TRANSIT FACT BOOK

February 1995

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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.

Most data reported in the section on Canadian Statistics are taken from **Summary of Canadian Transit Statistics** and predecessor documents published by the Canadian Urban Transit Association. Data in the two fixed guideway tables were obtained from an APTA survey. 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 National Transit Database (NTD) 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; prior to 1994 it was called the Section 15 report.

APTA continues to conduct surveys to obtain data for various tables that are not collected in the NTD.

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 NTD requirements effective in 1979 resulted in several alterations to previous transit recordkeeping practices. Passenger data are collected for NTD by a sample survey technique not normally used by transit systems prior to NTD 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. Beginning in 1993, the Number of Employees is based on the actual number of persons at the end of the fiscal year.

Because of the time required for transit systems to compile and report the large amount of data for this book, data for the last calendar year 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.

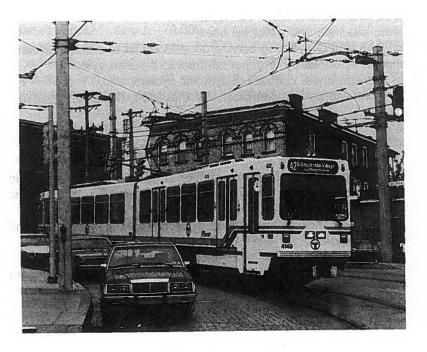
Formed on a cooperative, nonprofit basis, APTA's objectives are:

- 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



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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 in the Glossary in the back of this book. 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, monorail, 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 60.

4. VEHICLES

Transit fleets contain about 107,000 active vehicles. About 65,000 motorbuses, 23,000 demand response vehicles, 10,000 heavy rail cars, and 4,500 commuter rail cars comprise the bulk.

5. EMPLOYEES

It takes over 291,000 employees to operate, maintain, and administer transit service. About 179,000 of those are employed in motorbus service, 52,400 in heavy rail, 29,000 in demand response, 22,000 in commuter rail, and the balance in other modes. Of the total, operators and conductors on board the vehicles comprise 49%, maintenance personnel 27%, and all others 24%.

In addition, there are 11,000 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 8.4 billion trips were taken on transit in 1993. Of these, 5.4 billion were motorbus trips, about 2.7 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 72% of transit <u>operating revenues</u> come from the area in which the service is provided: 37% comes from the passengers, 29% from local governments, and 6% from non-government sources. State and federal governments contribute 22% and 6%, respectively.

The mean adult base fare in 1993 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.

Capital revenue 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 41% 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 1994 gasoline and oil cost estimates of \$0.056/mile and maintenance and tire costs of \$0.035/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 automobile that AAA estimates at \$4,551 per year or \$12.47 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	\$1.12
Maintenance & tires	0.70
<u>Parking</u>	5.00
Total	6.82

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

Fares	\$2.00
Casalina 9 -!!	Ψ2.00
Gasoline & oil	0.34
Maintenance & tires	_0.21
Total	2.55

10. EXPENSES

Operating expense in 1993 was about \$17.5 billion. Motorbus accounted for \$10.3 billion, heavy rail for \$3.7 billion, light rail for \$0.3 billion, commuter rail for \$2.1 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 (45%), fringe benefits (25%), purchased transportation (11%), and fuel and supplies (9%). Services, utilities, insurance, and other costs made up the remaining 10%.

About 46% of expenses are devoted to scheduling and operation of revenue vehicles, 17% to their maintenance, 10% to facilities maintenance, 11% to purchased transportation, and 16% to administration.

<u>Capital expenses</u> are monies paid for transit infrastructure (facilities, vehicles, and major equipment). In 1993, 27% of funds went for vehicles, 47% for facilities, and 26% for equipment.

TABLE 1
Source of Transit Operating Revenues, 1980 and 1993

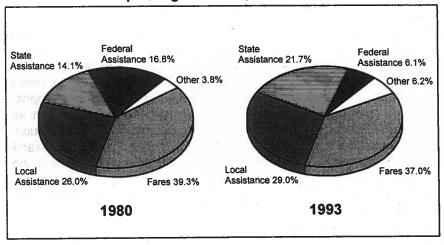
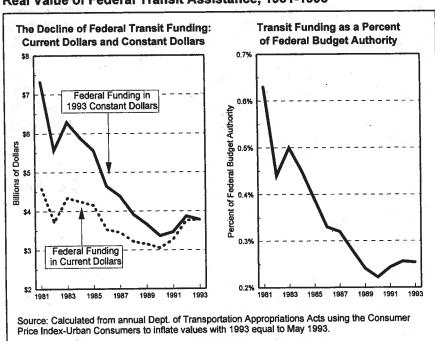


TABLE 2

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 300,000 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,

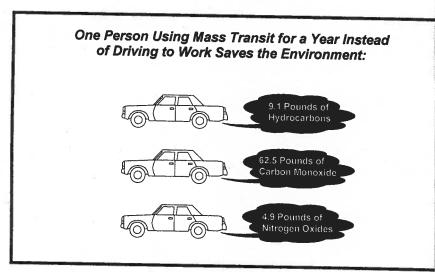
A full heavy rail car accomodates about 180 people including standees; a train of six cars carries 1,080 people, thus replacing 900 automobiles.

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.

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

TABLE 3

Adverse Environmental Impact of Automobiles



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.

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.

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:

		Carbon	Nitrogen
<u>Mode</u>	Hydrocarbons	Monoxide	<u>Oxides</u>
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>	<u>Hydrocarbons</u>	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 1990-1992 average death rates in terms of 100 million passenger miles are as follows:

	Death Rate
Automobiles	0.97
Intercity & commuter railroads	0.03
Airlines	0.01
Intercity buses	0.02
School buses	0.01
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 GDP 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 1993, transit inflation, measured by the TPI, increased 98.7 percent, compared to 75.4 percent for the CPI and 72.7 percent for the GDP Deflator. The costs of transit items grew 31 percent faster than the costs of consumer goods during this period.

TABLE 4

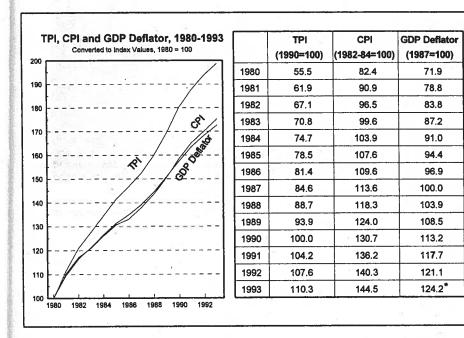


TABLE 5

File: PUBCOST

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 Highway services, administration, interest, and debt retirement Total	\$20.0 11.8 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 <u>85.0</u> 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 9.0 126.3
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 II

Profile of U.S. Transit



Transit Modal Statistics at a Glance

		NUMBER Of Systems (c)		ACTIVE VEHICLES		OPERATING EMPLOYEES (d)	
MODE	1992	1993	1992	1993	1992	1993	
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Other (a)	2,693 1,176 1,517 3,917 13 19 5 14 27 43 5,086	2,694 1,177 1,517 3,917 14 20 5 16 27 47 5,088	63,080 56,162 6,918 20,695 10,245 1,058 907 4,413 100 1,753 102,251	64,642 56,642 8,000 23,218 10,261 1,025 851 4,494 108 2,183 106,782	163,387 149,571 13,816 25,863 47,493 3,849 1,691 21,151 2,653 1,015 267,102	178,968 162,490 16,478 28,975 52,398 3,943 1,921 21,934 2,537 1,073 291,749	

All data are preliminary.

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

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

(c) Total is not sum of all modes since many systems operate more than one mode.
(d) Based on employee equivalents of 2,080 hours equals one employee; beginning 1993 equals actual employees.

TABLE 6 (continued)

Transit Modal Statistics at a Glance

	RE	SENGER VENUE LLIONS)	EXP	ATING ENSE LIONS)
MODE	1992	1993	1992	1993
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Other (a) Total	\$3,058.8 3,012.9 45.9 75.8 1,830.3 97.8 48.7 970.1 44.0 27.0 6,152.5	\$3,083.9 3,040.1 43.8 94.5 1,913.3 102.3 52.4 995.5 39.2 38.4 6,319.5	\$9,881.2 9,252.9 628.3 667.3 3,551.1 308.9 124.4 2,012.6 179.1 56.8 16,781.4	\$10,336.6 9,672.1 664.5 733.3 3,668.6 315.8 131.9 2,081.1 184.7 54.3 17,506.3

All data are preliminary.

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

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

Transit Modal Statistics at a Glance

	UNLINKED PASSENGER TRIPS (MILLIONS)		PASSENGER MILES (MILLIONS)		AVERAGE TRIP LENGTH (MILES)		
MODE	1992	1993	1992	1993	1992	1993	
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Other (a)	5,517 5,257 260 72 2,207 188 126 314 47 30 8,501	5,371 5,117 254 75 2,209 188 121 322 48 28 8,362	20,336 19,496 840 495 10,737 701 199 7,320 270 183 40,241	20,075 19,238 837 504 10,740 705 188 6,939 258 216 39,625	3.7 3.7 3.2 6.9 4.9 3.7 1.6 23.3 5.7 6.1	3.7 3.7 3.3 6.7 4.9 3.8 1.6 21.5 5.4 7.7	

All data are preliminary.

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

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

TABLE 6 (continued)

Transit Modal Statistics at a Glance

	VEHICLE MILES OPERATED (MILLIONS)		VEHICLE HOURS OPERATED (MILLIONS)		AVERAGE SPEED (MILES PER HOUR)	
MODE	1992	1993	1992	1993	1992	1993
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Other (a) Total Total Motor Bus Mile Equivalents (c)	2,178.0 2,006.5 171.5 363.5 525.4 28.6 13.9 218.8 2.3 24.1 3,354.6	2,205.7 2,025.0 180.7 359.9 525.7 27.7 13.6 223.8 2.5 28.5 3,387.4	165.1 152.6 12.5 28.7 25.6 2.2 1.8 6.5 0.4 1.2 231.5	166.3 153.2 13.1 27.0 25.6 2.1 1.8 6.6 0.4 1.3 231.1	13.2 13.1 13.6 12.7 20.5 13.0 7.7 33.8 6.4 20.1 14.5	13.3 13.2 13.8 13.3 20.5 13.2 73.9 6.3 21.9

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 $\frac{\omega}{\omega}$

All data are preliminary.

(a) Includes cable car, inclined plane, aerial tramway, vanpool, monorail, 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.

	ENERGY CONSUMPTION						
	GALLONS (MILLIONS)		KWH (MILLIONS)		CNG POUNDS (MILLIONS)		
MODE	1992	1993	1992	1993	1992	1993	
Motor Bus Urbanized Area Fixed-Route Other Fixed-Route Demand Response Heavy Rail Light Rail Trolleybus Commuter Rail Ferry Boat (b) Other (a) Total	595.2 560.2 35.0 49.5 0.0 0.0 55.0 20.9 1.5 722.1	595.9 560.9 35.0 55.4 0.0 0.0 59.5 19.9 1.8 732.5	0.2 0.2 0.0 0.0 3,193.3 297.3 80.5 1,124.2 0.0 20.6 4,716.1	0.2 0.2 0.0 0.0 3,286.6 281.6 78.7 1,113.5 0.0 20.3 4,780.9	3.1 3.1 0.0 3.3 0.0 0.0 0.0 0.0 0.0	5.2 5.2 0.0 4.7 0.0 0.0 0.0 0.0	

All data are preliminary.

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

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

Number of Transit Service Providers By State

File: SYSBYST

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
Arkansas	5	6	71	82
California	121	64	177	362
Colorado	11 %	18	22	51
Connecticut	26	4	76	106
Delaware	2	1	30	33
District of Columbia	1	0	20	21
Florida	28	29 53	98	155
Georgia	12	53	50	115
Hawaii	1.	3	30	34
I daho	5	5	31	41
Illinois	20	31	57	108
Indiana	31	28	71	130
Iowa	17	28 24	1 1	42
Kansas	4	120	50	174
Kentucky	6	21	46	73
Louisiana	15	42	61	118
Maine	8	11	0	19
Maryland	13	14	49	76
Massachusetts	18	14 =	59	80

(a), (b), (c) See footnotes Page 35.

(continued on Page 34)

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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
Michigan	19	45	44	108
Minnesota	10	35 17	115	160
Mississippi	5	17	56	78
Missouri	8	27	67	102
fontana	4	10	67 34 56	48
lebraska	2	50	56	108
levada	4	7	48	50
New Hampshire	3	3	21	59 27
lew Jersey	25	14	21 91	130
lew Mexico	25 5 73 22 2	17	51	73
lew York	73	29	260	362
iorth Carolina	22	19	52	93
lorth Dakota	2	22	23	47
Dhio	40	33	113	186
Oklahoma	3	15	173	191
Dregon	5	33 15 21	60	86
Pennsylvania	44	15	118	177
Rhode Island	1	1	23	25
South Carolina	10	6	118 23 65 47	25 81 62
South Dakota	10 ° 2 13	13	47	62
Tennessee	1 13	13 12	132	157
Texas	39	33	166	238

(a), (b), (c) See footnotes Page 35.

(continued on Page 35)

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	27	11	42	80
Washington	20	25	7	52
West Virginia	6	12	83	101
Wisconsin	18	32	71	121
Wyoming	1	21	20	42
United States Total	788	1,077	3,223	5,088

- (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.

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)	16 3 0 0 1 1	22 15 1 2 2 0	620 539 234 331 321 2,959	10 7 1 1	668 564 236 334 325 2,961
Total U.S. Transit Systems	21	42	5,004	21	5,088

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

(b) As of January 1, 1995. Excludes bus service operated by Intercity Bus Carriers.

TABLE 9

File: PUBTRAN

Public Transit as a Portion of All Transit*

176 may 1773 1473	147 73 17	ALL ST. PM. LINE	TO MY IT IN THE ST. TO.		179-137-2		T. C. S. H. LAWY &	711
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
					(MILLIONS)		(MILLIONS)	A
1945 1950 1955 1960	29 36 39 58	2% 3 3 5	14,609 24,570 22,011 23,738	16% 28 30 36	T * u) : : -	* :: ::
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

-- 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.

Fixed Guideway Mileage as of January 1, 1995 and Status and Mileage of Future Projects

MODE (a)	STATUS	OPENS	MILES (b)
?	planning	?	132.7
?	planning	2000	9.2
? TOTAL	•	=	141.9
AG	construction	1995	1.9
AG	construction	1997	1.4
AG	design	?	0.4
AG	open .	open	8.6
AG	planning	?	2.0
AG	planning	1996	1.5
AG	planning	1998	1.0
AG	planning	2003	22.0
AG TOTAL			38.8
cc	open	open	4.5
CC TOTAL		·	4.5
CR	construction	1995	60.5
CR	construction	1996	109.6
CR	construction	2002	0.0
CR	design	? —	10.7
CR	design	1995	78.1
CR	design	1996	42.0
R	design	1998	37.5
R	open	open	2,849.2
R	planning	?	1,185.1
R	planning	1995	8.0
R [planning	1997	38.0
R	planning	1998	53.0
R	planning	1999	107.0
R	planning	2002	67.0
R	planning	2004	3.0
R .	planning	2010	58.4
R TOTAL	= 55	4()	4,707.1
В	construction	1995	28.7
В	design	1996	24.5
В	open	open	296.8
В	planning	1996	12.3
В	planning	1997	32.2
B TOTAL			394.5

Fixed Guideway Mileage as of January 1, 1995 and Status and Mileage of Future Projects

MOI	DE (a)	STATUS	OPENS	MILES (b)
100)_ (a)	1		
HR	100	construction	1995	5.3
HR	Tas	construction	1996	46.8
HR	2.455	construction	1997	□ 3.3
HR	, T. 88	construction	1998	6.4
HR	= 8%	construction	1999	2.9
HR	7. 108,	construction	2001	6.3
HR		design	?	3.2
HR		design	2001	13.4
HR		design	2003	2.3
HR	1000	open	open	688.6
HR	84.5	planning	?	22.1
HR	0.6	planning	1999	7.0
HR	3711	planning	2000	6.7
HR	12.77	planning	2002+	21.0
HR	TOTAL			835.3
IP	830	construction	1995	0.1
IP	43315	open	open	1.4
IP	TOTAL			1.5
LR	200	construction	1995	27.0
LR	2.6	construction	1996	27.5
LR	3.81	construction	1997	14.5
LR	404	construction	1998	13.6
LR	55.5	design	?	32.1
LR	是 方	design	1996	4.7
LR	0,69	design	1997	13.0
LR	65	design	1998	6.0
LR	Barro.	design	1999	47.7
LR	2.77	design	2000	9.9
LR	13.9	design	2002	11.8
LR	9.00	open	open	305.3
LR	1000	planning	?	192.6
LR	BART	planning	1997	4.4
LR	- 11	planning	1999	2.1
LR	8	planning	2000	12.5
LR	72	planning	2001	18.4
LR	500	planning	2002	5.5
LR	(E)	planning	2003	33.9

Fixed Guideway Mileage as of January 1, 1995 and Status and Mileage of Future Projects

MO	DE (a)	STATUS	OPENS	MILES (b)
LR		planning	2004	19.2
LR		planning	2005	44.7
LR	TOTA	Ĺ		846.4
MB		construction	1995	80.5
MB		construction	1996	72.7
MB		construction	1997	30.1
MB		construction	1998	8.1
MB		construction	2003	3.9
MB		design	9 1993 -	2.3
MB		design	1995	7.0
MB		design	1996	47.2
MB		design	1997	60.8
MB		design	1998	14.0
MB		design	1999	28.3
MB		design	2000	58.2
MB		design	2008	2.3
MB		open	open	715.0
MB	25	planning	?	66.9
MB	ĺ	planning	1995	32.2
MB		planning	1996	8.5
MB	- 1	planning	1998	19.5
MB		planning	1998+	2.2
MB		planning	1999	2.3
MB		planning	2000	39.5
MB	i	planning	2000+	10.0
MB		planning	2001	2.8
MB		planning	2002	26.6
MB		planning	2003	17.9
MB	ļ	planning	2005	5.0
MB	İ	planning	2007	22.8
MB	-	planning	2015	5.0
	TOTAL		, v	1,391.6
МО		open	open	1.1 🗡
MO		planning	?	2.6
	TOTAL			3.7
ТВ		construction	1995	11.7
TB		design	1996	1.2

Fixed Guideway Mileage as of January 1, 1995 and Status and Mileage of Future Projects

MODE (a)	STATUS	OPENS	MILES (b)
ТВ	design	2000	1.0
ТВ	open	open	312.7
ТВ	planning	1996	15.5
ТВ	planning	1997	3.9
тв	planning	1999	14.0
TB 🚇	planning	2000	5.7
ТВ	planning	2008	0.5
TB TOTAL			366.2
TR	open	open	0.6
TR TOTAL			0.6

? = Uncertain, unknown, or not reported.

Source: APTA survey

⁽a) Motor bus data includes only fixed guideways 1.0 miles in length or longer; data for all other modes includes all guideways.
(b) Excludes data for a few guideways for which mileage was not reported.

Motor Bus Fixed Guideways Over 3 Miles in Length as of January 1, 1995

LOCATION	GUIDEWAY	SEGMENT	MILES
Atlanta, GA	I 20 East HOV Lanes	Hill St-Columbia Drive	9.0
Dallas, TX	I 30 East HOV Lanes E/B	Central Expressway-Dolphin Rd	3.3
Dallas, TX	I 30 East HOV Lanes W/B	Jim Miller-Central Expressway	5.2
Denver, CO	I 25 North HOV Lanes	Union Terminal-53rd	5.4
Denver, CO	US 36 HOV Lanes I/B	Sheridan-I 25	3.9
Fort Lauderdale, FL	195 HOV Lanes	Atlantic Blvd-0.4 mile N. of Broward Blvd	6.9
Hartford, CT	I 84 HOV Lanes	East Hartford-Vernon	9.5
Hartford, CT	I 91 North HOV Lanes	Hartford-Windsor Locks	10.0
Honolulu, HI	I H1 HOV Lanes	Wajawa-Keehi	8.9
Houston, TX	I 10 West HOV Lanes	TX 6-West Loop Terminus	13.0
Houston, TX	I 45 North HOV Lanes	I 10-Beltway 8	13.5
Houston, TX	I 45 South HOV Lanes	US 59-Almeda/Genoa	12.1
Houston, TX	US 290 Northwest HOV Lanes	I 10-FM 1960	13.5
Houston, TX	US 59 South HOV Lanes	Shepherd-West Bellfort	11.5
Los Angeles, CA	CA 55 HOV Lanes	CA 91-CA 73	11.0
Los Angeles, CA	CA 57 HOV Lanes	CA 22-Lambert	10.0
Los Angeles, CA	CA 91 HOV Lanes	I 110-Orange County Line	14.3
Los Angeles, CA	CA 91 HOV Lanes Eastbound	1110-1605	8.0
Los Angeles, CA	I 10 HOV Lanes	Alameda/Arcadia-Santa Anita	12.0

TABLE 11

FILE:MBFBUS

Motor Bus Fixed Guideways Over 3 Miles in Length as of January 1, 1995

LOCATION	GUIDEWAY	SEGMENT	MILES
Los Angeles, CA	I 210 HOV Lanes	CA 134-Sunflower	18.5
Los Angeles, CA	I 405 HOV Lanes	CA 22-I 5	20.5
Los Angeles, CA	I 405 HOV Lanes	I 110-Century Blvd	12.0
Los Angeles, CA	15 HOV Lanes	I 405-Red Hill Ave	7.8
Miami, FL	FL 112 HOV Lanes	I 95-NW 22nd	7.8
Miami, FL	I 95 HOV Lanes	Broward County Line-FL 112	3.4
Minneapolis, MN	Coon Rapids Blvd HOV Lanes	Avocet St-Yucca St.	4.0
Minneapolis, MN	I 35W South HOV Lanes	76th St-MN 13	6.3
Minneapolis, MN	I 394 HOV Lanes	Washington Ave-I 494	8.0
Minneapolis, MN	MN 252 HOV Lanes	I 694-93rd Ave N.	3.4
Minneapolis, MN	MN 47 HOV Lanes	35th Ave NE-85th Ave NE	5.5
Minneapolis, MN	MN 77 HOV Lanes	Old Shakopee Rd-I 35E South	4.2
Nashville, TN	I 65 South HOV Lanes	Concord Rd-Armory Dr	8.0
New York, NY	First Avenue HOV Lanes N/B	34th-96th	3.1
New York, NY	I 80 HOV Lanes	I 287-NJ 15	10.0
New York, NY	Long Island Expressway HOV Lanes	NY 110-Exit 57	12.0
New York, NY	Second Ave HOV Lanes S/B	14th-96th	4.1
Norfolk, VA	I 64/VA 244 HOV Lanes	7-?	14.0
Phoenix, AZ	AZ 202 HOV Lanes	I 10-Rural Rd	7.0

Motor Bus Fixed Guideways Over 3 Miles in Length as of January 1, 1995

LOCATION	GUIDEWAY	SEGMENT	MILES
Phoenix, AZ	I 10 HOV Lanes	91st Ave-AZ 360	22.0
Pittsburgh, PA	1 279-1 579 HOV Lanes	Bedford Ave-Perrysville Ave	5.0
Pittsburgh, PA	M.L. King East Busway	Liberty/Grant-Wilkinsburg	6.8
Pittsburgh, PA	South Busway	South Hills Junction-Glenbury	4.0
Saint Louis, MO	Hodiamont Busway	Enright Avenue-Hamilton Avenue	3.2
San Diego, CA	I 15 HOV Lanes	?-?	7.6
San Francisco, CA	US 101 HOV Lanes	Marin Co Civic Center-CA 37	6.5
San Francisco, CA	US 101 HOV Lanes	Richardson Bay-Sir Francis Drake Blvd	3.9
San Jose, CA	CA 237 HOV Lanes	I 880-Mathilda	5.5
San Jose, CA	CA 85 HOV Lanes	CA 237-US 101 South	22.0
San Jose, CA	I 280 HOV Lanes	Magdalena Ave-Bascom Ave	10.5
San Jose, CA	Montague Expressway HOV Lanes	US 101-I 680	6.0
San Jose, CA	San Tomas Expressway HOV Lanes	CA 17-US 101	8.0
San Jose, CA	US 101 HOV Lanes	Bernal Rd-San Mateo County Line	25.0
San Juan, PR	Fernandez Juncos Contraflow Lane	Gonzalez St-Villa Verde St	3.2
San Juan, PR	Ponce de Leon Contraflow Lane	Olimpo St-Guayama St	3.8
Seattle, WA	Airport Road HOV Lanes	86th PI SW (Casino Rd)-8th Ave W.	3.5
Seattle, WA	I 405 HOV Lanes	I 5-Renton	5.4
Seattle, WA	I 405 HOV Lanes	Sunset Blvd-Northup	21.2
	1		1 21.2

TABLE 11

FILE:MBFBUS

Motor Bus Fixed Guideways Over 3 Miles in Length as of January 1, 1995

LOCATION	GUIDEWAY	SEGMENT	MILES
Seattle, WA	I 5 Express HOV Lanes	Cherry St-Northgate	10.8
Seattle, WA	15 HOV Lanes	I 405-Kent/Des Moines S/B	5.0
Seattle, WA	15 HOV Lanes	Northgate-Snohomish Co Line	□ 10.0
Seattle, WA	15 HOV Lanes	S. Lucille St-Mercer St	10.8
Seattle, WA	1 5 HOV Lanes N/B	S. 272nd St-S. 200th St N/B	4.0
Seattle, WA	15 HOV Lanes S/B	King County Line-44th Ave W.	3.0
Seattle, WA	I 5 Mainline HOV Lanes	Mercer St-Northgate	10.7
Seattle, WA	I 90 HOV Lanes	5th Ave SE. Channel Bridge	13.3
Seattle, WA	I 90 HOV Lanes	Richards Rd-WA 900	10.6
Seattle, WA	WA 522 HOV Lanes S/B	Kenmore-NE 145th St	3.1
Washington, DC	I 66 HOV Lanes	VA 110-US 50	17.5
Washington, DC	I 95/I 395 HOV Lanes	C SW-US 1 Woodbridge Exit	19.3
Washington, DC	US 29 Congestion Bypass Shoulder Lns	MD 198-Industrial Parkway	4.4

Source: APTA survey

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Airports With Direct Access to Rail Transit*

СІТҮ	AIRPORT	TYPE OF RAIL	STATION LOCATION (a)
Atlanta, GA Chicago, IL Chicago, IL Cleveland, OH Philadelphia, PA Saint Louis, MO South Bend, IN Washington, DC	Atlanta International Midway O'Hare International Cleveland-Hopkins International Philadelphia International Lambert-St. Louis International Michiana Regional Washington National	HR HR HR CR CR LR CR HR	In building In building In building In building Outside building In building In building Outside building

HR = heavy rail, LR = light rail, CR = commuter rail

*Excludes airports that require a bus or van ride between the station and building and airports that only have internal non-transit rail circulation systems.

(a) "In building" indicates rail transit station is within or directly connected to the passenger terminal building via a weather-protected passageway. "Outside building" means station is within walking distance, but not connected, to the building.

TABLE 13

File: HISTORY

Milestones in U.S. Transit History

Year	Event Reger (RS) Number
1630	Bostonreputed first publicly operated ferry boat
1740	New York-reputed 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	Bostonfirst 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	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	BostonAmerican Street Railway Association (APTA's original predecessor) formed
1883	New Yorkfirst 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

Milestones in U.S. Transit History

Year	Event
1892	Indianapolis-first 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	Bostonfirst 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	Chicagofirst electric multiple-unit controlled rail line (Chicago & South Side Rapid Transit Railroad Co.)
1904	New Yorkfirst electric underground (& first 4-track express) heavy rail line (Interborough Rapid Transit Co.)
1905	New Yorkfirst public takeover of a private transit company (Staten Island Ferry)
1905	New Yorkfirst motor bus line (Fifth Avenue Coach Co.)
1906	Monroe, LA-first 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 (Laurel 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, NY-first 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-commuter rail line
1932	New York-first publicly operated heavy rail line (Independent Subway)

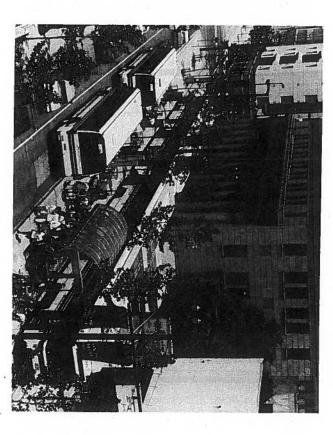
TABLE 13 (continued)

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	Chicagofirst 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
1943	Los Angelesfirst rail line in expressway median (Pacific Electric Railway)
1946	highest-ever transit ridership (23.4 billion)
1952	San Francisco-last new PCC car for U.S. transit system placed in service
1961	Washingtonfirst significant federal transit legislation (Housing & Urban Development Act of 1961)
1962	Seattle-first 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	Washingtoncreation of Urban Mass Transportation Administration (Urban Mass Transportation Act of 1964)
1966	New Yorkfirst 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)

Milestones in U.S. Transit History

	Year	Event
	1969	Philadelphiafirst modern heavy rail system realising 6
	1970	Philadelphiafirst modern heavy rail system replacing former rail line (Port Authority Transit Corporation) Fort Walton Beach, FLfirst dial-a-ride demand response bus
	1971	
	1972	Washingtonfirst federally subsidized intercity railroad providing commuter service (AMTRAK)
	1972	San Franciscofirst computer-controlled heavy rail system (Bay Area Rapid Transit District) transit ridership hits all-time low (5.3 billion)
	1973	a single free form (3.3 billion)
50	1973	Washington—some transit service required to be accessible to disabled (Rehabilitation Act of 1973)
0	1974	
	1974	
	1974	
	1975	
	1977	Worgantown, VVVnrst automated guideway neonlemoyer (Meet Virginia Haironait)
	1979	Oan Diegoilist wheelchair-lift-equipped fixed-route hus
	1979	Seattlefirst successful wheelchair-lift-equipped fixed-route bus service
	1979	vvasnington—first standardized transit data accounting eyetem (Section 45)
		San Diego-Tirst Completely new light rail system (San Diego Trollog)
	1982	vvasningtontransit trust fund for capital projects created thru dedication of
	1990	The second of various scivics (subject in the second to disabled /A
	1990	
	1991	vide in group-trained buses supject to strict politition controls (Cloop Air And of 4000)
	1991	vvasimgion-legeral government allowed to subsidize its amplayees'
	1991	Trading to I - list yelleral authorization of use of highway funds for transit (1-1)
	1992	Washingtonfirst limitation on amount of tax-free employer-paid automobile parking benefits and tripling of value of tax-free
	1993	Washingtontransit workers in safety-specific negligible and the safety-specific
	1995	Washingtontransit workers in safety-sensitive positions subjected to drug and alcohol testing Washington1.5 cents dedicated portion of federal fuel tax increased to 2 cents



Operating Expenses

52

Transit Financial Statement for 1993 and 1992

93	1992
00,000 \$ 6,	,152,500,000
	645,900,000
00,000	,798,400,000
00,000 5,	,268,100,000
00,000 3	,897,500,000
00,000	969,100,000
00,000	,116,700,000
00,000 16	,915,100,000

All data are preliminary.

TABLE 14 (continued)

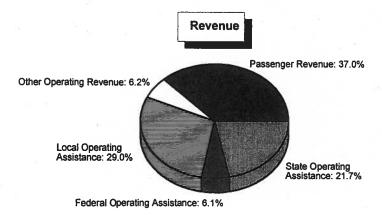
Transit Financial Statement for 1993 and 1992

	EXPENSE	S
	1993	1992
Vehicle Operations Expense	\$ 8,053,300,000	\$ 7,659,700,000
Vehicle Maintenance Expense	3,035,000,000	3,047,500,000
Ion-Vehicle Maintenance Expense	1,704,100,000	1,783,900,000
General Administration Expense	2,773,400,000	2,674,200,000
Purchased Transportation Expense	1,940,500,000	1,616,100,000
Total Operating Expense	17,506,300,000	16,781,400,000
epreciation and Amortization	2,501,700,000	2,033,900,000
Other Reconciling Items	857,800,000	1,218,300,000
Total Reconciling Items	3,359,500,000	3,252,200,000
Total Expense	20,865,800,000	20,033,600,000
		*:

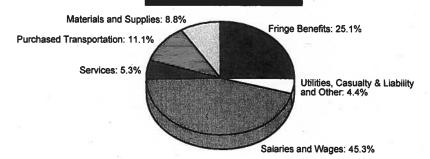
All data are preliminary.

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

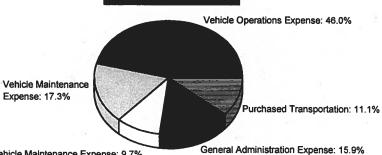
transferred to capital accounts for expenditure, (4) inclusion of Depreciation and Amortization costs in Total Expense that are met from revenue sources not included in Total Revenue, (5) exclusion of extraordinary revenues and extraordinary expenses, (6) actual profit or loss of privately owned transit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



Expense by Object Class



Expense by Function



Non-Vehicle Maintenance Expense: 9.7%

Expense: 17.3%

TABLE 16

Transit Operating Expense for 1993 Classified By Function and Object Class

EXF&0

CHA MOTTONIE	VEHICLE OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	GENERAL ADMINISTRATION	PURCHASED TRANSPORTATION	TOTAL
OBJECT CLASS	l to		(DOLLARS	(DOLLARS IN MILLIONS)		
Salaries and Wages Fringe Benefits Services	4,306.0 2,410.9 82.3	1,476.6 765.7 158.1	1,058.2 582.3 113.2	1,094.8 633.5 573.8	0.000	7,935.6
Materials and Supplies Utilities	89.3 106.8	36.5	161.8 304.6	203.1	000	1,092.5
Casualty & Liability Costs Purchased Transportation Other	26.3 0.0 641.8	7.0 0.0 -100.1	10.5 0.0 -528.3	551.9 . 0.0 -459.2	1,940.5	1,940.5 -445.8
Total	8,055.5	5,035.0	(PERCENT	(PERCENT OF TOTAL)	1,940.5	17,506.3
Salaries and Wages Fringe Benefits Services Fuels and Lubricants Materials and Supplies	24.60 13.77 0.47 2.23 0.51	8.43 4.37 0.90 0.30 3.65	6.04 0.65 0.01 0.92	3.28 3.28 3.28 0.00 1.16	888888	55.33 25.09 25.30 5.34 5.24 3.54
Casualty & Liability Costs Purchased Transportation Other Total	0.15 0.00 3.67 46.00	0.00 0.00 -0.57 17.34	9.00 -3.02 -3.02 -3.02	2.62 -2.62 15.84	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	11.08 100.00

Trend of Transit Expenses by Function Class, Dollars*

	2		OPERATING E	EXPENSE					
CALENDAR	VEHICLE	MAIN	TENANCE	GENERAL ADMINIS-	PURCHASED TRANSPOR-		DEPRECIATION	OTHER RECONCILING	TOTAL
YEAR	OPERATIONS	VEHICLE	NON-VEHICLE	TRATION	TATION	TOTAL	AMORTIZATION	ITEMS	EXPENSE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1980 1981 1982 1983	\$3,248.2 3,596.5 3,882.3 3,930.8	\$1,274.3 1,397.8 1,555.8 1,696.6	\$ 499.7 547.9 611.8 694.9	1,48 1,50	24.3(a) 32.1(a) 03.0(a) 33.7(a)	\$ 6,246.5 7,024.3 7,552.9 7,956.0	\$ 277.6 386.3 507.1 472.5	\$ 186.5 211.1 254.3 307.2	\$ 6,710.6 7,621.7 8,314.3 8,735.7
1984 1985 1986 1987 1988 1989 1990 1991 1992(b) P 1993	5,141.9 5,654.7 5,690.6 5,790.3 6,052.3 6,052.3 6,653.3 6,726.6 7,659.7 8,053.3	2,149.4 2,522.6 2,733.6 2,730.2 2,865.1 2,942.3 3,038.8 2,992.4 3,047.5 3,035.0	912.3 1,149.6 1,295.2 1,363.5 1,447.6 1,550.5 1,592.0 1,604.7 1,783.9 1,704.1	2,914.7 2,505.3 2,748.0 2,869.4 3,077.8 3,251.0 3,449.9 3,584.5 2,674.2 2,773.4	455.7 548.7 484.3 718.7 844.5 953.2 1,008.1 1,633.2 1,616.1 1,940.5	11,574.0 12,380.9 12,951.7 13,472.1 14,287.3 14,972.3 15,742.1 16,541.4 16,781.4 17,506.3	885.5 1,097.6 1,148.2 1,212.5 1,377.6 1,502.5 1,593.1 1,763.3 2,033.9 2,501.7	497.6 598.6 626.2 720.7 776.9 693.9 643.9 1,027.2 1,218.3 857.8	12,957.1 14,077.1 14,726.1 15,405.3 16,441.8 17,168.7 17,979.1 19,331.9 20,033.6 20,865.8

P = Preliminary

TABLE 18

Trend of Transit Operating Expenses by Object Class, Dollars*

File: EXOBJ

CALENDAR YEAR	SALARIES & WAGES	FRINGE BENEFITS	SERVICES	MATERIALS AND SUPPLIES	UTILITIES	CASUALTY & LIABILITY COSTS	PURCHASED TRANS- PORTATION	OTHER	TOTAL OPERATING EXPENSE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS
1980	\$3,280.9	\$1,353.1	\$237.6	\$ 759.4	\$231.3	\$237.8	\$146.	.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
1992(b)	7,670.5	4,318.6	907.8	1,529.1	608.5	557.8	1,616.1	-427.0	16,781
P 1993	7,935.6	4,392.4	927.4	1,537.1	623.4	595.7	1,940.5	-445.8	17,506.

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) General Administration and Purchased Transportation combined.

⁽b) Beginning 1992, total operating expense declined about \$400 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 about \$400 million due to change in accounting procedures at New York City Transit Authority.

Trend of Transit Operating Expenses by Mode, Dollars

		RAILWAY		1 2 1 -				TOTAL
CALENDAR	LIGHT	HEAVY	COMMUTER	TROLLEY	MOTOR	DEMAND	OTHER	OPERATÎNG
YEAR	RAIL	RAIL	RAIL	BUS	BUS	RESPONSE		EXPENSE
	(MILLIONS)							
1988	\$198.4	\$3,521.7	\$1,675.3	\$101.7	\$ 8,136.4	\$462.6	\$191.2	\$14,287.3
1989	210.8	3,701.0	1,841.4	105.5	8,415.1	481.1	217.4	14,972.3
1990	237.1	3,825.0	1,938.5	108.6	8,903.1	517.8	212.0	15,742.1
1991	291.1	3,858.6	1,942.4	113.5	9,501.4	608.5	225.9	16,541.4
1992(a)	308.9	3,555.1	2,012.6	124.4	9,881.2	667.3	231.9	16,781.4
P 1993	315.8	3,668.6	2,081.1	131.9	10,336.6	733.3	239.0	17,506.3

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TABLE 20

File: EXMODPOP

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

VEHICLE MODE,				P	ERCENT OF OPERA	ATING EXPENSE FOR	
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)	1988 1989 1990 1991 1992 1993	33 44 33 34 32 34	38.3 37.9 37.7 36.9 41.7 45.3	20.2 19.2 18.7 18.3 18.6 17.6	13.0 13.2 13.5 12.7 14.8 13.2	22.5 23.5 24.0 24.5 17.4 16.7	6.0 6.2 6.1 7.6 7.4 7.2
Motor Bus Only, 1,000,000 or More	1988 1989 1990 1991 1992 1993	61 51 65 83 74 75	53.4 51.8 48.4 47.6 49.5 49.2	20.8 21.5 20.3 17.6 18.8 19.0	2.8 2.9 3.2 3.1 3.1 3.3	18.8 19.9 18.8 16.8 15.3	4.2 3.9 9.3 14.9 13.3
Motor Bus Only, 500,000 - 1,000,000	1988 1989 1990 1991 1992 1993	22 24 27 28 26 25	56.3 55.1 54.0 54.6 54.4 52.8	19.4 19.1 18.1 18.2 18.1 17.2	2.9 2.9 2.7 2.8 2.7 2.4	17.8 18.2 17.6 16.4 17.0 17.9	3.6 4.7 7.6 8.0 7.7 9.7

(a), (b), (c) See footnotes Page 60.

⁽a) Beginning 1992 total operating expense declined about \$400 million due to change in accounting procedures at New York City Transit Authority.

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

VEHICLE MODE				P	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	1988 1989 1990 1991 1992 1993	50 55 59 62 58 53	56.5 57.2 56.2 56.0 54.8 54.2	19.6 18.9 18.4 18.5 17.9	2.4 2.4 3.0 2.6 2.9 2.9	17.8 17.4 17.1 16.7 17.4 17.8	3.7 4.1 5.3 6.2 7.1 7.7
Motor Bus Only, 200,000 or Fewer	1988 1989 1990 1991 1992 1993	102 111 103 93 76 61	56.6 55.2 53.2 52.8 55.1 49.7	18.5 18.0 18.2 16.9 16.6 15.0	2.2 2.2 2.3 2.2 1.8	18.2 18.1 18.2 17.0 15.6 15.7	4.5 6.5 8.1 11.1 10.9 17.5

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
- (c) Beginning 1992, data not comparable to prior years due to change in accounting procedures at New York City Transit Authority.



Operating Revenue

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TABLE 21

Trend of Transit Revenues, Dollars*

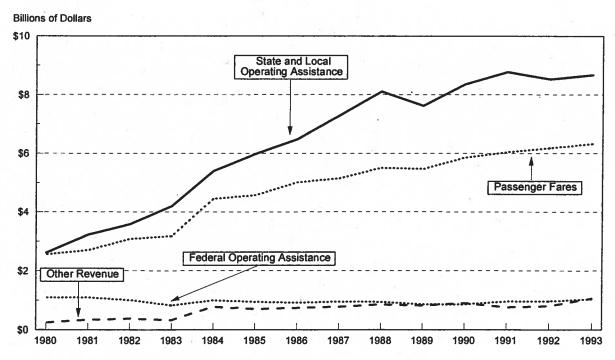
	OP	ERATING REVE	NUE	i și	OPERATING	ASSISTANCE	ET.	TOTAL
CALENDAR YEAR	PASSENGER(a)	OTHER	TOTAL	LOCAL	& STATE	FEDERAL	TOTAL	REVENUE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MIL	LIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1980 1981 1982 1983	\$2,556.8 2,701.4 3,077.0 3,171.6	\$248.3 343.8 380.0 332.5	\$2,805.1 3,045.2 3,457.0 3,504.1	3, 3,	511.2 225.7 582.0 194.6	\$1,093.9 1,095.1 1,005.4 827.0	\$3,705.1 4,320.8 4,587.4 5,021.6	\$ 6,510.2 7,366.0 8,044.3 8,525.7
1984 1985	4,447.7 4,574.7	780.5 701.8	5,228.2 5,276.5	5,399.1 5,978.5		995.8 939.6	6,394.9 6,918.1	11,623.1 12,194.6
				LOCAL(b)	STATE			26
1986 1987 1988 1989 1990 1991 1992(c) P 1993	5,113.1 5,114.1 5,224.6 5,419.9 5,890.8 6,037.2 6,152.5 6,319.5	737.3 776.6 840.7 836.7 895.0 766.8 645.9 1,060.0	5,850.4 5,890.7 6,065.3 6,256.6 6,785.8 6,804.0 6,798.4 7,379.5	4,244.5 4,680.6 4,893.1 4,995.4 5,326.8 5,573.4 5,268.1 4,963.5	2,305.6 2,564.6 2,677.1 2,796.3 2,970.6 3,199.5 3,897.5 3,708.1	941.2 955.1 901.1 936.6 970.0 955.9 969.1 1,041.6	7,491.3 8,200.3 8,471.3 8,728.3 9,267.4 9,728.8 10,116.7 9,713.2	13,341.7 14,091.0 14,536.6 14,984.9 16,053.2 16,532.8 16,915.1 17,092.7

P = Preliminary

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TABLE 22 **Trend of Transit Operating Revenue**



Excludes commuter railroad and most rural transit systems before 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.

⁽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 and other operating revenue declined by about \$500 million due to change in accounting procedures at New York City Transit Authority.

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)	1988 1989 1990 1991 1992 1993	33 44 33 34 32 34	36.1 37.0 41.2 40.4 42.9 41.4	5.0 5.0 4.2 3.8 3.2 3.3	54.5 53.4 50.6 51.7 49.7 50.9	4.4 4.6 4.0 4.1 4.2 4.4
Motor Bus Only, 1,000,000 or More	1988 1989 1990 1991 1992 1993	61 51 65 83 74 75	33.5 32.7 26.8 27.6 28.9 30.8	5.4 3.5 6.6 8.2 11.9 20.4	53.8 55.2 60.5 59.6 54.4 43.7	7.3 8.6 6.1 4.6 4.8 5.1
Motor Bus Only, 500,000 - 1,000,000	1988 1989 1990 1991 1992 1993	22 24 27 28 26 25	25.1 24.6 25.8 26.3 26.0 22.9	6.6 6.8 5.0 4.8 4.2 6.5	50.7 52.8 56.6 57.5 58.9 61.1	17.6 15.8 12.6 11.4 10.9 9.5

⁽a), (b), (c), (d) See footnotes Page 65.

TABLE 23 (continued)

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

			PERCE	PERCENT 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	1988 1989 1990 1991 1992 1993	50 55 59 62 58 53	24.6 23.5 21.0 21.1 22.8 22.3	5.5 5.2 5.5 5.5 3.8 5.9	53.2 54.7 57.4 57.9 59.8 58.7	16.7 16.6 16.1 15.5 13.6		
Motor Bus Only, 200,000 or Fewer	1988 1989 1990 1991 1992 1993	102 111 103 93 76 61	19.3 18.7 19.4 19.2 22.7 23.0	6.2 6.6 6.4 7.1 4.9 6.4	54.6 54.5 54.4 54.5 53.4 53.5	19.9 20.2 19.8 19.2 19.0 17.1		

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.

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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.

Trend of Transit Passenger Revenue by Mode, Dollars*

		RAILWAY				DEMAND RESPONSE	OTHER	TOTAL PASSENGER REVENUE
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS			
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1990 1991 (a) 1992 P 1993	\$82.6 97.8 97.8 102.3	\$1,740.8 1,700.6 1,830.3 1,913.3	\$952.2 958.0 970.1 995.5	\$45.8 51.6 48.7 52.4	\$2,966.8 3,098.4 3,058.8 3,083.9	\$40.9 68.9 75.8 94.5	\$61.7 61.9 71.0 77.6	\$5,890.8 6,037.2 6,152.5 6,319.5

P = Preliminary

TABLE 25 **Trend of Transit Fares**

File: FARES

	AVERAGE REVENUE PER	ADULT CAS	H FARE (RA	SE PERIOD)	PERCENT OF	TRANSIT SYST	EMS WITH (c)
CALENDAR YEAR	UNLINKED TRANSIT PASSENGER TRIP(a)(d)	HIGH	LOW	MEAN(b)	PEAK PERIOD SURCHARGES	TRANSFER CHARGES	ZONE FARES
1980 1981 1982 1983	\$.298 .326 .382 .387	\$.75 1.00 1.00 1.00	Free Free Free	\$.403 .473 .528 .549	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 1992	.503 .530 .583 .585 .603 .607 .669 .704 .724	1.50 1.50 2.10 2.75 2.75 2.75 2.75 6.00 6.00	Free Free Free Free Free Free Free	.569 .584 .617 .634 .662 .670 .730 .823 .860	9.5 8.6 8.8 8.4 7.8 6.4 6.5 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

(c) Percents represent a 300-transit-system sample, not estimated for all transit systems.

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^{*}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.

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

⁽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.

⁽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.

File: GOVOP

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

FISCAL	GRANT APPROVALS FOR OPERATING ASSISTANCE(a)
YEAR	TOTAL APPROVALS
	(MILLIONS)
1977 1978 1979	\$ 571.8 685.3 868.5
1980 1981 1982 1983 1984	1,120.7 1,129.5 1,055.5 887.9 922.4
1985 1986 1987 1988 1989	881.1 872.5 820.4 780.0 779.1 765.4
1991 1992 1993	779.4 779.4 768.4 795.7

(a) Federal Transit Act.

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

SECTION V

Capital Expenses

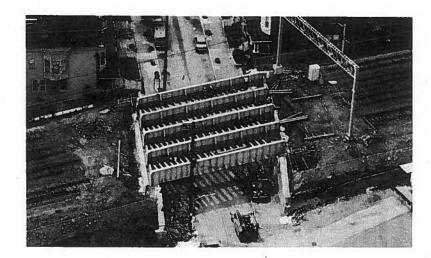


TABLE 27

File: CAPEXMOD

Trend of Transit Capital Expenses by Mode, Dollars

		RAILWAY						
CALENDAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL
YEAR	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS
1992 P 1993	494.9 478.2	2,054.1 1,901.5	1,310.5 1,645.0	34.8 18.8	1,301.9 1,563.6	67.6 98.4	171.9 122.8	5,435.7 5,828.3

P = Preliminary

TABLE 28

File: CAPEXTYP

Trend of Transit Capital Expenses by Type, Dollars

CALENDAR YEAR	ROLLING	FACILITIES	OTHER	TOTAL
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1992 P 1993	1,347.7 1,582.8	2,986.9 2,740.5	1,101.1 1,505.0	5,435.7 5,828.3

P = Preliminary

SECTION VI

Capital Revenue



File: GOVAPP

Trend of Transit Capital Revenues, Dollars

CALENDAR YEAR	FEDERAL ASSISTANCE	STATE ASSISTANCE	LOCAL ASSISTANCE	DIRECTLY GENERATED REVENUE (a)	LOCAL PLUS DIRECTLY GENERATED (a)	TOTAL REVENUE
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1988 1989 1990 1991 1992 P 1993	\$2,519.5 2,426.5 2,872.5 2,773.5 2,673.0 2,416.3	\$ 489.6 665.5 696.8 695.4 801.0 1,334.7	\$ 769.0 802.6 1,176.9 1,012.3 830.0 1,062.0	\$ 86.5 118.3 189.3 1,074.5 1,131.7 1,015.2	\$ 855.5 920.9 1,366.2 2,086.8 1,961.8 2,077.2	\$3,864.6 4,012.9 4,935.5 5,555.7 5,435.7 5,828.3

P = Preliminary

TABLE 31
United States Government Appropriations for Transit, Fiscal Years 1988-1995, Millions of Dollars

PROGRAM	1988	1989	1990	1991	1992	1993	1994	1995
Major Capital Investment Program: Sec. 3 New Starts/Extensions Sec. 3 Rail Modernization Sec. 3 Bus	\$ 980.3	\$ 985.0	\$ 982.0	\$1,115.0	\$1,342.2	\$1,725.0	\$1,785.0	\$1,725.0
	407.8	402.0	419.2	440.0	536.9	721.8	667.9	646.7
	427.0	439.0	430.7	455.0	536.9	666.3	760.1	725.0
	145.5	144.0	132.1	220.0	268.4	336.9	357.0	353.3
Formula Program: Sec. 5/9 Urbanized Area Operating Limit Sec. 5/9 Urbanized Area Capital Only Sec. 18 Rural Capital and Operating Sec. 16(b) Elderly and Disabled Other	1,832.0 804.7 927.7 64.6 35.0	1,705.0 804.7 798.9 66.4 35.0	1,724.8 802.3 822.0 65.6 34.9	1,835.0 802.3 932.3 65.4 35.0	1,983.7 802.3 1,020.5 106.1 54.9	1,700.0 802.3 758.2 90.8 48.6	2,414.9 802.3 1,424.3 129.6 58.7	2,500.0 710.0 1,573.9 132.9 59.2 24.0
Planning and Research:	62.0	60.0	59.9	58.0	109.1	85.0	92.2	92.2
Sec. 8 Planning	45.0	45.0	44.9	45.0	43.7	38.3	41.5	41.5
Sec. 18(h) RTAP	4.8	5.0	5.0	5.0	5.0	4.3	4.6	4.6
All Other Research and Training	12.2	10.0	10.0	8.0	60.4	42.5	46.1	46.1
University Research Centers	5.0	5.0	5.0	5.0	7.0	6.0	6.0	6.0
Interstate Transfer	123.5	200.0	159.5	160.0	160.0	75.0	45.0	48.0
Washington DC Metro	180.5	168.0	84.7	64.1	124.0	170.0	200.0	200.0
FTA Administration	31.9	31.9	31.8	32.6	37.0	38.6	39.5	43.1
TOTAL	3,215.2	3,154.9	3,047.7	3,269.7	3,763.0	3,799.6	4,582.6	4,614.3

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

⁽a) Includes non-governmental revenue, subsidies from non-transit sectors of a transit system's operations, and, beginning in 1991, taxes levied directly by a transit system and bridge and tunnel tolls.

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

FEDERAŁ Fiscal Year	BUS (a)	RAPID TRANSIT (b)	COMMUTER RAIL	OTHER (c)	TOTAL
· ·	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1979 1980 1981 1982 1983	\$ 544.6 935.8 994.3 854.4 1,138.4	\$1,318.7 1,474.3 1,546.1 1,307.1 1,455.5	\$ 232.6 340.4 373.5 323.0 465.4	\$ 5.7 36.6 31.8 59.6 102.3	\$2,101.6 2,787.1 2,945.7 2,544.1 3,161.6
	BUS	RAIL MODERNIZATION	NEW STARTS	OTHER (d)	TOTAL
1984 1985 1986 1987 1988 1989 1990 1991 1992 1993	1,039.6 921.2 1,023.6 862.8 820.0 789.9 760.9 826.0 941.8 1,295.2	1,110.0 1,080.2 869.1 975.5 1,145.7 1,105.1 998.9 1,029.2 1,153.8 1,146.0	709.9 490.2 1,228.3 617.6 538.2 671.0 603.7 515.2 492.5 996.5	16.5 18.6 17.2 18.8 16.9 23.5 16.5 26.0 24.9	2,876.0 2,510.3 3,138.2 2,474.7 2,520.8 2,589.5 2,380.0 2,396.4 2,612.9 3,465.1

*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.

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

TABLE 33

File: CAPPROG

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

FEDERAL FISCAL YEAR	DISCRETIONARY (a)	FORMULA (b)	OTHER (c)	TOTAL
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1979	\$1,225.0	\$ 255.6	\$ 620.9	\$2,101.6
1980	1.655.0	431.2	701.0	2,787.1
1981	1,655.0 1,925.0	361.1	659.6	2,945.7
1982	1,634.5	297.7	611.8	2.544.1
1983	1,640.9	863.1	657.7	3,161.6
1984	1,096.0	1,339.2	440.8	3,161.6 2,876.0
1985	727.7	1,491.6	291.1	2,510.3
1986	1,132.3	1,324.8	681.1	3,138.2
1987	694.5	1,376.5	403.7	2.474.7
1988	875.4	1,380.6	264.8	2,520.8
1989	1,199.7	967.7	422.1	2,589.5
1990	1,169.4	962.6	248.0	2,380.0
1991	1,108.4	1,035.0	253.0	2,396.4
1992	1,027.3	1,207.7	377.9	2,612.9
1993	1,792.8	1,426.5	245.8	3,465.1

^{*}Net amounts, excludes cancelled and reduced projects.

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

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⁽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, Interstate Transfer, and Section 18.

⁽a) Federal Transit Act: Section 3 and Section 16(b) 2.

⁽b) Federal Transit Act: Section 5, Section 9A, Section 9, and Section 18.

⁽c) Federal Aid Highway Act of 1973, as amended; Federal Aid Urban Systems and Interstate Transfer; and National Capital Transportation Act of 1969, as amended.

TABLE 34 File: FLEXFUND

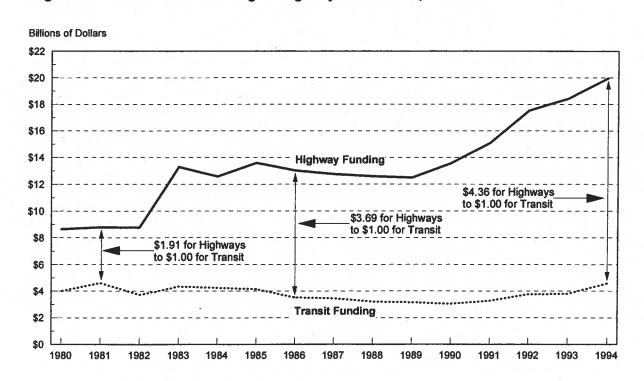
Flexible Highway Funds Obligated to Transit Under Provisions of Intermodal Surface Transportation Efficiency Act of 1991

FISCAL YEAR	CONGESTION MITIGATION & AIR QUALITY IMPROVEMENT PROGRAM	SURFACE TRANSPORTATION PROGRAM	INTERSTATE SUBSTITUTE & EARMARKED FEDERAL HIGHWAY ADMINISTRATION FUNDS	TOTAL
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1992 1993	\$121.2 288.9	\$ 20.7 125.7	\$101.6 14.0	\$243.5 428.6

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

TABLE 35

Divergence of Annual Federal Funding for Highways and Transit, 1980-1994



Source: APTA, Transit Funding Needs, 1995-2004, 1994.

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SECTION VII

Capital and Operating Funding Needs

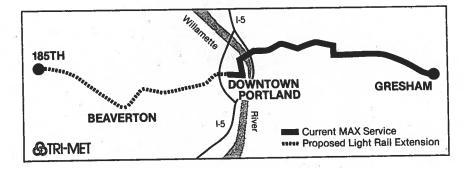
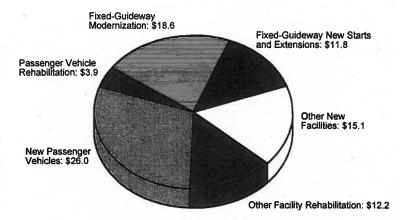


TABLE 35

Transit Capital Investment Needs to Maintain Current Service, 1995-2004, Billions of Dollars



Total Needs: \$87.6 Billion

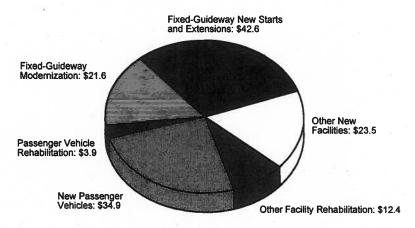
"Maintain Current Service" includes:

- (a) operation and maintenance of current service including normal replacement of vehicles and equipment,
- (b) improvements required by federal, state, and local mandates including the Clean Air Act and the Americans with Disabilities Act,
- (c) service expansion to meet increased demand that falls within your current service policy such as providing service to all retail centers of a minimum size or all residential areas within a geographic area,
- (d) construction or renovation of facilities necessary to maintain your current operating quality, and
- (e) continuation or completion of all modernization or expansion programs, such as new fixed guideways, that are underway or are planned for implementation with identified funding.

Source: APTA, Transit Funding Needs, 1995-2004, 1994

TABLE 36

Transit Capital Investment Needs to Expand Service, 1995-2004, Billions of Dollars



Total Needs: \$138.8 Billion

"Expand Service" includes:

- (a) all amounts reported in Table 35 (Maintain Current Service), plus
- (b) all additional planned modernization and expansion of facilities and service, whether included in a formal planning process or not, that could be accomplished from 1995 through 2004 if adequate funds were made available.

Source: APTA, Transit Funding Needs, 1995-2005, 1994

Capital Investment Needs, 1995-2004 (Millions of 1993 Dollars, Not Adjusted For Inflation)

CATEGORY	MAINTAIN CURRENT SERVICE	EXPAND SERVICE
New Passenger Vehicles:		
Regular Replacement and Growth New Starts and Extensions	21,419.0 1,001.8	24,831.6 5,629.8
Fixed-Guideway Modernization	3,603.1	4,487.9
Total New Passenger Vehicles	26,023.9	34,949.3
Fixed-Guideway New Starts and Extensions:		
Without New Vehicles	11,779.5	45,569.7
New Vehicle Needs	1,001.8	5,629.8
Total Including New Vehicles	12,781.3	47,999.6
Total Other New Facilities and Capital Items	15,109.3	23,468.2
Passenger Vehicle Rehabilitiation:		(F)
Regular Rehabilitation Projects	910.7	917.0
Fixed-Guideway Modernization	2,955.1	2,960.7
Total Passenger Vehicle Rehabilitation	3,865.8	3,877.8
Fixed-Guideway Modernization:	4	
Without Vehicle Costs	18,609.8	21,587.9
New Vehicle Needs	3,603.1	4,487.9
Vehicle Rehabilitation Needs	2,955.1	2,960.7
Total Fixed-Guideway Modernization	25,168.0	29,036.5
Total Facility and Other Capital Item Rehabilitation	12,231.0	12,358.6
Total Less All Duplication	87,619.4	138,811.5

Source: APTA, Transit Funding Needs, 1995-2004, 1994.

TABLE 38

File: OREVNEED

Operating Revenue Needs, 1995-2004 (Millions of 1993 Dollars, Not Adjusted For Inflation)

		
EXPENSE CLASS	MAINTAIN CURRENT SERVICE	EXPAND SERVICE
BY FU	UNCTION CLASS	
Vehicle Operations Maintenance General Administration Purchased Transportation Total Operating Revenue Need	91,124.0 60,819.0 40,546.0 16,511.0 209,000.0	100,866.9 67,321.8 44,881.2 18,276.4 231,346.3
BY (OBJECT CLASS	
Labor Including Fringe Benefits Materials and Supplies Purchased Transportation Services, Utilities, and Insurance	147,930.2 18,977.2 16,511.0 25,581.6	163,746.9 21,006.2 18,276.4 28,316.8
Total Operating Revenue Need	209,000.0	231,346.3

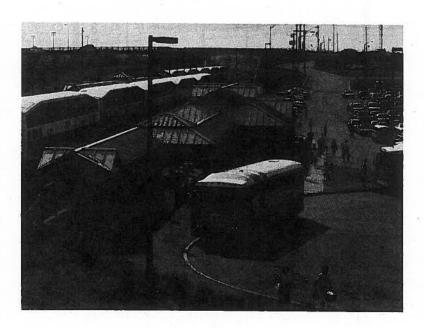
Note: Total amounts estimated from survey data, amounts for specific uses estimated from historical data.

Source: APTA, Transit Funding Needs, 1995-2004, 1994.

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SECTION VIII

Ridership and Transit Usage



File: BUSTRIPS

Trend of Transit Passenger Trips (a)

		RAILWAY	* (5-64) A =					TOTAL
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)
1980 1981 1982 1983	133 123 136 137	2,108 2,094 2,115 2,167	280 268 259 262	142 138 151 160	5,837 5,594 5,324 5,422		67 67 67 55	8,567 8,284 8,052 8,203
1984 1985 1986 1987 1988 1989 1990 1991 1992 P 1993	135 132 130 133 154 162 175 184 188	2,231 2,290 2,333 2,402 2,308 2,542 2,346 2,172 2,207 2,209	267 275 306 311 325 330 328 318 314 322	165 142 139 141 136 130 126 125 126	5,908 5,675 5,753 5,614 5,590 5,620 5,677 5,624 5,517 5,371	62 59 63 64 73 70 68 71 72 75	61 63 53 70 80 77 79 81 77 76	8,829 8,636 8,777 8,735 8,666 8,931 8,799 8,575 8,501 8,362

P = Preliminary

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
15 AR 17	(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 1992 P 1993	3,488 3,338 3,297 3,197 3,178 3,185 3,604 3,537 3,447 3,302	1,627 1,557 1,586 1,504 1,519 1,512 1,270 1,261 1,261 1,244 1,248	294 295 333 312 306 322 230 233 232 232	210 214 239 221 222 226 227 230 239 239	90 86 99 96 92 95 89 95 95 95	199 185 199 284 273 280 257 268 260 254	5,908 5,675 5,753 5,614 5,590 5,620 5,677 5,624 5,517 5,371

P = Preliminary

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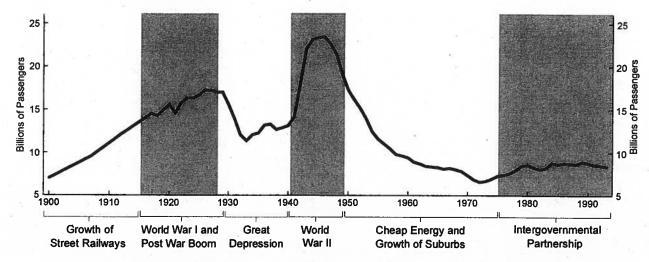
TABLE 40

⁻⁻ Data not available

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

⁽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 41
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 42
Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1993 (a)

File: TRIPSYS

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NAT TOTAL
	SYSTEM TOTAL (50 LARGE	ST SYSTEMS)		
1	Metropolitan Transportation Authority	New York, NY	1,980,424	23.7
	MTA New York City Transit	New York, NY	1,798,879	21.5
	MTA Long Island Railroad	New York, NY	92,462	1.1
	MTA Metro-North Railroad	New York, NY	59, 175	0.7
	MTA Long Island Bus	New York, NY	24,767	0.3
	MTA Staten Island Railway	New York, NY	5,141	0.1
2	Regional Transportation Authority	Chicago, IL	565,396	6.8
	Chicago Transit Authority	Chicago, IL	463, 194	5.5
	METRA	Chicago, IL	64,068	0.8
	PACE Suburban Bus	Chicago, IL	38,134	0.5
3	Los Angeles County Metropolitan Transp. Auth.	Los Angeles, CA	391,399	4.7
4	Washington Metropolitan Area Transit Authority	Washington, DC	353,278	4.2
5	Massachusetts Bay Transportation Authority	Boston, MA	336,934	4.0
6 7	Southeastern Pennsylvania Transportation Authority	Philadelphia, PA	330,004	3.9
7	San Francisco Municipal Railway	San Francisco, CA	230,322	2.8
8	New Jersey Transit Corporation	New York, NY	223,494	2.7
9	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	138,060	1.7
10	Mass Transit Administration, Maryland DOT	Baltimore, MD	105,598	1.3
11	New York City Department of Transportation	New York, NY	102,778	1.2
12	Metro-Dade Transit Agency	Miami, FL	92,951	1.1
13	Metropolitan Transit Authority of Harris County	Houston, TX	88,328	1.1
14	Municipality of Metropolitan Seattle	Seattle, WA	83,712	1.0

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATI
200	SYSTEM TOTAL (50 LARGEST SYSTEM	S), continued.		
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 31 33 33	San Francisco Bay Area Rapid Transit District Port Authority of Allegheny County City & County of Honolulu Dept. of Transp. Services Metropolitan Transit Commission City of Detroit Department of Transportation Port Authority of New York and New Jersey Regional Transit Authority of Orleans & Jefferson Alameda-Contra Costa Transit District Tri-County Metropolitan Transp. Dist. of Oregon Regional Transportation District Dallas Area Rapid Transit Milwaukee County Department of Transportation Greater Cleveland Regional Transit Authority Santa Clara County Transportation Agency San Diego Metropolitan Transit Development Board San Diego Transit Corporation San Diego Trolley VIA Metropolitan Transit Orange County Transportation Authority Bi-State Development Agency Connecticut Transit City of Phoenix Public Transit Department	San Francisco, CA Pittsburgh, PA Honolulu, HI Minneapolis, MN Detroit, MI New York, NY New Orleans, LA San Francisco, CA Portland, OR Denver, CO Dallas, TX Milwaukee, WI Cleveland, OH San Jose, CA San Diego, CA San Antonio, TX Los Angeles, CA St. Louis, MO Hartford, CT Phoenix, AZ	80,588 79,482 76,730 66,598 66,419 64,140 62,705 61,195 60,674 60,367 55,034 51,660 35,156 16,504 44,617 43,760 40,758 32,232	1.0 1.0 0.9 0.8 0.8 0.7 0.7 0.7 0.7 0.6 0.6 0.6 0.5 0.5

TABLE 42 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1993 (a)

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATI
	SYSTEM TOTAL (50 LARGEST	SYSTEMS), continued.	11 6	1
35	Westchester County Transit System	New York, NY	31,847	0.4
36	Niagara Frontier Transportation Authority	Buffalo, NY	31,310	0.4
37	Capital Metropolitan Transportation Authority	Austin, TX	26,184	0.3
38	Southwest Ohio Regional Transit Authority	Cincinnati, OH	26,009	0.3
36 37 38 39 40	Utah Transit Authority	Salt Lake City, UT	26,009 25,075	0.3
	Long Beach Transit	Los Angeles, CA	22,919	0.3
41	Broward County Division of Mass Transit	Fort Lauderdale, FL	22,300	0.3
42	Transit Authority of River City	Louisville, KY	22,204	0.3
42	Sacramento Regional Transit District	Sacramento, CA	21,291 19,486	0.3
44	Citizens Area Transit	Las Vegas, NV	19,486	0.2
45	San Mateo County Transit District	San Francisco, CA	19,307 18,835	0.2
46	Greater Richmond Transit Company	Richmond, VA	18,835	0.2
47 48 49	City of Tucson Mass Transit System	Tucson, AZ	18,452	0.2
48	Santa Monica Municipal Bus Lines	Los Angeles, CA	18,006	0.2
49	Montgomery County Transit Services	Washington, DC	16,973	0.2
50	Central Ohio Transit Authority	Columbus, OH	16,690	0.2
	MOTOR BUS (50 LARGEST	SYSTEMS)		
1	Metropolitan Transportation Authority	New York, NY	645,323	12.0
	MTA New York City Transit	New York, NY	620,556	11.6
	MTA Long Island Bus	New York, NY	24,767	0.5

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATL
	MOTOR BUS (50 LARGEST SY	STEMS), continued.		
2 3	Los Angeles County Metropolitan Transp. Auth.	Los Angeles, CA	376,783	7.0
3	Regional Transportation Authority	Chicago, IL	362,841	6.8
	Chicago Transit Authority	Chicago, IL	326,656	6.1
	PACE Suburban Bus	Chicago, IL	36,185	0.7
4	New Jersey Transit Corporation	New York, NY	174,700	3.3
5	Southeastern Pennsylvania Transportation Authority	Philadelphia, PA	166,640	3.1
6	Washington Metropolitan Area Transit Authority	Washington, DC	161,850	3.0
7	San Francisco Municipal Railway	San Francisco, CA	99 172	1.8
8	Massachusetts Bay Transportation Authority	Boston, MA	99,172 94,377	1.8
9	Metropolitan Transit Authority of Harris County	Houston, TX	87,328	1.6
10	Mass Transit Administration, Maryland DOT	Baltimore, MD	86,063	1.6
11	New York City Department of Transportation	New York, NY	84,492	1.6
12	City & County of Honolulu Dept. of Transp. Services	Honolulu, HI	76 142	1.4
13	Metro-Dade Transit Agency	Miami, FL	76,142 74,123	1.4
14	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	73,021	1.4
15	Port Authority of Allegheny County	Pittsburgh, PA	67,331	1.3
16	Metropolitan Transit Commission	Minneapolis, MN	66,598	1.2
17	City of Detroit Department of Transportation	Detroit, MI	66,419	1.2
18	Alameda-Contra Costa Transit District	San Francisco, CA	61,195	1.1
15 16 17 18 19 20 21	Regional Transportation District	Denver, CO	60,180	1.1
20	Municipality of Metropolitan Seattle	Seattle, WA	58,243	1.1
21	Regional Transit Authority of Orleans and Jefferson	New Orleans, LA	56,101	1.0

TABLE 42 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1993 (a)

23 Mi 24 Tr 25 Sar 26 VII 27 Gr 28 Or 29 Bi 30 Sar 31 Cor 32 Cir 33 Wes 34 So 35 Cap	MOTOR BUS (50 LARGEST SYSTEMS las Area Rapid Transit waukee County Department of Transportation -County Metropolitan Transp. Dist. of Oregon ta Clara County Transportation Agency Metropolitan Transit eater Cleveland Regional Transit Authority ange County Transportation Authority State Development Agency Diego Metro Transit Devel Bd (S.D. Transit Corp)	Dallas, TX Milwaukee, WI Portland, OR San Jose, CA San Antonio, TX Cleveland, OH Los Angeles, CA St. Louis, MO San Diego, CA	55,482 54,302 52,485 45,672 43,666 43,000 41,754 40,486	1.0 1.0 1.0 0.9 0.8 0.8 0.8
23 Mi	Lwaukee County Department of Transportation i-County Metropolitan Transp. Dist. of Oregon ita Clara County Transportation Agency if Metropolitan Transit eater Cleveland Regional Transit Authority inge County Transportation Authority State Development Agency if Diego Metro Transit Devel Bd (S.D. Transit Corp)	Milwaukee, WI Portland, OR San Jose, CA San Antonio, TX Cleveland, OH Los Angeles, CA St. Louis, MO	54,302 52,485 45,672 43,666 43,000 41,754 40,486	1.0 1.0 0.9 0.8 0.8 0.8
24 Tr 25 Sain 26 VI/ 27 Gre 28 Or 29 Bi 30 Sain 31 Cor 32 Ci 33 Wes 34 Soc 35 Cap	i-County Metropolitan Transp. Dist. of Oregon ta Clara County Transportation Agency Metropolitan Transit eater Cleveland Regional Transit Authority ange County Transportation Authority State Development Agency Diego Metro Transit Devel Bd (S.D. Transit Corp)	Portland, OR San Jose, CA San Antonio, TX Cleveland, OH Los Angeles, CA St. Louis, MO	52,485 45,672 43,666 43,000 41,754 40,486	1.0 0.9 0.8 0.8 0.8
25 San 26 VII 27 Gre 28 Ora 29 Bi 30 San 31 Cor 32 Ci 33 Wes 34 Soc 35 Cap	nta Clara County Transportation Agency Metropolitan Transit eater Cleveland Regional Transit Authority ange County Transportation Authority State Development Agency Diego Metro Transit Devel Bd (S.D. Transit Corp)	San Jose, CA San Antonio, TX Cleveland, OH Los Angeles, CA St. Louis, MO	45,672 43,666 43,000 41,754 40,486	0.9 0.8 0.8 0.8
26 VIII 27 Gr 28 Ora 29 Bi 30 Sar 31 Cor 32 Cit 33 Wes 34 Soc	Metropolitan Transit eater Cleveland Regional Transit Authority ange County Transportation Authority State Development Agency Diego Metro Transit Devel Bd (S.D. Transit Corp)	San Antonio, TX Cleveland, OH Los Angeles, CA St. Louis, MO	43,666 43,000 41,754 40,486	0.8 0.8 0.8
27 Green 29 Bi- 30 Sarr 31 Corr 32 Ciri 33 Wes 34 Soc 35 Cap 37 C	eater Cleveland Regional Transit Authority ange County Transportation Authority State Development Agency Diego Metro Transit Devel Bd (S.D. Transit Corp)	Cleveland, OH Los Angeles, CA St. Louis, MO	43,000 41,754 40,486	0.8 0.8
28 Orr 29 Bi 30 Sar 31 Cor 32 Cit 33 West 34 Sot 35 Cap	ange County Transportation Authority State Development Agency Diego Metro Transit Devel Bd (S.D. Transit Corp)	Los Angeles, CA St. Louis, MO	41,754 40,486	0.8
29 Bi 30 Sai 31 Cor 32 Cii 33 Wes 34 Soc 35 Cap	State Development Agency Diego Metro Transit Devel Bd (S.D. Transit Corp)	St. Louis, MO	40,486	0.8
30 Sar 31 Cor 32 Cir 33 Wes 34 Soc 35 Cap	n Diego Metro Transit Devel Bd (S.D. Transit Corp)		40,486	0.8
31 Cor 32 Cir 33 Wes 34 Sou 35 Cap	i Diego Metro Transit Devel Bd (S.D. Transit Corp)	San Diego. CA	75 154	1 0 7
32 Ci 1 33 Wes 34 Soc 35 Cap		1	35,156	0.7
33 Wes 34 Sou 35 Cap	necticut Transit	Hartford, CT	32,871	0.6
34 Sou 35 Cap	y of Phoenix Public Transit Department	Phoenix, AZ	31,922	0.6
35 Cap	tchester County Transit System	New York, NY	31,709	0.6
33 Lar	ithwest Ohio Regional Transit Authority	Cincinnati, OH	25,806	0.5
	pital Metropolitan Transportation Authority	Austin, TX	25,503	0.5
37 116	h Transit Authority	Salt Lake City, UT	24,807	0.5
3/ N16	gara Frontier Transportation Authority	Buffalo, NY	23,101	0.4
30 Lur	g Beach Transit	Los Angeles, CA	22,635	0.4
	Insit Authority of River City	Louisville, KY	21,915	0.4
	ward County Division of Mass Transit	Fort Lauderdale, FL	21,726	0.4
	izens Area Transit	Las Vegas, NV	19,486	0.4
42 Sar 43 Gre	Mateo County Transit District	San Francisco, CA Richmond, VA	19,191 18,725	0.4

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATE TOTAL
	MOTOR BUS (50 LARGEST SYSTEMS), continued.		
44	City of Tucson Mass Transit System	Tucson, AZ	18, 181	0.3
45	Santa Monica Municipal Bus Lines	Los Angeles, CA	18,006	0.3
46	Montgomery County Transit Services	Washington, DC	17,163	0.3
47	Central Ohio Transit Authority	Columbus, OH	16,607 15,169	0.3
48 49	Kansas City Area Transportation Authority	Kansas Cty, MO	15,169	0.3
49	City of El Paso Mass Transit Department	El Paso, TX	15,065	0.3
50	Sacramento Regional Transit District	Sacramento, CA	14,519	0.3
	HEAVY RAIL			
1	Metropolitan Transportation Authority	New York, NY	1,183,262	53.5
	MTA New York City Transit	New York, NY	1,178,121	53.3
	MTA Staten Island Railway	New York, NY	5,141	0.2
2	Washington Metropolitan Area Transit Authority	Washington, DC	191,428	8.7
	Massachusetts Bay Transportation Authority	Boston, MA	190,330	8.6
4	Regional Transportation Authority (Chicago TA)	Chicago, IL	135,370	6.1
5	Southeastern Pennsylvania Transportation Authority	Philadelphia, PA	94,332	4.3
6	San Francisco Bay Area Rapid Transit District	San Francisco, CA	78,302	3.5
7	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	65,005	2.9
8 9	Port Authority of New York and New Jersey	New York, NY	61,815	2.8
9	Metro-Dade Transit Agency	Miami, FL	14,818	0.7
10	Port Authority Transit Corp. of PA & NJ	Philadelphia, PA	11,232	0.5

TABLE 42 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1993 (a)

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATI
***	HEAVY RAIL, continu	ied.		
11 12 13	Mass Transit Administration, Maryland DOT Greater Cleveland Regional Transit Authority Los Angeles County Metropolitan Transp. Auth. (b)	Baltimore, MD Cleveland, OH Los Angeles, CA	11,114 6,563 1,983	0.5 0.3 0.1
	LIGHT RAIL			USE .
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	San Francisco Municipal Railway Southeastern Pennsylvania Transportation Authority Massachusetts Bay Transportation Authority San Diego Metropolitan Transit System (S.D. Trolley) Los Angeles County Metropolitan Transp. Auth. Port Authority of Allegheny County Niagara Frontier Transit Metro System Tri-County Metropolitan Transp. Dist. of Oregon Sacramento Regional Transit District Regional Transit Authority of Orleans and Jefferson Santa Clara County Transportation Agency Greater Cleveland Regional Transit Authority Mass Transit Administration, Maryland DOT New Jersey Transit Corporation Tandy Corporation McKinney Avenue Transit Authority	San Francisco, CA Philadelphia, PA Boston, MA San Diego, CA Los Angeles, CA Pittsburgh, PA Buffalo, NY Portland, OR Sacramento, CA New Orleans, LA San Jose, CA Cleveland, OH Baltimore, MD New York, NY Dallas, TX Dallas, TX	39,332 38,066 26,704 16,504 11,809 8,837 8,209 7,771 6,571 6,571 6,440 6,245 4,114 3,457 2,987 800 (f)	20.9 20.2 14.2 8.8 6.3 4.7 4.4 4.1 3.5 3.4 2.2 1.8 0.4

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATI
	LIGHT RAIL, contin	ued.	A A	
17 18 19	Municipality of Metropolitan Seattle Island Transit City of Detroit Department of Transportation	Seattle, WA Galveston, TX Detroit, MI	183 121 (f) 50 (f)	0.1 0.1 0.0
20	Memphis Area Transit Authority (b) Bi-State Development Agency (d) Regional Transportation District (d)	Memphis, TN St. Louis, MO Denver, CO	50 (f) NA NA	O.O NA NA
	COMMUTER RAIL (:)		
1	Metropolitan Transportation Authority MTA Long Island Railroad MTA Metro-North Railroad	New York, NY New York, NY New York, NY	151,581 92,462 59,119	47.1 28.7 18.4
2 3 4	Regional Transportation Authority (METRA) New Jersey Transit Corporation Massachusetts Bay Transportation Authority	Chicago, IL New York, NY Boston, MA	64,068 45,806 21,596	19.9 14.4 6.7
5 6 7	Southeastern Pennsylvania Transportation Authority Peninsula Corridor Joint Powers Board Mass Transit Administration, Maryland DOT	Philadelphia, PA San Francisco, CA Baltimore, MD	19,019 5,746 4,747	5.9 1.8 1.5
8	Tri-County Commuter Rail Authority Northern Indiana Commuter Transportation District Virginia Railway Express	Miami, FL Chicago, IL Washington, DC	2,697 2,531 1,394	0.8 1.0 0.4
10 11	Southern California Regional Rail Authority (b)	Los Angeles, CA	939	0.3

TABLE 42 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1993 (a)

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATI
	COMMUTER RAIL (c), cont	inued.	· · · · · · · · · · · · · · · · · · ·	- T
12 13 14 15	Connecticut Department of Transportation California Department of Transportation (g) Pennsylvania Department of Transportation Orange County Transportation Authority (g)	New Haven, CT Los Angeles, CA Philadelphia, PA Los Angeles, CA	274 198 190 170	0.1 0.1 0.1 0.1
	TROLLEYBUS			
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	San Francisco, CA Seattle, WA Philadelphia, PA Boston, MA Dayton, OH	81,808 22,644 11,051 3,123 2,431	67.6 18.7 9.1 2.6 2.0
	PUBLICLY SUPPORTED URBAN FER	RY BOAT (e)		
1 2 3 4 5 6 7	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	New York, NY Seattle WA Galveston, TX New Orleans, LA New York, NY San Francisco, CA New Orleans, LA	17,988 13,008 5,700 (f) 3,488 (f) 2,325 1,466 1,000 (f)	37.7 27.3 12.0 7.3 4.9 3.1 2.1

RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATL TOTAL
	PUBLICLY SUPPORTED URBAN FER	RY BOAT (e), continued.		P P
8 9 10 11 12 13 14	Casco Bay Island Transit District Tidewater Transportation District Commission Massachusetts Bay Transportation Authority Vallejo Transit System Alameda-Oakland Ferry Service Connecticut Department of Transportation Pierce County Ferry Kitsap Transit	Portland, ME Norfolk, VA Boston, MA San Francisco, CA San Francisco, CA Hartford, CT Tacoma, WA Bremerton, WA	643 (f) 498 407 237 (f) 237 (f) 213 126 (f) 95	1.3 1.0 0.9 0.5 0.5 0.4 0.3
	OTHER PUBLICLY SUPPORT	ED RAIL MODES	22	
1 2 3 4 5 6 7 8 9	San Francisco Municipal Railway (Cable car) Metro-Dade Transit Agency (Automated guideway) West Virginia University (Automated guideway) Detroit Transit Corporation (Automated guideway) Municipality of Metropolitan Seattle (Monorail) Port Authority of Allegheny County (Inclined plane) Roosevelt Island Aerial Tramway (Aerial tramway) Chattanooga Area Reg. Transp. Auth. (Inclined plane) Harbour Island People Mover (Automated guideway) Jacksonville Transport. Auth. (Automated guideway)	San Francisco, CA Miami, FL Morgantown, WV Detroit, MI Seattle, WA Pittsburgh, PA New York, NY Chattanooga, TN Tampa, FL Jacksonville, FL	9,606 2,344 2,100 (f) 2,000 (f) 1,950 (f) 1,409 1,100 (f) 406 400 (f) 301	43.9 10.7 9.6 9.1 8.9 6.4 5.0 1.9 1.8 1.4

TABLE 42 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1993 (a)

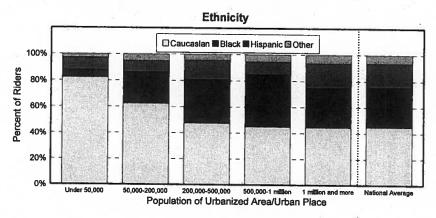
RANK	TRANSIT SYSTEM	URBANIZED AREA	NO. TRIPS (THOUSANDS)	% NATE
ъп	OTHER PUBLICLY SUPPORTED RA	IL MODES, continued.		
11 12	Cambria County Transit Authority (Inclined plane) Fenelon Place Elevator (Inclined plane)	Johnstown, PA Dubuque, IA	180 75 (f)	0.8

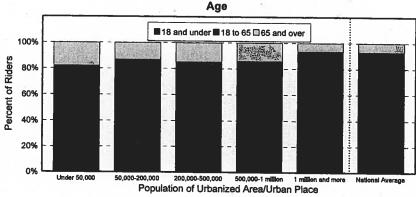
NA = Not available.

3

- (a) Data includes both directly operated and purchased service; some numbers are estimates.
 (b) Opened in fiscal year 1993; data for less than 12 months.
 (c) Excludes commuter-type services operated independently by Amtrak.
 (d) Opened in fiscal year 1994 or fiscal year 1995.
 (e) Excludes 13 private urban ferry companies and over 200 international, rural, island, and urban park ferries. Percents of national total will not add to 100.0 due to such exclusion.
- (f) APTA estimate; no data reported.
- (g) Service transferred to Southern California Regional Rail Authority in fiscal 1994.

TABLE 43
Profiles of Transit Riders





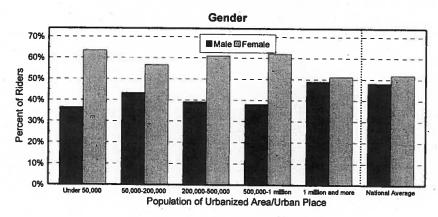
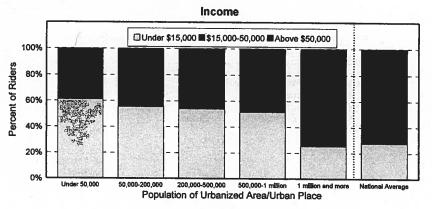


TABLE 43
Profiles of Transit Riders (continued)



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.

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	0.2
All other	0.7
Total	100.0

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

TABLE 45

File: HIGHEST%

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

CITY	PER CENT USING PUBLIC TRANSPORTATION
New York, NY	53.4%
Hoboken, NJ Jersey City, NJ	51.0
Jersey City, NJ	36.7 36.6
Washington, DC	36.6
San Francisco, CA	55.5
Boston, MA	31.5
Chicago, IL	31.5 29.7 28.7
Philadelphia, PA	28.7
Atlantic City, NJ	26.2
Arlington, VA	25.4
Newark, NJ	24.6 23.5 22.2
Cambridge, MA	23.3
Pittsburgh, PA	22.0
Baltimore, MD	20.9
Evanston, IL	20.0
Atlanta, GA White Plains, NY	19.1
Comdon Ni	18.1
Camden, NJ Oakland, CA	17.9
Hartford, CT	17.1
New Orleans, LA	16.9
Idaho Falls, ID	16.5
Minneapolis, MN	16.0
Seattle, WA	15.9
Berkeley, CA	15.2
Albany, NY	15.1

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

Trend of Passenger Miles

		RAILWAY		¥1				
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)
1980 1981 1982 1983	381 346 379 391	10,558 10,244 10,049 10,350	6,516 6,236 6,027 6,097	219 254 295 325	21,790 21,012 19,987 20,047		390 390 387 392	39,854 38,482 37,124 37,602
1984 1985 1986 1987 1988 1989 1990 1991 1992 P 1993	416 350 361 405 477 509 571 662 701 705	10,111 10,427 10,649 11,198 11,300 12,030 11,475 10,528 10,737 10,740	6,207 6,534 6,723 6,818 6,964 7,211 7,082 7,344 7,320 6,939	364 306 305 223 211 199 193 195 199 188	21,595 21,161 21,395 20,970 20,753 20,768 20,981 21,090 20,336 20,075	349 364 402 374 441 428 431 454 495 504	382 439 369 360 434 458 410 430 453 474	39,424 39,581 40,204 40,348 40,580 41,603 41,143 40,703 40,7241 39,625

P = Preliminary

106

(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 47
Trend of Vehicle Miles Operated

File: VEHMILE

CALENDAR	LIGHT RAIL	RAILWAY HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL VEHICLE MILES OPERATED(a)	TOTAL MOTOR BUS MILE EQUIVALENTS(b)
TEAK	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1980 1981 1982 1983	17.5 16.5 16.1 16.0	384.7 420.1 429.1 407.5	179.0 176.0 175.0 177.0	13.0 11.9 13.7 15.0	1,677.2 1,684.6 1,668.8 1,677.8		15.4 15.4 15.4 12.6	2,286.8 2,324.5 2,318.1 2,305.9	
1984 1985 1986 1987 1988 1989 1990 1991 1991 1992 P 1993	16.8 16.5 17.0 18.4 20.8 21.3 24.2 27.6 28.6 27.7	435.8 450.8 475.8 490.2 517.4 532.1 536.7 527.2 525.4 525.7	167.9 182.7 188.6 188.9 202.2 209.6 212.7 214.9 218.8 223.8	15.3 15.5 14.7 15.0 14.7 14.5 13.8 13.6 13.6	1,844.7 1,862.9 2,002.3 2,079.4 2,079.3 2,109.3 2,129.9 2,166.6 2,178.0 2,205.7	256.1 247.4 274.5 250.0 288.9 300.4 305.9 335.0 363.5 359.9	13.0 14.9 12.9 13.3 16.0 15.7 18.3 21.5 26.4 31.0	2,749.5 2,790.7 2,985.8 3,055.2 3,157.3 3,202.9 3,241.5 3,306.4 3,354.6 3,387.4	3,461.9 3,552.1 3,765.7 3,879.1 4,011.2 4,080.4 4,127.5 4,159.1 4,187.0 4,228.6

P = Preliminary

-- Data not available

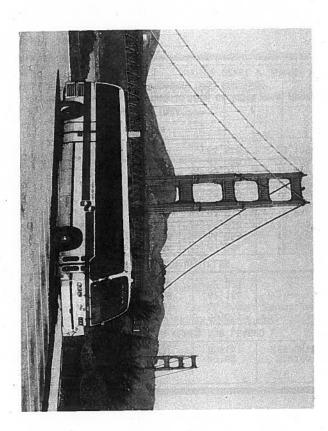
⁽a) Prior to 1984 excludes demand response and most rural and smaller systems funded via Sections 18 and 16(b)2, Federal Transit Act. Series not continuous between 1983 and 1984.

⁽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.

Trend of Vehicle Hours Operated

							138	
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL VEHICLE HOURS
	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1986 1987 1988 1989 1990 1991 1992 P 1993	1.5 1.6 1.8 1.9 2.0 2.2 2.2	25.6 26.0 27.4 28.2 28.4 24.6 25.6 25.6	5.8 5.8 6.4 6.5 6.4 6.5 6.5	1.9 1.9 1.8 1.8 1.8 1.8	153.7 160.3 160.5 161.4 163.0 163.8 165.1 166.3	21.7 21.9 23.5 24.0 24.4 26.3 28.7 27.0	0.8 1.1 1.2 1.0 1.4 1.4 1.6	211.0 218.6 222.7 224.9 227.5 226.5 231.5

P = Preliminary



Vehicles and Equipment

SECTION IX

Transit Passenger Vehicles

		RAILWAY					<u> </u>	
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	<u> </u>	
1980 1981 1982 1983	1,013 1,075 1,016 1,013	9,641 9,749 9,815 9,891	4,500 4,465 4,497 4,423	823 751 763 686	59,411 60,393 62,114 62,093		ii	75,388 76,433 78,205 78,106
			ACTIVE	PASSENGER VI	HICLES			
1984 1985 1986 1987 1988 1989 1990 1991 1992 P 1993	733 717 697 766 831 755 913 1,095 1,058 1,025	9,083 9,326 10,386 10,168 10,539 10,506 10,419 10,331 10,245 10,261	4,075 4,035 4,440 4,686 4,649 4,472 4,415 4,370 4,413 4,494	664 676 680 671 710 725 832 752 907 851	67,294 64,258 66,218 63,017 62,572 58,919 58,714 60,377 63,080 64,648	14,164 14,490 15,346 15,944 16,812 15,856 16,471 17,879 20,695 23,105	888 867 942 875 1,096 1,060 1,197 1,595 1,853 2,280	96,901 94,368 98,709 96,127 97,209 92,293 92,961 96,399 102,251 106,664

P = Preliminary

- 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.

TABLE 50 **New Transit Passenger Vehicles Delivered**

File: NEWVEH

	RAI	LWAY CARS	c)		MOTOR E	BUSES & DE	AND RESPONS	SE(a)	TOTAL
CALENDAR	LIGHT	HEAVY	COMMUTER	TROLLEY	29 SEATS	30-39	40 SEATS	TOTAL	PASSENĞER
YEAR	RAIL	RAIL	RAIL	BUSES	OR FEWER	SEATS	OR MORE		VEHICLES(b)
1980	32	130	=======================================	98	287	143	4,142	4,572	4,832
1981	188	276		0	153	171	3,735	4,059	4,523
1982	10	126		0	67	138	2,757	2,962	3,098
1983	30	88		0	151	74	3,856	4,081	4,199
1984 1985 1986 1987 1988 1989 1990 1991 1991 1992 1993	59 63 149 51 24 52 55 17 35	521 441 854 758 311 207 10 6 163 260	128 179 140 198 74 56 83 187 110	0 0 0 47 4 0 118 149 0	393 353 739 1,091 767 1,353 1,389 1,781 1,322 1,734	509 220 240 429 474 771 489 411 549 368	2,992 2,794 2,400 2,704 2,308 2,836 2,901 2,530 1,555 2,234	3,894 3,367 3,379 4,224 3,548 4,960 4,779 4,722 3,426 4,336	4,602 4,050 4,522 5,278 3,961 5,275 5,045 5,081 3,734 4,682

P = Preliminary

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

TABLE 51

File: NEWMBLG

New Motor Buses & Demand Response Vehicles Delivered by Length

CALENDAR YEAR	27/5" & BELOW	27′6" - 32′5"	32′6" - 37′5"	37′6" - 45′0"	ARTICULATED/ DOUBLE DECK	TOTAL
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
1992	968	338	584	1,482	54	3,426
P 1993	1,488	243	367	2,178	60	4,336

P = Preliminary

TABLE 52

File: VEHCHAR*

Characteristics of the Transit Fleet as of December 31

CHARACTERISTIC	YEAR*	MOTOR BUS	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	COMMUTER RAIL	DEMAND RESPONSE
Vehicles Owned and Leased	1989 1990 1991 1992 1993	61,276 61,063 63,154 66,234 67,880	10,649 10,562 10,410 10,393 10,365	1,034 1,062 1,304 1,264 1,240	729 847 817 963 934	4,490 4,574 4,473 4,538 4,674	16,490 17,130 18,701 21,264 24,413
Vehicles in Active Service	1989 1990 1991 1992 1993	58,919 58,714 60,377 63,080 64,648	10,506 10,419 10,331 10,245 10,261	755 913 1,095 1,058 1,025	725 832 752 907 851	4,472 4,415 4,370 4,413 4,494	15,856 16,471 17,879 20,695 23,105
Vehicles with Major Rehabilitation (b) (Per cent)	1989 1990 1991 1992 1993	11.0 10.2 9.6 14.0 14.2	37.1 46.9 49.5 46.0	25.6 26.9 24.4 25.2	0.0 0.0 0.5 1.2	47.2 47.2 48.4 49.8	1.6

--- Data not available

CHARACTERISTIC	YEAR*	MOTOR BUS	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	COMMUTER RAIL	DEMAND RESPONSE
Average Age (b) (Years)	1989 1990 1991 1992 1993	8.2 8.1 8.0 8.7 8.9	15.2 17.3 18.1 18.5 18.9	19.6 20.1 20.9 20.8 20.9	12.0 11.2 10.5 11.9 12.5	16.8 17.2 17.6 18.1 18.8	3.9
Average Length (b)	1989 1990 1991 1992 1993	38/1" 37/8" 37/7" 39/4" 39/4"	60/9" 61/1" 61/4" 61/4" 61/5"	61/2" 64/6" 64/9" 65/10" 66/8"	41'2" 43'11" 46'4" 45'10" 46'6"	84/8" 84/10" 84/10" 84/10" 84/11"	21/5" 21/5"
Average Number of Seats (b)	1989 1990 1991 1992 1993	42.7 41.7 41.2 43.8 43.7	55.6 55.7 55.7 55.7 55.7	57.4 57.3 57.6 58.4 59.1	49.1 50.7 52.1 52.2 52.8	122.5 125.6 126.7 127.0 127.7	12.9 12.6

⁻⁻⁻ Data not available

TABLE 52 (continued)

Characteristics of the Transit Fleet as of December 31

CHARACTERISTIC	YEAR*	MOTOR BUS	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	COMMUTER RAIL	DEMAND RESPONSE
Vehicles Equipped with Air Conditioning (b) (Per cent)	1989 1990 1991 1992 1993	78.4 80.5 83.3 82.9 84.0	92.3 93.6 94.8 95.5	56.5 57.2 59.4 60.8	20.5 17.4 17.9 12.7	100.0 100.0 100.0 100.0	95.2 95.5
Vehicles Equipped with Two-Way Radios (b)(c) (Per cent)	1989 1990 1991 1992 1993	89.0 90.7 89.9 94.0 96.4	79.6 78.3 77.3 27.2	72.0 73.2 72.6 75.3	92.5 93.6 99.4 99.4	65.2 63.9 63.3 63.7	96.0 96.3
Vehicles with Wheelchair Accessibility (b) (Per cent)	1989 1990 1991 1992 1993	40.2 43.5 49.5 50.8 54.9	(a) (a) (a) 82.8 93.2	(a) (a) (a) 40.7 45.5	32.9 42.9 47.0 51.1	(a) (a) (a) 32.4 33.3	84.7 86.9

<sup>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.
(b) Data from APTA survey.
(c) Decline in heavy rail in 1993 results from MTA New York City Transit replacing all vehicle radios with portable radios.</sup>

Motor Buses by Manufacturer (a)

MANUFACTURER	NUMBER OWNED AND LEASED	PERCENT	
General Motors Truck & Coach Division (after 1987: Truck only)	12,690	24.7%	
Flxible (includes Grumman Flxible)	11,866	23.1	
Transportation Manufacturing Corporation	4,498	8.8	
Neoplan USA Corporation	4,107	8.0	
Gillig Corporation	3,856	7.5	
Bus Industries of America (Ontario Bus Industries)	3,070	6.0	
Motor Coach Industries	2,329	4.5	
M.A.N. Truck and Bus Corporation	2,162	4.2	
New Flyer Industries and New Flyer of America (Flyer)	2,074	4.0	
Diesel Division, General Motors of Canada	1,080	2.1	
America Ikarus (Ikarus USA)	423	.8	
AM General Corporation	405	.8	
Eagle Coach Corporation	267	.8 .5 .5	
Chance Coach	248	.5	
Blue Bird Corporation	233	.5	
Stewart & Stevenson Services	230	.4	
Crown Coach Corporation	229	.4	
Volvo of America Corporation	227	.4	
Saab-Scania	223	.4	
National Coach Corporation	105	.4 .2 .2	
Thomas Built Buses	89	.2	

TABLE 53 (continued)

Motor Buses by Manufacturer (a)

MANUFACTURER	NUMBER OWNED AND LEASED	PERCENT
New Goshen Coach Corporation (Goshen)	74	.1
Boyertown Auto Body Works	73	.1
Champion Motor Coach	70	.1
ElDorado Bus Corporation (El Dorado Motor Corporation)	62	.1
AmTran Corporation	58	.1
El Dorado National Company	56	.1
Collins Bus Corporation	55	.1
Transportation Vehicles	48	.1
Carpenter Manufacturing	45	.1
Supreme Corporation	44	.1
Chevrolet Motor Division, General Motors Corporation	33	.1
Metrotrans Corporation	29	.1
MCR Technology & Walter Vetter Gmbh & Company	26	
Others	254	.5
Total	51,338	100.0

⁽a) Data as of January 1, 1994 from APTA survey of 284 transit systems. Understates shares of small vehicle manufacturers since most smaller transit systems not reporting data to survey only purchase small vehicles.

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Motor Buses by Year Built (a)

	NUM	BER	PERCENT		
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE	
1994 (model year built in 1993)	17	15	NA NA	NA	
1993	2,462	2,393	4.8	4.9	
1992	2,160	2,136	4.2	4.4	
1991	3,069	3,059	6.0	6.3	
1990	3,936	3,909	7.7	8.0	
1989	3,651	3,635	7.1	7.4	
988	2,847	2,838	5.5	5.8	
987	2,832	2,828	5.5	5.8	
986	2,981	2,971	5.8		
985	3,426	3,380	6.7	6.1	
984	2,984	2,925	5.8	6.9	
983	3,857	3 768	7.5	6.0	
982	2,720	3,768 2,613	5.3	7.7	
1978-1981	9,985	8,964		5.3	
1977 and earlier	4,411	3,486	19.4 8.6	18.3	
		3,400	0.0	7.1	
otal	51,338	48,920	100.0%	100.0%	
verage Age in Years**	8.9	8.6	V=		

^{**1993 = 0.5} years old; 1992 = 1.5 years old; 1991 = 2.5 years old; etc.

TABLE 55

Demand Response Vehicles by Year Built (a)

File: DRYEAR

18	NUMI	BER	PERCENT		
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE	
1994 (model year built in 1993) 1993 1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1983	98 829 595 821 832 838 441 348 320 219 107 77	53 716 594 810 827 830 420 336 289 209 92 60	1.7 14.7 10.6 14.6 14.8 14.9 7.8 6.2 5.7 3.9 1.9 1.4 2.0	1.0 13.4 11.1 15.2 15.5 15.6 7.9 6.3 5.4 3.9 1.7 1.1	
Total	5,637	5,335	100.0%	100.0%	
Average Age in Years**	4.0	4.0			

^{**1993 = 0.5} years old; 1992 = 1.5 years old; 1991 = 2.5 years old; etc.

יור

⁽a) Data as of January 1, 1994 from APTA survey of 284 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, 1994 from APTA survey of 203 demand response systems.

Trolleybuses by Year Built (a)

	NUM	BER	PERCENT		
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE	
1993	24 0	0	2.6		
1992 1991	114	110	12.2	12.9	
1990	118	118	12.6	13.9	
1989	0	0			
1988	4	4	.4	.5	
987	46	46	4.9	5.4	
980-1986	0	0	.=		
979	166	149	17.8	17.5	
978	0	0			
977	62 391	38 384	6.6 41.9	4.5 45.1	
976 971-1975	391	2	.3	.2	
945-1970	i i	l 'n			
1944 and earlier	6	0	.6		
otal	934	851	100.0%	100.0%	
Average Age in Years**	12.5	12.4	·		

^{**1993 = 0.5} years old; 1992 = 1.5 years old; 1991 = 2.5 years old; etc.

TABLE 57
Heavy Rail Cars by Year Built (a)

File: HRYEAR

	NUME	BER	PE	PERCENT		
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE		
1993 1992 1991 1990 1989 1988 1987 1986 1985 1985 1984 1979-1983 1974-1978 1969-1973	276 141 8 14 97 345 206 664 248 1,116 1,247 667 1,558 3,778	264 141 8 14 97 342 206 664 248 1,116 1,246 648 1,541 3,726	2.7 1.4 .1 .9 3.3 2.0 6.4 2.4 10.8 12.0 6.4 15.0 36.4	2.6 1.4 .1 .9 3.3 2.0 6.5 2.4 10.9 12.1 6.3 15.0 36.3		
Total	10,365	10,261	100.0%	100.0%		
Average Age in Years**	18.9	18.9		-1-		

^{**1993 = 0.5} years old; 1992 = 1.5 years old; 1991 = 2.5 years old; etc.

⁽a) Data as of January 1, 1994 from APTA survey of all 5 trolleybus systems.

⁽a) Data as of January 1, 1994 from APTA survey of all 14 heavy rail systems.

Light Rail Cars by Year Built (a)

		NUMBER	PE	PERCENT		
YEAR BUILT	OWNED AN	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE		
1993 1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1982 1977-1981 1974-1976	33 35 16 30 47 20 100 132 32 26 0 10 422 0	27 35 16 30 47 20 98 130 32 26 0 10 414 0	2.7 2.9 1.3 2.5 3.8 1.6 8.2 10.8 2.6 2.1 .8 34.5	2.7 3.5 1.6 3.0 4.6 2.0 9.7 12.9 3.2 2.6 1.0 40.9		
Total	1,223	1,011	100.0%	100.0%		
Average Age in Years**	20.9	15.8				

^{**1993 = 0.5} years old; 1992 = 1.5 years old; 1991 = 2.5 years old; etc.

TABLE 59

Commuter Rail Cars by Year Built (a)

File: CRYEAR

	NUMI	BER	PE	RCENT
YEAR BUILT	OWNED AND LEASED	IN ACTIVE SERVICE	OWNED AND LEASED	IN ACTIVE SERVICE
1993	48	32	1.0	.7
992	128	128	2.8	
991	156	156	3.4	2.9 3.5
990	90		1.9	2.0
989	54	89 53	1.2	1.2
988	143	143	3.1	3.2
987	138	138	3.0	3.1
986	68	68	1.5	15
985	252	252	5.4	1.5 5.7 3.2 5.7
984	142	142	5.4 3.1 7.1	1 30
979-1983	327	254	7.1	5.7
974-1978	706	680	15.2	15.2
969-1973	1,465	1 465	31.6	32.9
968 and earlier	916	1,465 858	19.8	19.2
otal	4,633	4,458	100.0%	100.0%
verage Age in Years**	18.8	18.7		

^{**1993 = 0.5} years old; 1992 = 1.5 years old; 1991 = 2.5 years old; etc.

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⁽a) Data as of January 1, 1994 from APTA survey of 18 of 22 light rail systems. Most missing vehicles are over 50 years old.

⁽a) Data as of January 1, 1994 from APTA survey of 16 of 17 commuter rail systems. Vehicles missing are owned by AMTRAK and are about 15 years old.

New Passenger Revenue Vehicles Needed

	MAINTAIN CURRENT SERVICE			EXPAND SERVICE		
CATEGORY	1995- 1999	2000- 2004	TEN YEAR TOTAL	1995- 1999	2000 - 2004	TEN YEAR TOTAL
Buses 35 Feet or Longer	27,400	23,400	50,800	33,300	27,200	60,500
Smaller Buses	3,000	3,000	6,000	3,800	3,500	7,300
Vans	23,000	20,900	43,900	26,800	24,600	51,400
Trolleybuses	200	50	250	200	70	270
Heavy Rail Cars	1,570	1,460	3,030	1,760	2,420	4.180
Light Rail Cars	350	. 0	350	1,050	580	1,630
Self-Propelled Commuter Rail Cars	790	830	1,620	930	960	4,180 1,630 1,890
Locomotive-Hauled Commuter Rail Cars	520	240	760	690	320	1,010
Other Passenger Vehicles	70	40	110	110	60	170
Total	56,900	49,920	106,820	68,640	59,710	128,350

Source: APTA, Transit Funding Needs, 1995-2004, 1994.

TABLE 61
Passenger Revenue Vehicles in Need of Rehabilitation

-iie:	VEHREHAB	

	MAIN	MAINTAIN CURRENT SERVICE			EXPAND SERVICE		
CATEGORY	1995 - 1999	2000- 2004	TEN YEAR TOTAL	1995 - 1999	2000- 2004	TEN YEAR TOTAL	
Buses 35 Feet or Longer Smaller Buses	5,500 100	3,500	9,000	5,600	3,500	9,100	
Vans	100	100 100	200 200	100 100	100 100	200 200	
Trolleybuses	200	0	200	200	0	200	
Heavy Rail Cars	1,400	1,500	2,900	1,400	1,500	2,900	
Light Rail Cars	460	370	830	460	370	830	
Self-Propelled Commuter Rail Cars	420	0	420	420	10	430	
Locomotive-Hauled Commuter Rail Cars	640	150	790	640	150	790	
Other Passenger Vehicles	200	70	270	200	70	270	
Total	9,020	5,790	14,810	9,120	5,800	14,920	

Source: APTA, Transit Funding Needs, 1995-2004, 1994.

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SECTION X

Employment



Trend of Transit Employment, Compensation, and Labor Costs*

CALENDAR	NUMBER	SALARIES	FRINGE	TOTAL	
YEAR	OF EMPLOYEES(a)(b)	AND WAGES	BENEFIT COSTS	LABOR COSTS	
		(MILLIONS)	(MILLIONS)	(MILLIONS)	
1980 1981 1982 1983	187,000 191,600 193,500 194,960	\$3,280.9 3,493.5 3,731.4 3,921.3 \$1,353.1 1,649.1 1,756.5 1,977.3		\$ 4,634.0 5,142.6 5,487.9 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	
1992	278,995	7,670.5	4,318.6	11,989.1	
P 1993	302,758	7,935.6	4,392.4	12,328.0	

P = Preliminary

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*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) Based on employee equivalents of 2,080 labor hours equals one employee; beginning 1993 equals actual employees.

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

TABLE 63 Trend of Transit Employees by Job Category*

File: EMPJOB

			NUN	BER OF EMPLOY	EES(a)(b)			
CALENDAR YEAR	VEHICLE OPERATORS(c)	OTHER OPERATIONS	VEHICLE MAINTENANCE	OTHER MAINTENANCE	ALL OTHER	TOTAL OPERATING	CAPITAL	TOTAL
1980 1981 1982 1983	95,690 96,930 95,800 94,170	22,830 22,740 22,580 22,400	22,220 23,640 24,830 25,030	32,350 33,190 33,240 33,980	13,910 15,100 17,500 19,380	187,000 191,600 193,950 194,960		187,000 191,600 193,950 194,960
1984 1985 1986 1987 1988 1989 1990 1990 1991 1992(d) P 1993	122,843 127,065 129,263 126,770 126,565 126,154 127,039 129,145 130,312 142,374	32,397 25,277 24,543 25,269 25,149 25,613 23,517 24,136 39,237 42,858	31,420 30,514 33,621 33,743 32,464 31,424 31,861 48,270 52,719	43,227 45,400 45,629 46,453 44,054 43,800 44,282 42,708 24,062 26,257	25,522 33,781 36,052 36,124 35,971 34,886 35,914 38,007 25,221 27,541	255,409 262,037 269,108 268,083 265,482 262,917 262,176 265,857 267,102 291,749	7,788 7,983 8,746 8,527 10,101 9,570 10,663 10,288 11,893 11,009	263,197 270,020 277,854 276,610 275,583 272,487 272,839 276,145 278,995 302,758

Data not available

(a) Based on employee equivalents of 2,080 labor hours equals one employee; beginning 1993 equals actual employees.

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

^{*}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.

⁽d) Beginning 1992, ticketing, fare collection, and security personnel reclassified from "All Other" to "Other Operations," and vehicle maintenance administrative and support personnel reclassified from "Other Maintenance" to "Vehicle Maintenance."

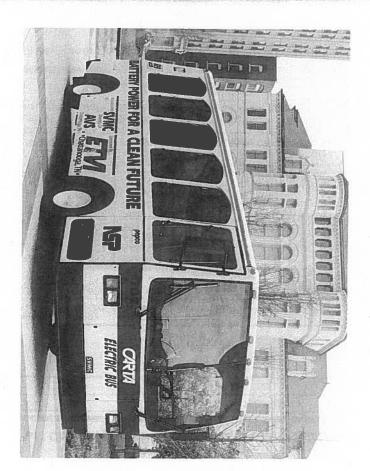
Trend of Transit Operating Employees by Mode (a) (b)

		RAILWAY						
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	MOTOR BUS	DEMAND RESPONSE	OTHER	TOTAL
1984 1985 1986 1987 1988 1989 1990 1991 1991 1992 P 1993	3,242 2,980 3,511 3,802 3,952 4,066 4,175 3,849 3,943	47,047 49,670 51,028 51,333 46,212 46,690 46,102 47,423 47,493 52,398	21, 884 22, 929 22, 414 23, 270 23, 188 22, 215 21, 443 21, 083 21, 151 21, 934	2,012 1,893 2,140 2,090 2,039 2,013 1,925 1,826 1,691 1,921	154,326 157,581 165,839 165,176 165,407 162,990 162,189 163,555 163,387 178,968	23,798 23,767 20,664 19,068 21,391 21,453 22,740 24,196 25,863 28,975	3,100 3,217 3,512 3,340 3,343 3,604 3,711 3,599 3,668 3,610	255, 409 262, 037 269, 108 268, 083 265, 482 262, 917 262, 176 265, 857 267, 102 291, 749

P = Preliminary

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(a) Based on employee equivalents of 2,080 labor hours equals one employee; beginning 1993 equals actual employees.(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.



Energy and Environment

SECTION XI

Trend of Fossil Fuel Consumption by Transit Passenger Vehicles*

CAL ENDAD				(GALLONS IN	THOUSANDS)		125	(THOUSANDS
CALENDAR YEAR		\$4	£	DIESEL		3	OTHER (a)	CNG POUNDS
1980 1981 1982 1983		30-1		431,400 445,950 455,590 450,260	1000 1000 1000 1000 1000 1000 1000 100	¥	11,400 13,950 11,670 9,460	
8.5	COMMUTER	FERRY BOAT(b)	MOTOR BUS	DEMAND RESPONSE	ALL OTHER	TOTAL		51
1984 1985	58,320 55,372	21,624 20,747	505,049 518,137	15,: 14,		600,364 608,738	49,907 45,704	::
1986 1987 1988 1989 1990 1991 1992	54,608 51,594 53,054 52,516 52,681 54,315 54,951 59,525	22,655 19,901 19,202 19,402 19,627 20,465 20,926 19,939	546,892 543,314 552,658 551,156 563,151 572,861 592,049 588,620	15,868 15,393 15,090 14,824 15,497 17,422 16,896 19,459	21 71 65 118 74 95 122	640,044 630,273 640,069 638,016 651,030 665,158 684,944 687,699	38,156 34,220 40,055 39,389 33,906 34,467 37,179 44,744	6,352 9,889

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.

(a) Includes gasoline and all other non-diesel fossil fuels except CNG.
(b) Excludes international, rural, rural interstate, island, and urban park ferries.

TABLE 66

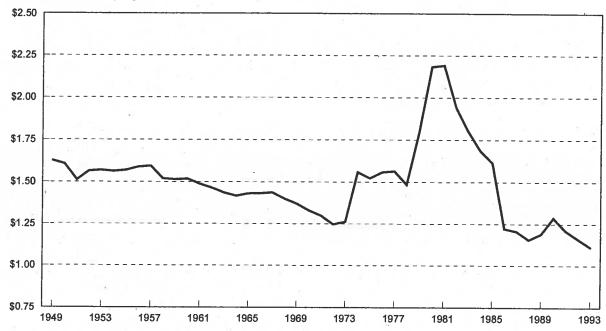
File: ALTFUEL

Trend of Non-Diesel Fossil Fuel Consumption by Transit Passenger Vehicles

		(GALLONS	IN THOUSANDS)			POUNDS (THOUSANDS
CALENDAR YEAR	GASOLINE	PROPANE (LIQUID PETROLEUM GAS)	LIQUID NATURAL GAS	METHANOL	OTHER	COMPRESSED NATURAL GAS
1992 P 1993	32,906 37,010	2,487 2,104	191 517	1,583 4,814	12 299	6,352 9,889

P = Preliminary

Constant 1993 dollars per gallon



(a) Regular leaded gas from 1949 to 1976, regular unleaded gas beginning in 1977.

Source: APTA, Transit Funding Needs, 1995-2004, 1994.

TABLE 68 File: ELECPOWR

Trend of Electric Power Consumption by Transit Passenger Vehicles*

CALENDAR YEAR		(KILO	WATT HOURS	IN MILLIONS)	
1980 1981 1982 1983		3-3-5-	2 2	,446 ,655 ,722 ,930		
	COMMUTER	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	ALL OTHER	TOTAL
1984 1985	901 1,043	3,092 2,928	ų.	245 245		4,238 4,216
1986 1987 1988 1989 1990 1991 1992 P 1993	1,170 1,155 1,195 1,293 1,226 1,239 1,124 1,113	3,066 3,219 3,256 3,286 3,284 3,248 3,193 3,287	173 191 243 242 239 274 297 282	70 70 68 68 69 72 80 79	10 21 23 23 19 20 22 20	4,489 4,656 4,785 4,912 4,837 4,853 4,716

P = Preliminary

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

TABLE 69

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 70

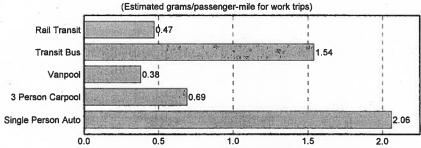
Transnortation Energy Use by Mode 1882

	FIJE CONSTINE	DEDCENT
	(TRILLION BTUS)	OF TOTAL
Automobiles	9,240.5	40.0
Transit Buses	81.0	7.0
Trucks	7.538.5	32.7
Motorcycles	23.8	0.1
Total Highway	16,977.0	73.6
Off-highway	665.2	2.9
Air	1,970.8	8.5
Water	1,641.3	7.1
Pipeline	8,63	3.7
Transit Rail	6.04	0.2
Commuter Rail	22.0	0.1
Intercity Rail	17.4	0.1
Freight Rail	425.4	- eo
Military	471.8	2.0
Total	23.081.1	100.0

TABLE 71

Pollution Reduction Resulting From Transit Use

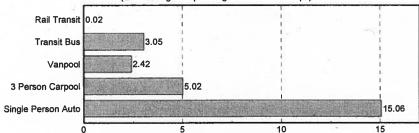




*Damages lung tissues. Also precursor of ozone which irritates respiratory tract and eyes, decreases the lungs' working ability and causes both cough and chest pain.

Emissions of Carbon Monoxide*





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

Can cause dizziness, headaches, impaired coordination and death.

Emissions of Hydrocarbons*

(Estimated grams/passenger-mile for work trips)

Rail Transit Bus
Vanpool
3 Person Carpool
Single Person Auto
0.0 0.5 1.0 1.5 2.0

*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.

Federal Transit Legislation



History and Provisions of the Federal Transit Act

File: FTA

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:

- 1961: The Housing and Urban Development Act of 1961 provided funding for transit demonstrations and loans for mass transportation projects.
- 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.
- 1966: The Urban Mass Transportation Act of 1966 expanded funding for capital purchases and allowed funding for research, planning, and training.
- 1966: The Urban Mass Transportation Administration was moved to the newly created Department of Transportation (DOT).
- 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.
- 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.

- 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.
- 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.
- 1982: The Federal Public Transportation Act of 1982, Title III of the Surface Transportation Assistance Act of 1982 provided that 1¢ of a 5¢ 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.
- 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.
- 1990: The Omnibus Budget Reconciliation Act of 1990 raised to 1.5¢ the portion of the Highway Trust Fund tax on motor fuels to be placed in the Mass Transit Account.
- 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.

• 1993: The Omnibus Budget Reconciliation Act of 1993 raised to 2.0¢ the portion of the Highway Trust Fund tax on motor fuels to be placed in the Mass Transit Account, to take effect on October 1, 1995.

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 associations 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.

Other Major Federal Laws Affecting Transit

• Americans with Disabilities Act of 1990, prohibits discrimination based on disabilities in the areas of employment, public services, public accommodations and services operated by private entities, public transit and telecommunications.

Employers are prohibited from discriminating against any qualified individual with a disability in regard to job application procedures, the hiring, advancement or discharge of employees, employee compensation, job training, and other terms, conditions or privileges of employment. Employers with 25 or more employees had to comply by July 26, 1992; those with 15 to 24 employees had until July 26, 1994. These provisions apply to private employers, state and local governments, employment agencies, and labor unions.

All programs, activities and services provided or made available by state and local government, including public transportation, are prohibited from discriminating on the basis of disability, regardless of whether or not those entities receive federal financial assistance.

In particular, all transit buses and rail cars ordered after August 25, 1990 must be accessible to the mobility-impaired and contain audible and visual features to aid the hearing and sight-impaired. At least one car on every rail train must be accessible by July 26, 1995.

All new passenger stations built after the effective date of the act must be accessible, and all "key" stations (end-of-line, transfer, and major traffic-generator) must be retrofitted for accessibility by July 26, 1994, unless an extension is granted for extraordinarily expensive retrofitting.

By January 26, 1997, full compliance with the provisions requiring paratransit service is required.

• Clean Air Act Amendments of 1990, recast transportation planning to ensure that, in areas experiencing air quality problems, such planning is geared to improved air quality as well as mobility. State and local officials are required to find ways to reduce emissions from the vehicle fleet (including transit buses), to develop projects and programs that will alter driving patterns to reduce the number of single-occupant vehicles, and to make alternatives such as transit an increasingly important part of the transportation network. The Act focuses on the issue of

"conformity" which is a determination made by the metropolitan planning organization and the U.S. Department of Transportation that transportation plans and programs in nonattainment areas meet the requirement of reducing pollutant emissions.

The Environmental Protection Agency imposed emissions standards as a result of the Act that require transit bus engines to meet increasingly strict emission standards, culminating in the following in 1998:

nitrogen oxides--4.0 grams/brake horsepower-hour (a 33% reduction from the 1990 pre-law standard), and

particulate matter (soot)--.05 g/bhh (a 92% reduction).

No reductions in the 1990 carbon monoxide and hydrocarbon emissions levels of 15.5 g/bhh and 1.3 g/bhh were mandated, since they are not feasible due to technological limitations.

• Omnibus Transportation Employee Testing Act of 1991, mandates regulations requiring recipients of financial assistance under Sections 3, 9, and 18 of the Federal Transit Act and Section 103(e)4 of Title 23 of the United States Code to establish multifaceted anti-drug and alcohol-misuse programs for their own as well as contracted safety-sensitive employees. Implementation of such programs was required by January 1, 1995 for transit systems serving a population of 200,000 or greater, and by January 1, 1996 for other transit systems.

Safety-sensitive positions include revenue vehicle operators, dispatchers, maintenance staff, non-revenue vehicle operators if a Commercial Driver's License is required, police and security personnel carrying a firearm, and supervisors when performing safety-sensitive functions.

Commuter rail employees are exempt, since they are covered by Federal Railroad Administration regulations, and ferry boat employees, while covered, are also subject to additional Coast Guard regulations.

Educational, testing, and rehabilitation programs are required.

• Energy Policy Act of 1992 (Transit Benefit Law), authorized a tax-free employer-provided transit pass or subsidy fringe benefit for employees of \$60 per month and limited the similar benefit for parking to \$155 per month, which could be used when parking at a transit park-and-ride facility. Subsequent legislation made this a permanent benefit for federal employees, including the military.

SECTION XIII

Canadian Statistics



Canadian Fixed-Route Summary Statistics

CALENDAR YEAR	NUMBER OF Systems	REVENUE PASSENGER TRIPS	TOTAL VEHICLE MILES	OPERATING REVENUE(a)	DIRECT OPERATING EXPENSE(a)
		(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
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	447.5	763.6	1,482.0
1983	74	1,385.7	443.1	839.4	1,573.4
1984	78	1,371.6	427.0	871.8	1,630.9
1985	70	1,434.1	444.4	932.0	1,680.4
1986	73	1,521.3	477.5	1,060.7	1,853.2
1987	72	1,500.0	443.7	1,085.5	1,969.8
1988	74	1,538.4	479.6	1,163.2	2,114.0
1989	76	1,519.3	468.4	1,241.3	2,260.6
1990	77	1,532.4	487.1	1,312.9	2,451.4
1991	92	1,450.0	484.0	1,401.0	2,518.6
1992	92	1,364.0	467.5	1,377.7	2,580.2

(a) Monetary data are Canadian Dollars.

Source: Summary of Canadian Transit Statistics and predecessor documents, Canadian Urban Transit Association.

TABLE 73

Canadian Fixed-Route Active Passenger Vehicles

File CANVEH

12		RAILWAY CAR	S			70741
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL (a)	TROLLEY BUSES	MOTOR BUSES	OTHER	TOTAL PASSENGEI VEHICLES
1980	418	1,627	539	10,013 10,231	0	12,597 12,886 13,202 13,058 13,164 12,713
1981	485	1,630	540	10,231	0	12,886
1982	415	1,638	649	10.500	0	13, 202
1983	392	1,619	649	10.396	2	13,058
1984	405	1,619	600	10,396 10,538	2	13, 164
1985	398	1,574	552	10.114	75	12,713
1986	507	1,558	551	10.284	80	12 980
1987	516	1.449	513	10.434	80 77	12 989
1988	524	1,449 1,439	523	10.492	76	13 054
1989	593	1,652	488	9.961	235	12 929
1990	532	1,381	472	10,114 10,284 10,434 10,492 9,961 10,626	446	12,989 12,989 13,054 12,929 13,457 13,542 12,783
1991	527	1,379	272	10,992	372	13 542
1992	500	1,735	358	10,082	108	12 783

(a) Includes Commuter Rail Vehicles.

Source: Summary of Canadian Transit Statistics and predecessor documents, Canadian Urban Transit Association.

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Canadian Fixed-Route New Passenger Vehicle Purchases

	RAILW	AY CARS				TOTAL
CALENDAR YEAR	LIGHT RAIL	HEAVY RAIL	TROLLEY BUSES	MOTOR BUSES	OTHER	VEHICLES PURCHASED
1980	75	14	5	771	0	865
1981	126	2	1	557	0	686
1982	8	10	120	813	0	951
1983	44	71	224	469	l o	808
1984	29	0	24	340	0	393
1985	0	0	0	407	l ō	407
1986	0	0	0	326	0	326
1987	0	0	0	500	l 0	500
1988	0	0	Ō	354	0	354
1989	20	77	0	641	15	753
1990	0	0	0	487	67	554
1991	l o	l o	0	528	8	536
1992	16	l ŏ	Ö	495	56	567

Source: Summary of Canadian Transit Statistics and predecessor documents, Canadian Urban Transit Association.

TABLE 75

Canadian Fixed-Route Fares

File: CANFARES

		AVERAGE REVENUE	ADUL	T CASH FARE (BASE PERI	OD) (a)
CALE YE	NDAR AR	PER REVENUE PASSENGER TRIP(a)	HIGH	LOW	AVERAGE
19	80	\$.44	\$.65	\$.30	\$.47
19	81	.50	.75	.35	.53
19	82	.56	.85	.40	.62
19	83	.61	1.00	.40	.69
19	84	.64	1.00	.50	.74
19	85	.65	1.50	.50	.79
	86	.70	1.50	.50	.86
19	87	.72	1.50	.60	.90
	88	.76	1.50	.50	.95
19	89	.82	1.50	.50	1.01
	90	.86	1.75	.50	1.07
19		.97	2.00	.75	1.18
	92	1.01	2.00	.75	1.20

(a) Monetary data are Canadian dollars.

Source: Summary of Canadian Transit Statistics and predecessor documents, Canadian Urban Transif Association.

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Canadian Fixed-Route Employees

富			Ĭ.	NUMBER OF EMPLOYEES			
CALENDAR	VEHICLE OPERATORS	OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	OTHER	TOTAL	
1980 1981	19,61	89 (a) 26 (a)	5,567	2,071	5,504	32,831	
1982	20,6	-	5,576	2,303	6,680	35,252	
1984 1985	20,02	804 (a) 505 (a)	5,486	2,537	6,301 5,550	34,772 34,128 34,813	
1986	19,206	2,840	6,824	3,174	3,952	35,996	
1988 1989	20,402	3,028	7,235	3,031	5,297	37,993	
1990	21,040	3,223	7,336	3,569	4,560	39,728	
1992	20,663	2,533	7,025	2,795	5,327	38,343	
Mehicle operators and other operations combined	ond other operation	ne combined					

(a) Vehicle

Statistics and predecessor documents, Canadian Urban Transit Association. Summary

TABLE 77

FILE:FBCAN

Canadian Fixed Guideway Mileage as of January 1, 1995 and Status and Mileage of Future Projects

MODE (a)	STATUS	OPENS	MILES (b)
AG	open	open	15,2
AG TOTAL			15.2
CR	construction	1995	40.4
CR	open	open	279.6
CR TOTAL			320.0
FB	open	open	3.1
FB TOTAL		•	3.1
HR	construction	1996	1.0
HR	construction	2001	6.9
HR	design	?	3.2
HR	open	open	71.3
HR TOTAL	6 8		82.4
IP	open	open	0.1
IP TOTAL			0.1
IR	design	?	1.9
IR	open	open	4.0
IR TOTAL		P = =	5.9
LR	construction	1996	2.3
LR	open	open	92.5
LR	planning	?	10.4
LR TOTAL			105.2
MB	construction	1996	24.8
MB	construction	1999	6.8
MB	design	1996	2.5
MB	design	1997	7.5
мв	open	open	51.4
MB TOTAL			93.0
ТВ	open	open	210.3
TB TOTAL		: : : : : : : : : : : : : : : : : : :	210.3

Source: APTA survey

^{? =} Uncertain, unknown, or not reported.

(a) Motor bus data includes only fixed guideways 1.0 miles in length or longer; data for all other modes includes all guideways.

(b) Excludes data for a few guideways for which mileage was not reported.

TABLE 78

Canadian Motor Bus Fixed Guideway Over 3 Miles in Length as of January 1, 1995

LOCATION	GUIDEWAY	SEGMENT	MILES
Montreal, PQ	Cote des Neiges Bus Lanes	Jean Talon-Rene Levesque	3.4
Montreal, PQ	Du Parc Bus Lanes	Jean Talon-Rene Levesque	3.2
Montreal, PQ	Henri Bourassa Bus Lanes	Lacordaire-St. Laurent	4.3
Montreal, PQ	Pie IX Bus Lanes	47th-Pierre de Coubertin	3.7
Montreal, PQ	Rene Levesque Bus Lanes	Atwater-St. Denis	4.3
Ottawa, ON	East-West Transitway	Blair-Baseline	10.9
Quebec, PQ	Boul du Jardin-1e Ave Bus Lanes	Boul du Jardin/des Loutres-1e Ave/24e Rue	4.3
Quebec, PQ	Quatre-Bourgeois-Boul Laurier Bus Lanes	Entre des 3 drapeaux U.LEdifice Marly	3.7

Source: APTA survey

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TABLE 79

Canadian Services for Disabled Summary Statistics

File: CANDIS

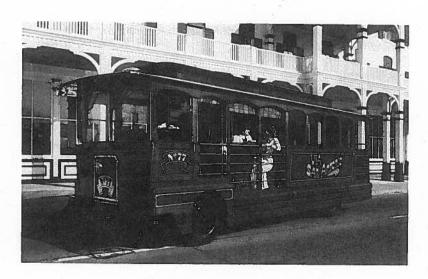
CALENDAR YEAR	NUMBER OF Systems	REVENUE PASSENGER TRIPS	TOTAL VEHICLE MILES	OPERATING REVENUE(a)	OPERATING EXPENSE(a)
		(MILLIONS)	(MILLIONS)	(MILLIONS)	(MILLIONS)
1991 1992	47 47	4.6 5.2	17.0 18.7	\$15.9 17.9	\$64.4 75.6

⁽a) Monetary data are Canadian Dollars.

Source: Summary of Canadian Transit Statistics and predecessor documents, Canadian Urban Transit Association.

SECTION XIV

Glossary



GENERAL DEFINITIONS

File: GLOSS

Commuter

A person who travels regularly between home and work or school.

Fixed Guideway System

A system of vehicles that can operate only on its own guideway constructed for that purpose (e.g., rapid rail, light rail). Federal usage in funding legislation also includes exclusive right-of-way bus operations, trolley coaches and ferryboats as "fixed guideway" transit.

Intermodal

Those issues or activities which involve or affect more than one mode of transportation, including transportation connections, choices, cooperation and coordination of various modes. Also known as "multimodal."

Mass Transit

Another name for "Public Transportation."

Mass Transportation

Another name for "Public Transportation."

Multi-Mode Transit System

A system operating more than one mode of service.

National Transportation System

An intermodal system consisting of all forms of transportation in a unified, interconnected manner to reduce energy consumption and air pollution while promoting economic development and supporting the Nation's preeminent position in international commerce. The NTS includes the National Highway System (NHS), public transportation and access to ports and airports.

Public Transit System

An organization that provides transportation services owned, operated, 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.

Public Transportation

Transportation by bus, rail, or other conveyance, either publicly or privately owned, which provides to the public general or special service on a regular and continueing basis. Also known as "mass transportation," "mass transit" and "transit."

Reverse Commuting

Movement in a direction opposite the main flow of traffic, such as from the central city to a suburb during the morning peak period.

Ridesharing

A form of transportation, other than public transit, in which more than on person shares the use of the vehicle, such as a van or car, to make a trip. Also known as "carpooling" or "vanpooling."

Transit

Another name for "Public Transportation."

Transit System

An organization (public or private) providing local or regional multioccupancy-vehicle passenger service. Organizations that provide service under contract to another agency are generally not counted as separate systems.

GEOGRAPHIC AND INFRASTRUCTURE DEFINITIONS

Arterial Street

A major thoroughfare, used primarily for through traffic rather than for access to adjacent land, that is characterized by high vehicular capacity and continuity of movement.

Auto Restricted Zone

An area in which normal automobile traffic is prohibited or limited to certain times, and vehicular traffic is restricted to public transit, emergency vehicles, taxicabs and, in some cases, delivery of goods.

Bus Lane

A street or highway lane intended primarily for buses, either all day or during specified periods, but sometimes also used by carpools meeting requirements set out in traffic laws.

Busway

Exclusive freeway lane for buses and carpools.

Central Business District (CBD)

The downtown retail trade and commercial area of a city or an area of very high land valuation, traffic flow, and concentration of retail business offices, theaters, hotels and services.

Commuter Lane

Another name for "High-Occupancy Vehicle Lane."

Contraflow Lane

Reserved lane for buses on which the direction of bus traffic is opposite to the flow of traffic on the other lanes.

Corridor

A broad geographical band that follows a general directional flow connecting major sources of trips that may contain a number of streets, highways and transit route alignments.

Crosstown

Non-radial bus or rail service which does not enter the Central Business District (CBD).

Exclusive Right-of-Way

A highway or other facility that can only be used by buses or other transit vehicles.

Fringe Parking

An area for parking usually located outside the Central Business District (CBD) and most often used by suburban residents who work or shop downtown.

High-Occupancy Vehicle (HOV) Lane

Exclusive road or traffic lane limited to buses, vanpools, carpools, and emergency vehicles. Also called "busway," "transitway," or "commuter lane."

Kiss and Ride

A place where commuters are driven and dropped off at a station to board a public transportation vehicle.

Park and Ride Lot

Designated parking areas for automobile drivers who then board transit vehicles from these locations.

Transfer Center

A fixed location where passengers interchange from one route or vehicle to another.

Transitway

Another name for "High-Occupancy Vehicle Lane."

Urban Place

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

Urbanized Area (UZA)

A U.S. Bureau of Census-designated area of 50,000 or more inhabitants consisting of a central city or two adjacent cities plus surrounding densely settled territory, but excluding the rural portion of cities.

MODE AND VEHICLE DEFINITIONS

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.

Aerial Tramway

An electric system of aerial cables with suspended unpowered passenger vehicles. The vehicles are 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 crew 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.

Carpool

An arrangement where two or more people share the use and cost of privately owned automobiles in traveling to and from prearranged destinations together.

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. Also called "Dial-a-Ride."

Dial-a-Ride

Another name for "Demand Response."

Downtown People Mover

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

Ferryboat

A boat providing fixed-route service across a body of water.

Fixed-Route

Service provided on a repetitive, fixed-schedule basis along a specific route with vehicles stopping to pick up and deliver passengers to specific locations; each fixed-route trip serves the same origins and destinations, unlike demand response and taxicabs. Modes include motorbus, trolleybus, jitney, vanpool, heavy rail, light rail, commuter rail, aerial tramway, automated guideway, monorail, cable car, inclined plane, and ferryboat.

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 "rapid rail," "subway," "elevated (railway)," or "metropolitan railway (metro)."

High Occupancy Vehicle (HOV)

Vehicles that can carry two or more persons. Examples of high occupancy vehicles are a bus, vanpool and carpool. These vehicles sometimes have exclusive traffic lanes called "HOV lanes," "busways." "transitways" or "commuter lanes."

High Speed Rail

A rail transportation system with exclusive right-of-way which serves densely traveled corridors at speeds of 124 miles per hour (200 km/hr) and greater.

Inclined Plane

A 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.

Jitney

Privately-owned, small or medium-sized vehicle usually operated on a fixed route but not on a fixed schedule.

Light Rail

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

Magnetic Levitation (Mag-Lev)

A rail transportation system with exclusive right-of-way which is propelled along a fixed guideway system by the attraction or repulsion of magnets on the rails and under the rail cars.

Metropolitan Railway

Another name for "Heavy Rail."

Mode

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

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 usually 55 feet or more in length with two connected passenger compartments that bends at the connecting point when the bus turns a corner.

Charter Bus: A bus transporting a group of persons who, pursuant to a common purpose, and under a single contract at a fixed price, have acquired the exclusive use of a bus to travel together under an itinerary.

Circulator Bus: A bus serving an area confined to a specific locale, such as a downtown area or suburban neighborhood with connections to major traffic corridors.

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

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

Feeder Bus: A bus service that picks up and delivers passengers to a rail rapid transit station or express bus stop or terminal.

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.

Subscription Bus: A commuter bus express service operated for a guaranteed number of patrons from a given area on a prepaid, reserved seat basis.

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 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.

Non-Fixed-Route

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

Paratransit

Comparable transportation service required by the Americans with Disabilities Act (ADA) of 1990 for individuals with disabilities who are unable to use fixed-route transportation systems.

Rapid Rail

Another name for "Heavy Rail."

Rapid Transit

Rail or motorbus transit service operating completely separate from all modes of transportation on an exclusive right-of-way.

Rehabilitation

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

Rolling Stock

The vehicles used in a transit system, including buses and rail cars.

Shuttle

A public or private vehicle that travels back and forth over a particular route, especially a short route or one that provides connections between transportation systems, employment centers, etc.

Streetcar

Another name for "Light Rail."

Suburban Rail

Another name for "Commuter Rail."

Trackless Trolley

Another name for "Trolleybus."

Tramway

Another name for "Light Rail."

Transit Passenger Vehicle

A vehicle used to carry passengers in transit service.

Trolley Car

Another name for "Light Rail."

Trolley Coach

Another name for "Trolleybus."

Trolleybus

An electric rubber-tired transit vehicle, manually steered, propelled by a motor drawing current through overhead wires from a central power source not on board the vehicle. Also known as "trolley coach" or "trackless trolley."

Urban Ferryboat

A boat providing fixed-route service across a body of water with one or more terminals within an urbanized area, excluding international and urban park ferries.

Vanpool

An arrangement in which a group of passengers share the use and cost of a van in traveling to an from pre-arranged destinations together.

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 total number of miles traveled by passengers on transit vehicles; 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.

Ridership

The number of rides taken by people using a public transportation system in a given time period.

Route Miles

The total number of miles included in a fixed route transit system network.

Single-Vehicle Transit Trip

A 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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