Modes include motorbus, trolleybus, jitney, vanpool, heavy rail, light rail, commuter rail, aerial tramway,

automated guideway, cable car, inclined plane, and ferryboat.

Non-Fixed-Route

Service <u>not</u> provided on a repetitive, scheduled basis along a specific route. Demand response is the only non-fixed-route mode.

Aerial Tramway

An electric system of aerial cables with suspended unpowered passenger vehicles propelled by separate cables attached to the vehicle suspension system and powered by engines or motors at a central location not on board the vehicle.

Automated Guideway

An electric railway operating without vehicle operators or other crewpersons on board the vehicle.

Cable Car

An electric railway operating in mixed street traffic with unpowered, individually-controlled transit vehicles propelled by moving cables located below the street surface and powered by engines or motors at a central location not on board the vehicle.

Commuter Rail

Railroad local and regional passenger train operations between a central city, its suburbs, and/or another central city. It may be either locomotive-hauled and self-propelled, and is characterized by multi-trip tickets, specific station-to-station fares, railroad employment practices, and usually only one or two stations in the central business district. Also known as "suburban rail."

Demand Response

Non-fixed-route service utilizing vans or buses with passengers boarding and alighting at pre-arranged times at any location within the system's service area.

Dial-a-Ride

Another name for "Demand Response."

Downtown People Mover

A type of automated guideway transit operating on a loop or shuttle route within the central business district of a city.

Ferryboat

A boat providing fixed-route service over water.

Heavy Rail

An electric railway with the capacity for a "heavy volume" of traffic and characterized by exclusive rights-of-way, multi-car trains, high speed and rapid acceleration, sophisticated signaling, and high platform loading. Also known as "subway," "elevated (railway)," or "metropolitan railway (metro)."

Inclined Plane

An electric railway operating over exclusive right-of-way on steep grades with unpowered vehicles propelled by moving cables attached to the vehicles and powered by engines or motors at a central location not on board the vehicle.

Light Rail

An electric railway with a "light volume" traffic capacity compared to "heavy rail." Light rail may use exclusive or shared rights-of-way, high or low platform loading, and multi-car trains or single cars. Also known as "streetcar," "trolley car," and "tramway".

Metropolitan Railway

Another name for "Heavy Rail."

Monorail

An electric railway in which a rail car or train of cars is suspended from or straddles a guideway formed by a single beam or rail. Most monorails are either heavy rail or automated guideway systems.

Motorbus

A rubber-tired, self-propelled, manually-steered vehicle with fuel supply carried on board the vehicle. Types include:

Advanced Design Bus: A bus introduced in 1977 that incorporates new styling and design features compared to previous buses.

Articulated Bus: A bus 55 feet or more in length with two connected passenger compartments that is able to bend at the connecting point when the bus turns a corner.

Double Deck Bus: A bus with two separate passenger compartments, one above the other.

Express Bus: A suburban or intercity bus that operates a portion of the route without stops or with a limited number of stops.

Intercity Bus: A bus with front doors only, high-backed seats, separate luggage compartments, and usually with restroom facilities for use in high-speed long-distance service.

Medium Size Bus: A bus from 29 to 34 feet in length.

New Look Bus: A bus with the predominant styling and mechanical equipment common to buses manufactured between 1959 and 1978.

Sightseeing Bus: A bus adapted for sightseeing use, usually with expanded window areas.

Small Bus: A bus 28 feet or less in length.

Standard-Size Bus: A bus from 35 to 41 feet in length.

Suburban Bus: A bus with front doors only, normally with high-backed seats, and without luggage compartments or restroom facilities for use in longer-distance service with relatively few stops.

Transit Bus: A bus with front and center doors, normally with a rear-mounted diesel engine, low-back seating, and without luggage compartments or restroom facilities for use in frequent-stop service.

Van: A 20-foot long or shorter vehicle, usually with an automotive-type engine and limited seating normally entered directly through side or rear doors rather than from a central aisle, used for demand response, vanpool, and lightly patronized motorbus service.

Paratransit Service

All transit service other than traditional fixed-route service. Normally, it means demand response, but it is often used for subscription motorbus, vanpool, and other special services.

Rapid Rail

Another name for "Heavy Rail."

Rapid Transit

Rail or motorbus transit service operating over completely gradeseparated exclusive right-of-way.

Special Service

Another name for "Paratransit Service."

Streetcar

Another name for "Light Rail."

Tramway

Another name for "Light Rail."

Trolley Car

Another name for "Light Rail."

Trolleybus

An electric rubber-tired transit vehicle, manually steered, propelled by a motor drawing current from a central power source not on board the vehicle through overhead wires.

Urban Ferryboat

A ferryboat with one or more terminals within an urbanized area, excluding international and urban park ferries.

Vanpool

A transit service in which passengers share a van with one passenger designated "driver." The route is "fixed," but varies as passengers change.

Transit Passenger Vehicle

A vehicle used to carry passengers in transit service.

Active Vehicle

Transit passenger vehicles licensed, where required, and maintained for regular use, including spares and vehicles out of service for maintenance purposes, but excluding vehicles in "dead" storage, leased to other operators, in energy contingency reserve status, permanently not usable for transit service, and new vehicles not yet outfitted for active service.

Rehabilitation

Major rebuilding or repair of a transit passenger vehicle for the purpose of preserving its useful service life.

Wheelchair Accessible Vehicle

A vehicle that a wheelchair-bound person may enter either 1) via an on-board retractable lift or ramp, 2) directly from a station platform reached by an elevator or a ramp that is either level with the vehicle floor or can be raised to floor level.

EXPENSE DEFINITIONS

Vehicle Operations

Expense for labor, materials, fees, and rents required for operating transit vehicles and passenger stations including all fuels for vehicle propulsion except electric propulsion power.

Vehicle Maintenance

Expense of labor, materials, services, and equipment used to repair and to service transit vehicles and service vehicles.

Non-Vehicle Maintenance

Expense of labor, materials, services, and equipment used to repair and service way and structures, vehicle movement control systems, fare collection equipment, communication systems, buildings and grounds, and equipment other than vehicles including expense of electric propulsion power for transit vehicles.

General Administration

Expense of labor, materials, and fees associated with general office functions, insurance, safety, legal services, and customer services.

Purchased Transportation

Expense of labor, materials, and fees paid to companies or organizations providing transit service under contract.

Total Operating Expense

The sum of "Vehicle Operations," "Vehicle Maintenance," "Non-Vehicle Maintenance," "General Administration," and "Purchased Transportation."

Depreciation and Amortization

Decline in value of transit system assets incurred through use of tangible property (depreciation) and intangible property (amortization). Because property is depreciated or amortized on a formula basis over several years, the amount recorded as depreciation or amortization normally does not represent the actual money spent for property in any specific time period.

Many public transit systems receive financial assistance for the purchase of property (capital assistance). Although the property purchased with capital assistance might be depreciated or amortized and thus reported as an "expense" in this book, any financial assistance received for the purchase of property is not included in "revenue" or "operating assistance" amounts.

Other Reconciling Items

All other expenses in addition to "Total Operating Expense" and "Depreciation and Amortization" including interest expenses and leases and rentals.

Total Expense

The sum of "Total Operating Expense," "Depreciation and Amortization," and "Other Reconciling Items."

Salaries and Wages

Pay and monetary allowances, including overtime, to employees for performance of their work.

Fringe Benefits

Pay or accruals to or on behalf of employees <u>not</u> for performance of their work, including sick pay, holiday pay, vacation pay, pension plans, life insurance, health insurance, unemployment insurance, social security, workmen's compensation, and other allowances.

Total Labor Costs

Sum of "Salaries and Wages" and "Fringe Benefit Costs."

Services

Labor or other work provided by outside organizations for a fee.

Fuel and Lubricants

Gasoline, diesel, other fuels, and vehicle lubricants.

Other Materials and Supplies

Materials and supplies other than "Fuel and Lubricants."

Utilities

Utilities including electric, gas, water, and telephone service, and propulsion power for electric vehicles.

Casualty and Liability

Protection of transit system from loss through insurance programs or for compensation of others for losses due to acts for which the transit system is liable.

Purchased Transportation

Expense of labor, materials, and fees paid to companies or organizations providing transit service under contract.

Other

Taxes, expense transfers, and miscellaneous expenses.

REVENUE DEFINITIONS

Operating Assistance

Financial assistance for transit operations (not capital expenditures). Such aid may originate with federal, local, or state governments.

Other Operating Revenue

Revenue derived from (1) organizations paying money in lieu of passenger fares, and charter, school bus, and freight service; (2) transit-related services such as station and vehicle concessions and advertising; and (3) non-transit-related services, such as rental of vehicles and properties, investment income, and non-park-and-ride parking revenue.

Passenger Revenue

Money, including fares and transfer, zone, and park-and-ride parking charges, paid by transit passengers; also known as "farebox revenue." Prior to 1984, data does not include fare revenues collected by contractors operating transit service.

Adult Base Fare

Basic fare paid by one person for one transit ride; excludes transfer charges, zone charges, express service charges, peak period surcharges, and reduced fares.

Average Fare per Unlinked Passenger Trip

"Passenger Revenue" divided by "Unlinked Passenger Trips."

Peak Period Surcharge

An extra fee required during peak periods (rush hours).

Transfer Charge

An extra fee charged for a transfer to use when boarding another transit vehicle to continue a trip.

Zone Charge

An extra fee charged for crossing a predetermined boundary.

RIDERSHIP AND EMPLOYMENT DEFINITIONS

Capital Employee

An employee involved with construction or capital procurement and who has no involvement with operation of the transit system.

Operating Employee

An employee involved with operation, maintenance, or administration of the transit system, excluding those involved in construction and capital procurement.

Passenger Miles

The number of miles traveled by passengers determined by multiplying the number of unlinked passenger trips times the average length of their trips.

Revenue Passenger Trips

The number of fare-paying transit passengers with each person counted once per trip; excludes transfer and non-revenue trips.

Single-Vehicle Transit Trip

Ā trip in which a person uses only one vehicle.

Total Motorbus Mile Equivalents

The number of vehicle miles that would have been operated by a transit mode if the service had been provided by motorbuses. Based on average seating plus standing capacity of the vehicle as compared to the capacity (70 people) of a standard-size motorbus.

Total Passenger Trips

Sum of all single-vehicle transit trips by (1) initial-board (first-ride) revenue passengers, (2) transfer passengers on second and successive rides, and (3) non-revenue passengers entitled to transportation without charge.

Unlinked Passenger Trips

The number of transit vehicle boardings, including charter and special trips. Each passenger is counted each time that person boards a vehicle.

Vehicle Miles Operated

Sum of all miles operated by passenger vehicles, including mileage when no passengers are carried. When vehicles are operated in trains, each vehicle is counted separately--e.g., an eight-vehicle train operating for one mile equals eight vehicle miles.

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