

1992 Transit Fact Book

American Public Transit Association
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TRANSIT FACT BOOK

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Transit Fact Book

TECHNICAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

APTA members total over 1,000 and include motor bus and rapid transit systems, organizations responsible for planning,

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

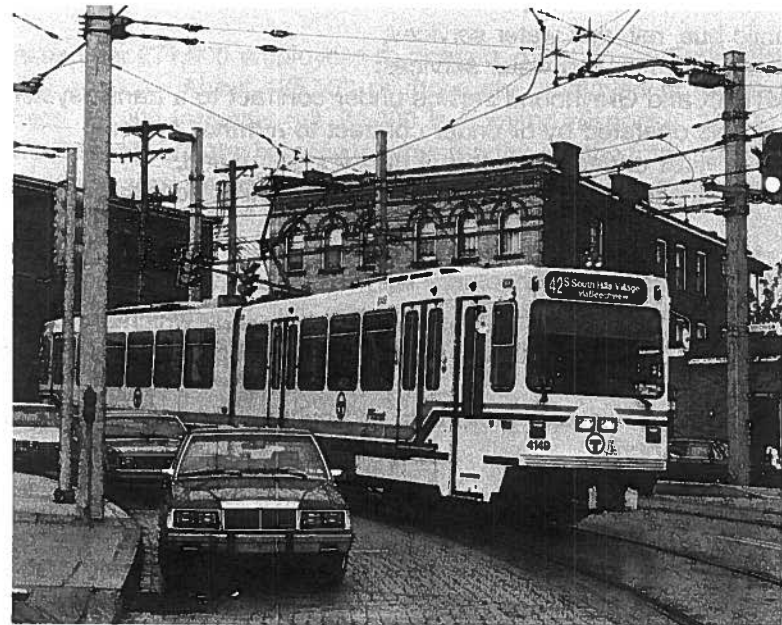
Formed on a cooperative, nonprofit basis, APTA's objectives are:

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

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

SECTION I

Overview of Transit Facts and Issues



OVERVIEW OF TRANSIT FACTS AND ISSUES

1. TRANSIT DEFINED

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

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

2. TYPES OF TRANSIT SERVICE

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

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

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

Water modes include ferryboat.

3. NUMBER OF TRANSIT SYSTEMS

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

4. VEHICLES

Transit fleets contain about 93,000 active vehicles. About 58,000 motorbuses, 17,000 demand response vehicles, 10,000 heavy rail cars, and 4,500 commuter rail cars comprise the bulk.

5. EMPLOYEES

It takes over 271,000 employees to operate, maintain, and administer transit service. About 165,000 of those are employed in motorbus service, 47,000 in heavy rail, 28,000 in demand response, 21,000 in commuter rail, and the balance in other modes. Of the total, operators and conductors on board the vehicles comprise 49%, maintenance personnel 29%, and all others 22%.

In addition, there are 10,300 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 8.6 billion trips were taken on transit in 1991. Of these, 5.7 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 6.5 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 transit-dependent market 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 transit-choice market are workers, environmentalists, travelers, and people on recreational, social, medical, or other journeys who do not have to use transit, but do so for reasons of speed, comfort, convenience, traffic avoidance, or environmental principle.

7. REVENUES

About 75% of transit operating revenues come from the area in which the service is provided: 36% comes from the passengers, 33% from local governments, and 6% from non-government sources. State and federal governments contribute 19% and 6%, respectively.

The mean adult base fare in 1991 was 82 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 50% of transit capital revenue comes from the federal government.

8. EFFECTS OF FARE INCREASES ON RIDERSHIP

There is a direct relationship between transit fares and ridership. An APTA study, "Effects of Fare Changes on Bus Ridership" (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) |
|---|-------------------------|
| <u>Walking to transit stop and taking transit</u> | |
| Fares | \$ 2.00 |

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

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

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

Driving alone

| | |
|---------------------|-------------|
| Gasoline & oil | \$ 1.08 |
| Maintenance & tires | 0.60 |
| <u>Parking</u> | <u>5.00</u> |
| Total | 6.68 |

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

| | |
|--------------------------------|-------------|
| Fares | \$ 2.00 |
| Gasoline & oil | 0.32 |
| <u>Maintenance & tires</u> | <u>0.18</u> |
| Total | 2.50 |

10. EXPENSES

Operating expense in 1991 was about \$16.8 billion. Motorbus accounted for \$9.6 billion, heavy rail for \$3.8 billion, light rail for \$0.3 billion, commuter rail for \$2.0 billion, trolleybus for \$0.1 billion, demand response for \$0.7 billion and the remaining modes for \$0.2 billion.

The largest types of expenses were salaries and wages (45%), fringe benefits (24%), purchased transportation (10%), and fuel and supplies (10%). Services, utilities, insurance, and other costs made up the remaining 11%.

About 41% of expenses are devoted to scheduling and operation of revenue vehicles, 18% to their maintenance, 10% to facilities maintenance, 10% to purchased transportation, and 21% to administration.

Capital expenses are monies paid for transit infrastructure (facilities, vehicles, and major equipment). In 1991, 35% of federal funds went for bus facilities, vehicles, and equipment, 43% for modernization of existing rail systems, and 22% for new rail systems.

TABLE 1

Source of Transit Operating Revenues

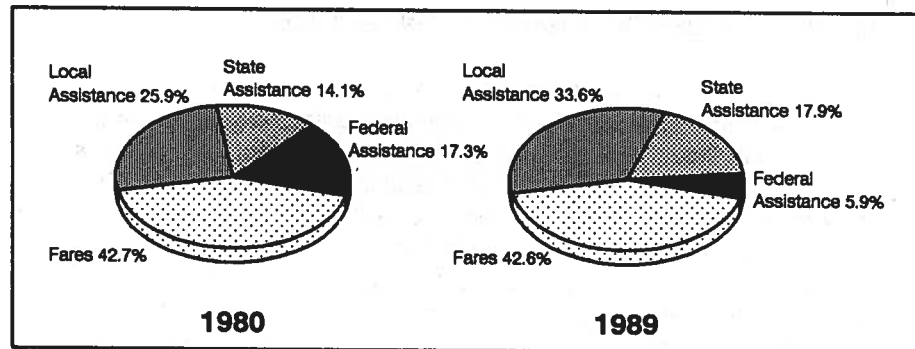
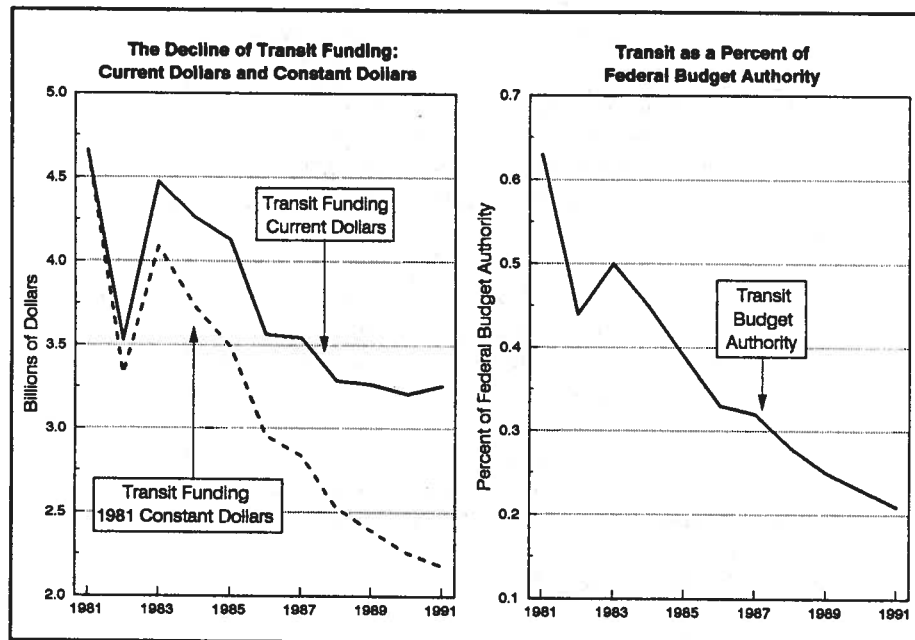


TABLE 2



Source: APTA, *Issue Paper*, June 1991.

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:

| | <u>BTU/Passenger Mile</u> |
|---------------|---------------------------|
| Automobile | 4,063 |
| Transit bus | 3,711 |
| Transit rail | 3,397 |
| Commuter rail | 3,102 |

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

2. Rational development

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

3. Mobility

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

4. Greater retail sales

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

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

An APTA study, "National Impacts of Transit Capital and Operating Expenditures on Business Revenues," estimates that a dollar invested in transit would result in a \$3 to \$3.50 increase in business revenues nationwide.

5. Less traffic congestion

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

- 6 city blocks (if traffic operates at 25 mph)
- 4.5 blocks (if traffic operates at 15 mph)

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

- 95 city blocks (if traffic operates at 25 mph)
- 68 blocks (if traffic operates at 15 mph)

6. Creation of jobs

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

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

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

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

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

TABLE 3

Congestion and Adverse Environmental Impact of Automobiles

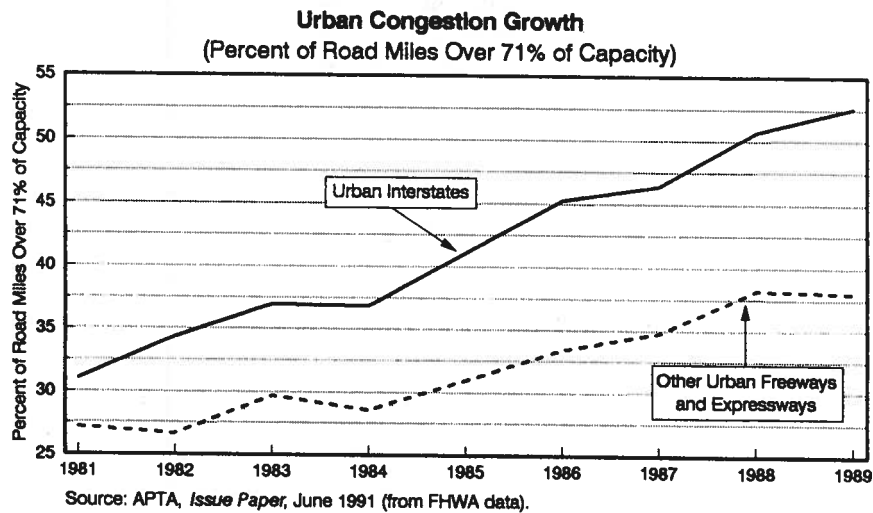
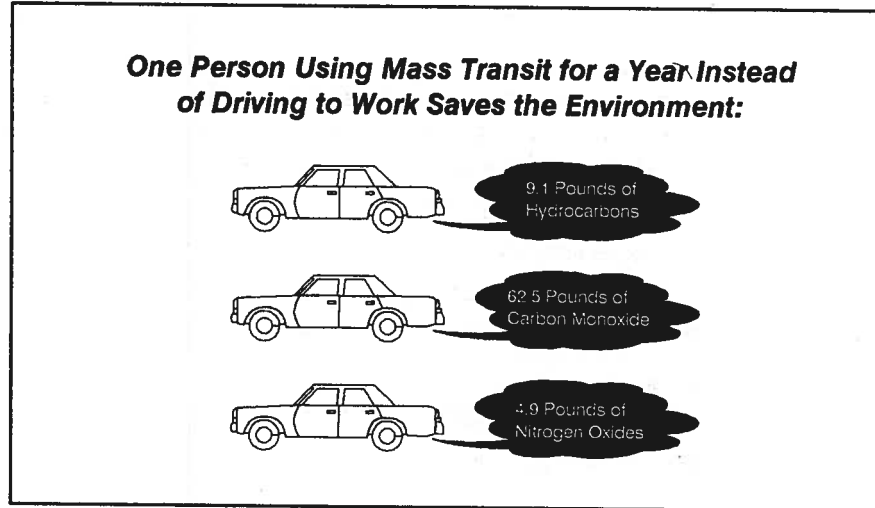


TABLE 4



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

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

7. Mobility during crises

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

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

8. Less air pollution

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

Pollution by Mode of Travel

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

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

Reduction in pollution when riding transit instead of driving

| <u>Mode</u> | <u>Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> |
|---------------|---------------------|------------------------|------------------------|
| 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 1988-1990 average death rates in terms of 100 million passenger miles are as follows:

| | <u>Death Rate</u> |
|--------------------------------|-------------------|
| Automobiles | 1.12 |
| Intercity & commuter railroads | 0.03 |
| Airlines | 0.02 |
| Intercity buses | 0.01 |
| School buses | 0.03 |
| Transit buses | 0.01 |
| Heavy & light rail vehicles | Not reported |

10. Increased Productivity

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

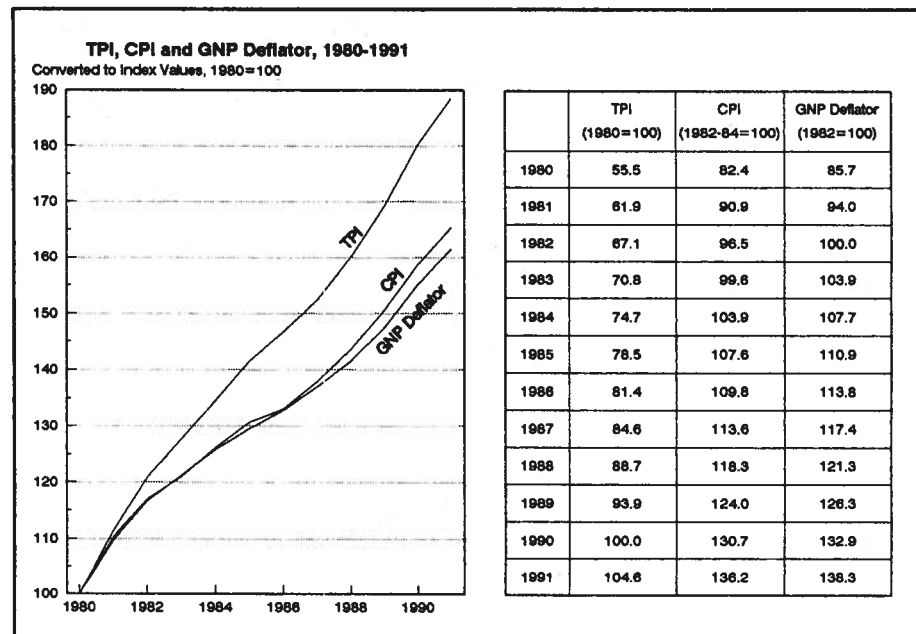
13. TRANSIT PRICE INDEX

Traditionally, analysts use the Consumer Price Index (CPI) or the GNP Deflator to adjust for monetary inflation when estimating changes in

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

From 1981 to 1991, transit inflation, measured by the TPI, increased 69.0 percent, compared to 49.8 percent for the CPI and 47.1 percent for the GNP Deflator. The costs of transit items grew 38 percent faster than the costs of consumer goods during this period.

TABLE 5



14. TRANSIT PRODUCTIVITY AND EFFICIENCY

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

Change in Transit Productivity and Operational Efficiency, 1985-90

| | 1985 | 1990 | '85-90* |
|---------------------------------------|---------|---------|---------|
| Productivity: | | | |
| Vehicle Miles/Employee | 10,355 | 11,881 | 14.9% |
| Vehicle Hours/Employee | 730 | 834 | 14.2% |
| Passenger Trips/Employee | 31,983 | 32,250 | 0.8% |
| Passenger Miles/Employee | 146,585 | 150,691 | 2.8% |
| Efficiency: | | | |
| Real Operating Expense/Vehicle Hour | \$79.99 | \$69.20 | -13.5% |
| Real Operating Expense/Vehicle Mile | 5.65 | 4.86 | -14.0% |
| Real Operating Expense/Passenger Trip | 1.83 | 1.79 | -2.2% |
| Real Operating Expense/Passenger Mile | 0.40 | 0.38 | -5.0% |

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

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

SECTION II

Profile of U.S. Transit



TABLE 6

Transit Modal Statistics at a Glance

| MODE | NUMBER OF SYSTEMS(a) | | ACTIVE VEHICLES | | OPERATING EMPLOYEES | |
|----------------------------|----------------------|-------|-----------------|--------|---------------------|---------|
| | 1990 | 1991 | 1990 | 1991 | 1990 | 1991 |
| Motor Bus | 2,688 | 2,690 | 58,714 | 57,865 | 162,189 | 165,347 |
| Urbanized Area Fixed-Route | 1,171 | 1,173 | 52,161 | 51,312 | 148,030 | 150,107 |
| Other Fixed-Route | 1,517 | 1,517 | 6,553 | 6,553 | 14,159 | 15,240 |
| Demand Response | 3,893 | 3,894 | 16,471 | 17,222 | 22,740 | 27,735 |
| Vanpool | 22 | 25 | 929 | 1,191 | 78 | 113 |
| Heavy Rail | 12 | 12 | 10,419 | 10,170 | 46,102 | 47,102 |
| Light Rail | 17 | 18 | 913 | 1,058 | 4,066 | 4,190 |
| Trolleybus | 5 | 5 | 832 | 919 | 1,925 | 1,826 |
| Commuter Rail | 14 | 15 | 4,415 | 4,550 | 21,443 | 21,387 |
| Ferry Boat (b) | 27 | 27 | 108 | 97 | 2,813 | 2,697 |
| Cable Car | 1 | 1 | 44 | 44 | 265 | 268 |
| Inclined Plane | 4 | 4 | 10 | 10 | 37 | 30 |
| Aerial Tramway | 1 | 1 | 2 | 2 | 20 | 20 |
| Automated Guideway | 7 | 7 | 104 | 104 | 498 | 813 |
| Total | 5,078 | 5,085 | 92,961 | 93,232 | 262,176 | 271,528 |

All data are preliminary.

(a) Total is not sum of all modes since many systems operate more than one mode.

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

TABLE 6 (continued)

Transit Modal Statistics at a Glance

| MODE | VEHICLE MILES OPERATED (MILLIONS) | | UNLINKED PASSENGER TRIPS (MILLIONS) | | PASSENGER MILES (MILLIONS) | |
|--------------------------------------|-----------------------------------|---------|-------------------------------------|-------|----------------------------|--------|
| | 1990 | 1991 | 1990 | 1991 | 1990 | 1991 |
| Motor Bus | 2,129.9 | 2,182.3 | 5,677 | 5,686 | 20,981 | 21,150 |
| Urbanized Area Fixed-Route | 1,957.8 | 2,001.7 | 5,421 | 5,393 | 20,184 | 20,277 |
| Other Fixed-Route | 172.1 | 180.6 | 256 | 293 | 797 | 873 |
| Demand Response | 305.9 | 359.2 | 68 | 72 | 431 | 528 |
| Heavy Rail | 536.7 | 525.0 | 2,346 | 2,167 | 11,475 | 10,488 |
| Light Rail | 24.2 | 27.7 | 175 | 186 | 571 | 670 |
| Trolleybus | 13.8 | 13.6 | 126 | 125 | 193 | 194 |
| Commuter Rail | 212.7 | 216.9 | 328 | 324 | 7,082 | 7,384 |
| Ferry Boat (b) | 2.4 | 2.4 | 50 | 50 | 286 | 274 |
| Other (a) | 15.9 | 21.2 | 29 | 33 | 124 | 172 |
| Total | 3,241.5 | 3,348.3 | 8,799 | 8,643 | 41,143 | 40,860 |
| Total Motor Bus Mile Equivalents (c) | 4,127.5 | 4,180.6 | | | | |

All data are preliminary.

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

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

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

TABLE 6 (continued)

Transit Modal Statistics at a Glance

| MODE | PASSENGER REVENUE (MILLIONS) | | OPERATING EXPENSE (MILLIONS) | | ENERGY CONSUMPTION | |
|----------------------------|------------------------------|-----------|------------------------------|-----------|--------------------|----------------|
| | 1990 | 1991 | 1990 | 1991 | GALLONS (MILLIONS) | KWH (MILLIONS) |
| | | | | | 1991 | 1991 |
| Motor Bus | \$2,966.8 | \$3,148.4 | \$8,903.0 | \$9,634.4 | 577.2 | 0.0 |
| Urbanized Area Fixed-Route | 2,905.5 | 3,075.3 | 8,320.7 | 8,940.1 | 537.9 | 0.0 |
| Other Fixed-Route | 61.3 | 73.1 | 582.3 | 694.3 | 39.3 | 0.0 |
| Demand Response | 40.9 | 58.3 | 517.8 | 698.0 | 60.5 | 0.0 |
| Heavy Rail | 1,740.8 | 1,690.8 | 3,825.0 | 3,841.2 | 0.0 | 3,226.0 |
| Light Rail | 82.6 | 97.5 | 237.1 | 291.3 | 0.0 | 274.1 |
| Trolleybus | 45.8 | 50.9 | 108.6 | 113.5 | 0.0 | 71.6 |
| Commuter Rail | 952.2 | 955.9 | 1,938.5 | 1,982.9 | 54.8 | 1,258.6 |
| Ferry Boat (b) | 55.5 | 43.5 | 171.1 | 177.9 | 20.7 | 0.0 |
| Other (a) | 26.0 | 18.7 | 40.9 | 46.3 | 1.5 | 19.8 |
| Total | 5,890.8 | 6,064.0 | 15,742.1 | 16,785.5 | 714.7 | 4,850.1 |

All data are preliminary.

-- = Not available.

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

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

TABLE 7

Number of Transit Service Providers By State

| STATE | URBANIZED AREA TRANSIT SYSTEMS(a) | SMALL URBAN AND RURAL TRANSIT SYSTEMS(b) | NON-PROFIT ELDERLY AND DISABLED SERVICE PROVIDERS(c) | TOTAL SERVICE PROVIDERS |
|----------------------|-----------------------------------|--|--|-------------------------|
| Alabama | 15 | 26 | 21 | 62 |
| Alaska | 1 | 8 | 32 | 41 |
| Arizona | 13 | 11 | 62 | 86 |
| Arkansas | 5 | 6 | 71 | 82 |
| California | 120 | 65 | 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 | 98 | 155 |
| Georgia | 12 | 53 | 50 | 115 |
| Hawaii | 1 | 3 | 30 | 34 |
| Idaho | 5 | 5 | 31 | 41 |
| Illinois | 20 | 31 | 57 | 108 |
| Indiana | 31 | 28 | 71 | 130 |
| Iowa | 17 | 24 | 1 | 42 |
| Kansas | 4 | 121 | 50 | 175 |
| Kentucky | 6 | 21 | 46 | 73 |
| Louisiana | 15 | 42 | 61 | 118 |
| Maine | 8 | 11 | 0 | 19 |
| Maryland | 13 | 14 | 49 | 76 |
| Massachusetts | 18 | 3 | 59 | 80 |

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

(continued on Page 30)

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 | 115 | 160 |
| Mississippi | 5 | 17 | 56 | 78 |
| Missouri | 8 | 27 | 67 | 102 |
| Montana | 4 | 10 | 34 | 48 |
| Nebraska | 2 | 50 | 56 | 108 |
| Nevada | 4 | 7 | 48 | 59 |
| New Hampshire | 3 | 3 | 21 | 27 |
| New Jersey | 25 | 14 | 91 | 130 |
| New Mexico | 5 | 17 | 51 | 73 |
| New York | 73 | 29 | 260 | 362 |
| North Carolina | 22 | 19 | 52 | 93 |
| North Dakota | 2 | 22 | 23 | 47 |
| Ohio | 40 | 33 | 113 | 186 |
| Oklahoma | 3 | 15 | 173 | 191 |
| Oregon | 5 | 21 | 60 | 86 |
| Pennsylvania | 44 | 15 | 118 | 177 |
| Rhode Island | 1 | 1 | 23 | 25 |
| South Carolina | 10 | 6 | 65 | 81 |
| South Dakota | 2 | 13 | 47 | 62 |
| Tennessee | 13 | 12 | 132 | 157 |
| Texas | 39 | 33 | 166 | 238 |

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

(continued on Page 31)

TABLE 7 (continued)

Number of Transit Service Providers By State

| STATE | URBANIZED AREA TRANSIT SYSTEMS(a) | SMALL URBAN AND RURAL TRANSIT SYSTEMS(b) | NON-PROFIT ELDERLY AND DISABLED SERVICE PROVIDERS(c) | TOTAL SERVICE PROVIDERS |
|---------------------|-----------------------------------|--|--|-------------------------|
| Utah | 3 | 4 | 43 | 50 |
| Vermont | 1 | 6 | 28 | 35 |
| Virginia | 26 | 11 | 42 | 79 |
| Washington | 20 | 25 | 7 | 52 |
| West Virginia | 6 | 12 | 83 | 101 |
| Wisconsin | 18 | 32 | 71 | 121 |
| Wyoming | 1 | 21 | 20 | 42 |
| United States Total | 787 | 1,077 | 3,222 | 5,085 |

(a) Transit systems reporting data for U.S. Federal Transit Administration Annual Section 15 Report and other known public and private transit systems. Systems operating in two or more states are counted in the state in which they operate the largest portion of their service.

(b) Transit systems receiving funds under the provisions of the Federal Transit Act, Section 18. Includes service providers operating fixed-route only, demand-response only, and combined fixed-route and demand-response service. Excludes providers also providing urbanized area service.

(c) Transit service providers receiving funds under the provisions of the Federal Transit Act, Section 16(b)2. Excludes service providers also providing urbanized area or small urban and rural service.

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

TABLE 8

Transit Systems Classified by Vehicle Type and Population Group

| POPULATION OF URBANIZED AREA | ALL-RAIL SYSTEMS | MULTI-MODE SYSTEMS | MOTOR BUS/ DEMAND RESPONSE/ VANPOOL SYSTEMS | ALL-FERRY SYSTEMS | TOTAL SYSTEMS(b) |
|------------------------------|------------------|--------------------|---|-------------------|------------------|
| 2,000,000 and greater | 15 | 21 | 621 | 10 | 657 |
| 500,000 to 2,000,000 | 3 | 12 | 540 | .7 | 562 |
| 250,000 to 500,000 | 0 | 2 | 234 | 1 | 238 |
| 100,000 to 250,000 | 0 | 1 | 332 | 1 | 333 |
| 50,000 to 100,000 | 1 | 2 | 321 | 1 | 324 |
| Less than 50,000(a) | 1 | 0 | 2,958 | 1 | 2,959 |
| Total U.S. Transit Systems | 20 | 38 | 5,006 | 21 | 5,085 |

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

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

TABLE 9

Public Transit as a Portion of All Transit*

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

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TABLE 10

Major High Occupancy Vehicle (HOV) Facilities*

| URBANIZED AREA | HOV FACILITY | LENGTH (miles) |
|------------------|-------------------------------|--------------------|
| Boston, MA | I-93 South | 1.1 1-way |
| Dallas, TX | I-30 East | 5.2 reversible |
| Denver, CO | U.S. 36-Boulder Turnpike | 5.5 1-way |
| Denver, CO | 16th Street Mall | 1.0 2-way |
| Denver, CO | I-25 | 11.0 1-way |
| Denver, CO | I-84 | 9.5 2-way |
| Hartford, CT | Moanalua Freeway | 2.5 east |
| Honolulu, HI | I-H-1 | 8.9 east, 7.8 west |
| Houston, TX | I-10 (Katy) | 13.0 reversible |
| Houston, TX | I-45 (North) | 13.5 reversible |
| Houston, TX | I-45 (Gulf) | 6.5 reversible |
| Houston, TX | U.S. 290 (Northwest) | 13.5 reversible |
| Los Angeles, CA | I-10 (El Monte) | 11.5 2-way |
| Los Angeles, CA | CA Route 91 | 8.0 east |
| Los Angeles, CA | CA Route 55 | 11.0 2-way |
| Los Angeles, CA | I-405 | 10.0 2-way |
| Los Angeles, CA | Spring Street | 1.5 north |
| Miami, FL | I-95 | 14.5 2-way |
| Minneapolis, MN | I-594 | 9.1 2-way |
| New Orleans, LA | Canal Street | 2.2 1-way |
| New York, NY | Long Island Expressway | 2.2 west |
| New York, NY | NJ Route 495 (Lincoln Tunnel) | 2.9 east |
| New York, NY | U.S. 9 | 2.0 reversible |
| New York, NY | Gowanus Expressway | 2.1 north |
| New York, NY | I-95 | 1.0 east |
| New York, NY | 49th/50th Streets | 1.1 2-way |
| New York, NY | U.S. 22 | 1.1 1-way |
| Orlando, FL | I-4 | 30.0 2-way |
| Philadelphia, PA | Haverford Township | 1.2 2-way |
| Philadelphia, PA | Chestnut Street | 1.1 2-way |

TABLE 10 (continued)

Major High Occupancy Vehicle (HOV) Facilities*

| URBANIZED AREA | TRANSITWAY | LENGTH (miles) |
|-------------------|-------------------------------|------------------------|
| Phoenix, AZ | I-10 West | 16.2 2-way |
| Phoenix, AZ | I-10 East | 18.1 2-way |
| Pittsburgh, PA | East (MLK, Jr.) Busway | 8.1 2-way |
| Pittsburgh, PA | South Busway | 4.3 2-way |
| Pittsburgh, PA | I-279 | 7.6 reversible |
| Saint Louis, MO | Hodiamont Right-of-Way | 3.2 2-way |
| San Diego, CA | I-15 | 7.5 reversible |
| San Francisco, CA | U.S. 101 North | 10.3 north, 10.2 south |
| San Francisco, CA | U.S. 101 South | 3.2 north, 2.0 south |
| San Francisco, CA | I-280 | 1.6 2-way |
| San Francisco, CA | Oakland Bay Bridge Access | 1.1 1-way |
| San Jose, CA | CA Route 237 | 4.0 1-way |
| San Jose, CA | San Tomas Expressway | 11.0 1-way |
| San Jose, CA | Montague Expressway | 5.0 1-way |
| San Jose, CA | U.S. 101 | 12.0 2-way |
| Seattle, WA | I-5 North | 5.8 south, 4.3 north |
| Seattle, WA | I-5 North | 3.5 south |
| Seattle, WA | I-405 North | 6.2 2-way |
| Seattle, WA | WA Route 520 | 2.8 west |
| Seattle, WA | WA Route 522 | 3.3 south |
| Seattle, WA | I-90 | 5.1 west |
| Seattle, WA | Transit Tunnel & South Busway | 1.8 2-way |
| Seattle, WA | WA Route 99 | 1.5 north |
| Seattle, WA | I-5 North | 2.0 north |
| Seattle, WA | I-5 South | 9.0 2-way |
| Washington, DC | I-395/I-95 (Shirley) | 10.1 reversible |
| Washington, DC | I-95 (Shirley) | 6.8 1-way |
| Washington, DC | I-66 | 10.0 1-way |
| Washington, DC | Dulles Access Road | 9.6 1-way |

*includes exclusive, stand-alone, and freeway priority lanes at least one mile long.

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

TABLE 11

Milestones in U.S. Transit History

| Year | Event |
|------|--|
| 1630 | Boston--reputed first publicly operated ferry boat |
| 1740 | New York--reputed first use of ox carts for carrying of passengers |
| 1811 | New York--first mechanically operated (steam-powered) ferry boat |
| 1827 | New York--first horse-drawn urban stagecoach line (Dry Dock & East Broadway) |
| 1830 | Baltimore--first railroad (Baltimore & Ohio Railroad Co.) |
| 1832 | New York--first horse-drawn street railway line (New York & Harlem Railroad Co.) |
| 1835 | New Orleans--oldest street railway line still operating (New Orleans & Carrollton line) |
| 1838 | Boston--first commuter fares on a railroad (Boston & West Worcester Railroad) |
| 1850 | New York--first use of exterior advertising on street railways |
| 1856 | Boston--first fare-free promotion |
| 1861 | New York--first failed attempt to form street railway labor organization |
| 1868 | New York--first cable-powered (& first elevated) line (West Side & Yonkers Patent Railway) |
| 1870 | New York--first pneumatic-powered (& first underground) line (Beach Pneumatic Railroad Co.) |
| 1870 | Pittsburgh--first inclined plane |
| 1871 | New York--first 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 Francisco--first successful cable-powered line (Clay St. Hill Railroad) |
| 1882 | Boston--American Street Railway Association (APTA's original predecessor) formed |
| 1883 | New York--first surviving street railway labor organization (Knights of Labor Local 2878) |
| 1884 | Cleveland--first electric street railway line (East Cleveland Street Railway) |
| 1884 | first transit-only publication (The Street Railway Journal) |
| 1885 | New York--first recorded strike by street railway workers (Third Avenue & Sixth Avenue Elevateds) |
| 1886 | Montgomery, AL--first semi-successful citywide street railway system (Capital City Street Railway Co.) |
| 1888 | Richmond, VA--first successful electric street railway line (Union Passenger Railway) |
| 1889 | New York--first major strike by street railway workers |

TABLE 11 (continued)

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, OR--first interurban rail line (East Side Railway Co.) |
| 1894 | Boston--first public transit commission (Boston Transit Commission) |
| 1895 | Chicago--first electric elevated rail line (Metropolitan West Side Elevated Railway) |
| 1897 | Boston--first electric underground (& first publicly-financed) street railway line (West End Street Railway) |
| 1898 | Chicago--first electric multiple-unit controlled rail line (Chicago & South Side Rapid Transit Railroad Co.) |
| 1904 | New York--first electric underground (& first 4-track express) heavy rail line (Interborough Rapid Transit Co.) |
| 1905 | New York--first public takeover of a private transit company (Staten Island Ferry) |
| 1905 | New York--first motor bus line (Fifth Avenue Coach Co.) |
| 1906 | Monroe, LA--first public takeover of a street railway |
| 1908 | New York--first interstate underground heavy rail line (Hudson & Manhattan Railroad to New Jersey) |
| 1910 | Hollywood, CA--first trolleybus line (Laurel Canyon Utilities Co.) |
| 1912 | San Francisco--first publicly operated street railway in a large city (San Francisco Municipal Railway) |
| 1912 | Cleveland--first street railway to operate motor buses (Cleveland Railway) |
| 1914 | Los Angeles--first jitney |
| 1917 | New York--last horse-drawn street railway line closed |
| 1918 | New York--APTA's predecessor organization first calls for public takeover of transit |
| 1920 | first motor bus not based on truck chassis (Fageol Safety Coach) |
| 1921 | New York--first 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 | Detroit--first motor bus without cowl-type engine |
| 1927 | Philadelphia--first 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 11 (continued)

Milestones in U.S. Transit History

| Year | Event |
|------|--|
| 1933 | San Antonio—first large city to replace all streetcars with motor buses |
| 1934 | New York—Transport 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 York—first industry-developed standardized street railway car (P.C.C. car) (Brooklyn & Queens Transit System) |
| 1938 | Chicago—first use of federal capital funding to build a transit rail line |
| 1939 | Chicago—first street with designated bus lane |
| 1940 | first time motor bus ridership exceeded street railway ridership |
| 1940 | San Francisco becomes last surviving cable car system |
| 1945 | Los Angeles—first 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 | Washington—first significant federal transit legislation (Housing & Urban Development Act of 1961) |
| 1962 | Seattle—first monorail (Seattle World's Fair) |
| 1962 | New York—first automated heavy rail line (Grand Central Shuttle) |
| 1963 | Chicago becomes last surviving city with interurban line (Chicago, South Shore, & South Bend Railroad) |
| 1964 | Washington—creation of Urban Mass Transportation Administration (Urban Mass Transportation Act of 1964) |
| 1966 | New York—first public takeover of commuter railroad (Long Island Rail Road Co.) |
| 1966 | Providence—first statewide transit system (Rhode Island Public Transit Authority) |
| 1966 | Washington—Urban Mass Transportation Administration moved to new Department of Transportation |
| 1968 | Minneapolis—first downtown transit mall (Nicollet Mall) |
| 1968 | Cleveland—first rail station at an airport opened |
| 1969 | Washington—first transitway (Shirley Highway) |

TABLE 11 (continued)

Milestones in U.S. Transit History

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

TABLE 12

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

| | |
|--|--------------|
| Costs recovered from drivers through taxes and tolls | |
| Highway construction and repair | \$20.0 |
| Highway maintenance | 11.8 |
| Highway services, administration, interest, and debt retirement | 12.5 |
| Total | <u>44.3</u> |
| Market costs not recovered from drivers | |
| Highway construction and repair | 13.3 |
| Highway maintenance | 7.9 |
| Highway services | 68.0 |
| Free parking | 85.0 |
| Total | <u>174.2</u> |
| External costs not recovered from drivers | |
| Health costs from air pollution | 10.0 |
| Reductions of motor vehicle CO2 emissions | 27.0 |
| Strategic petroleum reserve | 0.3 |
| Military expenditures | 25.0 |
| Accidents | 55.0 |
| Noise | 9.0 |
| Total | <u>126.3</u> |
| Total Public Cost | 344.8 |
| Miles traveled | 2,000.0 |
| Public Cost per mile traveled | 17¢ |
| Covered by user fees | 2¢ |
| Not covered by user fees | 15¢ |

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

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

SECTION III

Finance

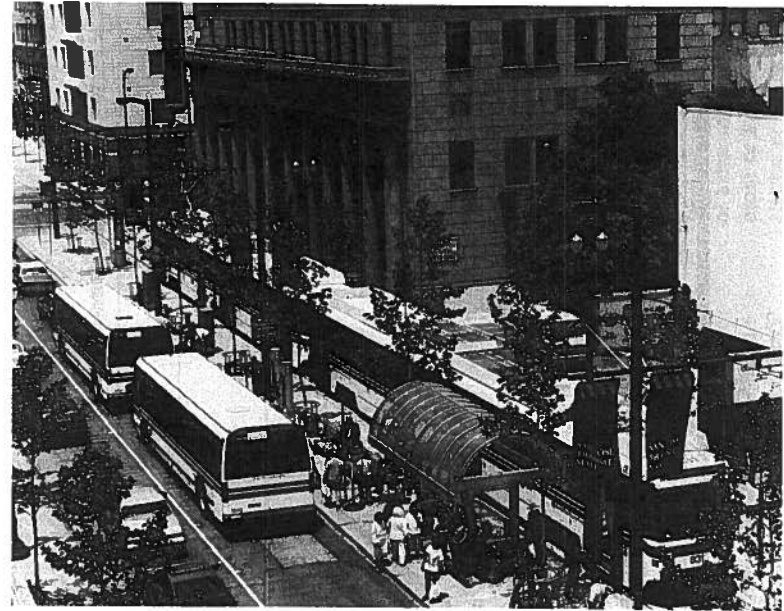


TABLE 13

Transit Financial Statement for 1991 and 1990

REVENUES

| | 1991 | 1990 |
|------------------------------|-------------------------|-------------------------|
| Passenger Revenue | \$ 6,064,000,000 | \$ 5,890,800,000 |
| Other Operating Revenue | 954,300,000 | 895,000,000 |
| Total Operating Revenue | <u>\$ 7,018,300,000</u> | <u>\$ 6,785,800,000</u> |
| Local Operating Assistance | \$ 5,605,100,000 | \$ 5,326,800,000 |
| State Operating Assistance | 3,241,800,000 | 2,970,600,000 |
| Federal Operating Assistance | 945,000,000 | 970,000,000 |
| Total Operating Assistance | <u>\$ 9,791,900,000</u> | <u>\$ 9,267,400,000</u> |
| Total Revenue | <u>\$16,810,200,000</u> | <u>\$16,053,200,000</u> |

All data are preliminary.

TABLE 13 (continued)

Transit Financial Statement for 1991 and 1990

EXPENSES

| | 1991 | 1990 |
|----------------------------------|-------------------------|-------------------------|
| Vehicle Operations Expense | \$ 6,833,800,000 | \$ 6,653,300,000 |
| Vehicle Maintenance Expense | 3,043,100,000 | 3,038,800,000 |
| Non-Vehicle Maintenance Expense | 1,611,300,000 | 1,592,000,000 |
| General Administration Expense | 3,622,400,000 | 3,449,900,000 |
| Purchased Transportation Expense | 1,674,900,000 | 1,008,100,000 |
| Total Operating Expense | <u>\$16,785,500,000</u> | <u>\$15,742,100,000</u> |
| Depreciation and Amortization | \$ 1,789,100,000 | \$ 1,593,100,000 |
| Other Reconciling Items | 1,042,600,000 | 643,900,000 |
| Total Reconciling Items | <u>\$ 2,831,700,000</u> | <u>\$ 2,237,000,000</u> |
| Total Expense | <u>\$19,617,200,000</u> | <u>\$17,979,100,000</u> |

All data are preliminary.

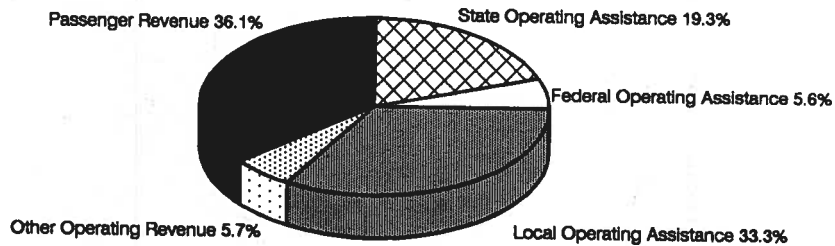
NOTE: The difference between Total Revenue and Total Expense is due to several factors including (1) use of the accrual system of accounting rather than the cash system of accounting, (2) amalgamation of accounts of transit systems recording revenue and expense is a variety of fiscal or calendar years,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

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

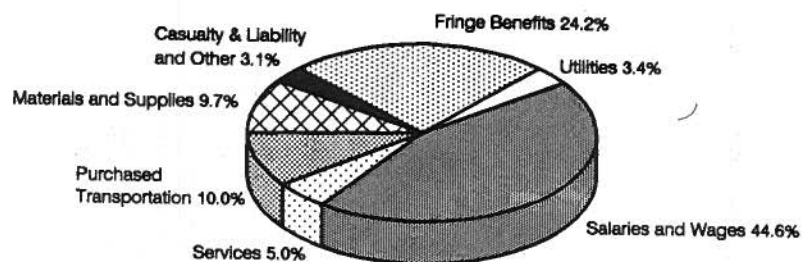
TABLE 14

Transit Operating Revenue and Expense in 1991

Revenue



Expense by Object Class



Expense by Function

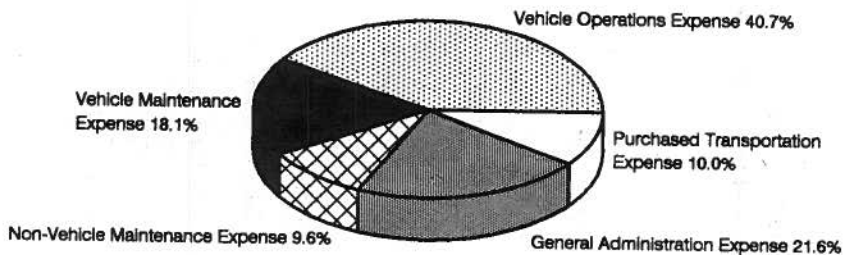


TABLE 15

Transit Operating Expense for 1991 Classified By Function and Object Class

| FUNCTION AND OBJECT CLASS | (DOLLARS IN MILLIONS) | | | | TOTAL |
|----------------------------|-----------------------|---------------------|-------------------------|------------------------|-----------|
| | VEHICLE OPERATIONS | VEHICLE MAINTENANCE | NON-VEHICLE MAINTENANCE | GENERAL ADMINISTRATION | |
| Salaries and Wages | 3,719.00 | 1,464.00 | 824.59 | 1,482.31 | 7,489.90 |
| Fringe Benefits | 1,979.34 | 740.26 | 494.95 | 841.05 | 4,055.60 |
| Services | 79.44 | 156.04 | 125.56 | 479.66 | 840.70 |
| Fuels and Lubricants | 480.45 | 28.74 | 1.61 | 0.00 | 510.80 |
| Materials and Supplies | 85.93 | 683.60 | 155.91 | 194.86 | 1,120.30 |
| Utilities | 102.15 | 4.77 | 291.70 | 176.58 | 575.20 |
| Casualty & Liability Costs | 25.94 | 6.36 | 10.19 | 584.51 | 627.00 |
| Purchased Transportation | 0.00 | 0.00 | 0.00 | 0.00 | 1,674.90 |
| Other | 361.55 | -40.67 | -293.21 | -136.57 | -108.90 |
| Total | 6,833.80 | 3,043.10 | 1,611.50 | 3,622.40 | 16,785.50 |
| | (PERCENT OF TOTAL) | | | | |
| Salaries and Wages | 22.16 | 8.72 | 4.91 | 8.83 | 44.62 |
| Fringe Benefits | 11.79 | 4.41 | 2.95 | 5.01 | 24.16 |
| Services | 0.47 | 0.93 | 0.75 | 2.86 | 5.01 |
| Fuels and Lubricants | 2.86 | 0.17 | 0.01 | 0.00 | 3.04 |
| Materials and Supplies | 0.51 | 4.07 | 0.93 | 1.16 | 6.67 |
| Utilities | 0.61 | 0.03 | 1.74 | 1.05 | 3.43 |
| Casualty & Liability Costs | 0.15 | 0.04 | 0.06 | 3.48 | 3.74 |
| Purchased Transportation | 0.00 | 0.00 | 0.00 | 0.00 | 9.98 |
| Other | 2.15 | -0.24 | -1.75 | -0.81 | -0.65 |
| Total | 40.71 | 18.13 | 9.60 | 21.58 | 100.00 |

TABLE 16

Trend of Transit Expenses by Function Class, Dollars*

| CALENDAR YEAR | OPERATING EXPENSE | | | | | | | TOTAL (MILLIONS) | DEPRECIATION AND AMORTIZATION (MILLIONS) | OTHER RECONCILING ITEMS (MILLIONS) | TOTAL EXPENSE (MILLIONS) |
|---------------|-------------------------------|------------------------|------------------------|------------------------|-----------------------------------|---------------------------|-------------------------------------|------------------|--|------------------------------------|--------------------------|
| | VEHICLE OPERATIONS (MILLIONS) | | MAINTENANCE (MILLIONS) | | GENERAL ADMINISTRATION (MILLIONS) | | PURCHASED TRANSPORTATION (MILLIONS) | | | | |
| | VEHICLE (MILLIONS) | NON-VEHICLE (MILLIONS) | VEHICLE (MILLIONS) | NON-VEHICLE (MILLIONS) | GENERAL ADMINISTRATION (MILLIONS) | TRANSPORTATION (MILLIONS) | | | | | |
| 1976 | 2,033.4 | | 894.1(a) | | 929.9(b) | | | 3,857.4 | 136.3 | 88.9 | 4,082.6 |
| 1977 | 2,219.8 | | 972.7(a) | | 928.5(b) | | | 4,121.0 | 161.4 | 84.2 | 4,366.6 |
| 1978 | 2,508.7 | | \$ 776.6 | \$ 292.1 | 961.7(b) | | | 4,539.1 | 149.6 | 100.2 | 4,788.9 |
| 1979 | 2,735.0 | | 1,070.2 | 398.8 | 1,027.7(b) | | | 5,231.7 | 253.4 | 126.3 | 5,611.4 |
| 1980 | 3,248.2 | | 1,274.3 | 499.7 | 1,224.3(b) | | | 6,246.5 | 277.6 | 186.5 | 6,710.6 |
| 1981 | 3,596.5 | | 1,397.8 | 547.9 | 1,482.1(b) | | | 7,024.3 | 386.3 | 211.1 | 7,621.7 |
| 1982 | 3,882.3 | | 1,555.8 | 611.8 | 1,503.0(b) | | | 7,552.9 | 507.1 | 254.3 | 8,314.3 |
| 1983 | 3,930.8 | | 1,696.6 | 694.9 | 1,633.7(b) | | | 7,956.0 | 472.5 | 307.2 | 8,735.7 |
| 1984 | 5,141.9 | | 2,149.4 | 912.3 | 2,914.7 | | 455.7 | 11,574.0 | 885.5 | 497.6 | 12,957.1 |
| 1985 | 5,654.7 | | 2,522.6 | 1,149.6 | 2,505.3 | | 548.7 | 12,380.9 | 1,097.6 | 598.6 | 14,077.1 |
| 1986 | 5,690.6 | | 2,733.6 | 1,295.2 | 2,748.0 | | 484.3 | 12,951.7 | 1,148.2 | 626.2 | 14,726.1 |
| 1987 | 5,790.3 | | 2,730.2 | 1,363.5 | 2,869.4 | | 718.7 | 13,472.1 | 1,212.5 | 720.7 | 15,405.3 |
| 1988 | 6,052.3 | | 2,865.1 | 1,447.6 | 3,077.8 | | 844.5 | 14,287.3 | 1,377.6 | 776.9 | 16,441.8 |
| 1989 | 6,275.3 | | 2,942.3 | 1,550.5 | 3,251.0 | | 953.2 | 14,972.3 | 1,502.5 | 693.9 | 17,168.7 |
| 1990 | 6,653.3 | | 3,038.8 | 1,592.0 | 3,449.9 | | 1,008.1 | 15,742.1 | 1,593.5 | 643.9 | 17,979.1 |
| P 1991 | 6,833.8 | | 3,043.1 | 1,611.3 | 3,622.4 | | 1,674.9 | 16,785.5 | 1,789.1 | 1,042.6 | 19,617.2 |

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) Vehicle Maintenance and Non-Vehicle Maintenance combined.

(b) General Administration and Purchased Transportation combined.

TABLE 17

Trend of Transit Expenses by Object Class, Dollars*

| CALENDAR YEAR | SALARIES & WAGES (MILLIONS) | FRINGE BENEFITS (MILLIONS) | SERVICES (MILLIONS) | MATERIALS AND SUPPLIES (MILLIONS) | UTILITIES (MILLIONS) | CASUALTY & LIABILITY COSTS (MILLIONS) | PURCHASED TRANSPORTATION (MILLIONS) | | OTHER (MILLIONS) | TOTAL OPERATING EXPENSE (MILLIONS) |
|---------------|-----------------------------|----------------------------|---------------------|-----------------------------------|----------------------|---------------------------------------|-------------------------------------|------------|------------------|------------------------------------|
| | | | | | | | (MILLIONS) | (MILLIONS) | | |
| 1977 | \$2,546.7 | \$ 813.6 | -- | -- | -- | -- | -- | -- | -- | \$ 4,121.0 |
| 1978 | 2,740.5 | 964.1 | -- | -- | -- | -- | -- | -- | -- | 4,539.1 |
| 1979 | 3,025.0 | 1,090.4 | \$136.3 | \$ 508.3 | \$188.7 | \$183.4 | \$ 99.6(a) | \$ 99.6(a) | | 5,231.7 |
| 1980 | 3,280.9 | 1,353.1 | 237.6 | 759.4 | 231.3 | 237.8 | 146.4(a) | 146.4(a) | | 6,246.5 |
| 1981 | 3,493.5 | 1,649.1 | 266.8 | 940.8 | 280.9 | 252.8 | 140.4(a) | 140.4(a) | | 7,024.3 |
| 1982 | 3,731.4 | 1,756.5 | 298.3 | 1,129.9 | 322.5 | 188.1 | 126.1(a) | 126.1(a) | | 7,552.9 |
| 1983 | 3,921.3 | 1,977.3 | 309.4 | 1,023.9 | 431.2 | 192.6 | 100.3(a) | 100.3(a) | | 7,956.0 |
| 1984 | 5,487.8 | 2,716.7 | 469.2 | 1,462.2 | 465.7 | 328.5 | \$ 455.7 | \$188.2 | | 11,574.0 |
| 1985 | 5,843.1 | 2,868.3 | 491.9 | 1,561.2 | 494.7 | 347.1 | 548.7 | 225.9 | | 12,380.9 |
| 1986 | 6,119.2 | 3,125.9 | 583.8 | 1,524.3 | 497.1 | 491.4 | 484.3 | 125.7 | | 12,951.7 |
| 1987 | 6,324.1 | 3,266.9 | 655.5 | 1,421.0 | 509.2 | 536.1 | 718.7 | 40.6 | | 13,472.1 |
| 1988 | 6,675.0 | 3,528.9 | 715.3 | 1,446.2 | 503.9 | 527.8 | 844.5 | 45.7 | | 14,287.3 |
| 1989 | 6,897.7 | 3,737.3 | 765.0 | 1,507.6 | 540.2 | 559.4 | 953.2 | 11.9 | | 14,972.3 |
| 1990 | 7,226.3 | 3,986.0 | 794.3 | 1,608.4 | 552.9 | 640.5 | 1,008.1 | -74.4 | | 15,742.1 |
| P 1991 | 7,489.9 | 4,055.6 | 840.7 | 1,631.1 | 575.2 | 627.0 | 1,674.9 | -108.9 | | 16,785.5 |

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) Purchased Transportation and Other combined.

TABLE 18

Trend of Transit Expenses by Mode, Dollars

| CALENDAR YEAR | RAILWAY | | | | | TROLLEY BUS (MILLIONS) | MOTOR BUS (MILLIONS) | DEMAND RESPONSE (MILLIONS) | OTHER (MILLIONS) | TOTAL OPERATING EXPENSE (MILLIONS) |
|---------------|-----------------------|-----------------------|--------------------------|------------|------------|------------------------|----------------------|----------------------------|------------------|------------------------------------|
| | LIGHT RAIL (MILLIONS) | HEAVY RAIL (MILLIONS) | COMMUTER RAIL (MILLIONS) | | | | | | | |
| | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | (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 | | |
| P 1991 | 291.3 | 3,841.2 | 1,982.9 | 113.5 | 9,634.4 | 698.0 | 224.2 | 16,785.5 | | |

P = Preliminary

TABLE 19

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

| VEHICLE MODE, POPULATION SIZE OF SERVICE DATA | CALENDAR YEAR | SAMPLE SIZE (a) | PERCENT OF OPERATING EXPENSE FOR | | | | | | |
|---|---------------|-----------------|----------------------------------|---------------------|-------------------------|------------------------|--------------------------|--|--|
| | | | VEHICLE OPERATIONS | VEHICLE MAINTENANCE | NON-VEHICLE MAINTENANCE | GENERAL ADMINISTRATION | PURCHASED TRANSPORTATION | | |
| | | | | | | | | | |
| Multi-Mode, All Areas (b) | 1986 | 24 | 38.7 | 20.6 | 13.7 | 23.0 | 4.0 | | |
| | 1987 | 33 | 38.9 | 20.9 | 14.1 | 23.1 | 3.0 | | |
| | 1988 | 33 | 38.3 | 20.2 | 13.0 | 22.5 | 6.0 | | |
| | 1989 | 44 | 37.9 | 19.2 | 13.2 | 23.5 | 6.2 | | |
| | 1990 | 33 | 37.7 | 18.7 | 13.5 | 24.0 | 6.1 | | |
| P 1991 | 34 | 36.9 | 18.3 | 12.7 | 24.5 | 7.6 | | | |
| Motor Bus Only, 1,000,000 or More | 1986 | 40 | 52.4 | 21.7 | 2.8 | 19.8 | 3.3 | | |
| | 1987 | 54 | 52.1 | 20.9 | 3.0 | 19.6 | 4.4 | | |
| | 1988 | 61 | 53.4 | 20.8 | 2.8 | 18.8 | 4.2 | | |
| | 1989 | 51 | 51.8 | 21.5 | 2.9 | 19.9 | 3.9 | | |
| | 1990 | 65 | 48.4 | 20.3 | 3.2 | 18.8 | 9.3 | | |
| P 1991 | 83 | 47.6 | 17.6 | 3.1 | 16.8 | 14.9 | | | |
| Motor Bus Only, 500,000 - 1,000,000 | 1986 | 22 | 56.5 | 18.8 | 2.7 | 17.9 | 4.1 | | |
| | 1987 | 23 | 56.3 | 19.1 | 2.8 | 18.1 | 3.7 | | |
| | 1988 | 22 | 56.3 | 19.4 | 2.9 | 17.8 | 3.6 | | |
| | 1989 | 24 | 55.1 | 19.1 | 2.9 | 18.2 | 4.7 | | |
| | 1990 | 27 | 54.0 | 18.1 | 2.7 | 17.6 | 7.6 | | |
| P 1991 | 28 | 54.6 | 18.2 | 2.8 | 16.4 | 8.0 | | | |

(a), (b) See footnotes Page 50.

TABLE 19 (continued)

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

| VEHICLE MODE, POPULATION SIZE OF SERVICE AREA | CALENDAR YEAR | SAMPLE SIZE(a) | PERCENT OF OPERATING EXPENSE FOR | | | | | PURCHASED TRANSPORTATION |
|---|------------------|-------------------|----------------------------------|------------------------|----------------------------|---------------------------|------|-----------------------------|
| | | | VEHICLE OPERATIONS | VEHICLE MAINTENANCE | NON-VEHICLE MAINTENANCE | GENERAL ADMINISTRATION | | |
| Motor Bus Only, 200,000 to 500,000 | 1986 | 49 | 56.3 | 19.7 | 1.9 | 19.1 | 3.0 | |
| | 1987 | 55 | 55.6 | 20.2 | 2.3 | 18.7 | 3.2 | |
| | 1988 | 50 | 56.5 | 19.6 | 2.4 | 17.8 | 3.7 | |
| | 1989 | 55 | 57.2 | 18.9 | 2.4 | 17.4 | 4.1 | |
| | 1990 | 59 | 56.2 | 18.4 | 3.0 | 17.1 | 5.3 | |
| | P 1991 | 62 | 56.0 | 18.5 | 2.6 | 16.7 | 6.2 | |
| Motor Bus Only, 200,000 or Fewer | 1986 | 97 | 56.0 | 19.2 | 2.0 | 17.9 | 4.9 | |
| | 1987 | 99 | 54.7 | 18.8 | 2.0 | 18.8 | 5.7 | |
| | 1988 | 102 | 56.6 | 18.5 | 2.2 | 18.2 | 4.5 | |
| | 1989 | 111 | 55.2 | 18.0 | 2.2 | 18.1 | 6.5 | |
| | 1990 | 103 | 53.2 | 18.2 | 2.3 | 18.2 | 8.1 | |
| | P 1991 | 93 | 52.8 | 16.9 | 2.2 | 17.0 | 11.1 | |

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

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

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

TABLE 20

Trend of Transit Revenues, Dollars*

| CALENDAR YEAR | OPERATING REVENUE | | | OPERATING ASSISTANCE | | | TOTAL REVENUE (MILLIONS) |
|------------------|----------------------------|---------------------|---------------------|-----------------------------|-----------------------|---------------------|--------------------------------|
| | PASSENGER(a) (MILLIONS) | OTHER (MILLIONS) | TOTAL (MILLIONS) | LOCAL & STATE (MILLIONS) | FEDERAL (MILLIONS) | TOTAL (MILLIONS) | |
| 1976 | \$2,025.6 | \$210.5 | \$2,236.1 | \$1,224.5 | \$ 442.9 | \$1,647.3 | \$3,883.4 |
| 1977 | 2,157.1 | 196.5 | 2,353.6 | 1,319.5 | 584.5 | 1,904.1 | 4,257.7 |
| 1978 | 2,271.0 | 178.9 | 2,449.9 | 1,542.1 | 689.5 | 2,231.7 | 4,681.5 |
| 1979 | 2,436.3 | 211.5 | 2,647.8 | 2,054.6 | 855.8 | 2,910.4 | 5,558.2 |
| 1980 | 2,556.8 | 248.3 | 2,805.1 | 2,611.2 | 1,093.9 | 3,705.1 | 6,510.2 |
| 1981 | 2,701.4 | 343.8 | 3,045.2 | 3,225.7 | 1,095.1 | 4,320.8 | 7,366.0 |
| 1982 | 3,077.0 | 380.0 | 3,457.0 | 3,582.0 | 1,005.4 | 4,587.4 | 8,044.3 |
| 1983 | 3,171.6 | 332.5 | 3,504.1 | 4,194.6 | 827.0 | 5,021.6 | 8,525.7 |
| 1984 | 4,447.7 | 780.5 | 5,228.2 | 5,399.1 | 995.8 | 6,394.9 | 11,623.1 |
| 1985 | 4,574.7 | 701.8 | 5,276.5 | 5,978.5 | 939.6 | 6,918.1 | 12,194.6 |
| | | | | LOCAL | STATE | | |
| 1986 | 5,113.1 | 737.3 | 5,850.4 | 4,244.5 | 2,305.6 | 941.2 | 13,341.7 |
| 1987 | 5,114.1 | 776.6 | 5,890.7 | 4,680.6 | 2,564.6 | 955.1 | 14,091.0 |
| 1988 | 5,224.6 | 840.7 | 6,065.3 | 4,893.1 | 2,677.1 | 901.1 | 14,536.6 |
| 1989 | 5,419.9 | 836.7 | 6,256.6 | 4,995.4 | 2,796.3 | 936.6 | 14,984.9 |
| 1990 | 5,890.8 | 895.0 | 6,785.8 | 5,326.8 | 2,970.6 | 970.0 | 16,053.2 |
| P 1991 | 6,064.0 | 954.3 | 7,018.3 | 5,605.1 | 3,241.8 | 945.0 | 16,810.2 |

P = Preliminary

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

(a) Beginning 1984 includes fare revenue retained by contractors.

(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.

TABLE 21

Trend of Transit Operating Revenue

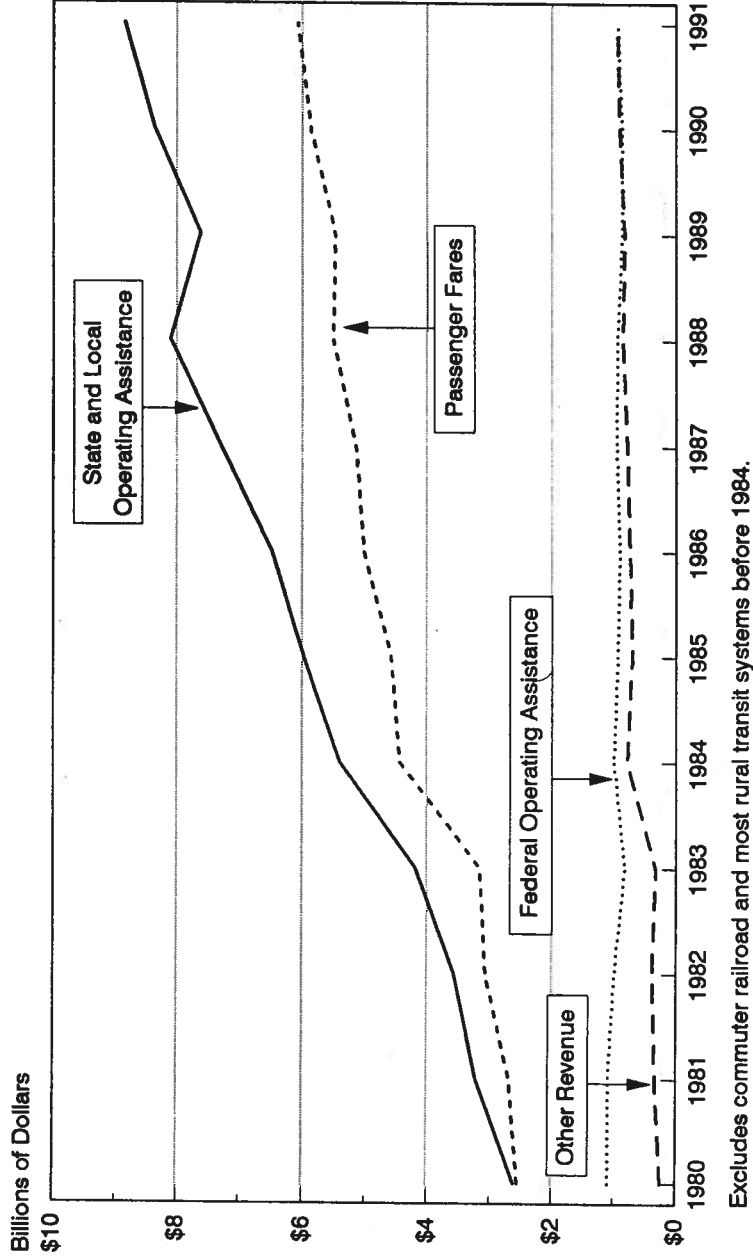


TABLE 22

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

| VEHICLE MODE POPULATION SIZE OF SERVICE AREA | CALENDAR YEAR | SAMPLE SIZE (a) | PERCENT OF REVENUE FOR OPERATIONS FROM | | | | |
|--|------------------|--------------------|--|-----------------------|----------------------------------|-----------------------|--|
| | | | PASSENGER FARES | OTHER EARNINGS (b) | STATE AND LOCAL ASSISTANCE | FEDERAL ASSISTANCE | |
| Multi-Mode, All Areas (c) | 1986 | 24 | 40.0 | 5.3 | 49.2 | 5.5 | |
| | 1987 | 33 | 37.8 | 4.9 | 52.7 | 4.6 | |
| | 1988 | 33 | 36.1 | 5.0 | 54.5 | 4.4 | |
| | 1989 | 44 | 37.0 | 5.0 | 53.4 | 4.6 | |
| | 1990 | 33 | 41.2 | 4.2 | 50.6 | 4.0 | |
| | P 1991 | 34 | 40.4 | 3.8 | 51.7 | 4.1 | |
| Motor Bus Only, 1,000,000 or More | 1986 | 40 | 32.0 | 6.0 | 54.1 | 7.9 | |
| | 1987 | 54 | 33.9 | 4.1 | 54.4 | 7.6 | |
| | 1988 | 61 | 33.5 | 5.4 | 53.8 | 7.3 | |
| | 1989 | 51 | 32.7 | 3.5 | 55.2 | 8.6 | |
| | 1990 | 65 | 26.8 | 6.6 | 60.5 | 6.1 | |
| | P 1991 | 83 | 27.6 | 8.2 | 59.6 | 4.6 | |
| Motor Bus Only, 500,000 - 1,000,000 | 1986 | 22 | 27.3 | 4.8 | 47.1 | 20.8 | |
| | 1987 | 23 | 25.9 | 7.1 | 47.4 | 19.6 | |
| | 1988 | 22 | 25.1 | 6.6 | 50.7 | 17.6 | |
| | 1989 | 24 | 24.6 | 6.8 | 52.8 | 15.8 | |
| | 1990 | 27 | 25.8 | 5.0 | 56.6 | 12.6 | |
| | P 1991 | 28 | 26.3 | 4.8 | 57.5 | 11.4 | |

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

TABLE 22 (continued)

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

| VEHICLE MODE POPULATION SIZE OF SERVICE AREA | CALENDAR YEAR | SAMPLE SIZE (a) | PERCENT OF REVENUE FOR OPERATIONS FROM | | | | |
|--|------------------|--------------------|--|-----------------------|----------------------------------|-----------------------|--|
| | | | PASSENGER FARES | OTHER EARNINGS (b) | STATE AND LOCAL ASSISTANCE | FEDERAL ASSISTANCE | |
| Motor Bus Only, 200,000 to 500,000 | 1986 | 49 | 23.9 | 3.9 | 55.2 | 17.0 | |
| | 1987 | 55 | 24.8 | 4.8 | 52.2 | 18.2 | |
| | 1988 | 50 | 24.6 | 5.5 | 53.2 | 16.7 | |
| | 1989 | 55 | 23.5 | 5.2 | 54.7 | 16.6 | |
| | 1990 | 59 | 21.0 | 5.5 | 57.4 | 16.1 | |
| | P 1991 | 62 | 21.1 | 5.5 | 57.9 | 15.5 | |
| Motor Bus Only, 200,000 or Fewer | 1986 | 97 | 20.3 | 6.0 | 50.8 | 22.9 | |
| | 1987 | 99 | 20.1 | 6.2 | 53.0 | 20.7 | |
| | 1988 | 102 | 19.3 | 6.2 | 54.6 | 19.9 | |
| | 1989 | 111 | 18.7 | 6.6 | 54.5 | 20.2 | |
| | 1990 | 103 | 19.4 | 6.4 | 54.4 | 19.8 | |
| | P 1991 | 93 | 19.2 | 7.1 | 54.5 | 19.2 | |

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

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

TABLE 23

Trend of Transit Passenger Revenue by Mode, Dollars*

| CALENDAR YEAR | RAILWAY | | | TROLLEY BUS (MILLIONS) | MOTOR BUS (MILLIONS) | DEMAND RESPONSE (MILLIONS) | OTHER (MILLIONS) | TOTAL PASSENGER REVENUE (MILLIONS) |
|------------------|-----------------------------|-----------------------------|--------------------------------|------------------------------|----------------------------|----------------------------------|---------------------|---|
| | LIGHT RAIL (MILLIONS) | HEAVY RAIL (MILLIONS) | COMMUTER RAIL (MILLIONS) | | | | | |
| 1990 | \$82.6 | \$1,740.8 | \$952.2 | \$45.8 | \$2,966.8 | \$40.9 | \$61.7 | \$5,890.8 |
| P 1991 | 97.5 | 1,690.8 | 955.9 | 50.9 | 3,148.4 | 58.3 | 62.2 | 6,064.0 |

P = Preliminary

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

TABLE 24

Trend of Transit Fares

| CALENDAR YEAR | AVERAGE REVENUE PER UNLINKED TRANSIT PASSENGER TRIP(a)(d) (cents) | ADULT CASH FARE (BASE PERIOD) (cents) | | | PERCENT OF TRANSIT SYSTEMS WITH (c) | | |
|---------------|---|---------------------------------------|------|---------|-------------------------------------|------------------|------------|
| | | FARE (BASE PERIOD) | | MEAN(b) | PEAK PERIOD SURCHARGES | TRANSFER CHARGES | ZONE FARES |
| | | HIGH | LOW | | | | |
| 1970 | 22.4 | 50 | 10 | -- | -- | -- | -- |
| 1975 | 26.7 | 75 | Free | -- | -- | -- | -- |
| 1976 | 27.4 | 75 | Free | -- | -- | -- | -- |
| 1977 | 28.4 | 75 | Free | 32.6 | 3.7% | -- | -- |
| 1978 | 28.6 | 75 | Free | 33.6 | 4.6 | -- | -- |
| 1979 | 28.8 | 75 | Free | 35.7 | 5.4 | -- | -- |
| 1980 | 29.8 | 75 | Free | 40.3 | 5.1 | 29.6% | 31.4% |
| 1981 | 32.6 | 100 | Free | 47.3 | 4.2 | 23.7 | 31.6 |
| 1982 | 38.2 | 100 | Free | 52.8 | 9.0 | 28.4 | 38.9 |
| 1983 | 38.7 | 100 | Free | 54.9 | 8.9 | 37.1 | 35.9 |
| 1984 | 50.3 | 150 | Free | 56.9 | 9.5 | 36.6 | 34.0 |
| 1985 | 53.0 | 150 | Free | 58.4 | 8.6 | 37.0 | 33.1 |
| 1986 | 58.3 | 210 | Free | 61.7 | 8.8 | 30.7 | 27.9 |
| 1987 | 58.5 | 275 | Free | 63.4 | 8.4 | 29.5 | 33.1 |
| 1988 | 60.3 | 275 | Free | 66.2 | 7.8 | 30.2 | 33.2 |
| 1989 | 60.7 | 275 | Free | 67.0 | 6.4 | 27.7 | 31.5 |
| 1990 | 66.9 | 275 | Free | 73.0 | 6.5 | 28.8 | 38.9 |
| P 1991 | 70.2 | 600 | Free | 82.3 | 5.5 | 24.2 | 39.4 |

P = Preliminary

-- Data not available

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

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

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

(d) Excludes commuter railroad, automated guideway, urban ferry boat, demand response, and most rural and smaller systems prior to 1984. Series not continuous between 1983 and 1984.

TABLE 25

United States Government Appropriations for Transit, Fiscal Years 1985-1992, Millions of Dollars

| PROGRAM | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|-----------|----------|----------|----------|----------|----------|-----------|-----------|
| Major Capital Investment Program: | \$1,040.0 | \$ 918.7 | \$ 915.0 | \$ 980.3 | \$ 985.0 | \$ 982.0 | \$1,115.0 | \$1,342.2 |
| Sec. 3 New Starts/Extensions | 422.5 | 368.4 | 365.0 | 407.8 | 402.0 | 419.2 | 440.0 | 536.9 |
| Sec. 3 Rail Modernization | 487.5 | 411.5 | 410.0 | 427.0 | 439.0 | 430.7 | 455.0 | 536.9 |
| Sec. 3 Bus | 130.0 | 138.8 | 140.0 | 145.5 | 144.0 | 132.1 | 220.0 | 268.4 |
| Formula Program: | | | | | | | | |
| Sec. 5/9 Urbanized Area Operating Limit | 2,474.5 | 2,086.8 | 2,035.0 | 1,832.0 | 1,705.0 | 1,724.8 | 1,835.0 | 1,983.7 |
| Sec. 5/9 Urbanized Area Capital Only | 870.3 | 868.8 | 860.9 | 804.7 | 804.7 | 802.3 | 802.3 | 802.3 |
| Sec. 18 Rural Capital and Operating | 1,507.4 | 1,128.8 | 1,064.1 | 927.7 | 798.9 | 822.0 | 932.3 | 1,020.5 |
| Sec. 16(b) Elderly and Disabled | 71.8 | 60.0 | 75.0 | 64.6 | 66.4 | 65.6 | 65.4 | 106.1 |
| | 25.0 | 29.2 | 35.0 | 35.0 | 35.0 | 34.9 | 35.0 | 54.9 |
| Planning and Research: | | | | | | | | |
| Sec. 8 Planning | 101.0 | 64.5 | 62.4 | 62.0 | 60.0 | 59.9 | 58.0 | 109.1 |
| Sec. 18(h) RTAP | 50.0 | 47.9 | 45.0 | 45.0 | 45.0 | 44.9 | 45.0 | 43.7 |
| All Other Research and Training | --- | --- | --- | 4.8 | 5.0 | 5.0 | 5.0 | 5.0 |
| | 51.0 | 16.6 | 17.4 | 12.2 | 10.0 | 10.0 | 8.0 | 60.4 |
| University Research Centers | | | | | | | | |
| Interstate Transfer | --- | --- | --- | 5.0 | 5.0 | 5.0 | 5.0 | 7.0 |
| Washington DC Metro | 250.0 | 210.2 | 200.0 | 123.5 | 200.0 | 159.5 | 160.0 | 160.0 |
| FTA Administration | 250.0 | 217.2 | 201.1 | 180.5 | 168.0 | 84.7 | 64.1 | 124.0 |
| Other | 31.0 | 28.7 | 31.0 | 31.9 | 31.9 | 31.8 | 32.6 | 37.0 |
| | 5.0 | 4.8 | 7.5 | --- | --- | --- | --- | --- |
| TOTAL | 4,151.5 | 3,530.9 | 3,452.0 | 3,215.2 | 3,154.9 | 3,047.7 | 3,269.7 | 3,763.0 |

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

TABLE 26

United States Government Operating Grant Approvals for Mass Transportation

| FISCAL YEAR | GRANT APPROVALS FOR OPERATING ASSISTANCE(a) | |
|-------------|---|---------|
| | TOTAL APPROVALS | |
| | (MILLIONS) | |
| 1977 | \$ | 571.8 |
| 1978 | | 685.3 |
| 1979 | | 868.5 |
| 1980 | | 1,120.7 |
| 1981 | | 1,129.5 |
| 1982 | | 1,055.5 |
| 1983 | | 887.9 |
| 1984 | | 922.4 |
| 1985 | | 881.1 |
| 1986 | | 872.5 |
| 1987 | | 820.4 |
| 1988 | | 780.0 |
| 1989 | | 823.9 |
| 1990 | | 815.3 |
| 1991 | | 831.3 |

(a) Federal Transit Act.

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

TABLE 27

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

| FEDERAL FISCAL YEAR | BUS (a) | RAPID TRANSIT (b) | COMPUTER RAIL | OTHER (c) | TOTAL |
|---------------------|------------|--------------------|---------------|------------|------------|
| | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) |
| 1977 | \$ 483.6 | \$1,001.1 | \$ 232.0 | \$ 7.0 | \$1,723.7 |
| 1978 | 598.5 | 1,162.9 | 271.7 | 3.8 | 2,036.9 |
| 1979 | 544.6 | 1,318.7 | 232.6 | 5.7 | 2,101.6 |
| 1980 | 935.8 | 1,474.3 | 340.4 | 36.6 | 2,787.1 |
| 1981 | 994.3 | 1,546.1 | 373.5 | 31.8 | 2,945.7 |
| 1982 | 854.4 | 1,307.1 | 323.0 | 59.6 | 2,544.1 |
| 1983 | 1,138.4 | 1,455.5 | 465.4 | 102.3 | 3,161.6 |
| | BUS | RAIL MODERNIZATION | NEW STARTS | OTHER (d) | TOTAL |
| 1984 | 1,039.6 | 1,110.0 | 709.9 | 16.5 | 2,876.0 |
| 1985 | 921.2 | 1,080.2 | 490.2 | 18.6 | 2,510.3 |
| 1986 | 1,023.6 | 869.1 | 1,228.3 | 17.2 | 3,138.2 |
| 1987 | 862.8 | 975.5 | 617.6 | 18.8 | 2,474.7 |
| 1988 | 820.0 | 1,145.7 | 538.2 | 16.9 | 2,520.8 |
| 1989 | 789.9 | 1,105.1 | 671.0 | 23.5 | 2,589.5 |
| 1990 | 760.9 | 998.9 | 603.7 | 16.5 | 2,380.0 |
| 1991 | 826.0 | 1,029.2 | 515.2 | 0.2 | 2,370.6 |

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

(a) Motor bus and trolleybus.

(b) Heavy rail and light rail.

(c) Urban ferry boat, cable car, inclined plane, and automated guideway transit.

(d) Planning grants from Section 9A, Section 9 and Interstate Transfer.

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

TABLE 28

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

| FEDERAL FISCAL YEAR | DISCRETIONARY (a) (MILLIONS) | FORMULA (b) (MILLIONS) | OTHER (c) (MILLIONS) | TOTAL (MILLIONS) |
|---------------------|---------------------------------|---------------------------|-------------------------|---------------------|
| 1974 | \$ 870.3 | \$ 0.0 | \$ 85.6 | \$ 955.9 |
| 1975 | 1,196.6 | 9.1 | 81.4 | 1,287.1 |
| 1976 | 1,346.1 | 32.3 | 576.5 | 1,954.8 |
| 1977 | 1,250.0 | 39.4 | 434.3 | 1,723.7 |
| 1978 | 1,400.0 | 50.1 | 586.8 | 2,036.9 |
| 1979 | 1,225.0 | 255.6 | 620.9 | 2,101.6 |
| 1980 | 1,655.0 | 431.2 | 701.0 | 2,787.1 |
| 1981 | 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 | 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 | 1,009.2 | 233.0 | 2,370.6 |

*Net amounts, excludes cancelled and reduced projects.

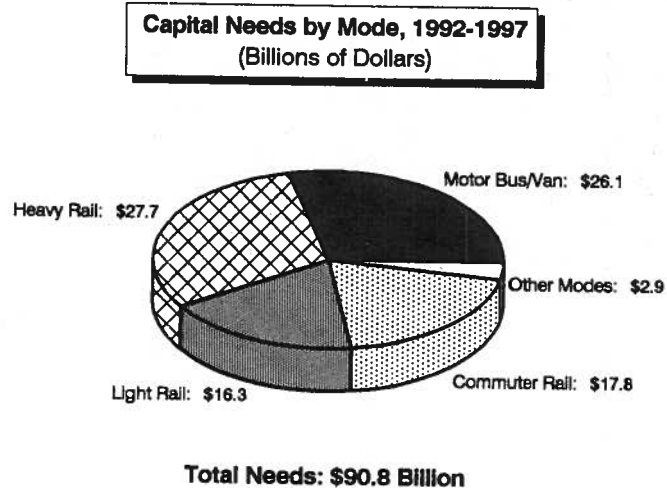
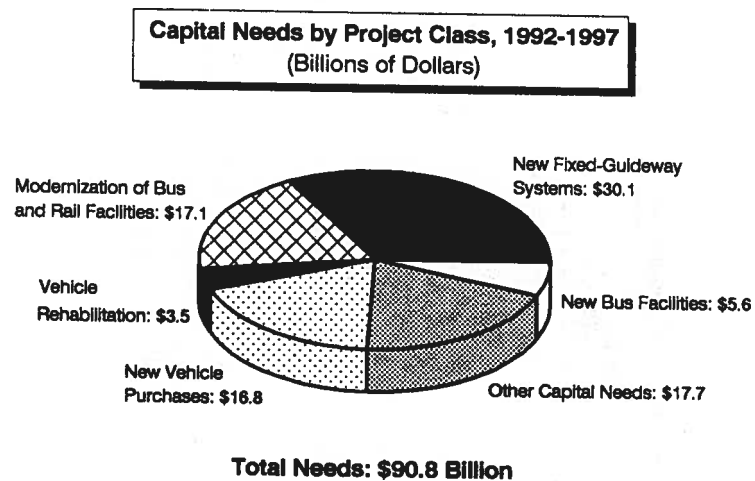
(a) Federal Transit Act: Section 3 and Section 16(b) 2.

(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.

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

TABLE 29
Transit Capital Needs 1992-1997



Source: APTA, *Public Transit - Sound Investment For The 21st Century*, 1991

TABLE 30

Trend of Transit Capital Revenues, Dollars

| CALENDAR YEAR | LOCAL ASSISTANCE (MILLIONS) | STATE ASSISTANCE (MILLIONS) | FEDERAL ASSISTANCE (MILLIONS) | OTHER ASSISTANCE (a) (MILLIONS) | TOTAL ASSISTANCE (MILLIONS) |
|---------------|-----------------------------|-----------------------------|-------------------------------|---------------------------------|-----------------------------|
| 1988 | \$ 769.0 | \$489.6 | \$2,519.5 | \$ 86.5 | \$3,864.6 |
| 1989 | 802.6 | 665.5 | 2,426.5 | 118.3 | 4,012.9 |
| 1990 | 1,176.9 | 696.8 | 2,872.5 | 189.3 | 4,935.5 |
| P 1991 | 1,008.5 | 680.4 | 2,722.9 | 1,072.8 | 5,484.6 |

P = Preliminary

22

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

SECTION IV

Ridership and Transit Usage

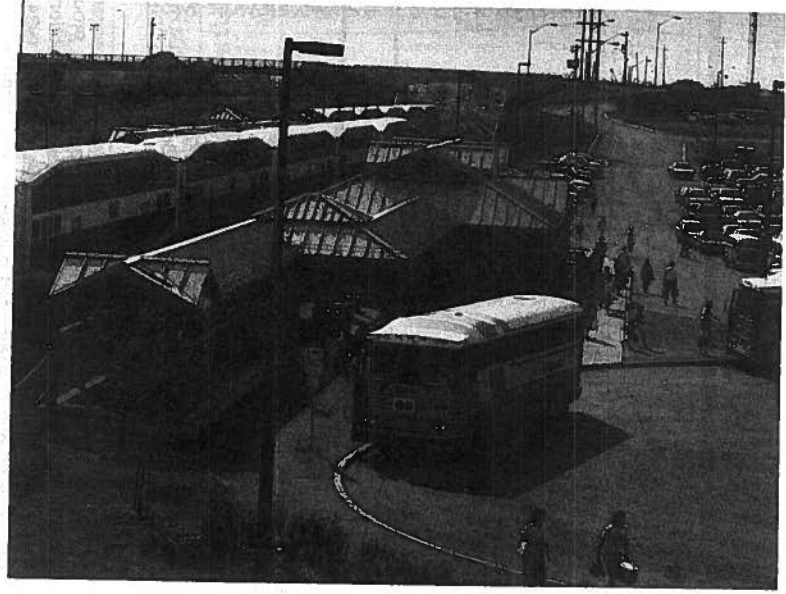


TABLE 31

Trend of Transit Passenger Trips (a)

| CALENDAR YEAR | RAILWAY | | | | TROLLEY BUS (MILLIONS) | MOTOR BUS (MILLIONS) | DEMAND RESPONSE (MILLIONS) | OTHER (MILLIONS) | TOTAL PASSENGER RIDES/TRIPS(b) (MILLIONS) |
|---------------|-----------------------|-----------------------|--------------------------|-----|------------------------|----------------------|----------------------------|------------------|---|
| | LIGHT RAIL (MILLIONS) | HEAVY RAIL (MILLIONS) | COMMUTER RAIL (MILLIONS) | | | | | | |
| | | | | | | | | | |
| 1970 | 235 | 1,881 | -- | 182 | 5,034 | -- | -- | 7,332 | |
| 1975 | 124 | 1,673 | 260 | 78 | 5,084 | -- | 65 | 7,284 | |
| 1976 | 112 | 1,632 | 260 | 75 | 5,247 | -- | 67 | 7,393 | |
| 1977 | 103 | 1,610 | 265 | 70 | 5,488 | -- | 67 | 7,603 | |
| 1978 | 104 | 1,706 | 267 | 70 | 5,721 | -- | 67 | 7,935 | |
| 1979 | 107 | 1,777 | 279 | 75 | 6,156 | -- | 67 | 8,461 | |
| 1980 | 133 | 2,108 | 280 | 142 | 5,837 | -- | 67 | 8,567 | |
| 1981 | 123 | 2,094 | 268 | 138 | 5,594 | -- | 67 | 8,284 | |
| 1982 | 136 | 2,115 | 259 | 151 | 5,324 | -- | 67 | 8,052 | |
| 1983 | 137 | 2,167 | 262 | 160 | 5,422 | -- | 55 | 8,203 | |
| 1984 | 135 | 2,231 | 267 | 165 | 5,908 | 62 | 61 | 8,829 | |
| 1985 | 132 | 2,290 | 275 | 142 | 5,675 | 59 | 63 | 8,636 | |
| 1986 | 130 | 2,333 | 306 | 139 | 5,753 | 63 | 53 | 8,777 | |
| 1987 | 133 | 2,402 | 311 | 141 | 5,614 | 64 | 70 | 8,735 | |
| 1988 | 154 | 2,308 | 325 | 136 | 5,590 | 73 | 80 | 8,666 | |
| 1989 | 162 | 2,542 | 330 | 130 | 5,620 | 70 | 77 | 8,931 | |
| 1990 | 175 | 2,345 | 328 | 126 | 5,677 | 68 | 79 | 8,799 | |
| 1991 | 186 | 2,167 | 324 | 125 | 5,686 | 72 | 83 | 8,643 | |

P = Preliminary

-- Data not available

(a) Total Passenger Rides from 1960 through 1979 based on individual transit data collection procedures. Unlinked Transit Passenger Trips beginning in 1980 based on data collection procedures defined by Federal Transit Act, Section 15. Prior to 1984, excludes demand response and most rural and smaller systems. Series not continuous between 1983 and 1984.

(b) Excludes commuter railroad, cable car, inclined plane, automated guideway, and urban ferry boat prior to 1975.

TABLE 32

Trend of Motor Bus 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(f) (MILLIONS) |
|---------------|--------------------|-------------------|-----------------|-----------------|----------------|------------------|---|
| | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) |
| 1970(b) | 2,246 | 1,038 | 659 | 426 | 492 | 173 | 5,034(f) |
| 1975(c) | 2,889 | 1,341 | 355 | 281 | 73 | 145 | 5,084 |
| 1980 | 3,324 | 1,550 | 408 | 309 | 91 | 155 | 5,837 |
| 1981(d) | 3,300 | 1,539 | 300 | 242 | 92 | 121 | 5,594 |
| 1982 | 3,130 | 1,459 | 286 | 237 | 91 | 121 | 5,324 |
| 1983 | 3,210 | 1,497 | 276 | 230 | 90 | 119 | 5,422 |
| 1984 | 3,488 | 1,627 | 294 | 210 | 90 | 199 | 5,908 |
| 1985 | 3,338 | 1,557 | 295 | 214 | 86 | 185 | 5,675 |
| 1986 | 3,297 | 1,586 | 333 | 239 | 99 | 199 | 5,753 |
| 1987 | 3,197 | 1,504 | 312 | 221 | 96 | 284 | 5,614 |
| 1988 | 3,178 | 1,519 | 306 | 222 | 92 | 273 | 5,590 |
| 1989 | 3,185 | 1,512 | 322 | 226 | 95 | 280 | 5,620 |
| 1990(e) | 3,604 | 1,270 | 230 | 227 | 89 | 257 | 5,677 |
| 1991 | 3,559 | 1,279 | 219 | 235 | 101 | 293 | 5,686 |

P = Preliminary

(a) Total Passenger Rides from 1960 through 1979 based upon individual transit system data collection procedures. Unlinked Passenger Trips beginning in 1980 based on data collection procedures defined by Federal Transit Act, Section 15. Series not continuous between 1983 and 1984.

(b) From 1965 through 1970 transit systems assigned by population of headquarters city.

(c) From 1975 through 1980 transit systems assigned by population of urbanized area based on 1970 United States Census of Population.

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

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

(f) Includes suburban and other surface lines not allocated to population groups prior to 1975.

TABLE 33

Major Trends of Transit Ridership

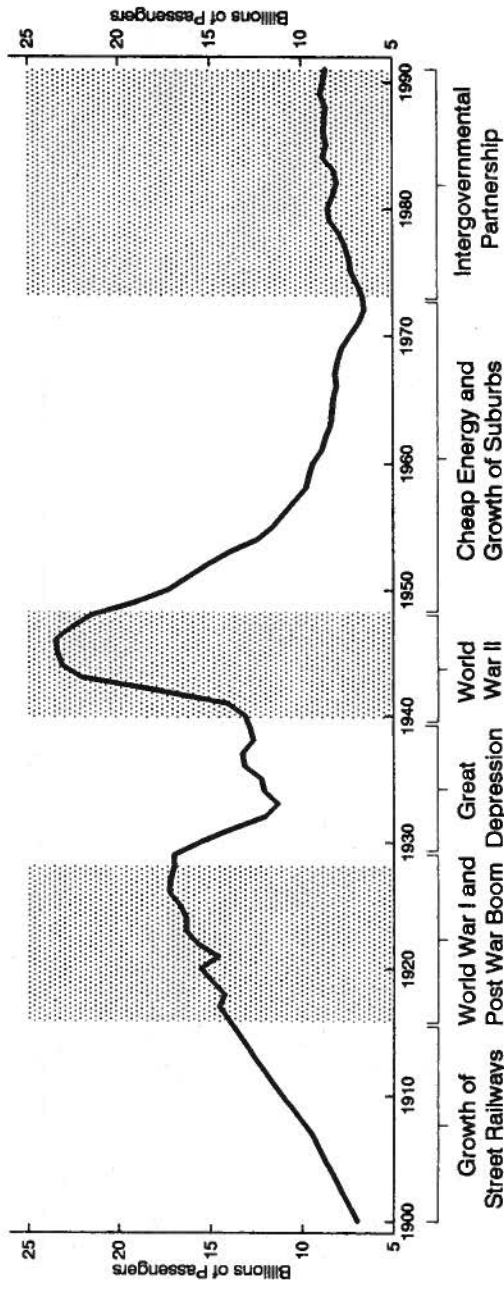


TABLE 34

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1991 (a)

| RANK | TRANSIT SYSTEM | LARGEST CITY | NO. TRIPS (MILLIONS) | % NATL TOTAL |
|-----------------------------------|---|-------------------|----------------------|--------------|
| SYSTEM TOTAL (30 LARGEST SYSTEMS) | | | | |
| 1 | Metropolitan Transportation Authority | New York, NY | 2,161.5 | 25.0 |
| 2 | Regional Transportation Authority | Chicago, IL | 644.2 | 7.5 |
| 3 | Southern California Rapid Transit District | Los Angeles, CA | 423.7 | 4.9 |
| 4 | Washington Metropolitan Area Transit Authority | Washington, DC | 368.1 | 4.3 |
| 5 | Southeastern Pennsylvania Transportation Authority | Philadelphia, PA | 343.7 | 4.0 |
| 6 | Massachusetts Bay Transportation Authority | Boston, MA | 317.3 | 3.7 |
| 7 | San Francisco Municipal Railway | San Francisco, CA | 239.3 | 2.8 |
| 8 | New Jersey Transit Corporation | New York, NY | 227.2 | 2.6 |
| 9 | Metropolitan Atlanta Rapid Transit Authority | Atlanta, GA | 143.2 | 1.7 |
| 10 | Mass Transit Administration of Maryland | Baltimore, MD | 107.0 | 1.2 |
| 11 | New York City Department of Transportation | New York, NY | 91.8 | 1.1 |
| 12 | Port Authority of Allegheny County | Pittsburgh, PA | 87.2 | 1.0 |
| 13 | Metropolitan Transit Authority of Harris County | Houston, TX | 86.0 | 1.0 |
| 14 | City of Detroit Department of Transportation | Detroit, MI | 80.9 | 0.9 |
| 15 | Municipality of Metropolitan Seattle | Seattle, WA | 80.1 | 0.9 |
| 16 | San Francisco Bay Area Rapid Transit District | San Francisco, CA | 78.2 | 0.9 |
| 17 | Metro-Dade Transit Agency | Miami, FL | 74.3 | 0.9 |
| 18 | City & County of Honolulu Dept. of Transp. Services | Honolulu, HI | 73.3 | 0.8 |
| 19 | Regional Transit Authority of Orleans & Jefferson | New Orleans, LA | 70.8 | 0.8 |
| 20 | Greater Cleveland Regional Transit Authority | Cleveland, OH | 66.8 | 0.8 |
| 21 | Alameda-Contra Costa Transit District | San Francisco, CA | 65.5 | 0.8 |
| 22 | Metropolitan Transit Commission | Minneapolis, MN | 65.4 | 0.8 |
| 23 | San Diego Metropolitan Transit System | San Diego, CA | 61.8 | 0.7 |

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1991 (a)

| RANK | TRANSIT SYSTEM | LARGEST CITY | NO. TRIPS (MILLIONS) | % NATL TOTAL |
|---|--|-------------------|-------------------------|-----------------|
| SYSTEM TOTAL (30 LARGEST SYSTEMS), continued. | | | | |
| 24 | Port Authority of New York and New Jersey | New York, NY | 61.6 | 0.7 |
| 25 | Tri-County Metropolitan Transp. Dist. of Oregon | Portland, OR | 58.7 | 0.7 |
| 26 | Dallas Area Rapid Transit | Dallas, TX | 57.9 | 0.7 |
| 27 | Regional Transportation District | Denver, CO | 56.8 | 0.7 |
| 28 | Milwaukee County Department of Transportation | Milwaukee, WI | 56.7 | 0.7 |
| 29 | Santa Clara County Transportation Agency | San Jose, CA | 50.1 | 0.6 |
| 30 | Bi-State Development Agency | St. Louis, MO | 46.8 | 0.5 |
| MOTOR BUS (25 LARGEST SYSTEMS) | | | | |
| 1 | Metropolitan Transportation Authority | New York, NY | 682.5 | 12.0 |
| 2 | Regional Transportation Authority | Chicago, IL | 431.1 | 7.6 |
| 3 | Southern California Rapid Transit District | Los Angeles, CA | 416.2 | 7.3 |
| 4 | Washington Metropolitan Area Transit Authority | Washington, DC | 179.8 | 3.2 |
| 5 | Southeastern Pennsylvania Transportation Authority | Philadelphia, PA | 179.6 | 3.2 |
| 6 | New Jersey Transit Corporation | New York, NY | 176.3 | 3.1 |
| 7 | San Francisco Municipal Railway | San Francisco, CA | 101.2 | 1.8 |
| 8 | Massachusetts Bay Transportation Authority | Boston, MA | 97.9 | 1.7 |
| 9 | Mass Transit Administration of Maryland | Baltimore, MD | 94.0 | 1.7 |
| 10 | Metropolitan Transit Authority of Harris County | Houston, TX | 85.4 | 1.5 |
| 11 | City of Detroit Department of Transportation | Detroit, MI | 80.9 | 1.4 |
| 12 | Metropolitan Atlanta Rapid Transit Authority | Atlanta, GA | 76.0 | 1.3 |
| 13 | Port Authority of Allegheny County | Pittsburgh, PA | 73.6 | 1.3 |

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1991 (a)

| RANK | TRANSIT SYSTEM | LARGEST CITY | NO. TRIPS (MILLIONS) | % NATL TOTAL |
|--|---|-------------------|-------------------------|-----------------|
| MOTOR BUS (25 LARGEST SYSTEMS), continued. | | | | |
| 14 | City & County of Honolulu Dept. of Transp. Services | Honolulu, HI | 72.8 | 1.3 |
| 15 | New York City Dept. of Transp. Private Lines | New York, NY | 70.3 | 1.2 |
| 16 | Alameda-Contra Costa Transit District | San Francisco, CA | 65.5 | 1.2 |
| 17 | Metropolitan Transit Commission | Minneapolis, MN | 65.4 | 1.2 |
| 18 | Regional Transit Authority of Orleans and Jefferson | New Orleans, LA | 62.4 | 1.1 |
| 19 | Municipality of Metropolitan Seattle | Seattle, WA | 57.3 | 1.0 |
| 20 | Dallas Area Rapid Transit | Dallas, TX | 57.0 | 1.0 |
| 21 | Regional Transportation District | Denver, CO | 56.6 | 1.0 |
| 22 | Metro-Dade Transit Agency | Miami, FL | 56.3 | 1.0 |
| 23 | Milwaukee County Department of Transportation | Milwaukee, WI | 55.9 | 1.0 |
| 24 | Greater Cleveland Regional Transit Authority | Cleveland, OH | 54.5 | 1.0 |
| 25 | Tri-County Metropolitan Transp. Dist. of Oregon | Portland, OR | 51.2 | 0.9 |
| HEAVY RAIL | | | | |
| 1 | Metropolitan Transportation Authority | New York, NY | 1,325.7 | 61.2 |
| 2 | Washington Metropolitan Area Transit Authority | Washington, DC | 188.3 | 8.7 |
| 3 | Massachusetts Bay Transportation Authority | Boston, MA | 172.2 | 7.9 |
| 4 | Regional Transportation Authority | Chicago, IL | 147.6 | 6.8 |
| 5 | Southeastern Pennsylvania Transportation Authority | Philadelphia, PA | 85.3 | 3.9 |
| 6 | San Francisco Bay Area Rapid Transit District | San Francisco, CA | 76.1 | 3.5 |
| 7 | Metropolitan Atlanta Rapid Transit Authority | Atlanta, GA | 67.1 | 3.1 |
| 8 | Port Authority of New York and New Jersey | New York, NY | 60.1 | 2.8 |

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1991 (a)

| RANK | TRANSIT SYSTEM | LARGEST CITY | NO. TRIPS (MILLIONS) | % NATL TOTAL |
|------------------------|---|-------------------|----------------------|--------------|
| HEAVY RAIL, continued. | | | | |
| 9 | Metro-Dade Transit Agency | Miami, FL | 13.9 | 0.6 |
| 10 | Mass Transit Administration of Maryland | Baltimore, MD | 12.8 | 0.6 |
| 11 | Port Authority Transit Corp. of PA & NJ | Philadelphia, PA | 11.4 | 0.5 |
| 12 | Greater Cleveland Regional Transit Authority | Cleveland, OH | 6.4 | 0.3 |
| | Southern California Rapid Transit District | Los Angeles, CA | UC | UC |
| LIGHT RAIL | | | | |
| 1 | Southeastern Pennsylvania Transportation Authority | Philadelphia, PA | 42.5 | 22.9 |
| 2 | San Francisco Municipal Railway | San Francisco, CA | 40.0 | 21.5 |
| 3 | Massachusetts Bay Transportation Authority | Boston, MA | 22.7 | 12.2 |
| 4 | San Diego Metropolitan Transit System | San Diego, CA | 18.0 | 9.7 |
| 5 | Port Authority of Allegheny County | Pittsburgh, PA | 10.0 | 5.4 |
| 6 | Regional Transit Authority of Orleans and Jefferson | New Orleans, LA | 8.2 | 4.4 |
| 7 | Niagara Frontier Transit Metro System | Buffalo, NY | 8.1 | 4.4 |
| 8 | Southern California Rapid Transit District | Los Angeles, CA | 7.5 | 4.0 |
| 9 | Tri-County Metropolitan Transp. Dist. of Oregon | Portland, OR | 7.0 | 3.8 |
| 10 | Sacramento Regional Transit District | Sacramento, CA | 6.6 | 3.6 |
| 11 | Greater Cleveland Regional Transit Authority | Cleveland, OH | 5.5 | 3.0 |
| 12 | Santa Clara County Transportation Agency | San Jose, CA | 4.0 | 2.2 |
| 13 | New Jersey Transit Corporation | Newark, NJ | 3.3 | 1.8 |
| 14 | Tandy Corporation/Dillard's Department Store | Fort Worth, TX | 1.6 | 0.9 |
| 15 | McKinney Avenue Transit Authority | Dallas, TX | 0.2 | 0.1 |
| 16 | Island Transit | Galveston, TX | 0.2 | 0.1 |

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1991 (a)

| RANK | TRANSIT SYSTEM | LARGEST CITY | NO. TRIPS (MILLIONS) | % NATL TOTAL |
|------------------------|--|-------------------|----------------------|--------------|
| LIGHT RAIL, continued. | | | | |
| 17 | Municipality of Metropolitan Seattle | Seattle, WA | 0.2 | 0.1 |
| 18 | City of Detroit Department of Transportation | Detroit, MI | 0.0 | 0.1 |
| | Mass Transit Administration of Maryland (c) | Baltimore, MD | NA | NA |
| | BI-State Development Agency | Saint Louis, MO | UC | UC |
| | Dallas Area Rapid Transit | Dallas, TX | UC | UC |
| | Memphis Area Transit Authority | Memphis, TN | UC | UC |
| | Regional Transportation District | Denver, CO | UC | UC |
| COMMUTER RAIL (b) | | | | |
| 1 | Metropolitan Transportation Authority | New York, NY | 153.3 | 47.3 |
| 2 | Regional Transportation Authority | Chicago, IL | 63.0 | 19.5 |
| 3 | New Jersey Transit Corporation | New York, NY | 47.6 | 14.7 |
| 4 | Southeastern Pennsylvania Transportation Authority | Philadelphia, PA | 24.1 | 7.4 |
| 5 | Massachusetts Bay Transportation Authority | Boston, MA | 19.9 | 6.1 |
| 6 | San Mateo County Transit District | San Francisco, CA | 6.1 | 1.9 |
| 7 | Maryland Department of Transportation | Baltimore, MD | 4.0 | 1.2 |
| 8 | Northern Indiana Commuter Transportation District | Chicago, IL | 3.3 | 1.0 |
| 9 | Tri-County Commuter Rail Authority | Miami, FL | 1.9 | 0.6 |
| 10 | Connecticut Department of Transportation | New Haven, CT | 0.2 | 0.1 |
| 11 | Pennsylvania Department of Transportation | Philadelphia, PA | 0.2 | 0.1 |
| 12 | California Department of Transportation | Los Angeles, CA | 0.2 | 0.1 |
| 13 | Orange County Transportation Authority | Los Angeles, CA | 0.1 | 0.0 |
| | Virginia Railway Express (e) | Washington, DC | NA | NA |
| | California Department of Transportation (d) | Sacramento, CA | NA | NA |
| | Dallas Area Rapid Transit | Dallas, TX | UC | UC |
| | Southern California Regional Rail Authority (f) | Los Angeles, CA | UC | UC |

TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1991 (a)

| RANK | TRANSIT SYSTEM | LARGEST CITY | NO. TRIPS (MILLIONS) | % NATL TOTAL |
|---|---|-------------------|-------------------------|-----------------|
| TROLLEYBUS | | | | |
| 1 | San Francisco Municipal Railway | San Francisco, CA | 87.0 | 69.8 |
| 2 | Municipality of Metropolitan Seattle | Seattle, WA | 20.9 | 16.8 |
| 3 | Southeastern Pennsylvania Transportation Authority | Philadelphia, PA | 11.8 | 9.5 |
| 4 | Massachusetts Bay Transportation Authority | Boston, MA | 3.4 | 2.7 |
| 5 | Miami Valley Regional Transit Authority | Dayton, OH | 1.6 | 1.3 |
| PUBLICLY SUPPORTED URBAN FERRY BOAT (g) | | | | |
| 1 | New York City Dept. of Transport. Staten Island Ferry | New York, NY | 21.2 | 42.1 |
| 2 | Washington State Department of Transportation | Seattle WA | 12.5 | 24.8 |
| 3 | Texas State Department of Transportation and Highways | Galveston, TX | 5.7 | 11.3 |
| 4 | Mississippi River Bridge Authority | New Orleans, LA | 3.1 | 6.2 |
| 5 | Port Authority of New York and New Jersey | New York, NY | 1.5 | 3.0 |
| 6 | Golden Gate Bridge, Highway and Transportation Dist. | San Francisco, CA | 1.5 | 3.0 |
| 7 | Pleaquemines Parish | New Orleans, LA | 1.0 | 2.0 |
| 8 | Massachusetts Bay Transportation Authority | Boston, MA | 0.8 | 1.6 |
| 9 | Casco Bay Transit District | Portland, ME | 0.7 | 1.4 |
| 10 | Tidewater Transportation District Commission | Norfolk, VA | 0.6 | 1.2 |
| 11 | Connecticut Department of Transportation | Hartford, CT | 0.4 | 0.8 |
| 12 | Vallejo Transit System | Vallejo, CA | 0.2 | 0.4 |
| 13 | Pierce County Ferry | Tacoma, WA | 0.1 | 0.2 |
| 14 | Erie Metropolitan Transit Authority | Erie, PA | 0.0 | 0.0 |

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TABLE 34 (continued)

Unlinked Passenger Trips by Mode by Transit System, Fiscal Year 1991 (a)

| RANK | TRANSIT SYSTEM | LARGEST CITY | NO. TRIPS (MILLIONS) | % NATL TOTAL |
|-------------------------------------|--|-------------------|-------------------------|-----------------|
| OTHER PUBLICLY SUPPORTED RAIL MODES | | | | |
| 1 | San Francisco Municipal Railway (Cable car) | San Francisco, CA | 10.6 | 38.0 |
| 2 | Detroit Transit Corporation (Automated guideway) | Detroit, MI | 4.0 | 14.3 |
| 3 | Metro-Dade Transit Agency (Automated guideway) | Miami, FL | 3.2 | 11.5 |
| 4 | West Virginia University (Automated guideway) | Morgantown, WV | 2.4 | 8.6 |
| 5 | Municipality of Metropolitan Seattle (Monorail) | Seattle, WA | 2.2 | 7.9 |
| 6 | Roosevelt Island Aerial Tramway (Aerial tramway) | New York, NY | 1.6 | 5.7 |
| 7 | Port Authority of Allegheny County (Inclined plane) | Pittsburgh, PA | 1.5 | 5.4 |
| 8 | Cambria County Transit Authority (Inclined plane) | Johnstown, PA | 0.9 | 3.2 |
| 9 | Harbour Island People Mover (Automated guideway) | Tampa, FL | 0.5 | 1.8 |
| 10 | Chattanooga Area Reg. Transp. Auth. (Inclined plane) | Chattanooga, TN | 0.3 | 1.1 |
| 11 | Jacksonville Transport. Auth. (Automated guideway) | Jacksonville, FL | 0.3 | 1.1 |
| 12 | Las Colinas Area Pers. Tr. Sys. (Auto. guideway) | Las Colinas, TX | 0.1 | 0.4 |
| 13 | Fenelon Place Elevator (Inclined plane) | Dubuque, IA | 0.1 | 0.4 |
| | South. California Rapid Tr. Dist. (Automated guideway) | Los Angeles, CA | UC | UC |

NA = Not available.

UC = Under construction.

(a) Data includes both directly operated and purchased service; some numbers are estimates.

(b) Excludes commuter-type services operated independently by Amtrak.

(c) Opened in April 1992.

(d) Opened in December 1991.

(e) Opened in June 1992.

(f) Opened in October 1992.

(g) Excludes 13 private urban ferry companies and over 200 international, rural, island, and urban park ferries.

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TABLE 35

Profiles of Transit Riders

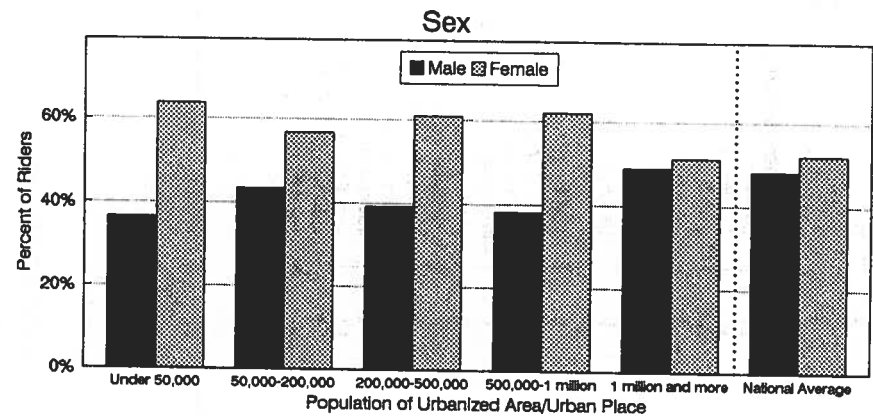
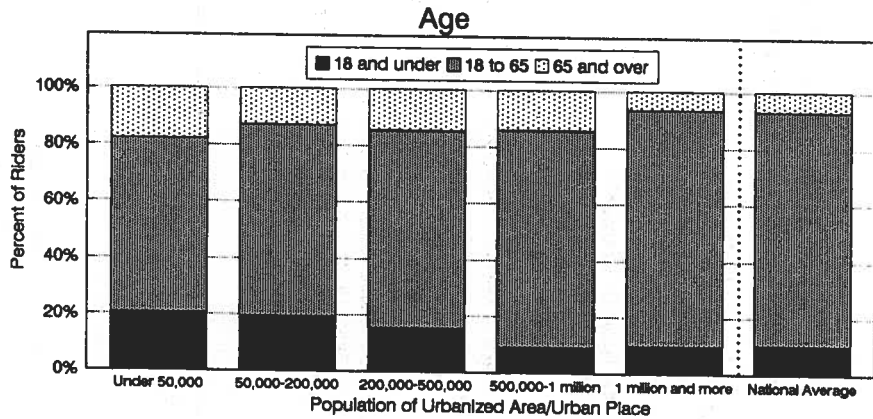
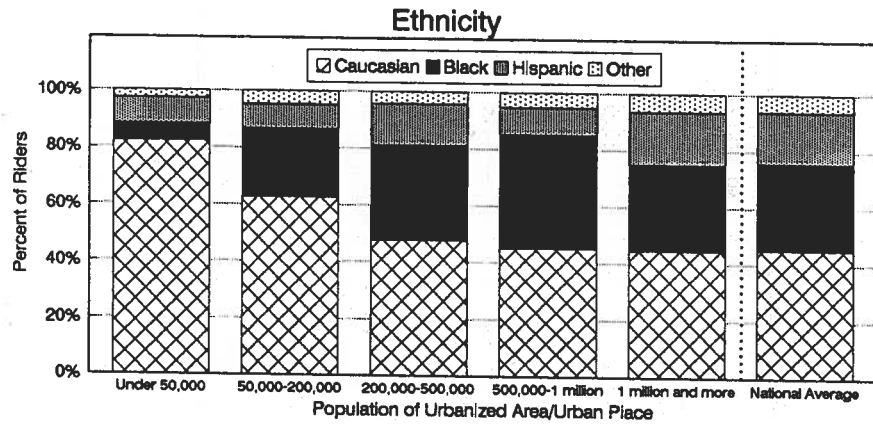


TABLE 35

Profiles of Transit Riders (continued)

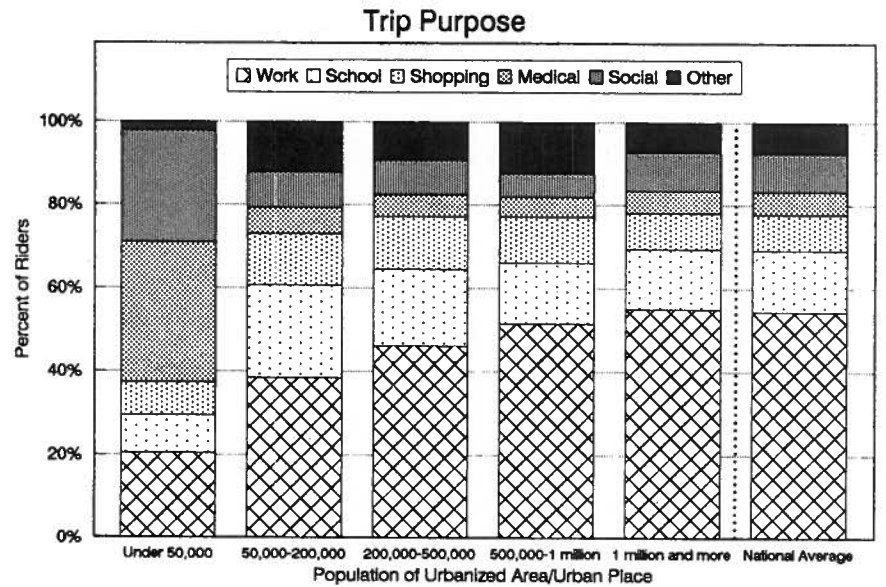
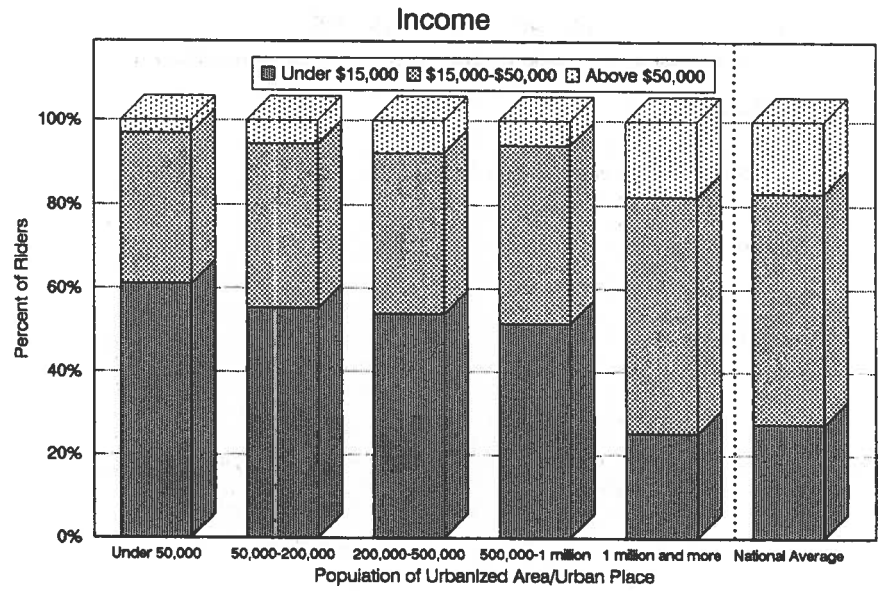


TABLE 36

Means of Transportation to Work, 1990

| Means | Percent |
|----------------------------------|---------|
| Automobiles/Vans/Motorcycles | |
| Single-occupant | 73.4 |
| 2-person carpool | 10.5 |
| 3-or-more person carpool/vanpool | 2.8 |
| Transit | 5.1 |
| Walked | 3.9 |
| Worked at home | 3.0 |
| Bicycle | 0.4 |
| Taxi | 0.2 |
| All other | 0.7 |
| Total | 100.0 |

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

TABLE 37

Percentage of Workers Using Public Transportation, 1980 City Central Business Districts With Over 5,000 Employees

| CITY | PER CENT USING PUBLIC TRANSPORTATION |
|-------------------|--------------------------------------|
| New York, NY | 82.7% |
| Chicago, IL | 74.6 |
| Brooklyn, NY | 64.4 |
| Philadelphia, PA | 60.2 |
| Boston, MA | 58.9 |
| San Francisco, CA | 56.6 |
| Pittsburgh, PA | 52.6 |
| Seattle, WA | 47.1 |
| Minneapolis, MN | 44.6 |
| Cleveland, OH | 43.4 |
| Newark, NJ | 43.3 |
| Washington, DC | 43.0 |
| Portland, OR | 42.9 |
| Baltimore, MD | 37.2 |
| Hartford, CT | 33.4 |
| Cincinnati, OH | 33.0 |
| San Antonio, TX | 32.0 |
| Atlanta, GA | 31.6 |
| Denver, CO | 31.2 |
| Milwaukee, WI | 30.7 |
| Buffalo, NY | 30.6 |
| Oakland, CA | 29.8 |
| Saint Paul, MN | 29.1 |
| New Orleans, LA | 29.0 |
| Saint Louis, MO | 26.9 |
| Detroit, MI | 26.0 |
| New Haven, CT | 25.7 |
| Los Angeles, CA | 24.7 |
| Rochester, NY | 24.4 |
| Providence, RI | 24.3 |
| Madison, WI | 23.4 |
| Dallas, TX | 23.0 |
| Honolulu, HI | 22.9 |
| Columbus, OH | 22.7 |
| Albany, NY | 22.5 |
| Kansas City, MO | 22.2 |
| Miami, FL | 21.7 |
| Richmond, VA | 20.6 |
| Wilmington, DE | 20.5 |
| Toledo, OH | 20.1 |

Source: U.S. Census Bureau, *1980 Census, Journey to Work, Characteristics of Workers in Metropolitan Areas*

TABLE 38

Trend of Passenger Miles

| CALENDAR YEAR | RAILWAY | | | | | TROLLEY BUS (MILLIONS) | MOTOR BUS (MILLIONS) | DEMAND RESPONSE (MILLIONS) | OTHER (MILLIONS) | TOTAL PASSENGER MILES(a) (MILLIONS) |
|---------------|-----------------------|------------|-----------------------|------------|--------------------------|------------------------|----------------------|----------------------------|------------------|-------------------------------------|
| | LIGHT RAIL (MILLIONS) | | HEAVY RAIL (MILLIONS) | | COMMUTER RAIL (MILLIONS) | | | | | |
| | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | | | | | |
| 1978 | 392 | 10,330 | 6,213 | 234 | 20,708 | -- | 390 | 38,267 | | |
| 1979 | 407 | 10,760 | 6,492 | 204 | 21,393 | -- | 390 | 39,646 | | |
| 1980 | 381 | 10,558 | 6,516 | 219 | 21,790 | -- | 390 | 39,854 | | |
| 1981 | 346 | 10,244 | 6,236 | 254 | 21,012 | -- | 390 | 38,482 | | |
| 1982 | 379 | 10,049 | 6,027 | 295 | 19,987 | -- | 387 | 37,124 | | |
| 1983 | 391 | 10,350 | 6,097 | 325 | 20,047 | -- | 392 | 37,602 | | |
| 1984 | 416 | 10,111 | 6,207 | 364 | 21,595 | 349 | 382 | 39,424 | | |
| 1985 | 350 | 10,427 | 6,534 | 306 | 21,161 | 364 | 439 | 39,581 | | |
| 1986 | 361 | 10,649 | 6,723 | 305 | 21,395 | 402 | 369 | 40,204 | | |
| 1987 | 405 | 11,198 | 6,818 | 223 | 20,970 | 374 | 360 | 40,348 | | |
| 1988 | 477 | 11,300 | 6,964 | 211 | 20,753 | 441 | 434 | 40,580 | | |
| 1989 | 509 | 12,030 | 7,211 | 199 | 20,768 | 428 | 458 | 41,603 | | |
| 1990 | 571 | 11,475 | 7,082 | 193 | 20,981 | 431 | 410 | 41,143 | | |
| 1991 | 670 | 10,488 | 7,384 | 194 | 21,150 | 528 | 446 | 40,860 | | |

P = Preliminary

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

TABLE 39

Trend of Vehicle Miles Operated

| CALENDAR YEAR | RAILWAY | | | | | TROLLEY BUS (MILLIONS) | MOTOR BUS (MILLIONS) | DEMAND RESPONSE (MILLIONS) | OTHER (MILLIONS) | TOTAL VEHICLE MILES OPERATED (a)(b) (MILLIONS) | TOTAL MOTOR BUS MILE EQUIVALENTS(c) (MILLIONS) |
|---------------|-----------------------|------------|-----------------------|------------|--------------------------|------------------------|----------------------|----------------------------|------------------|--|--|
| | LIGHT RAIL (MILLIONS) | | HEAVY RAIL (MILLIONS) | | COMMUTER RAIL (MILLIONS) | | | | | | |
| | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | (MILLIONS) | | | | | | |
| 1970 | 33.7 | 407.1 | -- | 33.0 | 1,409.3 | -- | 1,883.1 | -- | 1,883.1 | -- | |
| 1975 | 23.8 | 423.1 | 173.0 | 15.3 | 1,526.0 | 15.0 | 2,176.2 | 15.0 | 2,176.2 | -- | |
| 1976 | 21.1 | 407.0 | 173.0 | 15.3 | 1,581.4 | 15.4 | 2,213.2 | 15.4 | 2,213.2 | -- | |
| 1977 | 20.4 | 361.3 | 175.0 | 14.8 | 1,623.3 | 15.4 | 2,210.2 | 15.4 | 2,210.2 | -- | |
| 1978 | 19.5 | 363.5 | 174.0 | 13.3 | 1,630.5 | 15.4 | 2,216.2 | 15.4 | 2,216.2 | -- | |
| 1979 | 19.1 | 380.5 | 176.0 | 11.7 | 1,633.6 | 15.4 | 2,236.3 | 15.4 | 2,236.3 | -- | |
| 1980 | 17.5 | 384.7 | 179.0 | 13.0 | 1,677.2 | 15.4 | 2,286.8 | 15.4 | 2,286.8 | -- | |
| 1981 | 16.5 | 420.1 | 176.0 | 11.9 | 1,684.6 | 15.4 | 2,324.5 | 15.4 | 2,324.5 | -- | |
| 1982 | 16.1 | 429.1 | 175.0 | 13.7 | 1,668.8 | 15.4 | 2,318.1 | 15.4 | 2,318.1 | -- | |
| 1983 | 16.0 | 407.5 | 177.0 | 15.0 | 1,677.8 | 12.6 | 2,305.9 | 12.6 | 2,305.9 | -- | |
| 1984 | 16.8 | 435.8 | 167.9 | 15.3 | 1,844.7 | 13.0 | 2,749.5 | 13.0 | 2,749.5 | 3,461.9 | |
| 1985 | 16.5 | 450.8 | 182.7 | 15.5 | 1,862.9 | 14.9 | 2,790.7 | 14.9 | 2,790.7 | 3,552.1 | |
| 1986 | 17.0 | 475.8 | 188.6 | 14.7 | 2,002.3 | 12.9 | 2,985.8 | 12.9 | 2,985.8 | 3,765.7 | |
| 1987 | 18.4 | 490.2 | 188.9 | 15.0 | 2,079.4 | 13.3 | 3,055.2 | 13.3 | 3,055.2 | 3,879.1 | |
| 1988 | 20.8 | 517.4 | 202.2 | 14.7 | 2,097.3 | 16.0 | 3,157.3 | 16.0 | 3,157.3 | 4,011.2 | |
| 1989 | 21.3 | 532.1 | 209.6 | 14.5 | 2,109.3 | 15.7 | 3,202.9 | 15.7 | 3,202.9 | 4,080.4 | |
| 1990 | 24.2 | 536.7 | 212.7 | 13.8 | 2,129.9 | 18.3 | 3,241.5 | 18.3 | 3,241.5 | 4,127.5 | |
| 1991 | 27.7 | 523.0 | 216.9 | 13.6 | 2,182.3 | 23.6 | 3,348.3 | 23.6 | 3,348.3 | 4,180.6 | |

P = Preliminary

-- Data not available

(a) Excludes commuter railroad, cable car, inclined plane, automated guideway, and urban ferry boat prior to 1975.

(b) 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.

(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.

TABLE 40

Trend of Vehicle Hours Operated

| CALENDAR YEAR | RAILWAY | | | | TROLLEY BUS (MILLIONS) | MOTOR BUS (MILLIONS) | DEMAND RESPONSE (MILLIONS) | OTHER (MILLIONS) | TOTAL VEHICLE HOURS (a) (MILLIONS) |
|---------------|-----------------------|-----------------------|--------------------------|-----|------------------------|----------------------|----------------------------|------------------|------------------------------------|
| | LIGHT RAIL (MILLIONS) | HEAVY RAIL (MILLIONS) | COMMUTER RAIL (MILLIONS) | | | | | | |
| 1986 | 1.5 | 25.6 | 5.8 | 1.9 | 153.7 | 21.7 | 0.8 | 211.0 | |
| 1987 | 1.6 | 26.0 | 5.8 | 1.9 | 160.3 | 21.9 | 1.1 | 218.6 | |
| 1988 | 1.8 | 27.4 | 6.4 | 1.9 | 160.5 | 23.5 | 1.2 | 222.7 | |
| 1989 | 1.9 | 28.2 | 6.6 | 1.8 | 161.4 | 24.0 | 1.0 | 224.9 | |
| 1990 | 2.0 | 28.4 | 6.5 | 1.8 | 163.0 | 24.4 | 1.4 | 227.5 | |
| P 1991 | 2.1 | 24.5 | 6.5 | 1.8 | 165.5 | 25.7 | 1.5 | 227.6 | |

P = Preliminary

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

SECTION V

Vehicles and Equipment



TABLE 41

Transit Passenger Vehicles

| CALENDAR YEAR | RAILWAY | | | TROLLEY BUS | MOTOR BUS (a) | DEMAND RESPONSE | OTHER (a) | TOTAL PASSENGER VEHICLES (a) (b) |
|-------------------------------------|------------|------------|-------------------|-------------|---------------|-----------------|-----------|----------------------------------|
| | LIGHT RAIL | HEAVY RAIL | COMMUTER RAIL (a) | | | | | |
| PASSENGER VEHICLES OWNED AND LEASED | | | | | | | | |
| 1970 | 1,262 | 9,286 | -- | 1,050 | 49,700 | -- | -- | 61,298 |
| 1975 | 1,061 | 9,556 | -- | 703 | 50,811 | -- | -- | 62,183 |
| 1976 | 963 | 9,662 | 4,490 | 685 | 52,382 | -- | -- | 68,182 |
| 1977 | 992 | 9,587 | 4,392 | 645 | 51,968 | -- | -- | 67,584 |
| 1978 | 944 | 9,515 | 4,525 | 593 | 52,866 | -- | -- | 68,443 |
| 1979 | 959 | 9,470 | 4,402 | 725 | 54,490 | -- | -- | 70,046 |
| 1980 | 1,013 | 9,641 | 4,500 | 823 | 59,411 | -- | -- | 75,388 |
| 1981 | 1,075 | 9,749 | 4,465 | 751 | 60,393 | -- | -- | 76,433 |
| 1982 | 1,016 | 9,815 | 4,497 | 763 | 62,114 | -- | -- | 78,205 |
| 1983 | 1,013 | 9,891 | 4,423 | 686 | 62,093 | -- | -- | 78,106 |

ACTIVE PASSENGER VEHICLES

| | | | | | | | | |
|--------|-------|--------|-------|-----|--------|--------|-------|--------|
| 1984 | 733 | 9,083 | 4,075 | 664 | 67,294 | 14,164 | 888 | 96,901 |
| 1985 | 717 | 9,326 | 4,035 | 676 | 64,258 | 14,490 | 867 | 94,368 |
| 1986 | 697 | 10,386 | 4,440 | 680 | 66,218 | 15,346 | 942 | 98,709 |
| 1987 | 766 | 10,168 | 4,686 | 671 | 63,017 | 15,944 | 875 | 96,127 |
| 1988 | 831 | 10,539 | 4,649 | 710 | 62,572 | 16,812 | 1,096 | 97,209 |
| 1989 | 755 | 10,506 | 4,472 | 725 | 58,919 | 15,856 | 1,060 | 92,293 |
| 1990 | 913 | 10,419 | 4,415 | 832 | 58,714 | 16,471 | 1,197 | 92,961 |
| P 1991 | 1,058 | 10,170 | 4,550 | 919 | 57,865 | 17,222 | 1,448 | 93,232 |

P = Preliminary

-- Data not available

(a) Commuter rail data not available prior to 1976; 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 42

New Transit Passenger Vehicles Delivered

| CALENDAR YEAR | RAILWAY CARS (d) | | | TROLLEY BUSES | MOTOR BUSES (a) | | | TOTAL PASSENGER VEHICLES (b) |
|---------------|------------------|------------|---------------|---------------|-------------------|-------------|------------------|------------------------------|
| | LIGHT RAIL | HEAVY RAIL | COMMUTER RAIL | | 29 SEATS OR FEWER | 30-39 SEATS | 40 SEATS OR MORE | |
| 1965-69(c) | 0 | 1,878 | -- | 0 | 202 | 1,131 | 11,725 | 13,058 |
| 1970-74(c) | 0 | 1,248 | -- | 3 | 823 | 910 | 13,127 | 14,860 |
| 1975-79(c) | 171 | 1,371 | -- | 600 | 2,381 | 1,039 | 16,268 | 19,688 |
| 1980 | 32 | 130 | -- | 98 | 287 | 143 | 4,142 | 4,572 |
| 1981 | 188 | 276 | -- | 0 | 153 | 171 | 3,735 | 4,059 |
| 1982 | 10 | 126 | -- | 0 | 67 | 138 | 2,757 | 2,962 |
| 1983 | 30 | 88 | -- | 0 | 151 | 74 | 3,856 | 4,081 |
| 1984 | 59 | 521 | 128 | 0 | 393 | 509 | 2,992 | 3,894 |
| 1985 | 63 | 441 | 179 | 0 | 353 | 220 | 2,794 | 3,367 |
| 1986 | 149 | 854 | 140 | 0 | 739 | 240 | 2,400 | 3,379 |
| 1987 | 51 | 758 | 198 | 47 | 1,091 | 429 | 2,704 | 4,224 |
| 1988 | 24 | 311 | 74 | 4 | 767 | 474 | 2,308 | 3,961 |
| 1989 | 52 | 207 | 56 | 0 | 1,353 | 771 | 2,836 | 4,960 |
| 1990 | 55 | 10 | 83 | 118 | 1,389 | 489 | 2,901 | 4,779 |
| P 1991 | 17 | 6 | 187 | 149 | 1,394 | 1,553 | 1,996 | 4,942 |

P = Preliminary

-- Data not available

(a) Buses or bus-type only, excludes vans and passenger automobiles. Excludes most rural and smaller systems prior to 1984. Series not continuous for motor buses between 1983 and 1984.

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

(c) Five-year totals.

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

TABLE 43

New Motor Buses Delivered by Length (a)

| CALENDAR YEAR | 27'5" & BELOW | 27'6" - 32'5" | 32'6" - 37'5" | 37'6" - 42'5" | ARTICULATED/ DOUBLE DECK | TOTAL |
|---------------|---------------|---------------|---------------|---------------|--------------------------|-------|
| 1988 | 599 | 250 | 518 | 2,181 | 0 | 3,548 |
| 1989 | 1,151 | 320 | 810 | 2,635 | 44 | 4,960 |
| 1990 | 1,932 | 450 | 567 | 2,782 | 48 | 4,779 |
| P 1991 | 1,096 | 364 | 346 | 3,056 | 80 | 4,942 |

P = Preliminary

R = Revised

(a) Buses or bus-type only, excludes vans and passenger automobiles.

TABLE 44

Characteristics of the Transit Fleet

| CHARACTERISTIC | YEAR* | MOTOR BUS | HEAVY RAIL | LIGHT RAIL | TROLLEY BUS | COMMUTER RAILROAD |
|------------------------------------|--------|-----------|------------|------------|-------------|-------------------|
| Vehicles Owned and Leased | 1987 | 76,062 | 10,901 | 926 | 733 | 4,686 |
| | 1988 | 66,139 | 10,925 | 967 | 729 | 4,714 |
| | 1989 | 61,276 | 10,649 | 1,034 | 729 | 4,490 |
| | 1990 | 61,063 | 10,562 | 1,062 | 847 | 4,574 |
| | P 1991 | 60,528 | 10,247 | 1,260 | 998 | 4,657 |
| Vehicles in Active Service | 1987 | 63,017 | 10,168 | 766 | 671 | 4,686 |
| | 1988 | 62,572 | 10,539 | 831 | 710 | 4,649 |
| | 1989 | 58,919 | 10,506 | 755 | 725 | 4,472 |
| | 1990 | 58,714 | 10,419 | 913 | 832 | 4,415 |
| | P 1991 | 57,865 | 10,170 | 1,058 | 919 | 4,550 |
| Vehicles with Major Rehabilitation | 1987 | 7,150 | 1,571 | 149 | 0 | 1,932 |
| | 1988 | 6,614 | 2,373 | 155 | 0 | 2,037 |
| | 1989 | 6,740 | 3,576 | 155 | 0 | 2,290 |
| | 1990 | 6,228 | 3,918 | 272 | 0 | 2,093 |
| P 1991 | 5,811 | 4,812 | 351 | 0 | 2,198 | |

*As of December 31.

- Data not available

P = Preliminary

TABLE 44 (continued)

Characteristics of the Transit Fleet

| CHARACTERISTIC | YEAR* | MOTOR BUS | HEAVY RAIL | LIGHT RAIL | TROLLEY BUS | COMPUTER RAILROAD |
|-------------------------|--------|-----------|------------|------------|-------------|-------------------|
| Average Age (Years) | 1987 | 7.8 | 16.2 | 21.0 | 10.4 | 15.9 |
| | 1988 | 8.3 | 16.0 | 20.2 | 11.0 | 16.3 |
| | 1989 | 8.2 | 15.2 | 19.6 | 12.0 | 16.8 |
| | 1990 | 8.1 | 17.3 | 20.1 | 11.2 | 17.2 |
| | P 1991 | 8.0 | 18.1 | 20.9 | 10.5 | 17.6 |
| Average Length | 1987 | 38'6" | 60'4" | 59'8" | 40'1" | 84'7" |
| | 1988 | 38'2" | 61'1" | 59'3" | 41'2" | 84'8" |
| | 1989 | 38'1" | 60'9" | 61'2" | 41'2" | 84'8" |
| | 1990 | 37'8" | 61'1" | 64'6" | 43'11" | 84'10" |
| | P 1991 | 37'7" | 61'1" | 64'9" | 46'4" | 84'10" |
| Average Number of Seats | 1987 | 43.7 | 54.4 | 56.7 | 47.8 | 121.9 |
| | 1988 | 43.2 | 55.4 | 56.5 | 49.1 | 120.3 |
| | 1989 | 42.7 | 55.6 | 57.4 | 49.1 | 122.5 |
| | 1990 | 41.7 | 55.7 | 57.3 | 50.7 | 125.6 |
| | P 1991 | 41.2 | 55.7 | 57.6 | 52.1 | 126.7 |

*As of December 31.

-- Data not available

P = Preliminary

TABLE 44 (continued)

Characteristics of the Transit Fleet

| CHARACTERISTIC | YEAR* | MOTOR BUS | HEAVY RAIL | LIGHT RAIL | TROLLEY BUS | COMPUTER RAILROAD |
|---|--------|-----------|------------|------------|-------------|-------------------|
| Vehicles Equipped with Air Conditioning | 1987 | 57,655 | 8,151 | 304 | 174 | 4,581 |
| | 1988 | 51,522 | 9,214 | 350 | 174 | 4,692 |
| | 1989 | 48,040 | 9,725 | 396 | 174 | 4,366 |
| | 1990 | 49,156 | 9,749 | 600 | 174 | 4,574 |
| | P 1991 | 50,420 | 9,596 | 730 | 174 | 4,657 |
| Vehicles Equipped with Two-Way Radios | 1987 | 65,185 | 8,785 | 629 | 726 | 3,001 |
| | 1988 | 57,541 | 8,810 | 636 | 725 | 3,117 |
| | 1989 | 54,536 | 8,530 | 619 | 725 | 2,903 |
| | 1990 | 55,384 | 8,407 | 765 | 783 | 2,982 |
| | P 1991 | 54,415 | 8,031 | 922 | 934 | 2,976 |
| Vehicles with Wheelchair Accessibility | 1987 | 25,253 | (a) | (a) | 230 | (a) |
| | 1988 | 23,876 | (a) | (a) | 229 | (a) |
| | 1989 | 24,633 | (a) | (a) | 229 | (a) |
| | 1990 | 26,562 | (a) | (a) | 279 | (a) |
| | P 1991 | 29,961 | (a) | (a) | 428 | (a) |

*As of December 31.

-- Data not available

P = Preliminary

(a) Wheelchair accessibility for high-platform-boarding railcars is provided by station modifications.

TABLE 45

Motor Buses and Vans by Manufacturer (a)

| MANUFACTURER | NUMBER OWNED AND LEASED | PERCENT |
|--|----------------------------|---------|
| General Motors Truck & Coach Division (after 1987: Truck only) | 15,428 | 26.7% |
| Flexible (includes Grumman Flexible) | 12,505 | 21.7 |
| Neoplan USA Corporation | 4,062 | 7.0 |
| Transportation Manufacturing Corporation | 3,548 | 6.1 |
| Gillig Corporation | 3,343 | 5.8 |
| Bus Industries of America (Ontario Bus Industries) | 2,379 | 4.1 |
| Motor Coach Industries | 2,323 | 4.0 |
| M.A.N. Truck and Bus Corporation | 2,215 | 3.8 |
| New Flyer Industries and New Flyer of America (Flyer) | 1,870 | 3.2 |
| Diesel Division, General Motors of Canada | 1,124 | 1.9 |
| Dodge Trucks Division, Chrysler Corporation | 1,065 | 1.8 |
| AM General Corporation | 760 | 1.3 |
| Ford Division, Ford Motor Company | 704 | 1.2 |
| National Coach Corporation | 570 | 1.0 |
| Eagle International | 439 | .8 |
| Blue Bird Body Company | 424 | .7 |
| Champion Motor Coach | 397 | .7 |
| New Goshen Coach Corporation (Goshen) | 386 | .7 |
| Collins Industries | 374 | .6 |
| ELDorado Bus Corporation (EL Dorado Motor Corporation) | 349 | .6 |
| Thomas Built Buses | 296 | .5 |
| Chevrolet Motor Division, General Motors Corporation | 266 | .5 |
| Chance Manufacturing Company | 264 | .5 |
| Ikarus USA | 243 | .4 |
| Crown Coach Corporation | 239 | .4 |

TABLE 45 (continued)

Motor Buses and Vans by Manufacturer (a)

| MANUFACTURER | NUMBER OWNED AND LEASED | PERCENT |
|---|----------------------------|---------|
| Volvo of America Corporation | 227 | .4 |
| Saab-Scania | 223 | .4 |
| Braun Corporation | 162 | .3 |
| Wayne Corporation | 127 | .2 |
| Carpenter Body Works | 119 | .2 |
| Stewart & Stevenson | 112 | .2 |
| Wheeled Coach Industries (World Trans) | 95 | .2 |
| Coons Manufacturing | 88 | .2 |
| Skillcraft Industries | 85 | .1 |
| Boyetown Auto Body Works | 80 | .1 |
| Metrotrans Corporation | 75 | .1 |
| Supreme Corporation | 63 | .1 |
| Transportation Vehicles | 63 | .1 |
| Bud Industries | 60 | .1 |
| Coach and Equipment Manufacturing Corporation | 59 | .1 |
| Turtle Top | 59 | .1 |
| Others | 484 | .8 |
| Total | 57,754 | 100.0 |

(a) Data as of January 1, 1992 from APTA survey of 304 major transit systems. Understates shares of small vehicle manufacturers since most smaller transit systems not reporting data to survey only purchase small vehicles.

TABLE 46

Motor Buses and Vans by Year Built (a)

| YEAR BUILT | NUMBER | | PERCENT | |
|------------------------|------------------|-------------------|------------------|-------------------|
| | OWNED AND LEASED | IN ACTIVE SERVICE | OWNED AND LEASED | IN ACTIVE SERVICE |
| 1991 | | | | |
| 1990 | 4,399 | 4,144 | 7.6 | 7.5 |
| 1989 | 4,400 | 4,389 | 7.6 | 8.0 |
| 1988 | 4,507 | 4,498 | 7.8 | 8.1 |
| 1987 | 3,607 | 3,596 | 6.2 | 6.5 |
| 1986 | 3,397 | 3,389 | 5.9 | 6.1 |
| 1985 | 3,586 | 3,565 | 6.2 | 6.5 |
| 1984 | 3,824 | 3,796 | 6.6 | 6.9 |
| 1983 | 3,249 | 3,238 | 5.6 | 5.9 |
| 1982 | 4,239 | 4,165 | 7.3 | 7.5 |
| 1981 | 2,974 | 2,915 | 5.1 | 5.3 |
| 1980 | 4,051 | 4,010 | 7.0 | 7.3 |
| 1977-1979 | 4,102 | 3,903 | 7.1 | 7.1 |
| 1972-1976 | 5,081 | 4,505 | 8.8 | 8.2 |
| 1971 and earlier | 4,279 | 3,338 | 7.4 | 6.0 |
| | 2,059 | 1,748 | 3.6 | 3.2 |
| Total | 57,754 | 55,199 | 100.0% | 100.0% |
| Average Age in Years** | 8.0 | 7.7 | --- | --- |

**1991 = 0.5 years old; 1990 = 1.5 years old; 1989 = 2.5 years old; etc.

(a) Data as of January 1, 1992 from APTA survey of 304 major transit systems. Understates shares of eight most recent years since most smaller transit systems not reporting data to survey purchase primarily vehicles that last less than eight years.

TABLE 47

Trolleybuses by Year Built (a)

| YEAR BUILT | NUMBER | | PERCENT | |
|------------------------|------------------|-------------------|------------------|-------------------|
| | OWNED AND LEASED | IN ACTIVE SERVICE | OWNED AND LEASED | IN ACTIVE SERVICE |
| 1991 | | | | |
| 1990 | 149 | 102 | 14.9 | 11.2 |
| 1989 | 118 | 118 | 11.8 | 13.0 |
| 1988 | 0 | 0 | --- | --- |
| 1987 | 4 | 4 | .4 | .4 |
| 1986 | 46 | 46 | 4.6 | 5.1 |
| 1980-1986 | 0 | 0 | --- | --- |
| 1979 | 219 | 219 | 21.9 | 24.1 |
| 1978 | 0 | 0 | --- | --- |
| 1977 | 64 | 32 | 6.4 | 3.5 |
| 1976 | 391 | 384 | 39.2 | 42.3 |
| 1971-1975 | 3 | 2 | .3 | .2 |
| 1945-1970 | 0 | 0 | --- | --- |
| 1944 and earlier | 4 | 0 | .4 | --- |
| Total | 998 | 907 | 100.0% | 100.0% |
| Average Age in Years** | 10.5 | 10.6 | --- | --- |

**1991 = 0.5 years old; 1990 = 1.5 years old; 1989 = 2.5 years old; etc.

(a) Data as of January 1, 1992 from APTA survey of all 5 trolleybus systems.

TABLE 48

Heavy Rail Cars by Year Built (a)

| YEAR BUILT | NUMBER | | PERCENT | |
|------------------------|------------------|-------------------|------------------|-------------------|
| | OWNED AND LEASED | IN ACTIVE SERVICE | OWNED AND LEASED | IN ACTIVE SERVICE |
| 1991 | 8 | 0 | .1 | --- |
| 1990 | 14 | 14 | .1 | .1 |
| 1989 | 97 | 97 | .9 | 1.0 |
| 1988 | 345 | 344 | 3.4 | 3.4 |
| 1987 | 206 | 206 | 2.0 | 2.0 |
| 1986 | 664 | 664 | 6.5 | 6.5 |
| 1985 | 248 | 248 | 2.4 | 2.4 |
| 1984 | 1,116 | 1,116 | 10.9 | 11.0 |
| 1983 | 534 | 534 | 5.2 | 5.2 |
| 1982 | 350 | 349 | 3.4 | 3.4 |
| 1977-1981 | 733 | 725 | 7.1 | 7.1 |
| 1972-1976 | 1,361 | 1,345 | 13.3 | 13.2 |
| 1967-1971 | 1,021 | 1,010 | 10.0 | 9.9 |
| 1966 and earlier | 3,554 | 3,521 | 34.6 | 34.6 |
| Total | 10,251 | 10,173 | 100.0% | 100.0% |
| Average Age in Years** | 18.1 | 18.1 | --- | --- |

**1991 = 0.5 years old; 1990 = 1.5 years old; 1989 = 2.5 years old; etc.

(a) Data as of January 1, 1992 from APTA survey of all 12 heavy rail systems.

TABLE 49

Light Rail Cars by Year Built (a)

| YEAR BUILT | NUMBER | | PERCENT | |
|------------------------|------------------|-------------------|------------------|-------------------|
| | OWNED AND LEASED | IN ACTIVE SERVICE | OWNED AND LEASED | IN ACTIVE SERVICE |
| 1991 | 16 | 10 | 1.3 | 1.0 |
| 1990 | 30 | 30 | 2.4 | 2.9 |
| 1989 | 47 | 47 | 3.8 | 4.5 |
| 1988 | 20 | 20 | 1.6 | 1.9 |
| 1987 | 100 | 99 | 8.1 | 9.5 |
| 1986 | 132 | 129 | 10.7 | 12.4 |
| 1985 | 32 | 32 | 2.6 | 3.1 |
| 1984 | 26 | 26 | 2.1 | 2.5 |
| 1983 | 0 | 0 | --- | --- |
| 1982 | 10 | 10 | .8 | 1.0 |
| 1981 | 188 | 188 | 15.3 | 18.1 |
| 1980 | 15 | 15 | 1.2 | 1.4 |
| 1977-79 | 247 | 228 | 20.0 | 22.0 |
| 1954-1976 | 0 | 0 | --- | --- |
| 1953 and earlier | 369 | 203 | 30.0 | 19.6 |
| Total | 1,232 | 1,037 | 100.0% | 100.0% |
| Average Age in Years** | 20.9 | 16.9 | --- | --- |

**1991 = 0.5 years old; 1990 = 1.5 years old; 1989 = 2.5 years old; etc.

(a) Data as of January 1, 1992 from APTA survey of 14 of 18 light rail systems. Most missing vehicles are over 50 years old.

TABLE 50

Commuter Rail Cars by Year Built (a)

| YEAR BUILT | NUMBER | | PERCENT | |
|------------------------|------------------|-------------------|------------------|-------------------|
| | OWNED AND LEASED | IN ACTIVE SERVICE | OWNED AND LEASED | IN ACTIVE SERVICE |
| 1991 | 156 | 138 | 3.5 | 3.1 |
| 1990 | 90 | 88 | 2.0 | 2.0 |
| 1989 | 53 | 53 | 1.2 | 1.2 |
| 1988 | 143 | 143 | 3.2 | 3.2 |
| 1987 | 138 | 138 | 3.1 | 3.1 |
| 1986 | 68 | 68 | 1.5 | 1.5 |
| 1985 | 252 | 252 | 5.6 | 5.7 |
| 1984 | 142 | 142 | 3.1 | 3.2 |
| 1983 | 17 | 16 | .4 | .4 |
| 1982 | 159 | 157 | 3.5 | 3.6 |
| 1977-1981 | 506 | 460 | 11.2 | 10.4 |
| 1972-1976 | 839 | 837 | 18.6 | 19.0 |
| 1967-1971 | 1,139 | 1,139 | 25.3 | 25.9 |
| 1966 and earlier | 807 | 774 | 17.9 | 17.5 |
| Total | 4,509 | 4,405 | 100.0% | 100.0% |
| Average Age in Years** | 17.6 | 17.6 | --- | --- |

**1991 = 0.5 years old; 1990 = 1.5 years old; 1989 = 2.5 years old; etc.

(a) Data as of January 1, 1992 from APTA survey of 13 of 15 commuter rail systems. Vehicles missing are owned by AMTRAK and are about 15 years old.

SECTION VI

Employment



TABLE 51

Trend of Transit Employment, Compensation, and Labor Costs*

| CALENDAR YEAR | NUMBER OF EMPLOYEES(a) | SALARIES AND WAGES (MILLIONS) | FRINGE BENEFIT COSTS (MILLIONS) | TOTAL LABOR COSTS (MILLIONS) |
|---------------|------------------------|-------------------------------|---------------------------------|------------------------------|
| 1970 | 138,040 | 1,274.1 | -- | -- |
| 1975 | 159,800 | 2,236.0 | \$ 613.3 | \$ 2,849.3 |
| 1976 | 162,950 | 2,403.7 | 681.7 | 3,085.4 |
| 1977 | 162,510 | 2,546.7 | 813.6 | 3,360.3 |
| 1978 | 165,400 | 2,740.5 | 964.1 | 3,704.6 |
| 1979 | 177,900 | 3,025.0 | 1,090.4 | 4,115.4 |
| 1980 | 187,000 | 3,280.9 | 1,353.1 | 4,634.0 |
| 1981 | 191,600 | 3,493.5 | 1,649.1 | 5,142.6 |
| 1982 | 193,500 | 3,731.4 | 1,756.5 | 5,487.9 |
| 1983 | 194,960 | 3,921.3 | 1,977.3 | 5,898.6 |
| 1984 | 263,197 | 5,487.8 | 2,716.7 | 8,204.5 |
| 1985 | 270,020 | 5,843.1 | 2,868.3 | 8,711.4 |
| 1986 | 277,854 | 6,119.2 | 3,125.9 | 9,245.1 |
| 1987 | 276,610 | 6,324.1 | 3,266.9 | 9,591.0 |
| 1988 | 275,583 | 6,675.0 | 3,528.9 | 10,203.9 |
| 1989 | 272,487 | 6,897.7 | 3,737.3 | 10,635.0 |
| 1990 | 272,839 | 7,226.3 | 3,986.0 | 11,212.3 |
| P 1991 | 281,806 | 7,489.9 | 4,055.6 | 11,545.5 |

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

TABLE 52

Trend of Transit Employees by Job Category*

| CALENDAR YEAR | NUMBER OF EMPLOYEES(a)(b) | | | | | | | TOTAL OPERATING CAPITAL | TOTAL |
|---------------|---------------------------|------------------|-------------------|-------------------|-----------|-----------------|---------|-------------------------|---------|
| | VEHICLE OPERATOR(c) | OTHER OPERATIONS | VEHICLE MECHANICS | OTHER MAINTENANCE | ALL OTHER | TOTAL OPERATING | | | |
| 1978 | 85,100 | -- | -- | -- | 11,770 | -- | 165,400 | -- | 165,400 |
| 1979 | 90,760 | 23,360 | 20,650 | 31,360 | 31,360 | 177,900 | -- | -- | 177,900 |
| 1980 | 95,690 | 22,830 | 22,220 | 32,350 | 13,910 | 187,000 | -- | -- | 187,000 |
| 1981 | 96,930 | 22,740 | 23,640 | 33,190 | 15,100 | 191,600 | -- | -- | 191,600 |
| 1982 | 95,800 | 22,580 | 24,830 | 33,240 | 17,500 | 193,950 | -- | -- | 193,950 |
| 1983 | 94,170 | 22,400 | 25,030 | 33,980 | 19,380 | 194,960 | -- | -- | 194,960 |
| 1984 | 122,843 | 32,397 | 31,420 | 43,227 | 25,522 | 255,409 | 7,788 | 7,788 | 263,197 |
| 1985 | 127,065 | 25,277 | 30,514 | 45,400 | 33,781 | 262,037 | 7,983 | 7,983 | 270,020 |
| 1986 | 129,263 | 24,543 | 33,621 | 45,629 | 36,052 | 269,108 | 8,746 | 8,746 | 277,854 |
| 1987 | 126,770 | 25,269 | 33,467 | 46,433 | 36,124 | 268,083 | 8,527 | 8,527 | 276,610 |
| 1988 | 126,565 | 25,149 | 33,743 | 44,054 | 35,971 | 265,482 | 10,101 | 10,101 | 275,583 |
| 1989 | 126,154 | 25,613 | 32,464 | 43,800 | 34,886 | 262,917 | 9,570 | 9,570 | 272,487 |
| 1990 | 127,039 | 23,517 | 31,424 | 44,282 | 35,914 | 262,176 | 10,663 | 10,663 | 272,839 |
| P 1991 | 132,335 | 24,220 | 32,362 | 45,614 | 36,997 | 271,528 | 10,278 | 10,278 | 281,806 |

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

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

TABLE 53

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

| CALENDAR YEAR | RAILWAY | | | | TROLLEY BUS | MOTOR BUS | DEMAND RESPONSE | OTHER | TOTAL |
|---------------|------------|------------|---------------|--|-------------|-----------|-----------------|-------|---------|
| | LIGHT RAIL | HEAVY RAIL | COMPUTER RAIL | | | | | | |
| 1984 | 3,242 | 47,047 | 21,884 | | 2,012 | 154,326 | 23,798 | 3,100 | 255,409 |
| 1985 | 2,980 | 49,670 | 22,929 | | 1,893 | 157,581 | 23,767 | 3,217 | 262,037 |
| 1986 | 3,511 | 51,028 | 22,414 | | 2,140 | 165,839 | 20,664 | 3,512 | 269,108 |
| 1987 | 3,806 | 51,333 | 23,270 | | 2,090 | 165,176 | 19,068 | 3,340 | 268,083 |
| 1988 | 3,922 | 46,212 | 23,188 | | 2,039 | 165,407 | 21,391 | 3,323 | 265,482 |
| 1989 | 3,952 | 46,690 | 22,215 | | 2,013 | 162,990 | 21,453 | 3,604 | 262,917 |
| 1990 | 4,066 | 46,102 | 21,443 | | 1,925 | 162,189 | 22,740 | 3,711 | 262,176 |
| P 1991 | 4,190 | 47,102 | 21,387 | | 1,826 | 165,347 | 27,735 | 3,941 | 271,528 |

P = Preliminary

(a) Based on employee equivalents of 2,080 labor hours equals one employee.

(b) Excludes capital employees and an estimated 10,000-20,000 individuals not employed by transit systems and whose compensation is classified as "services" --e.g. boiler repairman, marketing consultant, independent auditor.

SECTION VII

Energy and Environment



TABLE 54

Trend of Fossil Fuel Consumption by Transit Passenger Vehicles*

| CALENDAR YEAR | (GALLONS IN THOUSANDS) | | | | | | OTHER (a) | CNG # |
|---------------|------------------------|----------------|-----------|-----------------|-----------|-------|-----------|-------|
| | COMMUTER RAIL | FERRY BOAT (b) | MOTOR BUS | DEMAND RESPONSE | ALL OTHER | TOTAL | | |
| 1970 | | | | 270,600 | | | 68,200 | |
| 1975 | | | | 365,060 | | | 7,576 | |
| 1976 | | | | 389,187 | | | 6,163 | |
| 1977 | | | | 402,842 | | | 9,273 | |
| 1978 | | | | 422,017 | | | 9,331 | |
| 1979 | | | | 423,212 | | | 8,973 | |
| 1980 | | | | 431,400 | | | 11,400 | |
| 1981 | | | | 445,950 | | | 13,950 | |
| 1982 | | | | 455,590 | | | 11,670 | |
| 1983 | | | | 450,260 | | | 9,460 | |
| 1984 | 58,320 | 21,624 | 505,049 | 15,371 | | | 49,907 | |
| 1985 | 55,572 | 20,747 | 518,137 | 14,482 | | | 45,704 | |
| 1986 | 54,608 | 22,655 | 546,892 | 15,868 | 21 | | 38,156 | |
| 1987 | 51,594 | 19,901 | 543,314 | 15,393 | 71 | | 34,220 | |
| 1988 | 53,054 | 19,202 | 552,658 | 15,090 | 65 | | 40,055 | |
| 1989 | 52,516 | 19,402 | 551,156 | 14,824 | 118 | | 39,389 | |
| 1990 | 52,681 | 19,627 | 563,151 | 15,497 | 74 | | 33,906 | |
| P 1991 | 54,758 | 20,673 | 575,120 | 19,615 | 118 | | 44,369 | |

P = Preliminary

-- Data not available

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

(a) Includes propane, LPG, LNG, Kerosene, and others.

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

TABLE 55

Trend of Electric Power Consumption by Transit Passenger Vehicles*

| CALENDAR YEAR | (KILOWATT HOURS IN MILLIONS) | | | | | TOTAL |
|---------------|------------------------------|------------|------------|-------------|-----------|-------|
| | COMMUTER RAIL | HEAVY RAIL | LIGHT RAIL | TROLLEY BUS | ALL OTHER | |
| 1970 | | | | 2,561 | | |
| 1975 | | | | 2,646 | | |
| 1976 | | | | 2,576 | | |
| 1977 | | | | 2,303 | | |
| 1978 | | | | 2,223 | | |
| 1979 | | | | 2,473 | | |
| 1980 | | | | 2,446 | | |
| 1981 | | | | 2,655 | | |
| 1982 | | | | 2,722 | | |
| 1983 | | | | 2,930 | | |
| 1984 | 901 | 3,092 | | 245 | | 4,238 |
| 1985 | 1,043 | 2,928 | | 245 | | 4,216 |
| 1986 | 1,170 | 3,066 | 173 | 70 | 10 | 4,489 |
| 1987 | 1,155 | 3,219 | 191 | 70 | 21 | 4,656 |
| 1988 | 1,195 | 3,256 | 243 | 68 | 23 | 4,785 |
| 1989 | 1,293 | 3,286 | 242 | 68 | 23 | 4,912 |
| 1990 | 1,226 | 3,284 | 239 | 69 | 19 | 4,837 |
| P 1991 | 1,259 | 3,226 | 274 | 72 | 19 | 4,850 |

P = Preliminary

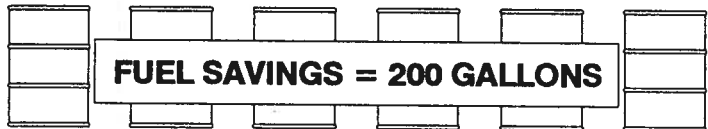
*Excludes commuter railroad and automated guideway prior to 1984. Series not continuous between 1983 and 1984.

TABLE 56

Energy Efficiency of Transit

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

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



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

TABLE 57

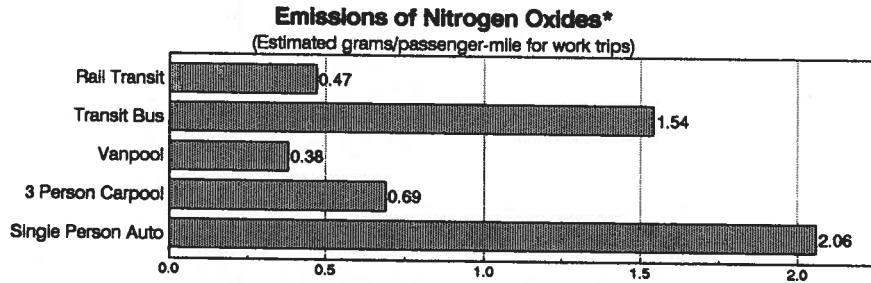
Transportation Energy Use by Mode, 1989

| | FUEL CONSUMPTION (TRILLION BTUs) | PERCENT OF TOTAL |
|----------------|-------------------------------------|---------------------|
| Automobiles | 9,053.5 | 39.2 |
| Transit Buses | 77.3 | 0.3 |
| Other Buses | 85.4 | 0.4 |
| Trucks | 7,587.7 | 32.9 |
| Motorcycles | 26.1 | 0.1 |
| Total Highway | 16,830.0 | 72.9 |
| Off-highway | 665.2 | 2.9 |
| Air | 1,981.3 | 8.6 |
| Water | 1,376.0 | 6.0 |
| Pipeline | 895.3 | 3.9 |
| Transit Rail | 42.6 | 0.2 |
| Commuter Rail | 22.4 | 0.1 |
| Intercity Rail | 17.6 | 0.1 |
| Freight Rail | 432.9 | 1.9 |
| Military | 816.0 | 3.5 |
| Total | 23,079.3 | 100.0 |

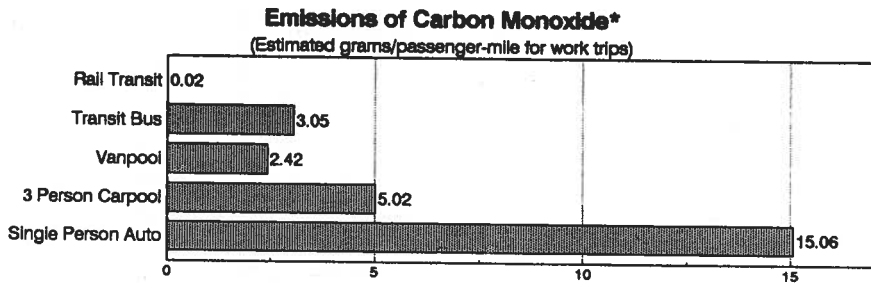
Source: U.S. Department of Energy, *Transportation Energy Data Book: Edition 12, Table 2.7.*

TABLE 58

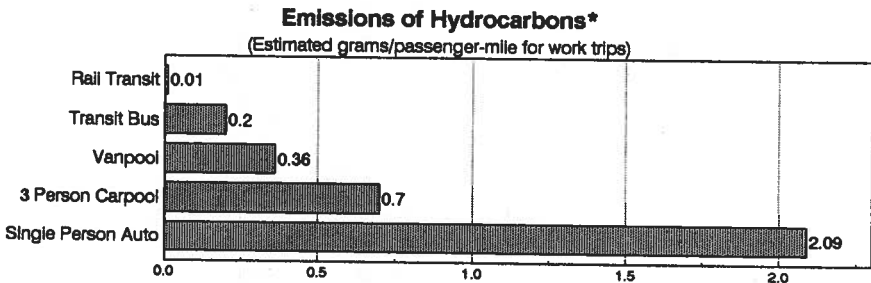
Pollution Reduction Resulting From Transit Use



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



*Limits blood's ability to transport oxygen to body tissues. Can cause dizziness, headaches, impaired coordination and death.



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

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

SECTION VIII

The Federal Transit Act



History and Provisions of the Federal Transit Act

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

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

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

- 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.
- 1991: The Federal Transit Act Amendments of 1991, Title III of the Intermodal Surface Transportation Efficiency Act of 1991, extended the authorization of transit assistance through FY 1997 at levels higher than any previous authorizations, changed the name of the transit law to the Federal Transit Act and changed the name of the Urban Mass Transportation Administration to the Federal Transit Administration, and continued a shift in funding distribution to formulas by distributing the rail modernization portion of Section 3 major capital funds by formula for the first time.

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

Funds for federal transit assistance come from two sources.

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

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

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

Status: Authorized through FY 1997.

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

Eligible Expenditures: For capital projects only.

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

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

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

Status: Authorized through FY 1997.

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

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

apportionment and is a limit on the use of apportioned funds, it is not an apportionment of additional money.

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

(1) Fixed guideway operations in urbanized areas over 200,000 population, basic formula, 28.87% of Section 9. The formula is 60% fixed guideway revenue vehicle miles operated and 40% fixed guideway route miles. Urbanized areas over 750,000 population that have commuter rail operations receive a minimum of 0.75% of this formula.

(2) Fixed guideway operations in urbanized areas over 200,000 population, incentive formula, 1.32% of Section 9. The formula is the number of fixed guideway passenger miles traveled multiplied by the number of fixed guideway passenger miles traveled per dollar of operating cost. Urbanized areas over 750,000 population that have commuter railroad operations receive a minimum of 0.75% of this formula.

(3) Bus operations in urbanized areas over 1,000,000 population, basic formula, 40.31% of Section 9. The formula is 50% bus revenue vehicle miles operated, 25% urbanized area population, and 25% urbanized area population density weighted by population.

(4) Bus operations in urbanized areas from 200,000 to 1,000,000 population, basic formula, 14.61% of Section 9. The formula is 50% bus revenue vehicle miles operated, 25% urbanized area population, and 25% urbanized area population density weighted by population.

(5) Bus operations in urbanized areas over 200,000 population, incentive formula, 5.57% of Section 9. The formula is the number of bus passenger miles traveled multiplied by the number of bus passenger miles traveled per dollar of operating cost.

(6) Mass transportation operations in urbanized areas less than 200,000 population, 9.32% of Section 9. The formula is 50% urbanized area population and 50% urbanized area population density weighted by population.

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

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

Status: Authorized through FY 1997.

Recipients of Funds: Private, non-profit corporations and assoc-

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

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

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

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

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

Status: Authorized through FY 1997.

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

Eligible Expenditures: For operations or capital projects.

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

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

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

SECTION IX

Canadian Statistics



TABLE 59

Canadian Transit: Summary Statistics

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

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

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

TABLE 60

Canadian Transit: Active Passenger Vehicles

| CALENDAR YEAR | RAILWAY CARS | | | | | MOTOR BUSES | OTHER | TOTAL PASSENGER VEHICLES |
|---------------|--------------|----------------|--|---------------|--|-------------|-------|--------------------------|
| | LIGHT RAIL | HEAVY RAIL (a) | | TROLLEY BUSES | | | | |
| | | | | | | | | |
| 1960 | 870 | 134 | | 1,185 | | 4,470 | 0 | 6,659 |
| 1965 | 738 | 334 | | 1,110 | | 5,224 | 0 | 7,406 |
| 1970 | 439 | 703 | | 782 | | 5,913 | 0 | 7,837 |
| 1975 | 388 | 826 | | 664 | | 8,160 | 0 | 10,038 |
| 1976 | 360 | 851 | | 608 | | 8,326 | 0 | 10,145 |
| 1977 | 356 | 1,005 | | 588 | | 8,828 | 0 | 10,777 |
| 1978 | 363 | 1,325 | | 549 | | 9,049 | 0 | 11,286 |
| 1979 | 375 | 1,377 | | 559 | | 9,554 | 0 | 11,865 |
| 1980 | 418 | 1,627 | | 539 | | 10,013 | 0 | 12,597 |
| 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 | | 10,538 | 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 | 77 | 12,989 |
| 1988 | 524 | 1,439 | | 523 | | 10,492 | 76 | 13,054 |
| 1989 | 533 | 1,652 | | 488 | | 9,961 | 235 | 12,929 |
| 1990 | 532 | 1,381 | | 472 | | 10,560 | 445 | 13,390 |

NOTE: Data for regular transit service only.

(a) Includes Commuter Rail Vehicles as of 1980.

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

TABLE 61

Canadian Transit: New Passenger Vehicle Purchases

| CALENDAR YEAR | RAILWAY CARS | | TROLLEY BUSES | MOTOR BUSES | OTHER | TOTAL VEHICLES PURCHASED |
|---------------|--------------|------------|---------------|-------------|-------|--------------------------|
| | LIGHT RAIL | HEAVY RAIL | | | | |
| 1975 | 0 | 0 | 27 | 1,005 | 0 | 1,032 |
| 1976 | 0 | 21 | 21 | 746 | 0 | 788 |
| 1977 | 0 | 154 | 0 | 826 | 0 | 980 |
| 1978 | 20 | 320 | 16 | 607 | 0 | 963 |
| 1979 | 11 | 52 | 0 | 650 | 0 | 713 |
| 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 | 0 | 808 |
| 1984 | 29 | 0 | 24 | 340 | 0 | 393 |
| 1985 | 0 | 0 | 0 | 407 | 0 | 407 |
| 1986 | 0 | 0 | 0 | 326 | 0 | 326 |
| 1987 | 0 | 0 | 0 | 500 | 0 | 500 |
| 1988 | 0 | 0 | 0 | 354 | 0 | 354 |
| 1989 | 20 | 77 | 0 | 641 | 0 | 738 |
| 1990 | 0 | 0 | 0 | 482 | 38 | 520 |

NOTE: Data for regular transit service only.

-- Data not available.

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

TABLE 62

Canadian Transit: Fares

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

-- Data not available.

(a) Monetary data are Canadian dollars.

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

NOTE: Data for regular transit service only.

TABLE 63

Canadian Transit: Employees

| CALENDAR YEAR | VEHICLE OPERATIONS | NUMBER OF EMPLOYEES | | | | TOTAL EMPLOYEES |
|---------------|--------------------|---------------------|---------------------|--------------------------|-----------------|-----------------|
| | | MAINTENANCE | | ADMINISTRATION AND OTHER | TOTAL EMPLOYEES | |
| | | REVENUE VEHICLE | NON-REVENUE VEHICLE | | | |
| 1970 | -- | -- | -- | -- | 22,023 | |
| 1975 | 16,152 | 7,054 | | 3,993 | 27,199 | |
| 1976 | 17,061 | 6,393 | | 4,674 | 28,128 | |
| 1977 | 17,670 | 7,060 | | 4,243 | 28,973 | |
| 1978 | 18,048 | 6,540 | | 5,353 | 29,941 | |
| 1979 | 18,419 | 7,559 | | 4,297 | 30,275 | |
| 1980 | 19,689 | 5,567 | 2,071 | 5,504 | 32,831 | |
| 1981 | 20,626 | 6,071 | 2,559 | 5,493 | 34,749 | |
| 1982 | 20,693 | 5,576 | 2,303 | 6,680 | 35,252 | |
| 1983 | 20,259 | 3,799 | 4,490 | 6,224 | 34,772 | |
| 1984 | 19,804 | 5,486 | 2,537 | 6,301 | 34,128 | |
| 1985 | 20,505 | 5,976 | 2,782 | 5,550 | 34,813 | |
| 1986 | 22,046 | 6,824 | 3,174 | 3,952 | 35,996 | |
| 1987 | 22,853 | 6,939 | 3,165 | 4,061 | 37,018 | |
| 1988 | 23,430 | 7,235 | 3,031 | 4,297 | 37,993 | |
| 1989 | 23,609 | 7,374 | 3,262 | 5,061 | 39,306 | |
| 1990 | 24,124 | 7,313 | 3,563 | 4,535 | 39,535 | |

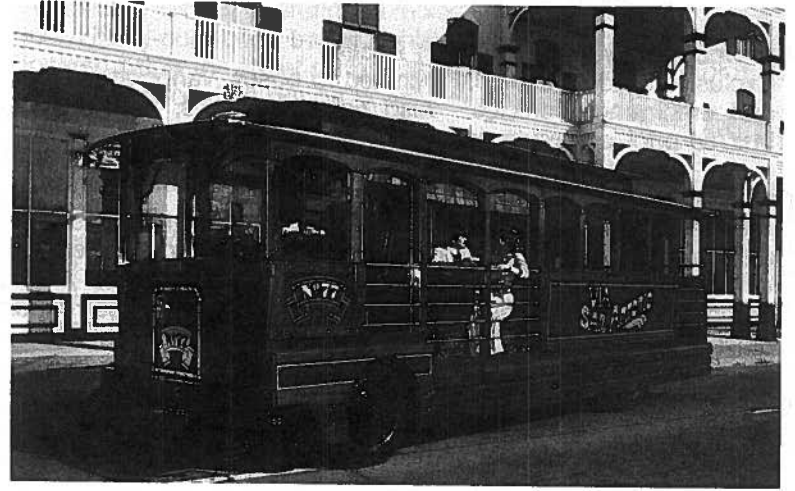
- Data not available.

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

NOTE: Data for regular transit service only.

SECTION X

Glossary and Index



GENERAL DEFINITIONS

Transit System

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

Multi-Mode Transit System

A system operating more than one mode of service.

Public Transit System

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

High-Occupancy Vehicle (HOV) Facility

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

Urbanized Area

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

Urban Place

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

MODE AND VEHICLE DEFINITIONS

Mode

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

Fixed-Route

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

Non-Fixed-Route

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

Aerial Tramway

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

Automated Guideway

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

Cable Car

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

Commuter Rail

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

Demand Response

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

Dial-a-Ride

Another name for "Demand Response."

Downtown People Mover

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

Ferryboat

A boat providing fixed-route service over water.

Heavy Rail

An electric railway with the capacity for a "heavy volume" of traffic and characterized by exclusive rights-of-way, multi-car trains, high

speed and rapid acceleration, sophisticated signaling, and high platform loading. Also known as "subway," "elevated (railway)," or "metropolitan railway (metro)."

Inclined Plane

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

Light Rail

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

Metropolitan Railway

Another name for "Heavy Rail."

Monorail

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

Motorbus

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Paratransit Service

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

Rapid Rail

Another name for "Heavy Rail."

Rapid Transit

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

Special Service

Another name for "Paratransit Service."

Streetcar

Another name for "Light Rail."

Tramway

Another name for "Light Rail."

Trolley Car

Another name for "Light Rail."

Trolleybus

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

Urban Ferryboat

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

Vanpool

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

Transit Passenger Vehicle

A vehicle used to carry passengers in transit service.

Active Vehicle

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

Rehabilitation

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

Wheelchair Accessible Vehicle

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

EXPENSE DEFINITIONS**Vehicle Operations**

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

Vehicle Maintenance

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

Non-Vehicle Maintenance

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

General Administration

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

Purchased Transportation

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

Total Operating Expense

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

Depreciation and Amortization

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

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

Other Reconciling Items

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

Total Expense

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

Salaries and Wages

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

Fringe Benefits

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

Total Labor Costs

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

Services

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

Fuel and Lubricants

Gasoline, diesel, other fuels, and vehicle lubricants.

Other Materials and Supplies

Materials and supplies other than "Fuel and Lubricants."

Utilities

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

Casualty and Liability

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

Purchased Transportation

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

Other

Taxes, expense transfers, and miscellaneous expenses.

REVENUE DEFINITIONS**Operating Assistance**

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

Other Operating Revenue

Revenue derived from (1) organizations paying money in lieu of

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

Passenger Revenue

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

Adult Base Fare

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

Average Fare per Unlinked Passenger Trip

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

Peak Period Surcharge

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

Transfer Charge

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

Zone Charge

An extra fee charged for crossing a predetermined boundary.

RIDERSHIP AND EMPLOYMENT DEFINITIONS**Capital Employee**

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

Operating Employee

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

Passenger Miles

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

Revenue Passenger Trips

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

Single-Vehicle Transit Trip

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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