

# **PUBLIC TRANSPORTATION FACT BOOK**

***57th Edition***

**April 2006**

published by

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## **PUBLIC TRANSPORTATION FACT BOOK**

April 2006

International Standard Book Number: 1-931594-21-X

### **About APTA**

APTA is a nonprofit international association of over 1,500 public and private member organizations including transit systems and commuter rail operators; planning, design, construction and finance firms; product and service providers; academic institutions, transit associations and state departments of transportation. APTA members serve the public interest by providing safe, efficient and economical transit services and products. Over ninety percent of persons using public transportation in the United States and Canada are served by APTA members.

### **APTA Vision Statement**

Be the leading force in advancing public transportation.

### **APTA Mission Statement**

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

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## Notes

The **Public Transportation Fact Book** (formerly the **Transit Fact Book**) was first published in 1943. Available data are expanded by standard statistical methods to estimate U.S. national totals. *All data are for the U.S. only, except for the section on Canada.* Data for Canada were provided by the Canadian Urban Transit Association (CUTA).

This book includes only public transportation data and excludes taxicab, unregulated jitney, school, sightseeing, intercity, charter, military, and non-public service (e.g., governmental and corporate shuttles), and special application systems (e.g., amusement parks, airports, and the following types of ferry service: international, rural, rural interstate, island and urban park).

Data are based on the annual National Transit Database (NTD) report published by the United States Government's Federal Transit Administration (FTA). APTA supplements these data with special surveys. Where applicable, data are calculated based on 2000 U.S. Census Bureau urbanized area population categories.

Because data are reported to the NTD based on transit agency fiscal years rather than calendar years, data listed for a particular year are necessarily extrapolations of the sum of data reported for all fiscal years ending in a particular calendar year. All Canadian data are based on calendar years.

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

Because of the time required to compile the large amount of data for this book, data for the last fiscal year reported are preliminary and will be refined when additional data become available.

Additional data and updated charts and tables can be found online at  
<http://www.apta.com/research/stats/>

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# Public Transportation

## Overview

### What is Public Transportation?

Public transportation is “transportation by a conveyance that provides regular and continuing general or special transportation to the public...” as defined by the federal government. It includes service by buses, subways, rail, trolleys and ferryboats. It also includes paratransit services for seniors and persons with disabilities as well as vanpool and taxi services operated under contract to a public transportation agency.

### Public Transportation Serves Billions Provides Freedom, Mobility

In 2004, Americans took 9.6 billion trips using public transportation. Since 1995, public transportation ridership in the U.S. grew by more than 23 percent, faster than highway travel. APTA estimates that about 33 million trips are taken each weekday in the United States.



*Passengers using a Los Angeles County Metropolitan Transportation Authority bus in California.*

People take public transportation for a variety of reasons. For some, it is literally a lifeline. Public transportation provides people from every walk of life with easy access to jobs, schools, medical appointments, shops, and other services, thereby providing them with mobility, choice and freedom.

### Who Rides Public Transportation and Why?

People use public transportation for a variety of reasons. Approximately 54 percent use transit to get to and from work; 15 percent to and from school; 9 percent to go shopping. About 52 percent of the riders are women and 48 percent are men.



*For everyone, including these Miami-Dade Transit riders, public transportation is there when it's needed, providing opportunities, freedom, and mobility.*

### Public Transportation Comes in Many Modes

Modes represent different methods of public transportation. Road modes include bus, trolleybus, vanpool, jitney, and paratransit service. Rail modes include heavy rail, light rail, commuter rail, automated guideway transit, inclined plane, cable car, monorail, and aerial tramway. Water modes include passenger-only and vehicle ferries, and water taxis.



*The Syracuse, New York CNY Centro system uses this typical paratransit vehicle to transport persons with disabilities who are unable to use its fixed route buses.*

### Providers

Today, more than 6,000 public transportation providers operate in the U.S and Canada. The majority operate more than one mode of service. Approximately 1,500 agencies provide bus service; 6,000 agencies operate paratransit service; and 150 agencies operate other modes.

Almost all of the public transportation agencies in the U.S. provide service which meet the needs of older Americans and persons with disabilities.

## Employees

In 2004, more than 359,000 public transportation employees provided services to passengers and managed capital investments. These employees operate, maintain and manage all modes of public transportation as well as aid in the construction of public transportation infrastructure. The majority of operating employees (61 percent) work in bus service, followed by 14 percent in heavy rail, 13 percent in paratransit, 7 percent in commuter rail, 2 percent in light rail, 2 percent in other rail modes and 1 percent in trolleybus.



*Vehicle operators, such as this bus operator for San Diego Transit Corporation, make up the majority of public transportation employees.*

## Vehicles Are Varied

The public transportation fleet comprises 144,000 vehicles in active service. Of this number, buses represent 56 percent; paratransit vehicles, 26 percent; heavy rail cars, 8 percent; commuter rail cars, 4 percent; light rail cars, 1 percent; and all other modes, 5 percent.

Many are using 21<sup>st</sup> Century technology such as onboard wireless internet on commuter buses, smart cards and electronic signage, all designed to improve passenger convenience, safety and comfort. To accommodate passengers with disabilities, many systems have speaking buses, which provide audio announcements of bus stops, and kneeling buses, which allow the front door of the bus to be lowered closer to the ground for easier accessibility.

U.S. transit agencies are increasingly investing in alternative fuel buses to reduce dependence on oil. About 17% of fixed-route buses currently use alternative fuels and 20% of buses on order will use alternative fuels.

## Public Transportation Benefits Everyone

Public transportation improves the quality of life in communities across the country by providing safe, efficient and economical service. It also serves as a vital component necessary for a healthy economy. In addition, not only does it benefit the people who use it, it also benefits society as a whole.

According to a 2003 Wirthlin Worldwide poll, four in five Americans or 81 percent agree that increased investment in public transportation would strengthen the economy, create jobs, reduce traffic congestion and air pollution and save energy.

A recent Harris Interactive poll revealed that 98 percent of all adults believe a good transportation system is very important, or essential, for the country as a whole.

Some of the most significant benefits are:

### Eases Traffic Congestion

Public transportation helps to alleviate the congestion on our nation's increasingly crowded network of roadways. According to the *2005 Texas Transportation Institute (TTI) Annual Urban Mobility Report*, public transportation reduces traffic delays and costs in America's 85 largest urban areas. The study concluded that public transportation services in America's most congested cities saved travelers 1.1 billion hours in travel time. Without public transportation, travel delays would have increased 27 percent.



*These Washington Metropolitan Area Transit Authority metro trains carry passengers along the heavily-congested I-66 in Virginia.*

### Creates and Sustains Jobs

The public transportation industry creates – and sustains – jobs for the nation's economy. In addition to the 359,000 people directly employed by the public transportation industry or directly-related areas – engineering, construction, manufacturing and retail industries – other jobs are created.

Every \$1 billion in federal funding invested in public transportation infrastructure generates approximately 47,500 American jobs.

### Provides Access to Jobs

Almost half of the nation's Fortune 500 companies, representing over \$2 trillion in annual revenue, are headquartered in America's transit-intensive metropolitan areas. Examples of cities where companies have located near public transportation are many and include Chicago, Atlanta and Dallas.

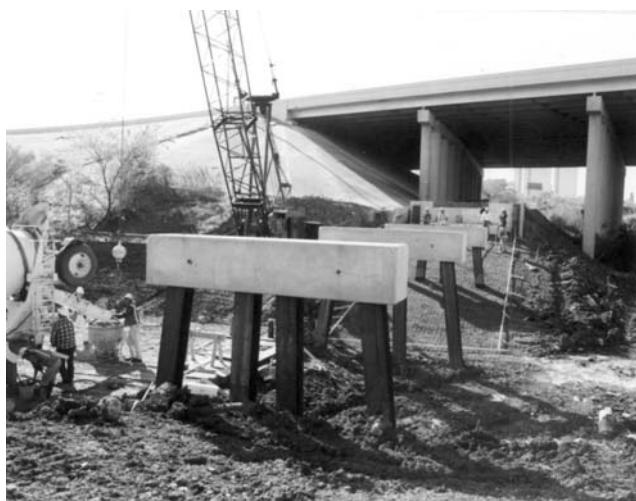
In addition to enhancing employee recruitment, businesses tied to public transportation are experiencing more employee reliability and less absenteeism and turnover. Public assistance agencies also use public transportation to help more people to enter the work force. The Federal Transit Administration's Job Access and Reverse Commuter Program provides grants to support transportation for thousands of citizens.

### Stimulates Economic Development

Studies confirm the positive economic impact of public transportation investment on new development and business revenues.

A Cambridge Systematics study estimated that each \$10 million in capital investment yields \$30 million in increased sales, while each \$10 million operating investment yields \$32 million.

Every dollar taxpayers invest in public transportation generates an average of \$6 in economic returns, ranging from \$4 to \$9.



*Communities throughout the country are spurring economic development by investing in public transportation projects like this commuter rail system in Dallas/Ft. Worth, Texas.*

### Boosts Real Estate Values

Real estate – residential, commercial and business – served by public transportation can command higher rents and maintain higher value than similar properties not as well served by transit.

For example, in the case of developments near the light rail system in Dallas, Texas, a 2002 University of North Texas study found that commercial properties located near suburban Dallas Area Rapid Transit (DART) stations increased in value 24.7 percent whereas properties not served by rail only increased 11.5 percent. Values of residential properties near the stations rose 32.1 percent compared to the 19.5 percent increase for properties not served by rail stations.

Also, according to the Urban Land Institute (ULI), residential properties for sale near commuter rail stops in California consistently enjoy price premiums, including a 17 percent advantage to properties in the San Diego region.

### Fosters More Livable Communities:

Public transportation facilities and transportation corridors are "natural focal points for communities" that serve to encourage economic and social activities and help create strong neighborhood centers that are economically stable, safe, and productive. When commuters ride public transportation or walk, contact with neighbors tends to increase, which helps bring a community closer.

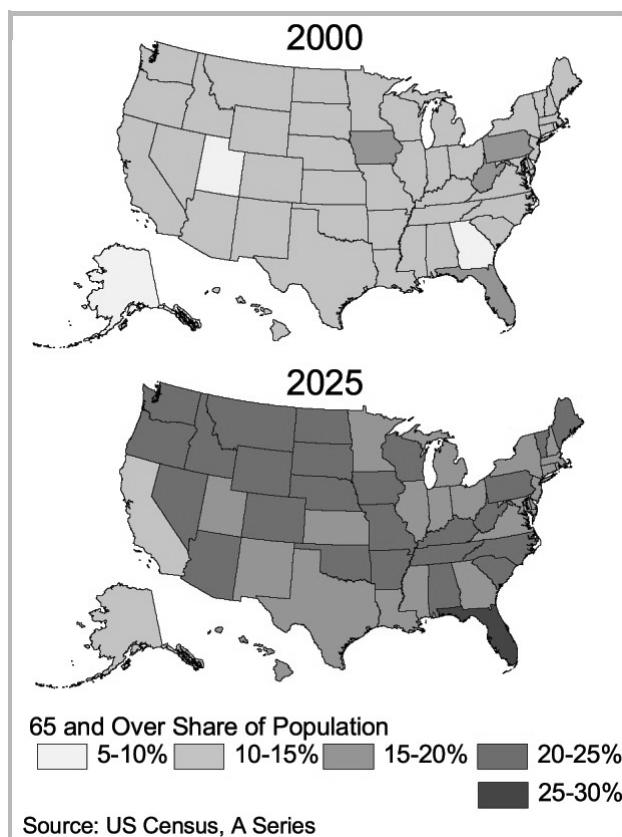


*The Charleston Area Regional Transportation Authority in South Carolina helps move both residents and tourists through Charleston's quaint streets.*

Transit-friendly walkable communities reduce reliance on cars and promote higher levels of physical activity. These more traditional settings may generate half the automobile trips of similarly sized modern day suburbs.

### **Provides Mobility for Seniors**

By the year 2025, 18 percent of the U.S. population will be 65 and over and many will be unable to drive. In fact, one-fifth of persons 65 and older do not drive.



*This chart (Linda Bailey, Surface Transportation Policy Project, "Aging Americans: Stranded Without Options") emphasizes the increasing percentage of people 65 and over. Public transportation is often the only viable way for some senior citizens to get around.*

A 2004 AARP/Surface Transportation Policy Project report found that 50% of non-drivers age 65 and older stay home on any given day partially because they lack transportation options. They make 15% fewer trips to doctors, and 65% fewer trips for social, family and religious activities.

Meeting the transportation needs of seniors is a major community objective as well as a national goal. Public transportation services, including regular route service and mini-buses, represent a lifeline for seniors, linking them with family, friends and a changing society.

The 2005 White House Conference on Aging confirmed just how important senior mobility issues are to the future of our nation. It ranked transportation options for older Americans to be among the top three priorities facing seniors.

Of the 73 resolutions presented at the 2005 conference, the pledge to "Ensure that Older Americans Have Transportation Options to Retain Their Mobility and Independence" received the third most votes.

### **Provides Access for Rural Areas**

Public transportation is equally important to America's rural heartland, where 40 percent of residents have no access to public transportation services and another 25 percent have very little access.

Transportation service is critical for rural America's 30 million transit-dependent persons, including senior citizens, low-income families and people with disabilities.

Both the American Association of State Highway and Transportation Officials (AASHTO) and APTA estimate that rural and small urban investment needs are approximately \$1 billion a year over the next six years.

### **Improves Air Quality**

Public transportation plays a vital role in reducing pollution. It produces 95 percent less carbon monoxide (CO), more than 92 percent fewer volatile organic compounds (VOCs) and nearly half as much carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NOx) for every passenger mile traveled as compared to traveling with private vehicles.

Public transportation reduces annual emissions for the pollutants that create smog, VOCs and NOx, by more than 70,000 tons and 27,000 tons respectively.

Today, more than ever, transit systems nationwide are reducing reliance on diesel fuel for their bus fleets and investing in compressed natural gas vehicles, buying low-sulfur, fuel-burning buses or planning a switch to diesel-electric hybrid buses. Other systems are replacing older diesel buses with newer ones to reduce emissions.

### **Reduces Energy Consumption**

Public transportation can significantly reduce dependency on gasoline. For every passenger mile traveled, public transportation uses about one half of the fuel consumed by cars, and about a third of that used by sport utility vehicles and light trucks.

Public transportation riders in the United States save 855 million gallons of gasoline per year.

These gasoline savings are equal to more than twice the energy consumed by the U.S. apparel industry, or half the energy burned by the U.S. paper pulp industry or by all U.S. manufacturers of computers and electronic equipment.

If Americans rode transit at the rate of 10 percent of daily travel, the U.S. would reduce its dependence on oil imported from the Persian Gulf by more than 40 percent. These fuel savings would equal nearly all the energy used by U.S. food manufacturers and more than the energy used by the U.S. petrochemical industry.

(*Conserving Energy and Preserving the Environment: The Role of Public Transportation*, Robert J. Shapiro, Kevin A. Hassett and Frank S. Arnold, 2002.)

### Saves Money

Public transportation saves money. For every dollar earned, the average household spends 19 of every dollar cents on transportation, 95 percent of which is for buying, maintaining and operating cars, the largest source of household debt after mortgages.

Americans living in transit-intensive metropolitan areas save \$18 billion annually in congestion costs. Every \$10 million invested in public transportation saves more than \$15 million, for both highway and transit users. This includes savings of about \$200 to \$4,500 worth of gas per year for a transit user.

In addition, transit reduces the needs for additional cars, a yearly expense of between \$6,000 and \$11,400.

Annual costs for public transportation may range from \$200 to \$2,600 depending on mileage traveled and other factors including transfer, distance or zone, time-of-day, express, and parking charges. This is far less than costs incurred in owning a car.

### Enhances Mobility During Emergencies

Time and time again, the availability of public transportation, in emergencies, both natural and man-made, has proven to be critical in maintaining basic access, mobility and safety for individuals in harm's way.

Public transportation has maintained service and helped evacuate threatened areas and transported emergency personnel during times of fires, hurricanes, windstorms and winter storms.

Most notably, on September 11, 2001, public transportation systems in the New York City area moved people safely away from the World Trade Center disaster. After the attack on the Pentagon, transit systems in the Washington, D.C. area evacuated hundreds of thousands in an early rush hour. Nationwide, transit systems evacuated tens of thousands of travelers from closed airports in major cities. Emergency plans went into effect at many systems to secure the safety of passengers. Not a single life was lost among the millions of people traveling on public transportation that day.

### Ensures Safety

Public transportation continues to be one of the safest modes of travel in the U.S. Safe travel is a high priority of public transportation systems, federal, state and local governments and APTA.

According to the National Safety Council's 2005-2006 "Injury Facts", riding a transit bus is 26 times safer than car travel. It is estimated that transit rail riders are 14 times safer than those traveling by car.

The public transportation industry and APTA continue to promote partnerships in safety and security. APTA's Safety and Security Management Programs are recognized internationally and provide leadership in program development, benchmarking of effective practices, and delivery of safety and security program audits of transit systems. In 2005, 60 public transportation systems participated in the rail, commuter rail or bus safety management programs offered by APTA in North America and Asia. These comprehensive programs are designed to examine every area of transit planning, construction, acquisition, operations and maintenance to ensure the safety of our public transportation passengers and employees.

### Why Is Public Transportation Safe?

- Transit vehicle operators are highly trained to drive defensively and anticipate potential safety problems.
- Public transportation vehicles are generally much larger and more substantially built than personal automobiles or vans.
- Most people on rail cars and busways travel on separate rights-of-way. Light rail, commuter rail and cable cars encounter grade crossings, many of which are protected by crossing gates.
- Passengers ride approximately 3-4 feet above the ground, offering protection from the most common area of impact.
- Providing more security than roadways, many transit systems feature new visual, voice and data communications systems linking vehicles, stations and riders with state-of-the-art operations centers.

## Americans Say They Want More Public Transportation

All around the country, people are saying they want more transit. Last year, voters nationwide approved state and local ballot initiatives to support public transit 84% of the time, even when it meant local taxes would be raised or continued.

A 2005 Harris Poll showed that 44% of Americans would like to see an increasing portion of travel go by rail in the future. Local travel by car was chosen by 11 percent of Americans.

## Growing Investment Needs

According to the U.S. Department of Transportation, in today's dollars, \$20.6 billion is needed annually to maintain and improve performance of the nation's transit systems.

The American Association of State and Highway Transportation Officials (AASHTO) Bottom Line Report documented investment needs of \$43.9 billion each year to improve and expand public transportation.

## The Public Sector's Investment in Public Transportation

In 2005, the Congress passed, and the president signed into law, the Safe, Accountable, Flexible, Efficient Transportation Equity Act, a Legacy for Users, with \$52.6 billion in guaranteed funding for public transportation through FY 09. SAFETEA-LU provides a record level of federal transit investment over 6 years.

Financial support by federal, state and local governments also allows people make a choice among travel modes. These expenditures have a high return on the public investment; every \$1 taxpayers invest in public transportation generates from \$4 to \$9 in economic returns.

## Funds to Build and Operate Public Transportation

Public transportation funds come from two main sources, capital and operating. **Capital funds** are used to finance infrastructure needs such as new construction and rehabilitation of existing facilities.

Up to 80 percent of the total capital cost may be federally-funded. The balance is typically paid for by a combination of state and local funds; many state and local governments provide more than the required minimum 20 percent of matching funds. In some cases, capital projects are financed solely by state and local funds. In 2004, public transportation agencies raised 29 percent of capital funds from tolls, fees, taxes, and non-governmental sources. States contributed 14 percent; local governments contributed 18 percent; and the federal government contributed 39 percent.

**Operating funds** provide income for operational expenses. In 2004, public transportation received \$29.7 billion in operating funds from all sources. For the same year, public transportation **operating expenses** totaled \$28.5 billion.

## Summary

Now more than ever, it is evident that public transportation is a critical piece of our nation's transportation system. Congestion is rising, gas prices are sky-rocketing, and people in record numbers are choosing to use public transit instead of driving.

Public transportation is expanding into areas such as Phoenix, Houston, Salt Lake City, once thought to be more focused on a car culture. State and local transportation ballot initiatives have passed overwhelmingly in communities throughout the country. People are saying they want more public transportation and they are willing to pay for it, even if it means paying more taxes.

Clearly, public transportation is on the move in the 21<sup>st</sup> Century.

# Federal Legislation

## History and Provisions of the Federal Transit Act and Other Major Laws Affecting Public Transportation

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. . ." In response, Congress enacted the Urban Mass Transportation Act of 1964, which provided federal aid to transit agencies for capital equipment purchases.

Continuing this commitment into its fifth decade, Congress enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) in 2005. SAFETEA-LU authorizes higher levels of funding for public transportation than any previous law. It continues and improves provisions of prior authorizing laws that are important to the continuing Federal commitment to improve public transportation service throughout America.

Landmarks in the evolution of the federal public transportation assistance program over the years include:

1961: The Housing Act of 1961 [*Public Law 87-70, June 30, 1961*] provided public transportation demonstration funding and mass transportation project loans.

1964: The Urban Mass Transportation Act of 1964 [*Public Law 88-365, July 9, 1964*] established a transit aid program under the Administrator of the Housing and Home Finance Agency (HHFA). Programs under the Housing Act of 1961 were continued, a program of grants for capital projects was established, and job protection provisions were provided for affected transit employees.

1965: The Department of Housing and Urban Development Act, [*Public Law 89-174, September 6, 1965*] merged HHFA into newly created Department of Housing and Urban Development (HUD), the implementation of the law took effect on January 13, 1966.

1966: The Urban Mass Transportation Act of 1966 [*Public Law 89-562, September 8, 1966*] expanded capital funding and allowed funding for research, planning, and training.

1968: Reorganization Plan No. 2 of 1968 [*33 Fed. Reg. 6965, February 26, 1968*] transferred the transit program from HUD to the Department of Transportation (DOT) effective July 30, 1968, creating the Urban Mass Transit Administration (UMTA).

1968: The Housing and Urban Development Act of 1968 [*Public Law 90-448, August 1, 1968*] increased authorized funding levels.

1969: The Housing and Urban Development Act Amendment [*Public Law 91-152, December 24, 1969*] increased authorized funding levels.

1970: The National Environmental Policy Act of 1969 [*Public Law 91-190, January 1, 1970*] required environmental impact statements for federally assisted transit and highway projects.

1970: The Urban Mass Transportation Assistance Act of 1970 [*Public Law 91-453, October 15, 1970*] authorized a \$3.1 billion program of capital grants.

1973: The Federal-Aid Highway Act of 1973 [*Public Law 93-87, August 13, 1973*] increased the federally funded portion of public transportation capital projects from 66 2/3% to 80% and authorized the use of Federal-Aid Urban Systems highway funds and Interstate Highway Transfers for qualifying public transportation projects and created a rural public transportation demonstration program.

1974: The National Mass Transportation Assistance Act of 1974 [*Public Law 93-503, November 26, 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.

1975: The Federal-Aid Highway Amendments of 1974 [*Public Law 93-643, January 4, 1975*] established federal policy in Section 105 that "elderly and handicapped persons have the same right as other persons to utilize mass transportation facilities."

1978: The Federal Public Transportation Act of 1978, Title III of the Surface Transportation Assistance Act of 1978 [*Public Law 95-599, November 6, 1978*] divided the formula grant program into categorical programs

that included capital grants for bus purchases, new starts, and fixed guideway modernization; established additional formula grant tiers for bus purchases and operating funds for fixed guideway systems; and added a formula program for rural places outside of urbanized areas.

1981: The Omnibus Budget Reconciliation Act of 1981 [*Public Law 97-35, August 13, 1981*] reduced authorization levels for FY 1982 from those set in the Federal Public Transportation Act of 1978.

1982: The Federal Public Transportation Act of 1982, Title III of the Surface Transportation Assistance Act of 1982 [*Public Law 97-424, January 6, 1983*] provided that 1 cent of a 5 cents per gallon 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 public transportation service data as well as population data.

1984: The Tax Reform Act of 1984 [*Public Law 98-396, July 18, 1984*] allowed employees to receive a *de minimis*, up to \$15 per month, tax-free fringe benefit in the form of an employer-provided public transportation subsidy or pass.

1987: The Federal Mass Transportation Act of 1987, Title III of the Surface Transportation and Uniform Relocation Assistance Act of 1987 [*Public Law 100-17, April 2, 1987*] provided that a portion of the Highway Trust Fund Mass Transit Account would be allocated by formula for capital purposes.

1990: The Omnibus Budget Reconciliation Act of 1990 [*Public Law 101-508, November 5, 1990*] raised to 1.5 cents per gallon the portion of the Highway Trust Fund tax on motor fuels to be placed in the Mass Transit Account.

1990: The Americans with Disabilities Act of 1990 (ADA) [*Public Law 101-336, July 26, 1990*] required transit agencies to provide service accessible to persons with disabilities.

1990: The Omnibus Budget Reconciliation Act of 1990 [*Public Law 101-508, November 5, 1990*] raised to 1.5 cents per gallon the portion of the Highway Trust Fund tax on motor fuels to be placed in the Mass Transit Account.

1990: The Clean Air Act Amendments of 1990 [*Public Law 101-549, November 15, 1990*] recast

transportation planning to provide for improved air quality.

1991: The Omnibus Transportation Employee Testing Act of 1991 [*Public Law 102-143, October 28, 1991*] mandated the establishment of anti-drug and alcohol misuse programs for safety-sensitive employees of recipients and contractors to recipients of Major Capital Investment, Urbanized Area Formula, and Rural Area Formula public transportation funds.

1991: The Federal Transit Act Amendments of 1991, Title III of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) [*Public Law 102-240, December 18, 1991*] extended public transportation assistance through FY 1997, increased the amounts authorized, re-named the transit law the Federal Transit Act and the Urban Mass Transportation Administration the Federal Transit Administration, and converted the rail modernization portion of Section 5309 major capital funds to a formula basis. Surface Transportation, Title I of ISTEA provided that specific funds authorized through Federal-Aid Highways programs may be used for either public transportation or highway projects. These flexible funds are to be used for the mode of transportation best suited to meeting the needs of individual areas and states.

1992: The Energy Policy Act of 1992 [*Public Law 102-486, October 24, 1992*] increased the tax-free amount of the public transportation commuter fringe benefit to \$60 per month with an inflation provision, removed the cliff provision which had made the entire benefit taxable if the monthly limit was exceeded, and extended the benefit to vanpools.

1993: The Omnibus Budget Reconciliation Act of 1993 [*Public Law 103-66, August 10, 1993*] raised to 2 cents per gallon the portion of the Highway Trust Fund tax on motor fuels to be placed in the Mass Transit Account, effective October 1, 1995.

1994: The Federal Transit Act was codified as Title 49, Chapter 53--Mass Transportation, of the United States Code [*Public Law 103-272, July 5, 1994*].

1997: The Taxpayer Relief Act of 1997 [*Public Law 105-34, August 5, 1997*] raised to 2.86 cents per gallon the portion of the Highway Trust Fund tax on motor fuels to be placed in the Mass Transit Account, effective October 1, 1997.

1998: The Federal Transit Act of 1998, Title III of the Transportation Equity Act for the 21st Century (TEA

21) [Public Law 105-178] extends the public transportation program. TEA 21 increased public transportation funding authorizations, up to 70 percent above ISTEA appropriation levels if all authorized amounts are appropriated. A total of \$41 billion is authorized for the six-year period, of which \$36 billion was guaranteed. The definition of eligible uses of Urbanized Area Formula capital funds was expanded to include preventive maintenance and ADA related expenditures for all urbanized areas and to include operating expenditures for urbanized areas under 200,000 population. The public transportation commuter benefit is expanded to include employee purchase of public transportation passes with pre-tax dollars. Two new programs were created: the Clean Fuels Formula Grant program which provides funds for adoption of clean fuel technologies and the Job Access and Reverse Commute program funds projects that improve job access for current and former welfare recipients and other eligible low-income individuals.

2005: The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) [Public Law 109-59, August 10, 2005] reauthorizes federal transit law. Including funds authorized in TEA 21 extension acts, over the six year period FY 2004 through FY 2009, it provides a record level of federal transit investment, \$52.6 billion. A new tier is added to the Urbanized Area Formula program directing funds to Small Transit Intensive Cities. Additional funds are provided for the Urbanized Area and Rural Formula programs through amounts authorized by new Growing States and High Density States programs. New programs are created: Transit on Indian Reservations to provide transit improvements on Indian reservation, New Freedom to provide transportation for persons with disabilities beyond the requirements of the Americans with Disabilities Act, Small Starts specifying amounts within the New Starts Program for smaller projects, Alternatives Analysis providing specified funds in addition to New Starts funds for this function, and Alternative Transportation in Parks and Public Lands to improve mobility in National Parks. New eligible expenses include intercity bus and rail stations, crime prevention and security, and mobility management.

## Funding Provisions of the Federal Transit Act

Funds for federal public transportation assistance come from two sources: general governmental revenues and the Mass Transit Account of the Highway Trust Fund. Transit agencies receive funds

from several Federal Transit Act programs, which allocate funding to urbanized areas or states by formula or for specific projects through discretionary processes. The largest are:

**Capital Investment, 49 U.S.C. 5309:** Begun in FY 1964, it provides capital assistance to eligible public transportation 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."

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

*Eligible Expenditures:* Capital projects only.

*Method of Apportionment or 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 allocated to specific projects at the discretion of the Congress or the Federal Transit Administration if the Congress does not specify a distribution. Eligible New Start projects for FY 2005 through FY 2009 and some Bus Capital projects for FY 2006 and FY 2009 are authorized in SAFETEA-LU. Amounts for individual projects are specified in annual appropriations laws.

*Matching Ratio:* Maximum of 80% federal, minimum of 20% non-federal.

**Urbanized Area Formula (UAF), 49 U.S.C. 5307 and 5336:** Apportions operating and capital assistance on a formula basis to urbanized areas. The original urbanized area formula program was established by the National Mass Transportation Assistance Act of 1974 and redone with the current overall structure by the Federal Public Transportation Act of 1982.

*Recipients of Funds:* Directly to urbanized areas of at least 200,000 population, through state governors to urbanized areas under 200,000 population. *Eligible Expenditures:* For urbanized areas of at least 200,000 population, capital expenditures by local decision. Eligible capital expenditures include acquisition of public transportation vehicles, construction of facilities including fixed-guideway rights-of-way, purchase of equipment, rehabilitation of buses, overhaul of rail vehicles, preventive maintenance, up to 10 percent of the apportioned amount for non-fixed-route ADA paratransit service, and other uses. For urbanized areas under 200,000 population, capital expenditures as for larger urbanized areas and operating expenditures.

**Method of Apportionment:** By seven formulas based on urbanized area population, mode of public transportation service, and comparative operating statistics. These formulas are:

(1) Bus operations in urbanized areas of at least 1,000,000 population, basic formula, 39.91% of the UAF beginning in FY 2006. The formula is 50% bus revenue vehicle miles operated, 25% urbanized area population, and 25% urbanized area population density weighted by population.

(2) Bus operations in urbanized areas from 200,000 to 999,999 population, basic formula, 14.47% of the UAF beginning in FY 2006. The formula is 50% bus revenue vehicle miles operated, 25% urbanized area population, and 25% urbanized area population density weighted by population.

(3) Bus operations in urbanized areas of at least 200,000 population, incentive formula, 5.51% of the UAF beginning in FY 2006. The formula is the number of bus passenger miles traveled multiplied by the number of bus passenger miles traveled per dollar of operating cost.

(4) Mass transportation operations in urbanized areas under 200,000 population, 9.23% of the UAF beginning in FY 2006. The formula is 50% urbanized area population and 50% urbanized area population density weighted by population.

(5) Fixed guideway operations in urbanized areas of at least 200,000 population, basic formula, 28.57% of the UAF beginning in FY 2006. The formula is 60% fixed guideway revenue vehicle miles operated and 40% fixed guideway route miles. Urbanized areas of at least 750,000 population that have commuter rail operations receive a minimum of 0.75% of this formula.

(6) Fixed guideway operations in urbanized areas of at least 200,000 population, incentive formula, 1.31% of the UAF beginning in FY 2006. 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 of at least 750,000 population that have commuter rail operations receive a minimum of 0.75% of this formula.

(7) Mass transportation operations in urbanized areas under 200,000 population with Small Transit Intensive Cities, 1.00% of the UAF beginning in FY 2006. The formula is the number of six different measures where a small urbanized area has values in excess of the average value for all urbanized areas from 200,000 to 999,999 population. Newly created in SAFETEA-LU.

**Matching Ratios:** Operating assistance: 50% federal,

50% non-federal. Capital assistance: 80% federal, 20% non-federal.

**Elderly and Disabled Persons, 49 U.S.C. 5310:** Established by the UMT Act of 1970 to assure mass transportation availability to elderly and disabled persons.

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

**Eligible Expenditures:** For capital equipment and cost of leased or contracted service.

**Method of Apportionment:** Apportioned by formula to states based on elderly and disabled population.

**Matching Ratio:** 80% federal, 20% non-federal.

**Rural Area Formula (RAF), 49 U.S.C. 5311:** Established by the STA Act of 1978 to apportion funds for mass transportation in rural areas outside of urbanized areas.

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

**Eligible Expenditures:** Operations or capital projects.

**Method of Apportionment:** Formula based 80% on non-urbanized area population of each state and 20% on non-urbanized land area of each state.

**Matching Ratio:** Operating assistance: 50% federal, 50% non-federal. Capital assistance: 80% federal, 20% non-federal.

**Growing States and High Density States Formula Program, 49 U.S.C. 5340:** Established by SAFETEA-LU to apportion additional funds to the Urbanized Area Formula and Rural Area Formula programs.

**Recipients of Funds:** Funds are distributed as an integral part of the Urbanized Area and Rural Area formula apportionments.

**Eligible Expenditures:** Operations or capital projects.

**Method of Apportionment:** Growing States funds are apportioned among states based on population projections for 15 years beyond the most recent Census of Population. Within each state funds are distributed among urbanized and nonurbanized areas based on population.

High Density States funds are distributed by formula among states that have population densities greater than 370 persons per square mile. Within states the funds are distributed among urbanized areas based on population.

*Matching Ratio:* The same as Urbanized Area Formula and Rural Area Formula funds.

**Job Access and Reverse Commute Program, Section 3037 of TEA 21:** Established by TEA 21 to improve job access for current and former welfare recipients and eligible low-income individuals.

*Recipients of Funds:* Local governmental authorities and agencies or nonprofit organizations selected by Metropolitan Planning Organizations in urbanized areas of at least 200,000 population and selected by the chief executive officer of the state for urbanized areas under 200,000 population.

*Eligible Expenditures:* Capital and operating costs of equipment, facilities, and associated capital maintenance items related to providing access to jobs, promoting public transportation use by workers with non-traditional work schedules, promoting the use of vouchers by appropriate agencies, the purchase or lease of vehicles for shuttle service at suburban locations, costs associated with adding reverse commute service or to otherwise facilitate transportation to suburban job opportunities, and promoting the use of employer provided transportation and public transportation pass benefits. Planning and coordination activities are not eligible.

*Method of Apportionment:* Beginning in FY 2006, distribution based on number of eligible low income persons and welfare recipients with 60% of funds to urbanized areas with 200,000 or more population, 20% to urbanized areas with fewer than 200,000 population, and 20% to rural areas.

*Matching Ratio:* 50% federal, 50% non-federal.

**Rural Transit Assistance Program, 49 U.S.C. 5311(b)(2):** Established by the FMT Act of 1987 to provide research, technical assistance, and training grants and related support services to non-urbanized areas. Allocated separately from funds in remainder of section 5311.

**New Freedom Program, 49 U.S.C. 5317:** Established by SAFETEA-LU, effective FY 2006, to provide funding for transportation for persons with disabilities.

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

*Eligible Expenditures:* New transportation services and

public transportation alternatives beyond those required by ADA to assist persons with disabilities.

*Method of Apportionment:* Apportioned using a formula based on the population of disabled people in a state, with 60 percent of the national funds apportioned to urbanized areas with populations larger than 200,000, 20 percent to states for use in urbanized areas of fewer than 200,000 persons, and 20 percent to states for use in rural areas.

*Matching Ratio:* Operating assistance: 50% federal, 50% non-federal. Capital assistance: 80% federal, 20% non-federal.

**Alternative Transportation in Parks and Public Lands, 49 U.S.C. 5320:** Established by SAFETEA-LU to develop public transportation in National Parks and other federal lands, this program is effective in FY 2006. The program is intended to improve mobility and reduce congestion and pollution. The Departments of Transportation and Interior will work cooperatively to develop and select capital or planning projects.

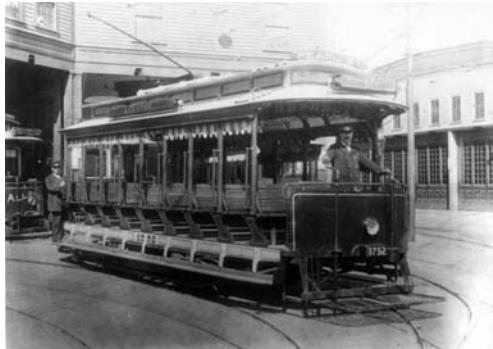
**Alternatives Analysis, 49 U.S.C. 5339:** Established by SAFETEA-LU and effective in FY 2006, the Alternatives Analysis program provides funding for alternatives analysis of new fixed guideway investment projects.



*Public transportation federal funding is extended to 2009 by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). In this photo, the House-Senate conference committee is working out details of the reauthorization bill.*

# History

Public transportation, except for ferryboats, was not a part of life until the 19th century, since home, work, and recreation were almost always within walking distance of each other. As distances in growing cities increased, horse-pulled stagecoaches were introduced to meet the need for better transportation for the few who could afford it, and the railroad was invented. The horsecar--initially a horse-pulled stagecoach body on special wheels that ran on rails--was devised to operate on the unpaved or poorly paved streets of that era.



The first U.S. rail car operated underground was on a light rail line in Boston in 1897 by a predecessor of today's Massachusetts Bay Transportation Authority.

As technology developed, elevated steam railroads, cable-pulled cars, electric streetcars, and underground electric trains all became common, and many of these developments were pioneered in the U.S. All operated on rails, and it wasn't until the 1910-1920 period that improved street pavement and internal combustion engines led to the widespread introduction of buses.



This Monterey, California bus still used in 1939 typified early buses. It wasn't until the 1930s that the engine-in-rear, flat-front design seen today became common.

The following pages highlight important milestones in U.S. public transportation history, some of which were preceded by similar developments in Europe.

**TABLE 1: Milestones in U.S. Public Transportation History**

1630	Boston--reputed first publicly operated ferryboat
1740	New York--reputed first use of ox carts for carrying of passengers
1811	New York--first mechanically operated (steam-powered) ferryboat
1827	New York--first horse-drawn urban stagecoach (omnibus) 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
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)
1874	San Francisco, CA--first recorded strike by street railway workers
1882	Boston--American Street Railway Association (APTA's original predecessor) formed
1883	New York--first publicly operated cable-powered line (Brooklyn Bridge)
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 public transportation-only publication (The Street Railway Journal)
1886	Montgomery, AL--first semi-successful citywide electric street railway transit agency (Capital City Street Railway Co.)
1888	Richmond, VA--first successful electric street railway transit agency (Union Passenger Railway)
1889	New York--first major strike by street railway workers
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 transportation commission (Boston Transit Commission)
1895	Chicago--first electric elevated rail line (Metropolitan West Side Elevated Railway)
1897	Boston--first electric underground street railway line (West End Street Railway/Boston Elevated Railway Co.)
1897	Boston--first publicly-financed public transportation facility (street railway tunnel)
1898	Chicago--first electric multiple-unit controlled rail line (Chicago & South Side Rapid Transit Railroad Co.)
1904	Bismarck, ND--first state-operated street railway (State of North Dakota Capital Car Line)
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 public transportation company (Staten Island Ferry)
1905	New York--first bus line (Fifth Avenue Coach Co.)
1906	Monroe, LA--first municipally-owned street railway
1908	New York--first interstate underground heavy rail line (Hudson & Manhattan Railroad to New Jersey)

**TABLE 1: Milestones in U.S. Public Transportation History (continued)**

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 buses (Cleveland Railway)
1916	Saint Louis--first public bus-only transit agency (St. Louis Division of Parks and Recreation Municipal Auto Bus Service)
1917	New York--last horse-drawn street railway line closed
1920	first 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 buses
1926	highest peacetime public transportation ridership before World War II (17.2 billion)
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)
1933	San Antonio--first large city to replace all streetcars with buses
1934	New York--Transport Workers Union of America founded
1935	Washington--Public Utility Holding Company Act of 1935 requires most power companies to divest themselves of public transportation operations and eliminates much private public transportation financing
1936	New York--first industry-developed standardized street railway car (P.C.C. car) (Brooklyn & Queens Transit System)
1936	Washington--first large-scale federal government public transportation assistance (Public Works Administration)
1938	Chicago--first use of federal capital funding to build a public transportation rail line
1939	Chicago--first street with designated bus lane
1940	first time bus ridership exceeded street railway ridership
1940	San Francisco becomes last surviving cable car transit agency
1941	New York, NY--first racially-integrated bus operator workforce
1943	Los Angeles--first rail line in expressway median (Pacific Electric Railway)
1943	New York--first issue of <i>Transit Fact Book</i> (then called "The Transit Industry of the United States, Basic Data and Trends")
1946	highest-ever public transportation ridership (23.4 billion)
1946	Washington--U.S. Supreme Court bans racial segregation in interstate transportation
1952	San Francisco--last new PCC car for U.S. transit agency placed in service
1958	authority for railroads to discontinue commuter service transferred from states to U.S. Interstate Commerce Commission
1961	Washington--first significant federal public transportation 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--first major U.S. government public transportation program (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 agency (Rhode Island Public Transit Authority)
1968	Washington--agency administering federal public transportation program re-named Urban Mass Transportation Administration and 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)
1969	Philadelphia--first modern heavy rail transit agency replacing former rail line (Port Authority Transit Corporation)
1970	Fort Walton Beach, FL--first dial-a-ride demand response transit agency
1971	Washington--first federally subsidized intercity passenger railroad (AMTRAK)
1972	San Francisco--first computer-controlled heavy rail transit agency (Bay Area Rapid Transit District)
1972	public transportation ridership hits lowest point in 20 <sup>th</sup> century (6.6 billion)
1973	Washington--some public transportation service required to be accessible to disabled (Rehabilitation Act of 1973)
1974	Boston, Cleveland, Newark, New Orleans, Philadelphia, Pittsburgh, & San Francisco become the last street railway systems
1974	Washington--first federal public transportation 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 transit agency (West Virginia University)
1977	San Diego--first wheelchair-lift-equipped fixed-route bus
1979	Washington--first standardized public transportation data accounting system (Section 15)
1980	San Diego--first completely new light rail transit agency in decades (San Diego Trolley)
1983	Washington--public transportation trust fund for capital projects created through dedication of one cent of federal gas tax
1989	Miami--first completely new commuter rail transit agency in decades (Tri-County Commuter Rail Authority)
1990	Washington--virtually all public transportation service required to be accessible to disabled (Americans with Disabilities Act of 1990)
1990	Washington--public transportation 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 public transportation (Intermodal Surface Transp. Efficiency Act)
1992	Washington--first limitation on amount of tax-free employer-paid automobile parking benefits and tripling of value of tax-free benefit for public transportation use (National Energy Policy Strategy Act)
1993	Washington--public transportation workers in safety-sensitive positions subjected to drug and alcohol testing
1998	Washington--major expansion and restructuring of federal transportation program (Transportation Equity Act for the 21 <sup>st</sup> Century)
2000	American Public Transit Association changes name to American Public Transportation Association
2005	Federal transit law (SAFETEA-LU) reauthorized extending federal funding through 2009

# National Summary

## General Definitions

Note: for subject-specific definitions relating to expenses, funding, passengers, buses, rail, and other subjects, see the definitions in those sections.

**Public transportation (public transit, transit, mass transit, mass transportation)** is transportation by a conveyance that provides regular and continuing general or special transportation to the public, but not including school buses, charter or sightseeing service.

A **transit agency (transit system)** is an entity (public or private) responsible for administering and managing transit activities and services. Transit agencies can directly operate transit service or contract out for all or part of the total transit service provided. When responsibility is with a public entity, it is a **public transit agency**. When more than one mode of service is operated, it is a **multimode transit agency**.

A **mode** is the system for carrying transit passengers described by specific right-of-way, technology and operational features. Transit data are generally collected by mode.

**Intermodal (multimodal)** are those issues or activities which involve or affect more than one mode of transportation, including transportation connections, choices, cooperation and coordination of various modes.

**Fixed-route** service provided on a repetitive, fixed-schedule basis along a specific route with vehicles stopping to pick up and deliver passengers to specific locations; each fixed-route trip serves the same origins and destinations, unlike paratransit. Includes route deviation service, where revenue vehicles deviate from fixed routes on a discretionary basis.

**Non-fixed-route** service is not provided on a repetitive, fixed-schedule basis along a specific route to specific locations. Paratransit is the only non-fixed-route mode.

Other general definitions include:

A **carpool** is an arrangement where two or more people share the use and cost of privately owned vehicles in traveling together to and from pre-arranged destinations. Carpools are not public transportation.

A **commuter** is a person who travels regularly between home and work or school.

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

**Reverse commuting** is movement in a direction opposite the main flow of traffic, such as from the central city to a suburb during the morning peak period.

**Ridesharing** is a form of transportation, other than a transit agency, in which more than one person shares the use of the vehicle, such as a van or car, to make a trip. Also known as "carpooling" or "vanpooling."

An **urban place** is a U.S. Bureau of the Census-designated area (less than 50,000 population) consisting of closely settled territory not populous enough to form an urbanized area.

An **urbanized area (UZA)** is an area defined by the U.S. Census Bureau that includes one or more incorporated cities, villages and towns (central place) and the adjacent densely settled surrounding territory (urban fringe) that together have a minimum of 50,000 persons. The urban fringe generally consists of contiguous territory having a density of at least 1,000 persons per square mile. UZAs do not conform to congressional districts or any other political boundaries. Most U.S. government transit funding is based on urbanized areas.

**TABLE 2: Number of Public Transportation Service Providers by Mode**

MODE	NUMBER
Aerial Tramway	2
Automated Guideway Transit	7
Bus	1,500
Cable Car	1
Commuter Rail	21
Ferryboat (b)	47
Heavy Rail	14
Inclined Plane	4
Light Rail	29
Monorail	2
Paratransit	5,960
Trolleybus	4
Vanpool	69
<b>TOTAL (a)</b>	<b>6,429</b>

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

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

**TABLE 3: National Totals, Fiscal Year 2004**

Agencies, Number of	6,429
Fares Collected, Passenger	\$9,774,590,000
Fare per Unlinked Trip, Average	\$1.02
Expense, Operating Total (a)	\$28,505,824,000
Salaries and Wages (b)	\$11,979,317,000
Fringe Benefits (b)	\$7,599,247,000
Services (b)	\$1,655,340,000
Fuel and Lubricants (b)	\$936,430,000
Materials and Supplies, Other (b)	\$1,649,914,000
Utilities (b)	\$848,859,000
Casualty and Liability (b)	\$750,379,000
Purchased Transportation (b) (c)	\$3,832,917,000
Other (b)	-\$746,580,000
Vehicle Operations (c)	\$12,865,791,000
Vehicle Maintenance (c)	\$5,042,617,000
Non-vehicle Maintenance (c)	\$2,790,180,000
General Administration (c)	\$3,974,318,000
Expense, Capital Total	\$13,246,018,000
Rolling Stock	\$3,687,374,000
Facilities, Guideway, Stations, Administrative Buildings	\$7,543,689,000
Other	\$2,014,955,000
Trips, Unlinked Passenger, Annual	9,575,323,000
Miles, Passenger	49,073,201,000
Trip Length, Average (miles)	5.1
Miles, Vehicle Total	4,470,765,000
Miles, Vehicle Revenue	3,981,194,000
Hours, Vehicle Total	302,821,000
Hours, Vehicle Revenue	272,059,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	14.6
Revenue Vehicles Available for Maximum Service	143,822
Vehicles Operated at Maximum Service	116,502
Age, Average (years)	9.6
Air-conditioned	93.4%
Lifts, Wheelchair	48.8%
Ramps, Wheelchair	26.0%
Accessible Only via Stations	15.3%
Power Source, Diesel or Gasoline	66.3%
Power Source, Alternative	30.5%
Rehabilitated	10.7%
Employees, Operating	345,871
Vehicle Operations	216,824
Vehicle Maintenance	60,160
Non-vehicle Maintenance	30,653
General Administration	38,233
Employees, Capital	12,774
Diesel Fuel Consumed (gallons)	730,706,000
Other Fuel Consumed (gallons)	164,717,000
Electricity Consumed (kwh)	5,825,280,000

(a) is the sum of (b) lines OR the sum of (c) lines.

Definitions can be found at the beginning of each respective section.

## Largest Transit Agencies

Each variable chosen to rank agencies by size will yield a different list. Vehicles vary widely in size; transfers result in double-counting some passengers; expenses are largely determined by wage rate and benefit levels; employee counts may include numerous part-time employees and do not include contract personnel. For these reasons, listed are the top 20 transit systems based on two categories: Unlinked Passenger Trips and Passenger Miles (definitions can be found on page 11).

**TABLE 4: 20 Largest Transit Agencies Ranked by  
Unlinked Passenger Trips, Fiscal Year 2004 (Thousands)**

	TRANSIT AGENCY	URBANIZED AREA (Primary City)	PASSENGER TRIPS
1	MTA New York City Transit (NYCT)	New York, NY	2,655,645.3
2	Chicago Transit Authority (CTA)	Chicago, IL	474,750.7
3	Washington Metropolitan Area Transit Authority (WMATA)	Washington, DC	397,782.7
4	Los Angeles County Metropolitan Trp Authority (LACMTA)	Los Angeles, CA	393,598.0
5	Massachusetts Bay Transportation Authority (MBTA)	Boston, MA	389,910.3
6	Southeastern Pennsylvania Trp Authority (SEPTA)	Philadelphia, PA	332,690.4
7	New Jersey Transit Corporation (NJ TRANSIT)	New York, NY	229,887.6
8	San Francisco Municipal Railway (MUNI)	San Francisco, CA	215,743.7
9	Metropolitan Atlanta Rapid Transit Authority (MARTA)	Atlanta, GA	136,157.1
10	Maryland Transit Administration (MTA)	Baltimore, MD	112,634.1
11	King County DOT (King County Metro)	Seattle, WA	102,088.5
12	Miami-Dade Transit (MDT)	Miami, FL	98,543.5
13	Tri-County Metropolitan Trp District of Oregon (TriMet)	Portland, OR	98,412.9
14	San Francisco Bay Area Rapid Transit District (BART)	San Francisco, CA	97,545.6
15	MTA Long Island Rail Road (MTA-LIRR)	New York, NY	96,202.0
16	Metropolitan Transit Auth of Harris County, Texas (Metro)	Houston, TX	95,881.6
17	Denver Regional Transportation District (RTD)	Denver, CO	82,362.8
18	Dallas Area Rapid Transit (DART)	Dallas, TX	77,036.1
19	Metro-North Commuter Railroad Company (MTA-MNCR)	New York, NY	72,617.9
20	GTJC (MTA NYCT took over service in 2005)	New York, NY	69,759.3

Source: Federal Transit Administration National Transit Database

**TABLE 5: 20 Largest Transit Agencies Ranked by  
Passenger Miles, Fiscal Year 2004 (Thousands)**

	TRANSIT AGENCY	URBANIZED AREA (Primary City)	PASSENGER MILES
1	MTA New York City Transit (NYCT)	New York, NY	9,934,849.3
2	New Jersey Transit Corporation (NJ TRANSIT)	New York, NY	2,885,478.8
3	MTA Long Island Rail Road (MTA-LIRR)	New York, NY	1,994,484.8
4	Metro-North Commuter Railroad Company (MTA-MNCR)	New York, NY	1,968,922.3
5	Washington Metropolitan Area Transit Authority (WMATA)	Washington, DC	1,955,778.9
6	Chicago Transit Authority (CTA)	Chicago, IL	1,879,604.0
7	Massachusetts Bay Transportation Authority (MBTA)	Boston, MA	1,862,072.1
8	Los Angeles County Metropolitan Trp Authority (LACMTA)	Los Angeles, CA	1,663,158.1
9	Northeast IL Regional Commuter Railroad Corp (Metra)	Chicago, IL	1,518,710.2
10	Southeastern Pennsylvania Trp Authority (SEPTA)	Philadelphia, PA	1,443,752.3
11	San Francisco Bay Area Rapid Transit District (BART)	San Francisco, CA	1,228,433.2
12	Metropolitan Atlanta Rapid Transit Authority (MARTA)	Atlanta, GA	736,269.9
13	Maryland Transit Administration (MTA)	Baltimore, MD	652,444.0
14	Metropolitan Transit Auth of Harris County, Texas (Metro)	Houston, TX	565,113.0
15	King County DOT (King County Metro)	Seattle, WA	553,309.6
16	Tri-County Metropolitan Trp District of Oregon (TriMet)	Portland, OR	431,856.2
17	San Francisco Municipal Railway (MUNI)	San Francisco, CA	429,006.7
18	Miami-Dade Transit (MDT)	Miami, FL	426,622.6
19	Denver Regional Transportation District (RTD)	Denver, CO	402,450.1
20	Dallas Area Rapid Transit (DART)	Dallas, TX	372,598.4

Source: Federal Transit Administration National Transit Database

# NATIONAL SERVICE AND OPERATING DATA

## Passengers

### *Highlights.....*

- 9.6 billion unlinked trips were taken in 2004. 59.9% were by bus, 28.7% by heavy rail, and 11.4% for all other modes combined.
- Average trip length was longest for vanpools at 30.8 miles. Commuter rail averaged 23.5 miles, paratransit 8.5 miles, ferryboat 6.1 miles, heavy rail 5.2 miles, light rail 4.5 miles, and bus 3.7 miles.
- 52% of trips are taken by women, 1% by people with disabilities.
- 7% of trips are by those 65 and older, 10% by those 18 and under, 31% by African Americans, 18% by Hispanics, 6% by Asian-heritage and Native Americans.
- 54% of trips are work-related, 15% school-related, 9% shopping-related, 5.5% medically-related, 9% socially-related.
- 27% are by those with family incomes below \$15,000, 55% by \$15,000-\$50,000 families, and 17% by those with incomes over \$50,000.

The U.S. Federal Transit Administration requires that annual unlinked passenger trips and passenger miles data be collected or estimated by the predominantly large and medium-sized transit agencies participating in its National Transit Database. APTA supplements this with monthly data, which includes some smaller transit agencies not required to participate in the NTD.

**Unlinked Passenger Trips** is the number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

**Passenger Miles** is the cumulative sum of the distances ridden by each passenger.

**Average Trip Length** is the average distance ridden for an unlinked passenger trip by time period (weekday, Saturday, Sunday) computed as passenger miles divided by unlinked passenger trips.

### **Number of People Using Public Transportation**

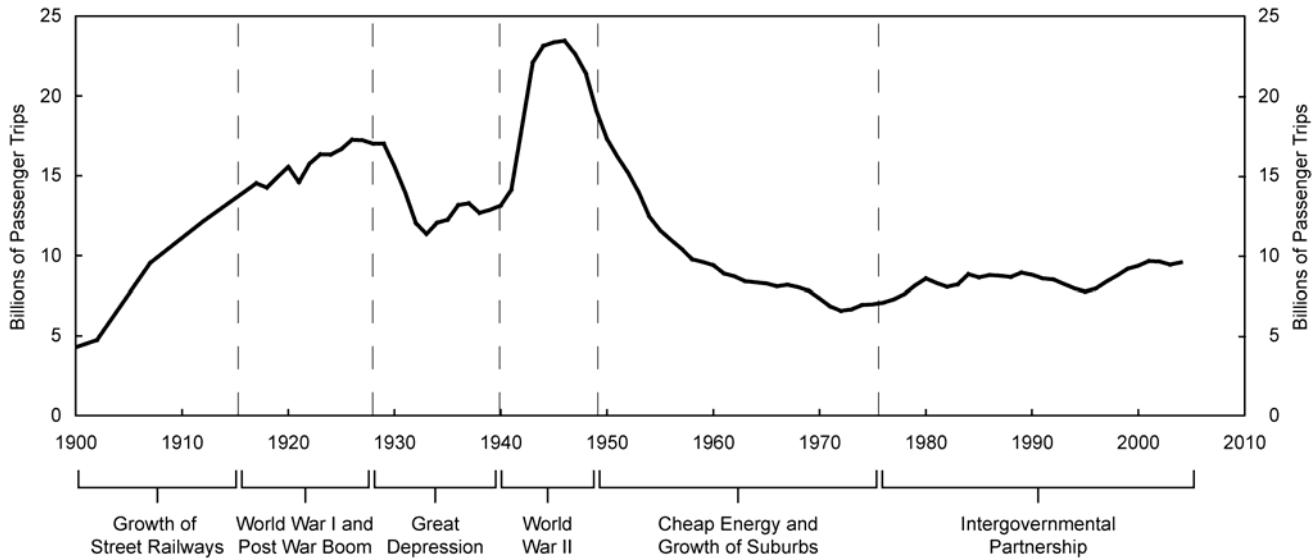
All ridership data reported in this book relate to trips taken--not to people--because that is how data are collected and reported. The heavy use of passes, transfers, joint tickets, and cash by people transferring from one vehicle to another, one mode to another, and from one public transportation agency to another makes it impossible to count people. Only boardings (unlinked passenger trips) can be counted with any accuracy. At the largest public transportation agencies, even the number of boardings may be estimated for at least a portion of the ridership (e.g., free shuttle vehicles without fareboxes and light rail service using the "proof-of-payment" system).

### **Historical Ridership Trends**

Public transportation's popularity has been affected by changing social and economic forces. In the beginning of the 20<sup>th</sup> Century, ridership grew steadily until the Great Depression. Between 1929 and 1939, people took fewer work trips and often could not afford to take leisure trips. During World War II, public transportation was the dominant mode on the transportation landscape. Ridership peaked in 1946, when Americans took 23.4 billion trips on trains, buses and trolleys.

After World War II, ridership experienced a decline due to inexpensive fuel and government policies favoring low-density suburban development and the sprawl created by the new interstate highway system. By 1960, ridership dropped to 9.3 billion trips, and it continued to decline to a low of 6.5 billion trips in 1972. Beginning in 1973, ridership started to increase, reaching 9.6 billion trips in 2004. Reasons for the increase include a strong economy and improved customer service. Also, higher levels of public and private investment in public transportation resulted from 1991 federal legislation and succeeding funding bills.

**TABLE 6: Major Trends of Public Transportation Ridership**



**TABLE 7: Unlinked Passenger Trips by Mode, Millions**

FISCAL YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	5,677	328	68	2,346	175	126	79	8,799
1991	5,624	318	71	2,172	184	125	81	8,575
1992	5,517	314	72	2,207	188	126	77	8,501
1993	5,381	322	81	2,046	188	121	78	8,217
1994	4,871	339	88	2,169	284	118	80	7,949
1995	4,848	344	88	2,033	251	119	80	7,763
1996	4,887	352	93	2,157	261	117	81	7,948
1997	5,013	357	99	2,430	262	121	92	8,374
1998	5,399	381	95	2,393	276	117	89	8,750
1999	5,648	396	100	2,521	292	120	91	9,168
2000	5,678	413	105	2,632	320	122	93	9,363
2001	5,849	419	105	2,728	336	119	97	9,653
2002	5,868	414	103	2,688	337	116	97	9,623
2003	5,692	410	111	2,667	338	109	109	9,434
2004 P	5,731	414	114	2,748	350	106	112	9,575
2004 % of Total	59.9%	4.3%	1.2%	28.7%	3.7%	1.1%	1.2%	100.0%

P = Preliminary

**TABLE 8: Average Weekday Unlinked Passenger Trips by Mode, 2004**

MODE	AVERAGE WEEKDAY UNLINKED TRIPS	PER CENT OF TOTAL
Bus	19,645,000	59.9%
Commuter Rail	1,419,000	4.3%
Ferryboat (b)	222,000	0.7%
Heavy Rail	9,418,000	28.7%
Light Rail	1,199,000	3.7%
Other Rail (a)	109,000	0.3%
Paratransit	390,000	1.2%
Trolleybus	363,000	1.1%
Vanpool	54,000	0.2%
<b>TOTAL</b>	<b>32,820,000</b>	<b>100.0%</b>

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

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

**TABLE 9: Average Unlinked Trip Length by Mode, 2004**

MODE	AVERAGE TRIP LENGTH (MILES)
Bus	3.7
Commuter Rail	23.5
Ferryboat (b)	6.1
Heavy Rail	5.2
Light Rail	4.5
Other Rail (a)	1.0
Paratransit	8.5
Trolleybus	1.6
Vanpool	30.8
<b>TOTAL</b>	<b>5.1</b>

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

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

**TABLE 10: Passenger Miles by Mode, Millions**

FISCAL YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	20,981	7,082	431	11,475	571	193	410	41,143
1991	21,090	7,344	454	10,528	662	195	430	40,703
1992	20,336	7,320	495	10,737	701	199	453	40,241
1993	20,247	6,940	562	10,231	705	188	511	39,384
1994	18,832	7,996	577	10,668	833	187	492	39,585
1995	18,818	8,244	607	10,559	860	187	533	39,808
1996	19,096	8,351	656	11,530	957	184	604	41,378
1997	19,604	8,038	754	12,056	1,035	189	663	42,339
1998	20,360	8,704	735	12,284	1,128	182	735	44,128
1999	21,205	8,766	813	12,902	1,206	186	779	45,857
2000	21,241	9,402	839	13,844	1,356	192	792	47,666
2001	22,022	9,548	855	14,178	1,437	187	843	49,070
2002	21,841	9,504	853	13,663	1,432	188	843	48,324
2003	21,262	9,559	930	13,606	1,476	176	893	47,903
2004 P	21,377	9,719	962	14,354	1,576	173	911	49,073
2004 % of Total	43.6%	19.8%	2.0%	29.3%	3.2%	0.4%	1.9%	100.0%

P = Preliminary

**TABLE 11: Annual Unlinked Passenger Trips and Passenger Miles for Urbanized Areas Over 1,000,000 Population, Fiscal Year 2004 (Thousands) (a)**

RANK (b)	URBANIZED AREA	UNLINKED TRIPS	PASSENGER MILES
1	New York-Newark, NY-NJ-CT	3,383,886.2	18,966,321.2
2	Los Angeles-Long Beach-Santa Ana, CA	606,842.5	2,790,328.1
3	Chicago, IL-IN	582,785.7	3,751,324.8
4	Philadelphia, PA-NJ-DE-MD	350,517.6	1,589,177.9
5	Miami, FL	151,222.1	756,782.9
6	Dallas-Fort Worth-Arlington, TX	85,764.4	436,105.1
7	Boston, MA-NH-RI	396,087.1	1,888,774.3
8	Washington, DC-VA-MD	442,936.2	2,266,691.6
9	Detroit, MI	45,393.2	242,781.5
10	Houston, TX	95,881.6	565,113.0
11	Atlanta, GA	147,582.3	802,673.6
12	San Francisco-Oakland, CA	415,112.8	2,233,441.3
13	Phoenix-Mesa, AZ	55,334.2	224,274.4
14	Seattle, WA	156,255.6	1,015,891.8
15	San Diego, CA	88,604.5	512,939.6
16	Minneapolis-St. Paul, MN	67,398.6	318,719.3
17	San Juan, PR	84,941.0	386,988.5
18	St. Louis, MO-IL	47,883.1	283,928.2
19	Baltimore, MD	114,289.7	658,775.6
20	Tampa-St. Petersburg, FL	21,026.7	105,780.8
21	Denver-Aurora, CO	82,362.8	402,450.1
22	Cleveland, OH	58,869.8	252,096.3
23	Pittsburgh, PA	69,142.1	310,170.6
24	Portland, OR-WA	105,697.9	473,604.0
25	San Jose, CA	39,775.7	169,489.7
26	Riverside-San Bernardino, CA	24,182.9	127,541.6
27	Cincinnati, OH-KY-IN	27,123.9	156,237.3
28	Virginia Beach, VA	20,488.5	93,252.3
29	Sacramento, CA	32,353.5	141,581.4
30	Kansas City, MO-KS	13,754.3	55,787.9
31	San Antonio, TX	43,209.6	164,333.9
32	Las Vegas, NV	51,294.6	188,596.7
33	Milwaukee, WI	56,350.0	177,566.6
34	Indianapolis, IN	9,299.5	47,254.7
35	Providence, RI-MA	18,090.7	91,543.5
36	Orlando, FL	23,432.9	144,207.2
37	Columbus, OH	14,703.0	49,693.7
38	New Orleans, LA	54,945.3	134,675.2

Source: Federal Transit Administration National Transit Database.

(a) Data for some areas may be understated since not all transit agencies report to the federal government. Data for some areas may be overstated since some transit agencies serve other urbanized areas and only agency-total data are reported.

(b) By urbanized area population in 2000 Census.

# Service Operated

## Highlights.....

- In 2004, transit vehicles traveled 4.4 billion miles and for 302.8 million hours.
- Buses operated 55.3% of vehicle miles, commuter rail 6.6%, paratransit 19.9%, heavy rail 14.4%, and light rail 1.5%.
- Buses operated 62.6% of vehicle hours, commuter rail 3.1%, paratransit 20.3%, heavy rail 10.8%, and light rail 1.5%.
- Average revenue service speed was highest for vanpools at 32.6 miles per hour. Commuter rail was 31.5, heavy rail 20.4, light rail 15.5, paratransit 14.4, and bus 12.6.

**Average Speed** is vehicle revenue miles divided by vehicle revenue hours.

**Directional Route Miles** is the mileage in each direction over which public transportation vehicles travel while in revenue service. Directional route miles are a measure of the route path over a facility or roadway, not the service carried on the facility; e.g. number of routes, vehicles or vehicle revenue miles. Directional route miles are computed with regard to direction of service, but without regard to the number of traffic lanes or rail tracks existing in the right-of-way. Directional route miles do not include staging or storage areas at the beginning or end of a route.

**Miles of Track** is the sum of the number of tracks per one mile segment of right-of-way. Miles of track are measured without regard to whether or not rail traffic can flow in only one direction on the track. All track is counted, including yard track and sidings.

**Vehicle Hours** are the hours a vehicle travels from the time it pulls out from its garage to go into revenue service to the time it pulls in from revenue service. It is often called platform time. For conventional scheduled services, it includes revenue time and deadhead time.

**Vehicle Miles** are the miles a vehicle travels from the time it pulls out from its garage to go into revenue service to the time it pulls in from revenue service. It is often called platform miles. For conventional scheduled services, it includes revenue miles and deadhead miles.

**Vehicle Revenue Hours** are the hours traveled when the vehicle is in revenue service (i.e., the time when a vehicle is available to the general public and there is an expectation of carrying passengers). These passengers either directly pay fares, are subsidized by public policy, or provide payment through some contractual arrangement. Vehicles operated in fare-free service are considered in revenue service. Revenue service excludes school bus service and charter service. For conventionally scheduled services, vehicle revenue hours are comprised of 2 elements: running time and layover/recovery time.

**Vehicle Revenue Miles** are the miles traveled when the vehicle is in revenue service (i.e., the time when a vehicle is available to the general public and there is an expectation of carrying passengers). These passengers either directly pay fares, are subsidized by public policy, or provide payment through some contractual arrangement. Vehicles operated in fare-free service are considered in revenue service. Revenue service excludes school bus service and charter service. For conventionally scheduled services, vehicle revenue miles are comprised of running miles only.



A Southeastern Pennsylvania Transportation Authority train in Philadelphia, Pennsylvania, operates in a freeway median. When counting vehicle miles and hours for trains, each car is counted, so this 6-car train operates 6 vehicle miles for each mile traveled and 6 vehicle hours for each hour in service.

**TABLE 12: Vehicle Miles Operated by Mode, Millions**

YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	2,129.9	212.7	305.9	536.7	24.2	13.8	18.3	3,241.5
1991	2,166.6	214.9	335.0	527.2	27.6	13.6	21.5	3,306.4
1992	2,178.0	218.8	363.5	525.4	28.6	13.9	26.4	3,354.6
1993	2,209.6	223.9	406.0	522.1	27.7	13.0	32.2	3,435.1
1994	2,162.0	230.8	463.7	531.8	34.0	13.7	31.5	3,467.5
1995	2,183.7	237.7	506.5	537.2	34.6	13.8	36.7	3,550.2
1996	2,220.5	241.9	548.3	543.1	37.6	13.7	45.2	3,650.3
1997	2,244.6	250.7	585.3	557.7	41.2	14.0	52.3	3,745.8
1998	2,174.6	259.5	670.9	565.7	43.8	13.6	65.5	3,793.6
1999	2,275.9	265.9	718.4	577.7	48.7	14.2	71.4	3,972.2
2000	2,314.8	270.9	758.9	595.2	52.8	14.5	73.7	4,080.8
2001	2,376.5	277.3	789.3	608.1	54.3	12.8	77.9	4,196.2
2002	2,411.1	283.7	802.6	620.9	61.0	13.9	83.5	4,276.7
2003	2,420.8	286.0	864.0	629.9	64.3	13.8	84.6	4,363.4
2004 P	2,471.0	294.7	889.5	642.4	67.4	13.4	92.4	4,470.8
2004 % of Total	55.3%	6.6%	19.9%	14.4%	1.5%	0.3%	2.1%	100.0%

P = Preliminary

**TABLE 13: Vehicle Hours Operated by Mode, Millions**

YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	163.0	6.5	24.4	28.4	2.0	1.8	1.4	227.5
1991	163.8	6.4	26.3	24.6	2.2	1.8	1.4	226.5
1992	165.1	6.5	28.7	25.6	2.2	1.8	1.6	231.5
1993	166.2	6.6	30.5	27.2	2.1	1.8	1.8	236.2
1994	162.1	6.9	32.6	27.3	2.5	1.8	1.5	234.7
1995	162.9	7.2	34.9	27.6	2.5	1.8	1.6	238.5
1996	165.5	7.3	37.0	28.0	2.7	1.8	1.9	244.2
1997	167.0	7.5	39.5	28.8	2.8	1.8	2.1	249.5
1998	164.0	7.9	44.1	29.3	2.9	1.8	2.3	252.3
1999	170.1	8.5	48.2	29.9	3.2	1.9	2.5	264.3
2000	174.3	9.4	50.9	30.9	3.5	2.0	3.0	274.0
2001	179.4	8.8	53.8	31.6	3.6	1.8	2.7	281.7
2002	182.7	8.8	54.4	32.0	4.1	1.9	2.9	286.8
2003	184.2	9.0	58.8	31.8	4.2	1.8	3.4	293.1
2004 P	189.7	9.3	61.5	32.8	4.4	1.8	3.3	302.8
2004 % of Total	62.6%	3.1%	20.3%	10.8%	1.5%	0.6%	1.1%	100.0%

P = Preliminary

**TABLE 14: Average Vehicle Speed in Revenue Service by Mode, 2004**

MODE	AVERAGE SPEED (MILES PER HOUR)
Bus	12.6
Commuter Rail	31.5
Paratransit	14.4
Ferryboat (b)	8.4
Heavy Rail	20.4
Light Rail	15.5
Other Rail (a)	6.4
Paratransit	14.4
Trolleybus	7.9
Vanpool	37.6
<b>TOTAL</b>	<b>14.6</b>

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

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

**TABLE 15: Vehicle Revenue Miles and Vehicle Revenue Hours by Mode, 2004**

MODE	VEHICLE REVENUE MILES (000)	VEHICLE REVENUE HOURS (000)
Bus	2,150,535	170,604
Commuter Rail	268,901	8,532
Ferryboat (b)	3,983	473
Heavy Rail	624,568	30,680
Light Rail	66,645	4,306
Other Rail (a)	3,175	493
Paratransit	767,262	53,116
Trolleybus	13,026	1,642
Vanpool	83,099	2,212
<b>TOTAL</b>	<b>3,981,194</b>	<b>272,059</b>

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

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

# Vehicles

## Highlights.....

- There were over 143,000 active vehicles providing public transportation service in 2004.
- Buses comprised 56.3%, commuter rail 4.3%, heavy rail 7.5%, light rail 1.1%, and paratransit 25.8%.
- In 2006, average age of buses was 7.5 years, commuter rail cars 18.2 years, heavy rail 21.6 years, light rail 16.7 years, and paratransit 3.9 years.
- Average length of buses was 39.7 feet, commuter rail cars 85.0 feet, heavy rail 61.8 feet, light rail 76.5 feet, and paratransit 22.1 feet.
- 19.1% of buses used alternative power, 49.6% of commuter rail cars, 100% of heavy rail and trolleybuses, 98.8% of light rail, and 6.3% of paratransit.
- 96.9% of buses were wheelchair accessible, 78.1% of commuter rail cars, 98.7% of heavy rail, 86.0% of light rail, and 92.9% of paratransit.
- About 8,000 buses and paratransit vehicles used compressed natural gas and CNG blends, over 1,100 used liquefied natural gas and LNG blends, and about 500 used propane.

For definitions of vehicles used in a mode, see the "Bus and Trolleybus," "Paratransit," "Ferryboat," "Rail," and "Vanpool" sections.

**Accessible Vehicle** is a revenue vehicle that does not restrict access, is usable, and provides allocated space and/or priority seating for individuals who use wheelchairs.

**Revenue Vehicle** is a vehicle in the fleet that is available to operate in revenue service, including spares and vehicles temporarily out of service for routine maintenance and minor repairs.

**High Occupancy Vehicle (HOV)** is a vehicle that can carry two or more persons. Examples of high occupancy vehicles are a bus, vanpool and carpool. These vehicles sometimes have exclusive traffic lanes called "HOV lanes," "busways," "transitways" or "commuter lanes."

**Passenger Vehicle** is a vehicle used to carry passengers in transit service.

**Rehabilitation** is the rebuilding of revenue vehicles to original specifications of the manufacturer. Rebuilding may include some new components but has less emphasis on structural restoration than would be the case in a remanufacturing operation, focusing on mechanical systems and vehicle interiors.



*Heavy rail, automated guideway, bus, and paratransit vehicles operated by the Miami-Dade Transit Agency in Miami, Florida, illustrate the wide variety of vehicles used in public transportation.*

**TABLE 16: Average Vehicle Age by Mode, 2006**

MODE	AVERAGE AGE (YEARS)
Bus	7.5
Commuter Rail	18.2
Commuter Rail Locomotive	18.7
Ferryboat	22.9
Heavy Rail	21.6
Jitney	7.2
Light Rail	16.7
Other Rail	34.1
Paratransit	3.9
Trolleybus	8.9
Vanpool	4.1

Source: APTA survey.

**TABLE 17: Average Vehicle Length by Mode, 2006**

MODE	AVERAGE LENGTH (FEET)
Bus	39.7
Commuter Rail	85.0
Commuter Rail Locomotive	61.2
Ferryboat	203.9
Heavy Rail	61.8
Jitney	23.4
Light Rail	76.5
Other Rail	45.0
Paratransit	22.1
Trolleybus	45.9
Vanpool	17.5

Source: APTA survey.

**TABLE 18: Revenue Vehicles by Mode**

FISCAL YEAR	BUS	COMMUTER RAIL (a)	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	58,714	4,982	16,471	10,567	910	610	1,176	93,430
1991	60,377	5,126	17,879	10,478	1,092	551	1,568	97,071
1992	63,080	5,164	20,695	10,391	1,055	665	1,821	102,871
1993	64,850	4,982	23,527	10,282	1,001	635	2,268	107,545
1994	68,123	5,126	28,729	10,282	1,051	643	2,462	116,416
1995	67,107	5,164	29,352	10,166	1,048	695	2,809	116,341
1996	71,678	5,240	30,804	10,243	1,114	675	2,996	122,750
1997	72,770	5,426	32,509	10,228	1,078	655	3,807	126,473
1998	72,142	5,536	29,646	10,296	1,076	646	4,706	124,048
1999	74,228	5,550	31,884	10,362	1,180	657	5,076	128,937
2000	75,013	5,498	33,080	10,311	1,327	652	5,360	131,241
2001	76,075	5,572	34,661	10,718	1,371	600	5,792	134,789
2002	76,190	5,724	34,699	10,849	1,448	616	5,581	135,107
2003	77,328	5,959	35,954	10,754	1,482	672	6,141	138,290
2004 P	81,033	6,228	37,078	10,858	1,622	597	6,406	143,822
2004 % of Total	56.3%	4.3%	25.8%	7.5%	1.1%	0.4%	4.5%	100.0%

P = Preliminary

(a) Includes locomotives which make up roughly 10% of commuter rail vehicles.

**TABLE 19: Alternative Power Vehicles by Mode, 2006 (a)**

MODE	PER CENT USING ALTERNATIVE POWER
Bus	19.1%
Commuter Rail	49.6%
Commuter Rail Locomotive	11.0%
Ferryboat	58.2%
Heavy Rail	100.0%
Jitney	0.0%
Light Rail	98.8%
Other Rail	74.6%
Paratransit	6.3%
Trolleybus	100.0%
Vanpool	0.8%

Source: APTA survey.

(a) Alternative power includes all power except straight diesel and gasoline.



This Torrance Transit System hybrid-electric bus in California operates by combining fossil fuel and electric power technologies.

**TABLE 20: Accessible Vehicles by Mode, 2006**

MODE	ACCESSIBLE VEHICLES (a)	VEHICLES REPORTED	PER CENT ACCESSIBLE (a)
Bus	55,808	57,616	96.9%
Commuter Rail	4,743	6,070	78.1%
Ferryboat	32	67	47.8%
Heavy Rail	11,012	11,154	98.7%
Jitney	315	315	100.0%
Light Rail	1,780	2,070	86.0%
Other Rail	147	193	76.2%
Paratransit	11,120	11,970	92.9%
Trolleybus	650	712	91.3%
Vanpool	151	4,261	3.5%

Source: APTA survey. Data reported are not national totals.

(a) Accessible vehicles include accessibility via lift, ramp, and station.



The Maryland Transit Authority in Baltimore, Maryland operates low-floor buses that use an extendable ramp for wheelchair access.

**TABLE 21: Revenue Vehicle Power Sources, 2006**

POWER SOURCE	BUS	COMMUTER RAIL CAR	COMMUTER RAIL LOCO-MOTIVE	HEAVY RAIL	LIGHT RAIL	PARA-TRANSIT	TROLLEY BUS	OTHER	TOTAL
Compressed Natural Gas	7,488	0	0	0	0	311	0	30	7,829
CNG Blends	169	0	0	0	0	2	0	0	171
Clean Diesel	618	0	0	0	0	207	0	0	825
Diesel	46,266	18	639	0	24	7,714	0	286	54,947
Electric & Diesel	750	0	0	0	0	0	26	28	804
Electric & Other	211	0	0	0	0	0	0	15	226
Electric Third Rail or Catenary	0	3,008	79	11,151	2,046	0	686	144	17,114
Gasoline	336	0	0	0	0	3,498	0	3,969	7,803
Liquefied Natural Gas	1,092	0	0	0	0	38	0	0	1,130
Propane	310	0	0	0	0	161	0	0	471
Other (a)	376	0	0	0	0	39	0	0	415
Unpowered	0	3,044	0	3	0	0	0	49	3,096
<b>TOTAL</b>	<b>57,616</b>	<b>6,070</b>	<b>718</b>	<b>11,154</b>	<b>2,070</b>	<b>11,970</b>	<b>712</b>	<b>4,521</b>	<b>94,831</b>

Source: APTA January 1, 2006 survey of about 300 transit agencies.

(a) Includes bio/soy fuel, biodiesel, hydrogen and propane blends.

**TABLE 22: New Passenger Vehicles Delivered by Mode**

YEAR	RAIL CARS (c)			BUSES & PARATRANSIT (a)				TROLLEY BUS	TOTAL (b)
	COMMUTER RAIL	HEAVY RAIL	LIGHT RAIL	29 SEATS OR FEWER	30-39 SEATS	40 SEATS OR MORE			
1990	83	10	55	1,389	489	2,901	4,779	118	5,045
1991	187	6	17	1,781	411	2,530	4,722	149	5,081
1992	110	163	35	1,322	549	1,555	3,426	0	3,734
1993	8	260	54	1,919	566	2,351	4,836	24	5,182
1994	47	55	72	2,502	433	2,483	5,418	36	5,628
1995	38	72	38	2,823	733	2,466	6,022	3	6,173
1996	111	10	39	2,620	1,531	1,865	6,016	3	6,179
1997	198	34	76	2,910	1,090	2,329	6,329	0	6,637
1998	122	120	80	2,696	1,381	3,058	7,135	54	7,511
1999	132	122	123	2,829	1,259	2,727	6,815	0	7,192
2000	116	204	136	3,146	1,653	2,897	7,696	0	8,152
2001	54	751	111	4,682	3,051	3,285	11,018	149	12,083
2002	166	828	107	3,131	1,964	2,119	7,214	88	8,403
2003	338	470	169	3,200	2,070	1,584	6,854	103	7,934
2004	571	76	127	2,894	1,778	1,484	6,156	31	6,961
2005 P	476	50	129	2,125	1,404	1,140	4,669	23	5,347
2005 % of Total	8.2%	1.1%	1.7%	41.6%	25.6%	21.3%	88.5%	0.4%	100.0%

P = Preliminary

(a) Buses and paratransit only; excludes vanpool vans. Bus comprises about 25% of the 29-seats-or-fewer size group and virtually 100% of the other size groups.

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

(c) Source for rail modes; *Railway Age*, January issue.

# Employees

## Highlights.....

- There were about 346,000 operating employees, plus about 13,000 capital employees, in 2004.
- 62.7% of the operating employees were in vehicle operations, 17.4% in vehicle maintenance, 8.9% in non-vehicle maintenance, and 11.1% in general administration.
- Bus employees were 61.3%, commuter rail 7.3%, paratransit 12.6%, heavy rail 13.6%, and light rail 2.4%.
- Average compensation per employee (salaries and fringe benefits) was about \$57,604.

Data in this section include transit agency employees. Data exclude persons employed by other organizations under service contracts to perform certain duties. For some agencies, virtually all personnel are contracted, so employee counts only include a small number of office personnel.

There are two types of employees:

A **Capital Employee** is an employee whose labor hour cost is reimbursed under a capital grant or is otherwise capitalized. Generally, only large transit agencies have such employees.

An **Operating Employee** is an employee engaged in the operation of the transit system. Types include:

A **General Administration Employee** is an executive, professional, supervisory, or secretarial transit system person engaged in general management and administration activities: preliminary transit system development, customer services, promotion, market research, injuries and damages, safety, personnel administration, general legal services, general insurance, data processing, finance and accounting, purchasing and stores, general engineering, real estate management, office management and services, general management, and planning.

A **Non-Vehicle Maintenance Employee** is an executive, professional, supervisory, or secretarial transit system person engaged in non-vehicle maintenance, a person providing maintenance support to such persons for inspecting, cleaning, repairing and replacing all components of: vehicle movement control systems; fare collection and counting equipment; roadway and track; structures, tunnels, and subways; passenger stations; communication system; and garage, shop, operating station, general administration buildings, grounds and equipment. In addition, it includes support for the operation and maintenance of electric power facilities.

An **Other Vehicle Operations Employee** is an executive, professional, or supervisory transit system person engaged in vehicle operations, a person providing support in vehicle operations activities, a person engaged in ticketing and fare collection activities, or a person engaged in system security activities.

A **Vehicle Maintenance Employee** is an executive, professional, secretarial, or supervisory transit system person engaged in vehicle maintenance, a person performing inspection and maintenance, vehicle maintenance of vehicles, performing servicing functions for revenue and service vehicles, and repairing damage to vehicles resulting from vandalism or accidents.

A **Vehicle Operator** is a person (other than security agents) scheduled to be aboard vehicles in revenue operations including vehicle operators, conductors, and ticket collectors.



*This light rail operator goes through simulator training at the Metropolitan Transit Authority of Harris County, in Houston, Texas.*



*Many employees labor behind the scenes, such as this Utah Transit Authority control room operator in Salt Lake City, Utah.*

**TABLE 23: Operating Employees by Mode (a) (b)**

FISCAL YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	162,189	21,443	22,740	46,102	4,066	1,925	3,711	262,176
1991	163,555	21,083	24,196	47,423	4,175	1,826	3,599	265,857
1992	163,387	21,151	25,863	47,493	3,849	1,691	3,668	267,102
1993	177,167	20,634	30,021	52,433	3,920	1,944	3,400	289,519
1994	174,373	22,596	35,450	51,062	5,140	1,848	3,618	294,087
1995	181,973	22,320	39,882	45,644	4,935	1,871	3,866	300,491
1996	190,152	22,604	44,667	45,793	5,728	2,084	3,916	314,944
1997	196,861	21,651	44,029	45,935	5,940	2,037	4,306	320,759
1998	198,644	22,488	48,406	45,163	6,024	2,053	4,974	327,752
1999	204,179	22,896	51,186	46,311	6,058	2,140	5,115	337,885
2000	211,095	23,518	52,021	47,087	6,572	2,223	5,325	347,841
2001	214,674	23,851	55,846	47,865	7,021	2,008	6,001	357,266
2002	214,825	24,391	56,746	48,464	7,598	2,027	6,671	360,722
2003	205,478	24,813	42,935	48,327	7,619	1,964	6,848	337,982
2004 P	212,122	25,296	43,642	47,211	8,184	1,928	7,488	345,871
2004 % of Total	61.3%	7.3%	12.6%	13.6%	2.4%	0.6%	2.2%	100.0%

P = Preliminary

(a) Based on employee equivalents of 2,080 labor hours equals one employee; beginning 1993 equals actual employees. Series not continuous between 1992 and 1993.

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

**TABLE 24: Employees by Function (a) (b) (c)**

FISCAL YEAR	VEHICLE OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	GENERAL ADMINISTRATION	OPERATING TOTAL	CAPITAL	TOTAL
1990	150,556	31,424	44,282	35,914	262,176	10,663	272,839
1991	153,281	31,861	42,708	38,007	265,857	10,288	276,145
1992	169,549	48,270	24,062	25,221	267,102	11,893	278,995
1993	179,426	53,041	28,043	29,009	289,519	9,665	299,184
1994	183,673	51,405	27,004	32,005	294,087	10,207	304,294
1995	190,675	51,905	27,329	30,582	300,491	10,695	311,186
1996	199,615	54,645	27,239	33,445	314,944	11,682	326,626
1997	207,510	53,322	27,232	32,695	320,759	13,081	333,840
1998	209,047	57,128	28,335	33,242	327,752	10,963	338,715
1999	215,185	59,018	28,914	34,768	337,885	11,938	349,823
2000	221,885	61,155	29,527	35,274	347,841	11,753	359,594
2001	228,091	62,404	29,963	36,808	357,266	13,490	370,756
2002	227,470	62,679	30,520	40,053	360,722	13,048	373,770
2003	209,392	59,007	29,139	40,444	337,982	12,984	350,987
2004 P	216,824	60,160	30,653	38,233	345,871	12,774	358,645
2004 % of Total	62.7%	17.4%	8.9%	11.1%	100.0%		

P = Preliminary

(a) Based on employee equivalents of 2,080 labor hours equals one employee; beginning 1993 equals actual employees. Series not continuous between 1992 and 1993.

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

(c) Beginning 1992, ticketing, fare collection, and security employees reclassified from "General Administration" to "Other Vehicle Operations," and vehicle maintenance administrative and support employees reclassified from "Non-Vehicle Maintenance" to "Vehicle Maintenance." Series not continuous between 1991 and 1992.



*Mechanics must undergo extensive training to be able to repair the various types of equipment used by a transit agency. These Dallas Area Rapid Transit Authority mechanics in Dallas, Texas undergo bus maintenance training.*



*Track workers at the MTA Metro-North Railroad in New York City pursue their never-ending task of making sure the roadbed and track are in good repair.*

**TABLE 25: Employee Compensation, Millions of Dollars**

FISCAL YEAR	NUMBER OF EMPLOYEES (a)(b)	SALARIES AND WAGES	FRINGE BENEFITS	COMPENSATION (c)	COMPENSATION PER EMPLOYEE (ACTUAL DOLLARS)
1990	272,839	7,226.3	3,986.0	11,212.3	41,095
1991	276,145	7,394.5	3,998.4	11,392.9	41,257
1992	278,995	7,670.5	4,318.6	11,989.1	42,972
1993	299,184	7,932.1	4,400.3	12,332.4	41,220
1994	304,294	8,223.8	4,451.7	12,675.5	41,655
1995	311,186	8,213.1	4,484.0	12,697.1	40,802
1996	326,626	8,437.6	4,401.4	12,839.0	39,308
1997	333,840	8,771.7	4,503.7	13,275.4	39,766
1998	338,715	9,211.2	4,843.6	14,054.8	41,494
1999	349,823	9,495.1	5,052.3	14,547.4	41,585
2000	359,594	10,400.2	5,412.9	15,813.1	43,975
2001	370,756	10,626.9	5,705.6	16,332.5	44,052
2002	373,770	11,197.4	6,246.9	17,444.3	46,671
2003	350,987	11,634.0	6,913.4	18,547.4	52,844
2004 P	358,645	12,487.4	8,172.0	20,659.4	57,604

P = Preliminary

(a) Based on employee equivalents of 2,080 labor hours equals one employee; beginning 1993 equals actual employees. Employee data not continuous between 1992 and 1993.

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

(c) "Compensation" is sum of "Salaries and Wages" and "Fringe Benefits".

# Energy and Environment

## Highlights.....

- About 895 million gallons of fossil fuels and 5.8 billion kilowatt-hours of electricity were used to move transit vehicles in 2004.
- 81.6% of all fossil fuels used was diesel, of which 75.3% was used by buses, 9.9% by commuter rail, 10.0% by paratransit, and 4.8% by ferryboats.
- 67.9% of the non-diesel fuel used was compressed natural gas, 14.7% gasoline, 10.5% liquefied natural gas, and 3.4% propane.
- 63.2% of the electric power was used by heavy rail, 24.9% by commuter rail, and 9.5% by light rail.
- All diesel buses average 3.7 miles per gallon, though heavily-loaded 40-60-foot buses might average considerably less. Compressed natural gas buses average 2.4 m.p.g., while liquefied natural gas buses average 1.8 m.p.g.
- A daily transit user making a 5-mile trip each way instead of driving a 25-mile per gallon vehicle would save 100 gallons of gasoline per year costing about \$225 (assuming \$2.25 per gallon). Savings could range up to 2,000 gallons costing over \$4,500 for a 15 m.p.g. vehicle traveling 60 miles each way.



This Washington Metropolitan Area Transit Authority bus in Washington, DC runs on compressed natural gas..

Public transportation, while a large user of energy, is a major contributor to energy conservation since multiple-occupancy vehicles use less energy than automobiles on a passenger-mile basis.

Most rail transit vehicles and trolleybuses emit little or no pollution since they are electrically propelled. Most buses, ferryboats, commuter rail locomotives, and many paratransit vans use diesel, which, with innovations such as clean diesel, are getting less polluting all the time. Vanpools, many paratransit vans, and a few buses use gasoline.

Many newer buses are being fueled by alternative fuels such as compressed natural gas, liquefied natural gas, propane and hydrogen fuel cells. These types of vehicles, along with various sorts of hybrid electrics, not only improve air quality, but also reduce public transportation's reliance on oil-based fuels. Many transit agencies are only buying alternative-fuel vehicles now.

In addition, transit agencies are also subject to diesel-electric locomotive emissions, scrap tires, vehicle air-conditioning system refrigerants, stormwater runoff from transit facilities, hazardous waste management, underground storage tanks, asbestos and lead-based paint removal, and hazardous wastes in rights-of-way regulations.



This San Francisco Municipal Railway light rail vehicle is powered by overhead electrical wires.

**TABLE 26: Electric Power Consumption by Mode, Millions of Kilowatt Hours**

FISCAL YEAR	COMMUTER RAIL	HEAVY RAIL	LIGHT RAIL	TROLLEYBUS	OTHER	TOTAL
1990	1,226	3,284	239	69	19	4,837
1991	1,239	3,248	274	72	20	4,853
1992	1,124	3,193	297	80	22	4,716
1993	1,196	3,287	281	79	22	4,865
1994	1,244	3,431	282	103	21	5,081
1995	1,253	3,401	288	100	26	5,068
1996	1,255	3,332	321	69	30	5,007
1997	1,270	3,253	361	78	26	4,988
1998	1,299	3,280	381	74	39	5,073
1999	1,322	3,385	416	75	39	5,237
2000	1,370	3,549	463	77	51	5,510
2001	1,354	3,646	487	74	49	5,610
2002	1,334	3,683	510	73	49	5,649
2003	1,383	3,632	507	69	51	5,643
2004 P	1,449	3,684	553	68	72	5,825
2004 % of Total	24.9%	63.2%	9.5%	1.2%	1.2%	100.0%

P = Preliminary

**TABLE 27: Fossil Fuel Consumption by Mode, Thousands of Gallons (a)**

FISCAL YEAR	DIESEL					NON-DIESEL (c)	
	BUS	COMMUTER RAIL	PARA-TRANSIT	FERRY BOAT (b)	OTHER		
1990	563,151	52,681	15,497	19,627	74	651,030	33,906
1991	572,861	54,315	17,422	20,465	95	665,158	34,467
1992	592,049	54,951	16,896	20,926	122	684,944	38,188
1993	575,740	59,766	22,890	19,968	147	678,511	47,251
1994	565,064	61,900	29,949	21,146	167	678,226	64,838
1995	563,767	63,064	28,958	22,307	190	678,286	71,470
1996	577,680	61,888	30,923	21,991	232	692,714	76,305
1997	597,636	63,195	32,020	23,881	220	716,952	83,369
1998	606,631	69,200	38,275	25,269	246	739,621	89,883
1999	618,204	73,005	43,202	28,721	237	763,369	93,092
2000	635,160	70,818	48,088	31,780	179	786,025	103,078
2001	587,184	72,204	54,898	30,266	111	744,663	112,088
2002	558,990	72,847	61,569	30,993	136	724,535	138,175
2003	538,747	72,264	69,505	32,071	161	712,747	146,365
2004 P	550,466	71,999	72,971	35,120	150	730,706	164,717
2004 % of Total	75.3%	9.9%	10.0%	4.8%	0.0%	100.0%	

P = Preliminary

(a) Data includes passenger vehicles and locomotives; excludes other non-passenger-vehicle and non-vehicle consumption.

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

(c) Prior to 1992, includes gasoline only. Series not continuous between 1991 and 1992.

**TABLE 28: Non-Diesel Fossil Fuel Consumption by Fuel, Thousands of Gallons (a)**

FISCAL YEAR	COMPRESSED NATURAL GAS	GASOLINE	LIQUIFIED NATURAL GAS	PROPANE (LIQUID PETROLEUM GAS)	OTHER	TOTAL
1992	1,009	32,906	191	2,487	1,595	38,188
1993	1,579	37,928	474	2,098	5,172	47,251
1994	4,835	43,921	1,450	1,871	12,761	64,838
1995	10,740	42,769	2,236	3,686	12,039	71,470
1996	15,092	41,495	2,862	5,235	11,621	76,305
1997	23,906	41,547	4,030	5,150	8,736	83,369
1998	37,268	35,645	5,331	6,631	5,008	89,883
1999	44,398	32,699	7,672	5,604	2,719	93,092
2000	54,794	29,908	12,567	4,988	821	103,078
2001	66,215	26,606	13,765	4,702	800	112,088
2002	81,051	23,711	18,499	5,614	3,326	132,201
2003	100,071	22,740	15,794	5,548	2,213	146,365
2004 P	111,810	24,293	17,303	5,654	5,657	164,717
2004 % of Total	67.9%	14.7%	10.5%	3.4%	3.4%	100.0%

P = Preliminary

(a) Data includes passenger vehicles; excludes non-passenger-vehicle and non-vehicle consumption.

**TABLE 29: Examples of Fuel Savings to a Person Commuting to Work on Public Transportation**

LENGTH OF TRIP	MILES TRAVELED PER YEAR (a)	ANNUAL FUEL SAVINGS, GALLONS BASED ON FOLLOWING PERSONAL VEHICLE FUEL EFFICIENCIES					
		15 MILES PER GALLON	20 MILES PER GALLON	25 MILES PER GALLON	30 MILES PER GALLON	35 MILES PER GALLON	40 MILES PER GALLON
2 miles	944	62.9	47.2	37.8	31.5	27.0	23.6
5 miles	2,360	157.3	118.0	94.4	78.7	67.4	59.0
10 miles	4,720	314.7	236.0	188.8	157.3	134.9	118.0
20 miles	9,440	629.3	472.0	377.6	314.7	269.7	236.0
30 miles	14,160	944.0	708.0	566.4	472.0	404.6	354.0
40 miles	18,880	1,258.7	944.0	755.2	629.3	539.4	472.0
50 miles	23,600	1,573.3	1,180.0	944.0	786.7	674.3	590.0
60 miles	28,320	1,888.0	1,416.0	1,132.8	944.0	809.1	708.0

(a) Based on 472 trips per year: 365 days minus 52 Saturdays minus 52 Sundays minus 7 holidays minus 10 days vacation minus 8 days sick leave times 2 trips per day.

**TABLE 30: Major Power Source Efficiency, Miles per Gallon (a)**

MODE	ELECTRIC POWER (b)	DIESEL	COMPRESSED NATURAL GAS	GASOLINE	LIQUIFIED NATURAL GAS	PROPANE (LIQUID PETROLEUM GAS)
Automated Guideway	0.13	NA	NA	NA	NA	NA
Aerial Tramway	0.03	NA	NA	NA	NA	NA
Bus	0.51	3.65	2.40	5.35	1.84	2.36
Cable Car	0.12	NA	NA	NA	NA	NA
Commuter Rail	0.10	0.29	NA	NA	NA	NA
Ferryboat	NA	0.07	NA	NA	NA	NA
Heavy Rail	0.17	NA	NA	NA	NA	NA
Inclined Plane	0.08	NA	NA	NA	NA	NA
Light Rail	0.12	NA	NA	NA	NA	NA
Paratransit	NA	8.10	8.49	8.16	NA	4.66
Trolleybus	0.18	NA	NA	NA	NA	NA
Vanpool	NA	9.10	NA	13.96	NA	NA

Source: Federal Transit Administration, 2004 National Transit Database.

Minor bus power sources: bio-diesel—4.92, kerosene—3.68.

(a) Computed using total annual miles and total annual gallons and kilowatt hours of reporting systems. "NA" for little or no data available.

(b) Miles per kilowatt hour.

# Safety

## Highlights.....

- Safety incidents involving transit vehicles of the 560 agencies reporting data in 2004 included about 7,700 collisions, 135 derailments/buses going off road and about 1,800 fires.
- There were 248 fatalities and roughly 19,000 injuries involving transit vehicles or on transit properties. Automobile occupants were about 18 times more likely to die.
- 34.7% of the fatalities were commuter rail-related, 31.0% bus-related, and 23.8% heavy rail-related.
- 62.7% of the injuries were bus-related, 25.0% heavy rail-related, and 7.2% commuter rail-related.

Public transportation safety data, collected by the Federal Transit Administration since 1979, include incidents, fatalities, and injuries that do NOT involve criminal activity. However, these data for many transit agencies were incomplete or inaccurate because those systems were not in full compliance with the FTA reporting requirements. In addition, it has been impossible to separate out patron-only data for the various types of safety incidents because data reported combined patrons, employees, and other persons (e.g., automobile and other vehicle occupants, pedestrians, bicyclists).

In 1995, the FTA improved its efforts to ensure compliance and revised its reporting form to report patron, employee, and other data separately for each type of incident. By 1996 most of the reporting problems had been eliminated.

In 2002 however, the FTA changed the way it collects and reports data. Data are no longer reported on an individual agency basis, and many categories have been grouped together. For instance, all fatalities are grouped together by mode, making it impossible to distinguish between fatalities caused by suicide, vehicle collisions, incidents in parking lots, etc. This also makes direct comparison between other modes of travel – air, highway – nearly impossible. Also in 2002, thresholds for reporting incidents have changed. All injuries and incidents (collisions, derailments, personal casualties, fires and property damage) are only reported if immediate medical attention is required away from the scene or if property damage exceeds \$7,500. Previously, all reported injuries and all property damage exceeding \$1,000 (for transit agency property only) were taken into account.

One must be cautious when attempting to compare public transportation safety data to other modes of transportation. Along with the issues previously mentioned, other factors that make public transportation safety and security data unique are as follows:

- No other mode of transportation operates in an environment so fraught with the potential for injury—twice a day for three or four hours a continuing flow of thousands of people bump into and jostle one another in the constricted spaces of public transportation vehicles and on the platforms, ramps, stairways, escalators, and elevators of public transportation stations and transfer centers.
- Most public transportation buses and vans have built-in lifts or ramps to accommodate those using wheelchairs, walkers, and other mobility aids, while most rail, bus, and ferry stations have stairways, escalators, or elevators. All these have a significant risk factor resulting in a disproportionate number of safety incidents. No other mode of travel depends on such equipment to any significant extent.
- Minor incidents with less than \$7,500 in transit agency property damage are **not** counted as safety incidents unless a fatality, injury (requiring immediate medical attention away from the scene), or fire occurs. Such incidents (e.g., a 2-mile-an-hour collision with a post or another vehicle resulting in a dented bumper or broken taillight) are so common that they are considered "wear-and-tear" incidents that have no safety implications.
- A fatality is defined as a death confirmed within 30 days of an incident, and can involve passengers, transit facility occupants, employees, other workers, trespassers and other individuals
- All fires are counted even if they involve something as minor as a cigarette burning in a trash can.
- Heavy and commuter rail stations act as magnets for those contemplating suicide, with about one-third of all deaths reported to the FTA for these two modes being suicides. In addition, there are numerous injuries to persons failing in suicide attempts as well as to public transportation vehicle occupants (due to emergency braking) and to others in the wrong place at the wrong time. These casualties inflate the public transportation total, but are obviously beyond the transit agency's control.

**TABLE 31: Fatality Rates by Mode of Travel,  
2001-2003**  
**(Average Deaths per 100 Million  
Passenger Miles)**

TYPE OF VEHICLE	DEATH RATE
Airlines	0.02
Automobiles	0.77
Vans, SUVs, pickup trucks	0.76
Heavy, light, & other rail vehicles	Not reported
Intercity & commuter railroads	0.03
Intercity buses	0.02
Transit buses	0.03

Source: *Injury Facts*, National Safety Council, 2005-2006.



*Fire training facilities, like this one at the Washington Metropolitan Area Transit Authority in Washington, DC, better prepare transit agencies for dealing with emergencies.*

**TABLE 32: Fatalities by Mode**

FISCAL YEAR	AUTOMATED GUIDEWAY	COMMUTER RAIL	PARATRANSIT (a)	HEAVY RAIL	LIGHT RAIL	BUS (a)	VANPOOL (a)	TOTAL
1993	0	98	2	83	15	83	0	281
1994	0	112	2	85	13	108	0	320
1995	0	92	6	79	15	82	0	274
1996	0	72	11	74	6	101	0	264
1997	0	79	7	77	3	109	0	275
1998	2	94	4	54	23	109	0	286
1999	0	95	1	84	17	102	0	299
2000	0	87	8	80	30	90	0	295
2001	0	87	5	59	21	95	0	267
2002	0	116	0	73	13	78	0	280
2003	0	77	4	49	17	87	0	234
2004 P	1	86	0	59	22	77	3	248
2004 % of Total	0.4%	34.7%	0.0%	23.8%	8.9%	31.0%	1.2%	100.0%

Source: Federal Transit Administration, Safety and Security Statistics. Data reported include about 560 of the largest transit agencies.

(a) Data may significantly understate total since data for systems not reporting to the FTA comprises a significant portion of these modes.

**TABLE 33: Total Injuries by Mode (b)(c)**

FISCAL YEAR	AUTOMATED GUIDEWAY	COMMUTER RAIL	PARATRANSIT (a)	HEAVY RAIL	LIGHT RAIL	BUS (a)	VANPOOL (a)	TOTAL
1993	10	1,560	652	10,532	982	38,873	59	52,668
1994	10	2,374	731	11,673	1,181	42,195	29	58,193
1995	8	2,374	935	11,238	1,319	41,297	25	57,196
1996	20	1,953	882	11,093	1,604	39,709	27	55,288
1997	16	2,388	1,121	12,285	1,087	39,181	54	56,132
1998	12	1,677	1,064	11,059	1,076	41,035	67	55,990
1999	21	1,761	1,345	9,665	1,271	41,221	41	55,325
2000	15	1,783	1,736	10,848	1,338	40,925	52	56,697
2001	36	1,813	1,374	10,641	1,201	38,840	40	53,945
2002	28	1,483	347	4,806	557	11,995	44	19,260
2003	29	1,597	401	4,158	539	11,493	18	18,235
2004 P	15	1,364	296	4,738	633	11,898	38	18,982
2004 % of Total	0.1%	7.2%	1.6%	25.0%	3.3%	62.7%	0.2%	100.0%

Source: Federal Transit Administration, Safety and Security Statistics. Data reported include about 560 of the largest transit agencies.

(a) Data may significantly understate total since data for systems not reporting to the FTA comprises a significant portion of these modes.

(b) Includes personal casualty injuries (detailed below) plus injuries resulting from collisions, fires, derailments/buses going off road.

(c) Discontinuous between 2001 and 2002 because injuries prior to 2002 included all reported injuries. In 2002, only injuries requiring immediate medical treatment away from the scene were considered.

**TABLE 34: Personal Casualty Injuries by Mode (b)(c)**

FISCAL YEAR	AUTOMATED GUIDEWAY	COMMUTE R RAIL	PARATRANSIT (a)	HEAVY RAIL	LIGHT RAIL	BUS (a)	VANPOOL (a)	TOTAL
1993	9	1,326	412	9,916	607	16,765	1	29,036
1994	8	2,102	391	10,952	832	21,072	2	35,359
1995	8	2,057	520	10,438	911	18,655	2	32,591
1996	20	1,719	494	10,190	903	16,774	2	30,102
1997	15	2,254	558	11,526	727	17,285	2	32,367
1998	11	1,599	551	10,369	700	19,011	14	32,255
1999	20	1,706	695	9,153	801	19,403	4	31,782
2000	15	1,679	845	10,082	886	19,252	3	32,762
2001	36	1,721	720	9,688	815	18,137	2	31,119
2002	20	1,577	171	5,111	510	6,831	1	14,221
2003	28	1,607	140	3,808	380	4,141	1	10,105
2004 P	15	1,456	123	4,394	409	4,755	1	11,153
2004 % of Total	0.1%	13.1%	1.1%	39.4%	3.7%	42.6%	0.0%	100.0%

Source: Federal Transit Administration, Safety and Security Statistics. Data reported include about 560 of the largest transit agencies.

- (a) Data may significantly underestimate total since data for systems not reporting to the FTA comprises a significant portion of these modes.
- (b) Only includes injuries occurring while entering/exiting a vehicle or within stations/stops, (e.g., slips, trips and falls). Excludes injuries resulting from collisions, derailment/buses going off road and fires.
- (c) Discontinuous between 2001 and 2002 because casualties prior to 2002 included all reported casualties. In 2002, only casualties requiring immediate medical treatment away from the scene were considered.

**TABLE 35: Collisions by Mode (b) (c)**

FISCAL YEAR	AUTOMATED GUIDEWAY	COMMUTER RAIL	PARATRANSIT (a)	HEAVY RAIL	LIGHT RAIL	BUS (a)	VANPOOL (a)	TOTAL
1993	1	166	513	630	419	28,491	118	30,338
1994	1	201	644	718	473	27,625	36	29,698
1995	1	171	640	600	290	23,733	54	25,489
1996	1	151	768	328	323	23,305	77	24,953
1997	3	157	878	309	352	22,919	159	24,777
1998	3	153	656	273	297	22,220	179	23,781
1999	0	170	854	358	276	21,370	130	23,158
2000	1	208	994	336	333	22,069	157	24,098
2001	0	185	969	304	301	21,769	207	23,735
2002	0	46	280	150	527	12,767	33	13,803
2003	0	45	262	132	521	6,677	8	7,645
2004 P	0	50	214	150	459	6,802	28	7,703
2004 % of Total	0.0%	0.6%	2.8%	1.9%	6.0%	88.3%	0.4%	100.0%

Source: Federal Transit Administration, Safety and Security Statistics. Data reported include about 560 of the largest transit agencies.

- (a) Data may significantly underestimate total since data for systems not reporting to the FTA comprises a significant portion of these modes.
- (b) Includes collisions with vehicles, objects and people
- (c) Prior to 2002, incidents included property damage in excess of \$1,000 to transit property only. In 2002, this threshold changed to \$7,500 and included all property damage.

**TABLE 36: Property Damage by Mode, in Thousands (b)**

FISCAL YEAR	AUTOMATED GUIDEWAY	COMMUTE R RAIL	PARATRANSIT (a)	HEAVY RAIL	LIGHT RAIL	BUS (a)	VANPOOL (a)	TOTAL
1993	\$0	\$9,004	\$547	\$3,912	\$801	\$30,503	\$158	\$44,925
1994	\$3	\$5,141	\$779	\$1,597	\$785	\$29,994	\$78	\$38,376
1995	\$20	\$4,629	\$985	\$2,854	\$1,669	\$36,020	\$90	\$46,266
1996	\$14	\$11,080	\$1,470	\$6,388	\$3,839	\$34,622	\$145	\$57,557
1997	\$20	\$8,473	\$1,777	\$8,690	\$2,047	\$34,165	\$307	\$55,479
1998	\$0	\$4,903	\$2,206	\$10,029	\$2,696	\$41,355	\$308	\$61,497
1999	\$0	\$4,080	\$2,717	\$2,224	\$4,939	\$40,962	\$393	\$55,314
2000	\$34	\$6,858	\$2,211	\$5,034	\$3,022	\$41,320	\$442	\$58,921
2001	\$0	\$5,771	\$2,876	\$20,176	\$2,685	\$41,046	\$528	\$73,081
2002	\$0	\$177	\$1,450	\$2,476	\$2,108	\$25,662	\$312	\$32,185
2003	\$45	\$20,953	\$1,313	\$5,652	\$2,432	\$28,707	\$113	\$59,215
2004 P	\$0	\$15,373	\$964	\$3,678	\$2,757	\$20,461	\$140	\$43,373
2004 % of Total	0.0%	35.4%	2.2%	8.5%	6.4%	47.2%	0.3%	100.0%

Source: Federal Transit Administration, Safety and Security Statistics. Data reported include about 560 of the largest transit agencies.

- (a) Data may significantly underestimate total since data for systems not reporting to the FTA comprises a significant portion of these modes.
- (b) Prior to 2002, incidents included property damage in excess of \$1,000 to transit property only. In 2002, this threshold changed to \$7,500 and included all property damage.

# NATIONAL FINANCIAL DATA

## Capital Expenses

*Highlights.....*

- \$13.2 billion was spent in 2004
- 27.8% was spent for rolling stock, 57.0% for facilities, guideways, stations and administrative buildings, and 15.2% for other expenses.
- 28.3% was used for bus projects, 19.5% for commuter rail, 28.7% for heavy rail, 18.4% for light rail.

**Capital Expenses** are the expenses related to the purchase of equipment. Equipment means an article of non-expendable tangible personal property having a useful life of more than one year and an acquisition cost which equals the lesser of: the capitalization level established by the government unit for financial statement purposes or \$5,000. Capital expenses do not include operating expenses that are eligible to use capital funds. There are nine types:

**Guideway** is the buildings and constructions (e.g., dedicated facilities for the operation of trains and buses including at-grade, elevated and subway structures, tunnels, bridges, track, paved highway lanes, bus loops) with all attached fixtures, located along the route where passenger service is offered. Does not include passenger stations or bus pull-ins.

**Systems** includes the computers, monitors, printers, scanners, data storage devices and associated software that supports general office, accounting, scheduling, vehicle maintenance, non-vehicle maintenance, and customer service functions.

A **station** is a passenger boarding/alighting facility with a platform, which may include stairs; elevators; escalators; passenger controls (e.g., faregates or turnstiles); canopies; wind shelters; lighting; signs; buildings with a waiting room, ticket office or machines, restrooms, or concessions. Includes all fixed guideway passenger facilities (except for on-street cable car and light rail stops), including busway passenger facilities; underground, at-grade, and elevated, rail stations; and ferryboat terminals. Includes transportation/transit/transfer centers, park-and-ride facilities, and transit malls with the above components, including those only utilized by motor buses. Does not include bus, light rail, or cable car stops (which are typically on-street locations at the curb or in a median, sometimes with a shelter, signs, or lighting).

**Facilities** include administration, central/overhaul maintenance facilities, light maintenance and storage facilities, and equipment of any of these items.

**Administrative buildings** are the general administrative offices owned by the transit agency.

**Rolling Stock** is the revenue vehicles used in providing transit service for passengers. The term revenue vehicles includes the body and chassis and all fixtures and appliances inside or attached to the body or chassis, except fare collection equipment and revenue vehicle movement control equipment (radios). For rubber tired vehicles, it includes the cost of one set of tires and tubes to make the vehicle operational, if the tires and tubes are owned by the transit agency.

**Fare revenue collection equipment** include turnstiles, fare boxes (drop), automated fare boxes and related software, money changers and fare dispensing machines (tickets, tokens, passes).

**Other Vehicles** includes service, supervisory and other vehicles other than rolling stock.

**Other** includes furniture, equipment that is not an integral part of buildings and structures, shelters, signs, and passenger amenities (e.g., benches) not in passenger stations.

## IMPACTS OF PUBLIC TRANSPORTATION ON THE U.S. ECONOMY

### BUSINESS SALES:

- **CAPITAL INVESTMENT:** \$30 million in increased sales per each \$10 million investment.
- **OPERATING INVESTMENT:** \$32 million in increased sales per each \$10 million investment.

**HIGHWAY & PUBLIC TRANSPORTATION USER COSTS:** \$15 million in operating, fuel, and congestion costs per each \$10 million investment.

**BUSINESS OUTPUT:** \$2 million per each \$10 million investment in first year, increasing to \$31 million per each \$10 million in the 20<sup>th</sup> year.

**PERSONAL INCOME:** \$0.8 million per each \$10 million investment in first year, increasing to \$18 million per each \$10 million in the 20<sup>th</sup> year.

**STATE & LOCAL GOVERNMENT REVENUE:** 4%-16% increase due to income and employment increases resulting from public transportation investments.

Source: *Public Transportation and the Nation's Economy*, Cambridge Systematics, 1999.

## Notes on Capital Costs

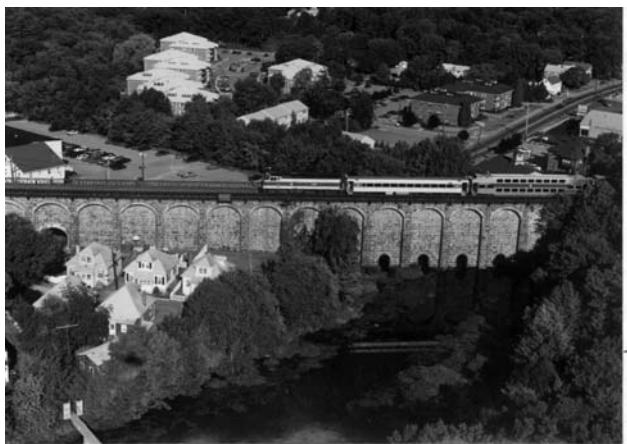
Capital expense costs reported to the Federal Transit Administration exclude expenses of purchased transportation contractors. Data in the following tables include APTA estimates for such expenses.

Because most capital projects take several years to complete, and data are reported each year as spent, it is not possible to correlate data to particular projects. Yearly totals rise and fall based on construction schedules, so comparison of data for various years has little value because of the differing projects included in each year.

**Bond Expenses** are not considered capital expenses by the FTA. Interest payments are considered a reconciling item for operating expenses. Principal repayments are not reported since the funds from bond issues have already been spent on rolling stock, facilities, and other equipment.



*Major construction, such as this escalator for a Dallas Area Rapid Transit light rail line, pump millions of dollars into local economies.*



*The rehabilitated Canton Viaduct built in the mid-1800s and still in use today by the Massachusetts Bay Transportation Authority commuter rail trains to Boston. A portion of capital funds are spent to modernize old infrastructure such as this.*

## Construction Costs

Although data for public transportation infrastructure construction costs (e.g., new rail lines, high-occupancy-vehicle lanes, and busways) are reported to the Federal Transit Administration National Transit Database, data are not reported by complete project—only by year by mode, which could cover several projects being constructed simultaneously. Also, most projects are constructed over a period of several years, and only broad category data (vehicles, facilities, and other) are reported. Details on mileage, number of stations, size of parking lots, and other variables are not reported. Dozens of variables impact the cost of a project, and some costs, such as the quality of construction and the artistic beauty of a project, cannot be accurately measured. A few of those variables include:

- 1) land acquisition,
- 2) land clearance and demolition,
- 3) relocation of existing businesses and residences,
- 4) availability of “free” or low-cost right-of-way such as abandoned railroads,
- 5) utility relocation,
- 6) number, size, and length of stations,
- 7) number of tracks or lanes,
- 8) length of trackage or roadway,
- 9) number and size of maintenance yards and facilities,
- 10) proportion in deep tunnel, shallow tunnel, on the surface, and elevated,
- 11) number and size of parking lots or garages,
- 12) number and size of bridges,
- 13) station and right of way enhancements such as landscaping, works of art, information kiosks, benches, telephones, concession booths, fountains, etc.,
- 14) type and number of fare vending and collection machines,
- 15) inflation over the several-year time period needed for most projects,
- 16) the going labor costs for and number of construction workers,
- 17) type and number of propulsion, signal, communication, and other operating systems,
- 18) when the project was constructed,
- 19) the number of vehicles required,
- 20) interest and other financing charges.

For these reasons, it is not possible to develop accurate comparative construction cost data on a per-mile or any other basis since the detailed data on the above (and other) variables are not reported to allow identification of comparable projects.

**TABLE 37: Capital Expense by Mode, Millions of Dollars**

FISCAL YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1992	1,301.9	1,310.5	67.6	2,054.1	494.9	34.8	171.9	5,435.7
1993	1,567.3	1,645.1	91.8	1,901.5	488.3	18.8	126.8	5,839.6
1994	1,470.3	1,436.4	99.3	2,070.1	544.1	57.4	155.1	5,832.7
1995	2,050.8	1,689.2	86.2	2,560.5	688.4	15.5	139.7	7,230.3
1996	2,035.6	1,690.1	105.2	2,228.0	849.9	19.2	155.8	7,083.8
1997	2,423.5	1,817.5	118.5	2,346.1	876.5	54.1	213.3	7,849.5
1998	2,804.9	1,402.2	131.5	2,350.8	967.2	67.0	169.2	7,892.8
1999	3,249.0	1,622.0	122.0	2,706.7	1,004.8	89.8	180.4	8,974.7
2000	3,248.8	1,783.5	134.2	2,852.2	1,244.8	148.9	174.6	9,587.0
2001	3,737.9	2,291.2	154.0	3,506.5	1,444.2	157.8	127.1	11,418.7
2002	3,513.2	2,378.0	218.4	4,564.2	1,723.5	187.6	262.7	12,847.6
2003	3,241.7	2,479.2	241.8	4,437.0	2,325.1	118.8	397.0	13,240.6
2004 P	3,747.3	2,585.8	243.9	3,795.8	2,441.3	143.1	288.8	13,246.0
2004 % of Total	28.3%	19.5%	1.8%	28.7%	18.4%	1.1%	2.2%	100.0%

P= Preliminary

**TABLE 38: Capital Expense by Type, Millions of Dollars**

FISCAL YEAR	ROLLING STOCK	FACILITIES (a)	OTHER (b)	TOTAL
1992	1,347.7	2,986.9	1,101.1	5,435.7
1993	1,616.2	2,826.3	1,397.1	5,839.6
1994	1,340.6	3,159.2	1,332.9	5,832.7
1995	1,834.5	3,836.9	1,558.9	7,230.3
1996	1,834.4	3,810.7	1,438.7	7,083.8
1997	2,355.7	4,468.1	1,025.7	7,849.5
1998	2,721.8	4,267.9	903.1	7,892.8
1999	3,239.4	4,697.8	1,037.5	8,974.7
2000	3,138.6	5,405.2	1,043.2	9,587.0
2001	4,027.4	6,301.8	1,089.5	11,418.7
2002	4,351.1	7,409.1	1,087.4	12,847.6
2003	3,728.2	7,568.9	1,943.6	13,240.6
2004 P	3,687.4	7,543.7	2,015.0	13,246.0
2004 % of Total	27.8%	57.0%	15.2%	100.0%

P = Preliminary

- (a) As of 2003 includes facilities, guideways, stations and administrative buildings.
- (b) As of 2003 includes other vehicles, fare revenue collection equipment, systems and other.

**TABLE 39: Capital Expense by Mode and Type, Fiscal Year 2004, Millions of Dollars**

TYPE	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
Guideway	247.5	941.5	0.0	1,398.2	1,413.9	71.5	0.2	4,072.7
Stations	346.6	391.4	11.0	977.8	240.2	0.7	149.0	2,116.7
Admin. Build.	119.1	4.4	14.6	11.9	0.7	0.0	0.6	151.3
Facilities	499.9	156.0	56.2	349.8	126.5	12.0	2.5	1,203.0
Rolling Stock	1,953.5	728.7	130.5	329.6	380.8	51.2	113.0	3,687.4
Other Vehicles	29.3	4.2	2.6	18.5	3.6	0.3	0.2	58.7
Fare Rev. Coll.	71.2	16.2	2.5	39.4	10.5	1.1	1.8	142.6
Systems	256.7	83.5	14.3	495.8	149.5	4.8	4.9	1,009.5
Other	223.5	259.9	12.3	174.9	115.5	1.4	16.6	804.0
Total	3,747.3	2,585.9	243.9	3,795.8	2,441.3	143.1	288.8	13,246.0
% of Total	28.3%	19.5%	1.8%	28.7%	18.4%	1.1%	2.2%	100.0%

All data are preliminary

# Capital Funding

## Highlights.....

- \$13.2 billion was received from all sources in 2004.
- 39.0% of capital funding came from the federal government, 13.9% from state governments, 18.2% from local governments, and 28.9% was raised by transit agencies from directly-levied taxes, advertising, interest income, and other sources.
- Federal capital and operating appropriations totaled \$8.5 billion for 2006.
- Federal capital and planning grant approvals for 2004 totaled \$7.9 billion.
- 38.4% of federal grant approvals went for bus-related projects, 41.3% for fixed-guideway modernization, 18.3% for new start transit projects, and 2.1% for planning.

A **Capital Funding Source** is a source of funds used to pay for capital expenses. There are two types:

**Government Funds** are funds provided by federal, state, and/or local governments. For some purposes, also includes directly generated taxes, tolls, fees, and other imposed funding sources.

**Federal Funds** are financial assistance from the federal government to assist in paying the operating costs of providing transit service.

**State Government Funds** are financial assistance obtained from a state government(s) to assist with paying the costs of providing transit services.

**Local Government Funds** are financial assistance from local governments (below the state level) to help cover the operating costs of providing transit service.

**Directly Generated Funds** are any funds where revenues are generated by or donated directly to the transit agency, including passenger fare revenues, advertising revenues, donations, bond proceeds and taxes imposed by the transit agency. Almost all such funds for capital purposes are bonds and directly imposed taxes: fares and advertising revenues are normally used only for operating expenses.

**TABLE 40: Capital Funding Sources, Millions of Dollars**

FISCAL YEAR	FEDERAL ASSISTANCE	STATE ASSISTANCE	LOCAL ASSISTANCE	DIRECTLY GENERATED (a)	LOCAL PLUS DIRECTLY GENERATED	TOTAL
1990	2,872.5	696.8	1,176.9	189.3	1,366.2	4,935.5
1991	2,773.5	695.4	1,012.3	1,074.5	2,086.8	5,555.7
1992	2,673.0	801.0	830.0	1,131.7	1,961.8	5,435.7
1993	2,432.4	1,325.5	1,079.6	1,002.1	2,081.7	5,839.6
1994	2,622.8	1,047.8	997.9	1,164.2	2,162.1	5,832.7
1995	3,422.2	1,020.3	888.2	1,899.6	2,787.8	7,230.3
1996	3,592.8	915.9	926.0	1,649.1	2,575.1	7,083.8
1997	4,275.6	1,037.0	898.8	1,638.1	2,536.9	7,849.5
1998	3,919.0	932.2	1,032.2	2,009.4	3,041.6	7,892.8
1999	3,960.4	911.5	1,128.2	2,974.6	4,102.8	8,974.7
2000	4,525.6	1,030.5	1,469.2	2,561.7	4,030.9	9,587.0
2001	5,768.5	1,066.6	1,304.4	3,279.2	4,583.6	11,418.7
2002	5,215.6	1,496.5	2,582.9	3,552.5	6,135.4	12,847.5
2003	5,277.5	1,681.9	2,397.8	3,883.5	6,281.2	13,240.6
2004 P	5,171.0	1,841.9	2,407.7	3,825.4	6,233.0	13,246.0
2004 % of Total	39.0%	13.9%	18.2%	28.9%	47.1%	100.0%

P = Preliminary

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

**TABLE 41: Federal Public Transportation Appropriations, Fiscal Years 2000-2006, Millions of Dollars**

PROGRAM	2000	2001	2002	2003	2004	2005	2006
<b>FORMULA PROGRAMS TOTAL</b>	<b>3,128.9</b>	<b>3,392.3</b>	<b>3,673.0</b>	<b>3,874.7</b>	<b>3,877.0</b>	<b>4,080.3</b>	<b>4,582.4</b>
Urbanized Area	2,772.9	2,935.1	3,200.0	3,423.5	3,425.6	3,593.2	3,432.0
Growing States and High Density States	---	---	---	---	---	---	384.1
Nonurbanized Areas	193.6	205.0	223.4	239.0	239.2	250.9	384.1
Elderly and Disabled	72.9	77.2	84.6	90.1	90.1	94.5	110.9
New Freedom	---	---	---	---	---	---	77.2
Over-the-Road Bus	3.7	4.7	7.0	7.0	6.9	6.9	7.4
Job Access and Reverse Commute	75.0	99.8	125.0	104.3	104.4	124.0	136.6
Alternative Transportation in Parks	---	---	---	---	---	---	21.8
Reports and Audits	---	---	---	---	---	---	3.5
Alternatives Analysis	---	---	---	---	---	---	24.8
Other	10.8	70.5	33.0	10.8	10.8	10.8	---
<b>MAJOR CAPITAL INVESTMENT</b>	<b>2,490.1</b>	<b>2,694.6</b>	<b>2,891.0</b>	<b>3,110.6</b>	<b>3,188.6</b>	<b>3,361.7</b>	<b>3,674.4</b>
New Starts/Extensions	969.1	1,060.1	1,136.4	1,251.2	1,316.0	1,437.8	1,488.0
Fixed-Guideway Modernization	980.4	1,056.1	1,136.4	1,206.5	1,199.4	1,204.7	1,329.8
Bus and Bus Facilities (a)	540.6	578.4	618.2	652.9	673.2	719.2	856.6
<b>PLANNING TOTAL</b>	<b>60.0</b>	<b>62.9</b>	<b>67.0</b>	<b>72.5</b>	<b>72.6</b>	<b>72.4</b>	<b>94.1</b>
<b>RESEARCH TOTAL</b>	<b>46.7</b>	<b>46.9</b>	<b>49.0</b>	<b>48.7</b>	<b>52.7</b>	<b>54.6</b>	<b>74.4</b>
<b>FTA ADMINISTRATION</b>	<b>60.0</b>	<b>63.9</b>	<b>67.0</b>	<b>72.5</b>	<b>75.1</b>	<b>77.4</b>	<b>79.2</b>
<b>TOTAL</b>	<b>5,785.7</b>	<b>6,260.6</b>	<b>6,747.0</b>	<b>7,179.0</b>	<b>7,265.9</b>	<b>7,646.3</b>	<b>8,504.5</b>

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

(a) Includes Clean Fuels Funds.

**TABLE 42: Federal Capital and Planning Grant Approvals by Use, Millions of Dollars**

FEDERAL FISCAL YEAR	BUS (a)	FIXED-GUIDEWAY MODERNIZATION (a)	NEW STARTS (a)	PLANNING (b)	TOTAL
1990	760.9	998.9	603.7	64.4	2,427.9
1991	826.0	1,029.2	515.2	80.5	2,450.9
1992	941.7	1,153.8	492.5	80.8	2,668.8
1993	1,295.2	1,146.0	996.5	77.9	3,515.6
1994	1,401.6	1,474.3	657.2	97.2	3,630.3
1995	1,988.7	1,767.2	1,677.7	100.2	5,533.8
1996	1,465.7	1,482.3	1,109.3	122.8	4,180.1
1997	1,582.6	1,501.1	922.4	118.6	4,124.7
1998	1,640.9	1,598.2	898.0	88.2	4,225.3
1999	2,300.7	1,994.7	996.2	103.4	5,395.0
2000	3,622.0	2,232.8	1,343.4	167.8	7,366.0
2001	2,986.1	2,383.5	1,239.4	185.5	6,794.5
2002	3,271.1	2,446.1	1,413.7	192.1	7,323.0
2003	3,318.5	2,517.1	1,360.7	194.0	7,390.4
2004	3,038.1	3,264.5	1,445.2	164.9	7,912.7
2004 % of Total	38.4%	41.3%	18.3%	2.1%	100.0%

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

(a) Includes total funding for listed usage from capital, formula, and other funding programs.

(b) Includes funds used for planning from all funding programs.

**TABLE 43: Federal Capital and Planning Grant Approvals by Source Program, Millions of Dollars**

FEDERAL FISCAL YEAR	CAPITAL INVESTMENT (a)	FORMULA (b)	PLANNING (c)	OTHER (d)	TOTAL
1990	1,134.6	997.4	47.9	248.0	2,427.9
1991	1,073.6	1,069.8	54.5	253.0	2,450.9
1992	973.7	1,261.3	55.9	377.9	2,668.8
1993	1,745.9	1,473.3	50.5	245.9	3,515.6
1994	1,547.1	1,706.3	53.0	323.9	3,630.3
1995	2,608.5	2,520.1	52.5	352.7	5,533.8
1996	1,690.5	2,123.9	50.7	315.0	4,180.1
1997	1,716.3	2,130.0	76.0	202.4	4,124.7
1998	1,648.3	2,311.8	53.9	211.3	4,225.3
1999	2,064.7	3,270.0	57.4	2.9	5,395.0
2000	2,708.6	4,490.4	114.0	53.0	7,366.0
2001	2,522.2	4,122.0	128.0	22.3	6,794.5
2002	2,849.0	4,289.4	131.7	52.9	7,323.0
2003	2,957.1	4,124.8	135.2	173.3	7,390.4
2004	2,932.4	3,720.3	111.7	1,148.3	7,912.7
2004 % of Total	37.1%	47.0%	1.4%	14.5%	100.0%

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

(a) Bus and Bus Facilities, Fixed-Guideway Modernization, and New Start programs

(b) Urbanized Area, Rural, and Elderly Individuals and Individuals with Disabilities, Over-the-Road Bus, Job Access/Reverse Commute formula programs.

(c) Metropolitan Planning, State Planning, Rural Transportation Assistance Program, and Consolidated Planning Grants.

(d) Federal Aid Urban Systems, Interstate Transfer, Emergency Supplemental, and National Capital Transportation Act.

**TABLE 44: Flexible Highway Funds Transferred to Public Transportation, Millions of Dollars**

FEDERAL FISCAL YEAR	CONGESTION MITIGATION & AIR QUALITY IMPROVEMENT PROGRAM	SURFACE TRANSPORTATION PROGRAM	INTERSTATE SUBSTITUTE & EARMARKED FEDERAL HIGHWAY ADMINISTRATION FUNDS	TOTAL
1992	177.0	25.2	101.6	303.8
1993	298.4	146.9	23.9	469.2
1994	317.0	183.2	109.5	609.7
1995	484.1	200.3	117.4	801.8
1996	344.6	324.2	111.3	780.1
1997	257.9	207.9	48.3	514.1
1998	223.3	243.9	0.1	467.3
1999	573.0	384.4	11.8	969.2
2000	864.0	708.4	26.7	1,599.1
2001	633.1	532.1	68.2	1,233.4
2002	689.8	383.7	44.0	1,117.5
2003	599.5	293.9	115.2	1,008.6
2004	659.8	285.2	35.9	980.9
2004 % of Total	59.4%	29.1%	11.4%	100.0%

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

**TABLE 45: Average Annual Capital Cost to Improve Public Transportation Physical Conditions and Service Performance, 2001-2020, Billions of 2000 Dollars**

NEEDS COMPONENT	Cost to Maintain Conditions & Maintain Performance	Cost to Improve Conditions & Maintain Performance	Cost to Maintain Conditions & Improve Performance	Cost to Improve Conditions & Improve Performance
VEHICLE FLEET				
Replacement and Rehabilitation	3.8	5.6	3.8	5.6
OTHER TRANSIT ASSETS				
Replacement and Rehabilitation	4.8	5.1	4.8	5.1
EXPANSION TO ACCOMMODATE RIDERSHIP GROWTH (a)	9.7-23.7	9.8-23.7	17.1-32.1	17.2-32.2
RURAL/SMALL URBAN	0.5	0.5	1.0	1.0
<b>TOTAL (a)</b>	<b>18.9-32.8</b>	<b>21.0-34.9</b>	<b>26.7-41.7</b>	<b>28.9-43.9</b>

Source: Cambridge Systematics, *Expanded State and National Transit Investment Analysis*, 2002.

(a) Lower number assumes 1.6% annual growth, higher number 3.5% annual growth.

# Operating Expenses

## Highlights.....

- \$28.5 billion was spent in 2004.
- 45.1% was for vehicle operations, 17.7% for vehicle maintenance, 9.8% for non-vehicle maintenance, 13.9% for general administration, and 13.4% for purchased transportation.
- 42.0% was for salaries and wages, 26.7% for fringe benefits, 13.4% for purchased transportation, and 17.9% for other expenses.
- 9.1% was for materials and supplies, 3.0% for utilities, 2.6% for casualty and liability costs, and -2.6% (due to negative accounting costs) for other expenses.
- 56.2% was for buses, 8.9% for paratransit, 12.1% for commuter rail, 16.6% for heavy rail, 3.1% for light rail, and 2.5% for all other modes.

**Operating Expenses** are the expenses associated with the operation of the transit agency, and classified by function or activity and the goods and services purchased. It is the sum of either the functions or the object classes listed below.

A **Function** is an activity performed or cost center of a transit agency. The four basic functions are:

**Vehicle Operations** includes all activities associated with the subcategories of the vehicle operations function: transportation administration and support; revenue vehicle operation; ticketing and fare collection; and system security.

**Vehicle Maintenance** includes all activities associated with revenue and non-revenue (service) vehicle maintenance, including administration, inspection and maintenance, and servicing (cleaning, fueling, etc.) vehicles. In addition, vehicle maintenance includes repairs due to vandalism and accident repairs of revenue vehicles.

**Non-Vehicle Maintenance** includes all activities associated with facility maintenance, including: administration; repair of buildings, grounds and equipment as a result of accidents or vandalism; operation of electric power facilities; and maintenance of vehicle movement control systems; fare collection and counting equipment; structures, tunnels and subways; roadway and track; passenger stations, operating station buildings, grounds and equipment; communication systems; general administration buildings, grounds and equipment; and electric power facilities.

**General Administration** includes all activities associated with the general administration of the transit agency, including transit service development, injuries and damages, safety, personnel administration, legal services, insurance, data processing, finance and accounting, purchasing and stores, engineering, real estate management, office management and services, customer services, promotion, market research and planning.

An **Object Class** is a grouping of expenses on the basis of goods and services purchased. Object Classes are as follows:

**Salaries and Wages** are the pay and allowances due employees in exchange for the labor services they render in behalf of the transit agency. The allowances include payments direct to the employee arising from the performance of a piece of work. Also called "Labor."

**Fringe Benefits** are the payments or accruals to others (insurance companies, governments, etc.) on behalf of an employee and payments and accruals direct to an employee arising from something other than a piece of work. These payments are transit agency costs over and above labor costs, but still arising from the employment relationship.

**Employee Compensation** is the sum of "Salaries and Wages" and "Fringe Benefits."

**Services** include the labor and other work provided by outside organizations for fees and related expenses. In most instances, services from an outside organization are procured as a substitute for in-house employee labor, except in the case of independent audits which could not be performed by employees in the first place. The substitution is usually made because the skills offered by the outside organization are needed for only a short period of time or are better than internally available skills.

The charge for these services is usually based on the labor hours invested in performing the service. Services include management service fees, advertising fees, professional and technical services, temporary help, contract maintenance services, custodial services and security services.

**Materials and Supplies** are the tangible products obtained from outside suppliers or manufactured internally. Freight, purchase discounts, cash discounts, sales and excise taxes (except on fuel and lubricants) are included in the cost of the material or supply. Charges to these expense are for the materials and supplies issued from inventory for use and for the materials and supplies purchased for immediate use, i.e., without going through inventory. These materials and supplies include tires, fuel and lubricants.

**Utilities** include the payments made to various utilities for utilization of their resources (e.g., electric, gas, water, telephone, etc.). Utilities include propulsion power purchased from an outside utility company and used for propelling electrically driven vehicles, and other utilities such as electrical power for purposes other than for electrically driven vehicles, water and sewer, gas, garbage collection, and telephone.

**Casualty and Liability Costs** are the cost elements covering protection of the transit agency from loss through insurance programs, compensation of others for their losses due to acts for which the transit agency is liable, and recognition of the cost of a miscellaneous category of corporate losses.

**Purchased Transportation** is transportation service provided to a public transit agency or governmental unit from a public or private transportation provider based on a written contract. The provider is obligated in advance to operate public transportation services for a public transit agency or governmental unit for a specific monetary consideration. Purchased transportation does not include franchising, licensing operation, management services, cooperative agreements or private conventional bus service.

**Other Expenses** is the sum of taxes, miscellaneous expenses, and expense transfers:

**Total Expense** is the sum of all the object classes or functions.



Approximately 50 Metropolitan Transit Authority of Harris County buses lined up at a Houston sports venue. The largest operating expense for any transit agency is its employee salaries and fringe benefits, which normally represent at least two-thirds of all operating expenses.

**TABLE 46: Operating Expense by Function Class, Millions of Dollars**

FISCAL YEAR	VEHICLE OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	GENERAL ADMINISTRATION	PURCHASED TRANSPORTATION	TOTAL
1990	6,653.3	3,038.8	1,592.0	3,449.9	1,008.1	15,742.1
1991	6,726.6	2,992.4	1,604.7	3,584.5	1,633.2	16,541.4
1992	7,659.7	3,047.5	1,783.9	2,674.2	1,616.1	16,781.4
1993	7,941.4	3,049.3	1,845.0	2,714.0	1,800.1	17,349.8
1994	8,211.9	3,184.5	1,819.4	2,752.0	1,952.1	17,919.9
1995	8,281.9	3,218.2	1,829.0	2,589.5	1,930.1	17,848.7
1996	8,331.9	3,295.1	1,802.2	2,744.3	2,167.2	18,340.7
1997	8,602.1	3,372.6	1,838.8	2,919.9	2,202.7	18,936.1
1998	9,176.7	3,579.2	1,783.9	3,065.8	2,132.9	19,738.5
1999	9,333.0	3,742.1	1,906.8	3,164.4	2,365.8	20,512.1
2000	10,110.9	4,267.1	2,177.7	3,328.8	2,761.0	22,645.5
2001	10,438.8	4,348.4	2,290.1	3,463.1	2,976.5	23,516.9
2002	11,057.4	4,550.6	2,448.1	3,807.8	2,970.1	24,834.0
2003	11,935.5	4,822.1	2,545.7	3,962.4	3,585.8	26,851.6
2004 P	12,865.8	5,042.6	2,790.2	3,974.3	3,832.9	28,505.8
2004 % of Total	45.1%	17.7%	9.8%	13.9%	13.4%	100.0%

P = Preliminary

**TABLE 47: Operating Expense by Object Class, Millions of Dollars**

FISCAL YEAR	SALARIES & WAGES	FRINGE BENEFITS	SERVICES	MATERIALS & SUPPLIES	UTILITIES	CASUALTY & LIABILITY	PURCHASED TRANSPORTATION	OTHER	TOTAL
1990	7,226.3	3,986.0	794.3	1,608.4	552.9	640.5	1,008.1	-74.4	15,742.1
1991	7,394.5	3,998.4	818.0	1,559.7	575.9	625.6	1,633.2	-63.9	16,541.4
1992	7,670.5	4,318.6	907.8	1,529.1	608.5	557.8	1,616.1	-427.0	16,781.4
1993	7,932.1	4,400.3	914.0	1,536.1	624.0	587.8	1,800.1	-444.6	17,349.8
1994	8,223.8	4,451.7	849.3	1,593.9	644.0	614.2	1,952.1	-409.1	17,919.9
1995	8,213.1	4,484.0	849.3	1,613.4	628.9	512.8	1,930.1	-382.9	17,848.7
1996	8,437.6	4,401.4	923.9	1,677.0	667.2	502.7	2,167.2	-436.3	18,340.7
1997	8,771.7	4,503.7	1,055.2	1,734.1	685.0	502.5	2,202.7	-518.8	18,936.1
1998	9,211.2	4,843.6	1,170.7	1,851.5	660.8	473.9	2,132.9	-606.1	19,738.5
1999	9,495.1	5,052.3	1,213.9	1,883.7	675.5	449.7	2,365.8	-623.9	20,512.1
2000	10,400.2	5,412.9	1,289.6	2,259.6	719.8	506.5	2,761.0	-704.1	22,645.5
2001	10,626.9	5,705.6	1,389.3	2,362.5	772.5	492.8	2,976.5	-809.2	23,516.9
2002	11,197.4	6,246.9	1,539.6	2,287.3	771.0	624.2	2,970.1	-802.5	24,834.0
2003	11,634.0	6,913.4	1,614.6	2,428.2	809.9	693.7	3,585.8	-828.1	26,851.6
2004 P	11,979.3	7,599.2	1,655.3	2,586.3	848.9	750.4	3,832.9	-746.6	28,505.8
2004 % of Total	42.0%	26.7%	5.8%	9.1%	3.0%	2.6%	13.4%	-2.6%	100.0%

P = Preliminary

**TABLE 48: Operating Expense by Mode, Millions of Dollars**

FISCAL YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	8,903.1	1,938.5	517.8	3,825.0	237.1	108.6	212.0	15,742.1
1991	9,501.4	1,942.4	608.5	3,858.6	291.1	113.5	225.9	16,541.4
1992	9,881.2	2,012.6	667.3	3,555.1	308.9	124.4	231.9	16,781.4
1993	10,109.6	2,088.4	793.0	3,668.6	315.9	131.9	242.5	17,349.8
1994	10,144.1	2,227.8	942.7	3,786.2	412.8	132.9	273.4	17,919.9
1995	10,320.5	2,211.2	1,000.4	3,522.9	376.1	138.9	278.7	17,848.7
1996	10,574.9	2,294.1	1,186.6	3,401.9	441.6	134.6	307.0	18,340.7
1997	10,944.0	2,278.1	1,284.5	3,473.7	472.5	140.2	343.1	18,936.1
1998	11,428.9	2,360.6	1,405.4	3,529.6	500.2	146.5	367.3	19,738.5
1999	11,713.8	2,574.9	1,419.3	3,693.4	545.6	166.9	398.2	20,512.1
2000	12,966.2	2,685.3	1,804.9	3,930.8	606.4	177.6	474.3	22,645.5
2001	13,335.2	2,860.8	1,754.0	4,180.1	682.2	172.4	532.2	23,516.9
2002	14,065.6	3,003.2	1,949.4	4,267.5	778.3	186.7	583.3	24,834.0
2003	15,240.3	3,178.5	2,363.4	4,446.2	815.2	182.7	625.3	26,851.6
2004 P	16,021.5	3,442.4	2,523.9	4,734.1	887.4	184.9	711.5	28,505.8
2004 % of Total	56.2%	12.1%	8.9%	16.6%	3.1%	0.6%	2.5%	100.0%

P = Preliminary

# Operating Funding

## Highlights.....

- \$29.7 billion was received from all sources in 2004.
- 32.9% came from passengers, 20.8% from local governments, 22.6% from state governments, 7.0% from federal governments, and 16.7% was raised by transit agencies from directly-levied taxes, advertising, interest income, and other sources.
- Average adult base cash fare was \$1.37
- Average fare paid per unlinked trip was \$1.02. For bus, it was \$0.75, commuter rail \$3.90, paratransit \$2.17, heavy rail \$1.06, and light rail \$0.67.

**Operating Funding Source** is a source of funds used to pay for operating expenses. Under federal regulations, some capital funds may be used to fund a portion of operating expenses, and would therefore be considered operating funds.

**Government Funds** are funds provided by federal, state, and/or local governments. For some purposes, also includes directly generated taxes, tolls, fees, and other imposed funding sources.

**Federal Funds** are financial assistance from the federal government to assist in paying the operating costs of providing transit service.

**State Government Funds** are financial assistance obtained from a state government(s) to assist with paying the costs of providing transit services.

**Local Government Funds** are financial assistance from local governments (below the state level) to help cover the operating costs of providing transit service.

**Directly Generated Funds** are any funds where revenues are generated by or donated directly to the transit agency, including passenger fare revenues, advertising revenues, donations, bond proceeds and taxes imposed by the transit agency. All the following are types of directly generated funds:

**Passenger Fares** are revenue earned from carrying passengers in regularly scheduled and paratransit service. Passenger fares include: the base fare; zone premiums; express service premiums; extra cost transfers; and quantity purchase discounts applicable to the passenger's ride.

**Adult Base Cash Fare** is the minimum cash fare paid by an adult for one transit ride; excludes transfer charges, zone or distance charges, express service charges, peak period surcharges, and reduced fares.

**Passenger Fares Received per Unlinked Passenger Trip** is "Passenger Fares" divided by "Unlinked Passenger Trips."

**Peak Period Surcharge** is an extra fee required during peak periods (rush hours).

**Transfer Surcharge** is an extra fee charged for a transfer to use when boarding another transit vehicle to continue a trip.

**Zone or Distance Surcharge** is an extra fee charged for crossing a predetermined boundary.

**Other Operating Funds** is the sum of freight tariffs, auxiliary transportation revenues, non-transportation revenues, revenue accrued through a purchased transportation agreement, and subsidy from other sectors of operations:

**Freight Tariffs** are the revenue earned from carrying all types of freight on runs whose primary purpose is passenger operations.

**Auxiliary Transportation Revenues** are the revenue earned from operations closely associated with transportation operations. Revenue includes station concessions; vehicle concessions; advertising revenues; ID card fees; fare evasion and park and ride lot fines; automotive vehicle ferriage; and other.

**Non-Transportation Revenues** are the revenue earned from activities not associated with the provision of transit service. Non-transportation revenues include investment earnings and other non-transportation sources including revenues earned from sales of maintenance services on property not owned or used by the transit agency; rentals of revenue vehicles to other operators; rentals of transit agency buildings and property to other organizations; parking fees generated from parking lots not normally used as park and ride locations; donations; grants from private foundations; development fees; rental car fees; and other.

**Revenue Accrued through a Purchased Transportation Agreement** is revenue accrued by a seller of transportation services through purchased transportation agreements, not including passenger fares for purchased transportation services from service provided under the purchased transportation agreement.

**Subsidy from Other Sectors of Operations** is the funds obtained from other sectors of a transit agency's operations to help cover the cost of providing transit services. Subsidies from other sectors of transit operations include subsidies from utility rates where the transit agency is a utility company; subsidies from bridge and tunnel tolls owned and operated by transit agency; and subsidies from other sources provided the same entity that operates the transit agency.



*Almost all transit agencies depend on fares paid by passengers to fund a major part of their expenses. These ticket vending machines are used by New York's Metro-North Railroad.*

**TABLE 49: Average Passenger Fare  
Per Unlinked Passenger Trip  
by Mode, Fiscal Year 2004, Dollars**

MODE	FARE PER UNLINKED PASSENGER TRIP
Bus	0.75
Commuter Rail	3.90
Ferryboat (b)	1.69
Heavy Rail	1.06
Light Rail	0.67
Other Rail (a)	1.04
Paratransit	2.17
Trolleybus	0.52
Vanpool	1.96
<b>TOTAL</b>	<b>1.02</b>

All data are preliminary

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

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

**TABLE 50: Operating Funding Sources, Millions of Dollars**

FISCAL YEAR	DIRECTLY GENERATED FUNDS			GOVERNMENT FUNDS				TOTAL PUBLIC FUNDS (d)	TOTAL
	PASSENGER FARES (a)	OTHER (b)	TOTAL	LOCAL (b)	STATE	FEDERAL (c)	TOTAL		
1990	5,890.8	895.0	6,785.8	5,326.8	2,970.6	970.0	9,267.4	9,267.4	16,053.2
1991	6,037.2	766.8	6,804.0	5,573.4	3,199.5	955.9	9,728.8	9,728.8	16,532.8
1992	6,152.5	645.9	6,798.4	5,268.1	3,879.5	969.1	10,116.7	10,116.7	16,915.1
1993	6,350.9	764.0	7,114.9	5,490.6	3,704.2	966.5	10,161.3	10,161.3	17,276.2
1994	6,756.0	2,270.6	9,026.6	4,171.2	3,854.4	915.6	8,941.2	10,570.3	17,967.8
1995	6,800.9	2,812.2	9,613.1	3,980.9	3,829.6	817.0	8,627.5	10,171.7	18,240.6
1996	7,416.3	2,928.2	10,344.5	4,128.5	4,081.8	596.4	8,806.7	10,502.1	19,151.2
1997	7,545.7	3,308.4	10,854.1	4,095.1	3,918.7	647.0	8,660.8	10,524.4	19,514.9
1998	7,969.6	3,684.7	11,654.3	4,376.9	4,279.4	751.2	9,407.5	11,360.9	21,061.8
1999	8,282.4	3,647.6	11,930.0	4,539.8	4,878.6	871.8	10,290.2	12,574.7	22,220.2
2000	8,745.8	4,216.7	12,962.5	5,318.8	4,967.1	994.2	11,280.1	13,239.0	24,242.6
2001	8,891.1	3,579.5	12,470.6	5,986.6	5,700.9	1,129.9	12,817.4	14,762.1	25,288.0
2002	8,648.9	4,601.6	13,250.5	5,343.9	6,718.6	1,319.4	13,381.9	15,593.2	26,632.4
2003	9,149.3	5,065.2	14,214.5	5,557.6	6,632.8	1,616.2	13,806.7	16,351.3	28,021.2
2004 P	9,774.6	4,960.2	14,734.8	6,184.3	6,713.2	2,085.9	14,983.4	17,570.9	29,718.1
2004 % of Total	32.9%	16.7%	49.6%	20.8%	22.6%	7.0%	50.4%	59.1%	100.0%

P = Preliminary

(a) Includes fares retained by contractors; beginning 1991 includes fare subsidies formerly included in "other".

(b) "Local" includes taxes levied directly by transit agency and other subsidies from local government such as bridge and tunnel tolls and non-transit parking lot funds. Beginning 1994, such funds reclassified from "local" to "other".

(c) Includes federal funds for capital uses that are accounted as operating funds under the National Transit Database accounting system.

(d) Includes "Total Government Funds" plus that portion of "Other Directly Generated Funds" included in "Local Government Funds" beginning in 1994 consisting of transit agency-raised taxes, tolls, and other dedicated funds.

**TABLE 51: Passenger Fares by Mode, Millions of Dollars (a)**

FISCAL YEAR	BUS	COMMUTER RAIL	PARA-TRANSIT	HEAVY RAIL	LIGHT RAIL	TROLLEY BUS	OTHER	TOTAL
1990	2,966.8	952.2	40.9	1,740.8	82.6	45.8	61.7	5,890.8
1991 (b)	3,098.4	958.0	68.9	1,700.6	97.8	51.6	61.9	6,037.2
1992	3,058.8	970.1	75.8	1,830.3	97.8	48.7	71.0	6,152.5
1993	3,116.7	995.5	93.9	1,913.3	102.5	52.4	76.6	6,350.9
1994	3,249.5	1,083.1	170.7	1,975.7	135.1	54.5	87.4	6,756.0
1995	3,287.2	1,077.5	146.3	2,018.2	126.5	54.0	91.2	6,800.9
1996	3,515.0	1,145.6	156.9	2,321.5	144.2	54.7	78.4	7,416.3
1997	3,557.8	1,177.6	170.4	2,350.9	138.6	56.9	93.5	7,545.7
1998	3,991.2	1,255.2	141.5	2,297.4	149.7	55.3	79.3	7,969.6
1999	4,175.0	1,308.7	158.6	2,323.3	163.5	59.5	93.8	8,282.4
2000	4,375.5	1,374.6	171.6	2,482.7	181.2	59.5	100.7	8,745.8
2001	4,356.7	1,438.7	181.5	2,532.6	203.8	59.5	118.3	8,891.1
2002	4,106.2	1,447.4	193.5	2,492.5	226.1	59.4	123.8	8,648.9
2003	4,269.6	1,552.2	244.0	2,654.3	229.1	53.5	146.7	9,149.3
2004 P	4,546.5	1,614.7	253.5	2,902.8	232.8	55.3	168.8	9,774.6
2004 % of Total	46.5%	16.5%	2.6%	29.7%	2.4%	0.6%	1.7%	100.0%

P = Preliminary

(a) 2002 was first year these data were available from the Federal Transit Administration National Transit Database reports. Estimates for previous years made by APTA from transit agency estimates, which are made according to each agency's procedures.

(b) Beginning in 1991 includes fare subsidies formerly classified as "Other" Operating Funding.

**TABLE 52: Passenger Fares Summary**

YEAR (a)	PASSENGER FARES RECEIVED PER UNLINKED TRIP	ADULT BASE CASH FARE (b)		PER CENT OF SYSTEMS WITH (d)		
		HIGHEST	AVERAGE (c)	PEAK PERIOD SURCHARGES	TRANSFER SURCHARGES	ZONE OR DISTANCE SURCHARGES
1990	0.669	2.75	0.730	6.5	28.8	38.9
1991	0.704	6.00	0.823	5.5	24.2	39.4
1992	0.724	6.00	0.860	5.6	26.6	39.0
1993	0.773	6.00	0.860	5.6	26.6	39.0
1994	0.850	6.00	0.955	6.4	25.2	37.7
1995	0.876	7.00	0.992	6.5	23.8	36.9
1996	0.933	7.00	1.047	7.0	22.9	32.6
1997	0.888	7.00	1.058	7.0	22.9	32.6
1998	0.871	7.00	1.065	6.1	21.9	32.9
1999	0.903	4.00	1.087	6.5	26.8	35.0
2000	0.934	5.00	1.128	7.5	21.6	33.2
2001	0.921	7.00	1.194	7.0	20.1	32.4
2002	0.899	9.00	1.238	4.5	21.3	28.5
2003	0.970	10.00	1.327	5.4	20.4	29.1
2004	1.021	10.00	1.367	7.6	19.7	29.9
2005 P	NA	12.50	1.384	6.1	19.2	24.6

P = Preliminary

(a) Fiscal years for Passenger Fares Received per Unlinked Trip. All other data for calendar years.

(b) Lowest base fare is \$0.00 (free).

(c) Unweighted average of adult base cash fares; excludes surcharges; each transit agency counted equally.

(d) Per cents represent an approximately 300-transit-agency sample, not estimated for all transit agencies.

**TABLE 53: Examples of Cost of Riding Public Transportation**

COST	\$0.50 BASE FARE	\$1.00 BASE FARE	\$1.50 BASE FARE	\$2.00 BASE FARE	\$2.50 BASE FARE	\$3.00 BASE FARE
<b>BASE ANNUAL COST (472 TRIPS)</b>						
No discounted fare media used	236.00	472.00	708.00	944.00	1,180.00	1,416.00
Monthly passes with 20% discount used	188.80	377.60	566.40	755.20	944.00	1,132.80
<b>ADDITIONAL ANNUAL COSTS (including 20% discount)</b>						
\$.25 surcharge to transfer to another vehicle	94.40	94.40	94.40	94.40	94.40	94.40
\$2.00 zone/distance surcharge (\$.50 each for 4 zones)	755.20	755.20	755.20	755.20	755.20	755.20
\$.50 peak-hour surcharge	188.80	188.80	188.80	188.80	188.80	188.80
\$.25 surcharge for express service	94.40	94.40	94.40	94.40	94.40	94.40
\$2.00 per day parking surcharge	755.20	755.20	755.20	755.20	755.20	755.20
<b>TOTAL ANNUAL COST (including 20% discount)</b>						
Including transfer surcharge only	283.20	472.00	660.80	849.60	1,038.40	1,227.20
Including distance surcharge only	944.00	1,132.80	1,321.60	1,510.40	1,699.20	1,888.00
Including distance and peak-hour surcharges	1,132.80	1,321.60	1,510.40	1,699.20	1,888.00	2,076.80
Including distance and express surcharges	1,038.40	1,227.20	1,416.00	1,604.80	1,793.60	1,982.40
Including distance and parking surcharges	1,699.20	1,888.00	2,076.80	2,265.60	2,454.40	2,643.20

Annual number of trips estimate based on 365 days minus 52 Saturdays minus 52 Sundays minus 7 holidays minus 10 days vacation minus 8 days sick leave times 2 trips per day.

**TABLE 54: Automobile Driving Costs, 2005**

CATEGORY	SMALL CAR	MIDSIZE CAR	LARGE CAR	SPORT UTILITY VEHICLE	VAN
<b>OPERATING COSTS (cents per mile)</b>					
Gasoline & Oil	6.9	8.5	9.3	10.8	8.9
Maintenance	4.7	5.8	5.4	5.3	5.7
Tires	0.5	0.7	0.5	0.9	0.6
<b>SUBTOTAL</b>	12.1	15.0	15.2	17.0	15.2
<b>OWNERSHIP COSTS (cost per year, dollars)</b>					
Insurance	1,456	1,195	1,212	1,398	1,130
License, registration, taxes	333	390	445	435	389
Depreciation (15,000 miles annually)	2,985	4,005	4,647	4,300	3,755
Finance charge (10% down; loan @ 6%/5 yrs.)	553	740	925	891	739
<b>SUBTOTAL</b>	5,327	6,330	7,229	7,024	6,013
<b>DEPRECIATION ADJUSTMENTS (dollars)</b>					
(mileage under 15,000 miles annually)	-550	-925	-1,175	-950	-925
(mileage over 15,000 miles annually)	650	950	1,175	925	950
<b>TOTAL ANNUAL COST (dollars)</b>					
10,000 miles per year	5,987	6,905	7,574	7,774	6,608
15,000 miles per year	7,142	8,580	9,509	9,574	8,293
20,000 miles per year	8,397	10,280	11,444	11,349	10,003

Source: American Automobile Association, *Your Driving Costs, 2005 Edition*. Data for a popular model of each type listed assuming ownership of more than 5 years or 75,000 miles before replacement.

# MODE DATA

## Bus and Trolleybus

### *Highlights.....*

See National Totals on page 43.

The vast majority of scheduled fixed-route transit service operates in bus and trolleybus modes on streets and highways using rubber-tired vehicles. In all but about 50 metropolitan areas and small cities, bus service is the only fixed-route transit service available.

A **mode** is a system for carrying transit passengers described by specific right-of-way, technology and operational features. Major fixed-route roadway modes are:

**Bus** mode uses vehicles powered by diesel, gasoline, battery or alternative fuel engines contained within the vehicle.

**Trolleybus** mode uses vehicles propelled by a motor drawing current from overhead wires via a connecting pole called a trolley from a central power source not on board the vehicle.

Only 4 transit agencies in the Boston, MA, Dayton, OH, San Francisco, CA, and Seattle, WA areas use trolleybus service. Although Southeastern Pennsylvania Transportation Authority in Philadelphia, PA reported trolleybus data for fiscal year 2003, all of these routes are now serviced using motor buses.

**Jitney** is a transit mode comprised of passenger cars or vans operating on fixed routes (sometimes with minor deviations) as demand warrants without fixed schedules or fixed stops. There is currently one jitney service in Laguna Beach, CA and a number of unofficial and often illegal jitneys are known to exist as well.

In Puerto Rico, there is a mode similar to jitney called a **publico**, which is comprised of passenger vans or small buses operating with fixed routes but no fixed schedules. Publicos are a privately owned and operated mass transit service which is market oriented and unsubsidized, but regulated through a public service commission, state, or local government. Publicos are operated under franchise agreements, fares are regulated by route, and there are special insurance requirements. Vehicle capacity varies from 8 to 24, and the vehicles may be owned or leased by the operator.

### Types of Service

**Local service**, where vehicles may stop every block or two along a route several miles long, is by far the most common type of bus service. Trolleybuses, unless bypass overhead wiring is available, cannot pass the trolleybus in front of them, and thus generally operate in local service only.

When limited to a small geographic area or to short-distance trips, local service is often called **circulator, feeder, neighborhood, trolley, or shuttle service**. Such routes, which often have a lower fare than regular local service, may operate in a loop and connect, often at a transfer center or rail station, to major routes for travel to more far-flung destinations. Examples are office park circulators, historic district routes, transit mall shuttles, rail feeder routes, and university campus loops.

**Express service** speeds up longer trips, especially in major metropolitan areas during heavily-patronized peak commuting hours, by operating long distances without stopping. Examples include park-and-ride routes between suburban parking lots and the central business district that operate on freeways, and express buses on major streets that operate local service on the outlying portions of a route until a certain point and then operate non-stop to the central business district.

**Limited-stop service** is a hybrid between local and express service, where the stops may be several blocks to a mile or more apart to speed up the trip.

**Bus rapid transit (BRT)** is a type of limited-stop service developed in the 1990s that relies on technology to help speed up the service. It can operate on exclusive transitways, high-occupancy-vehicle lanes, expressways, or ordinary streets. A BRT line combines intelligent transportation systems technology, priority for transit, rapid and convenient fare collection, and integration with land use policy in order to substantially upgrade bus system performance.



*This Massachusetts Bay Transit Authority BRT bus in Boston operates on an exclusive transitway, offering passengers an efficient means of travel.*

**TABLE 55: Bus and Trolleybus National Totals, Fiscal Year 2004**

	<b>BUS</b>	<b>TROLLEYBUS</b>
Agencies, Number of	1,500	4
Fares Collected, Passenger	\$4,546,503,000	\$55,342,000
Fare per Unlinked Trip, Average	\$0.75	\$0.52
Expense, Operating Total (a)	\$16,021,516,000	\$184,948,000
Salaries and Wages (b)	\$6,792,675,000	\$97,166,000
Fringe Benefits (b)	\$4,199,899,000	\$62,157,000
Services (b)	\$859,647,000	\$14,269,000
Fuel and Lubricants (b)	\$755,880,000	\$108,000
Materials and Supplies, Other (b)	\$943,550,000	\$7,001,000
Utilities (b)	\$191,616,000	\$3,489,000
Casualty and Liability (b)	\$444,634,000	\$4,056,000
Purchased Transportation (b) (c)	\$1,915,448,000	\$72,000
Other (b)	-\$81,832,000	-\$3,371,000
Vehicle Operations (c)	\$8,172,886,000	\$108,544,000
Vehicle Maintenance (c)	\$2,964,279,000	\$26,182,000
Non-vehicle Maintenance (c)	\$666,731,000	\$14,517,000
General Administration (c)	\$2,302,172,000	\$35,633,000
Expense, Capital Total	\$3,747,319,000	\$143,082,000
Rolling Stock	\$1,953,492,000	\$51,216,000
Facilities, Guideway, Stations, Admin. Buildings	\$1,213,098,000	\$84,236,000
Other	\$580,729,000	\$7,631,000
Trips, Unlinked Passenger, Annual	5,731,487,000	105,927,000
Miles, Passenger	21,376,973,000	173,205,000
Trip Length, Average (miles)	3.7	1.6
Miles, Vehicle Total	2,470,991,000	13,423,000
Miles, Vehicle Revenue	2,150,535,000	13,026,000
Hours, Vehicle Total	189,704,000	1,804,000
Hours, Vehicle Revenue	170,604,000	1,642,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	12.6	7.9
Revenue Vehicles Available for Maximum Service	81,033	597
Vehicles Operated at Maximum Service	64,904	483
Age, Average (years)	7.5	8.9
Air-conditioned	93.1%	16.3%
Lifts, Wheelchair	59.7%	83.7%
Ramps, Wheelchair	37.1%	7.6%
Accessible Only via Stations	0.1%	0.0%
Power Source, Diesel or Gasoline	80.9%	0.0%
Power Source, Alternative	19.1%	100.0%
Rehabilitated	5.2%	2.7%
Employees, Operating	212,122	1,928
Vehicle Operations	143,493	1,406
Vehicle Maintenance	37,553	263
Non-vehicle Maintenance	7,681	129
General Administration	23,395	130
Employees, Capital	3,519	20
Diesel Fuel Consumed (gallons)	550,466,000	0
Other Fuel Consumed (gallons)	131,356,000	0
Electricity Consumed (kwh)	2,399,000	67,679,000

(a) Sum of (b) lines OR sum of (c) lines.

## Types of Vehicles

A **transit bus** has front and center doors, normally with a rear-mounted engine, low-back seating, and without luggage compartments or restroom facilities for use in frequent-stop service. (By far the most common bus used for local service, these buses are mostly 40 feet long, but 35-foot and 30-foot versions are also common in smaller cities and on lightly-patronized routes.)



Connecticut Transit operates this 40-foot-long bus, the most common, in both Hartford and Stamford Connecticut. Most buses are high-floor models having two or three steps, but this is a low-floor model without steps.

A **trolleybus (trolley coach, trackless trolley)** is a rubber-tired electrically powered passenger vehicle operating on city streets drawing power from overhead lines with trolleys.



This trolleybus is a rubber-tired vehicle without an engine that is powered from two electric wires. Only five cities have them; this one is operated by the King County Department of Transportation in Seattle, Washington.

A **dual-mode trolleybus** is a trolleybus that also has an on-board power source that can be used in emergencies or to extend the route beyond the end of the overhead wires. Only one city (Seattle) operates such vehicles.

An **articulated bus** or **articulated trolleybus** is an extra-long (54 to 60 feet) vehicle with two connected passenger compartments. The rear body section is connected to the main body by a joint mechanism that allows the vehicle to bend when in operation for sharp turns and curves and yet have a continuous interior. (Such vehicles are normally operated in local service in the very largest metropolitan areas on extremely heavily-patronized routes.)



In the largest cities, some routes require 60-foot long articulated buses that bend in the middle; this one is operated by the Los Angeles Metropolitan Transit Authority in California.

An **intercity bus** has a front door only, separate luggage compartments, and usually restroom facilities and high-backed seats for use in high-speed long-distance service. (Such buses are 40 or 45 feet in length and are used by the largest transit agencies and private companies on express and limited-stop routes.)

A **suburban bus** has front doors only, normally high-backed seats, but no luggage compartments or restroom facilities for use in longer-distance service with relatively few stops. (Such 40 and 45-foot buses are used in the same manner as intercity buses.)

A **trolley replica bus (trolley)** has an exterior (and usually an interior) designed to look like a streetcar from the early 1900s. (These specialized buses are generally shorter--22 to 32 feet--and are used mostly on historic district and tourist-oriented circulator or shuttle services.)



Often called a trolley, this vehicle that imitates an old streetcar is called a "trolley replica bus." Its data are included with bus statistics since it is rubber-tired and has an on-board power source. This is a Sioux Falls Transit vehicle in City of Sioux Falls, South Dakota.

A **double decked bus** is a high-capacity bus having two levels of seating, one over the other, connected by one or more stairways. Total bus height is usually 13 to 14.5 feet, and typical passenger seating capacity ranges from 40 to 80 people. Although common in older cities of Europe and Asia where street capacity is very limited, only a handful of such buses are used in U.S. transit service.



This "Deuce" is a double-decked bus operated by the Regional Transportation Commission of Southern Nevada in Las Vegas, Nevada.

A **van** is a vehicle having a typical seating capacity of 5 to 15 passengers and classified as a van by vehicle manufacturers. A **modified van (body-on-chassis van)** is a standard van that has undergone some structural changes, usually made to increase its size and particularly its height. The seating capacity of modified vans is approximately 9 to 18 passengers.



A typical body-on-chassis van operated by the Metropolitan Atlanta Rapid Transit Authority in Atlanta, Georgia. These types of vehicles are mostly used for paratransit services, but also for lightly-patronized fixed route service.

**Automobiles** such as station wagons and **sport utility vehicles** may also be used on extremely lightly-patronized routes in remote rural areas.

Although most service is operated with new vehicles, a small proportion is operated by rehabilitated vehicles.

**Rehabilitation** is the rebuilding of revenue vehicles to original specifications of the manufacturer. **Rebuilding** may include some new components but has less emphasis on structural restoration than would be the case in a **remanufacturing** operation, focusing on mechanical systems and vehicle interiors.

**TABLE 56: New Bus and Trolleybus Market By Type, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	2,995	100.0%	2,399	100.0%	7,143	100.0%
2-level	53	1.8%	5	0.2%	0	0.0%
Articulated bus (55'-60')	327	10.9%	89	3.7%	554	7.8%
Intercity (35'-45')	44	1.5%	34	1.4%	277	3.9%
40' Transit (37'6"-42'5")	1,880	62.8%	1,723	71.8%	5,013	70.2%
35' Transit (32'6"-37'5")	236	7.9%	108	4.5%	614	8.6%
30' Transit (27'6"-32'5")	157	5.2%	345	14.4%	345	4.8%
Suburban (27'6"-45')	61	2.0%	10	0.4%	71	1.0%
Trolley replica (all lengths)	34	1.1%	16	0.7%	87	1.2%
Small vehicle (<27'6")	203	6.8%	69	2.9%	182	2.5%

Source: APTA survey. Bus data are about 70% and trolleybus data 100% of national totals.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

**TABLE 57: Bus Power Sources**

YEAR	CLEAN DIESEL	CNG & BLENDS	DIESEL	ELEC-TRIC & OTHER	GASO-LINE	LNG & BLENDS	PRO-PANE	OTHER (a)	TOTAL
1993	-	225	50,595	18	257	80	28	422	51,625
1994	-	353	49,716	31	283	287	28	640	51,338
1995	-	678	50,158	37	243	357	31	683	52,187
1996	-	1,074	48,050	41	234	347	29	569	50,344
1997	-	1,562	47,177	24	230	347	25	476	49,841
1998	-	2,148	47,174	33	250	346	12	484	50,447
1999	-	2,494	47,745	41	194	707	9	418	51,608
2000	-	3,072	49,249	68	197	772	25	81	53,464
2001	-	4,137	49,743	80	204	842	57	127	55,190
2002	-	5,497	50,894	113	203	879	87	142	57,815
2003	-	6,178	49,755	146	241	928	90	123	57,461
2004	-	6,035	48,545	181	231	974	101	174	56,241
2005	-	6,873	47,332	606	292	1,044	295	208	56,650
2006 P	618	7,657	46,266	961	336	1,092	310	376	57,616
2006 % of Total	1.1%	13.3%	80.3%	1.7%	0.6%	1.9%	0.5%	0.7%	100.0%

Source: APTA surveys of about 300 transit agencies including about 70% of all buses.

(a) Includes bio/soy fuel, biodiesel, hydrogen, methanol, ethanol and various blends.

**TABLE 58: New Bus and Trolleybus Market by Power Source, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	2,995	100.0%	2,399	100.0%	7,143	100.0%
Clean Diesel	36	1.2%	104	4.3%	173	2.4%
Compressed natural gas	638	21.3%	218	9.1%	859	12.0%
Diesel	1,819	60.7%	1,602	66.8%	3,602	50.4%
Dual-power	362	12.1%	351	14.6%	540	7.6%
Electric catenary	0	0.0%	38	1.6%	0	0.0%
Gasoline	65	2.2%	22	0.9%	22	0.3%
Liquefied natural gas	0	0.0%	10	0.4%	69	1.0%
Propane	24	0.8%	0	0.0%	0	0.0%
All others	51	1.7%	54	2.3%	193	2.7%
Undecided	0	0.0%	0	0.0%	1,685	23.6%

Source: APTA survey. Bus data are about 70% and trolleybus data 100% of national totals.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

**TABLE 59: Bus and Trolleybus Fuel and Power Consumption, Thousands of Gallons (a)**

FISCAL YEAR	DIESEL	COMPRESSED NATURAL GAS	GASOLINE	LIQUIDIFIED NATURAL GAS	PROPANE	OTHER	TOTAL NON-DIESEL	ELECTRICITY (KWH) (000)
1994	565,064	3,109	2,103	1,138	249	12,740	19,339	102,945
1995	563,767	10,011	2,297	1,737	269	11,967	26,281	100,659
1996	577,680	11,527	1,844	2,278	591	11,600	27,840	69,130
1997	597,636	20,050	2,722	3,276	1,033	8,705	35,807	78,561
1998	606,631	32,620	1,959	3,075	879	4,976	43,509	74,352
1999	618,024	39,861	1,402	5,251	659	2,711	49,884	75,920
2000	635,160	50,449	1,315	10,464	723	821	63,772	78,062
2001	587,184	60,917	1,472	11,670	1,171	763	75,993	75,108
2002	558,990	77,787	1,264	16,762	1,830	1,831	106,625	75,901
2003	535,963	94,881	1,119	14,231	1,843	1,867	113,940	71,126
2004 P	550,466	106,702	1,799	16,452	1,727	4,675	131,356	70,079

P = Preliminary

(a) Data includes passenger vehicles; excludes non-passenger-vehicle and non-vehicle consumption.

## Accessibility

A **station** is a public transportation passenger facility.

An **accessible station** is a station which provides ready access, and does not have physical barriers that prohibit and/or restrict access by individuals with disabilities, including individuals who use wheelchairs.

An **accessible vehicle** is a public transportation revenue vehicle that does not restrict access, is usable, and provides allocated space and/or priority seating for individuals who use wheelchairs.

Some **bus rapid transit (BRT) services** implemented in recent years utilize stations with high-level platforms, which require high-floor buses with no steps and a level floor. Hybrid buses that also have a lift would be necessary when BRT buses serve both stations with high-floor platforms and regular bus stops.



*The Regional Transportation Commission of Southern Nevada operates this optically-guided bus in Las Vegas. It approaches within 2 inches of the same-level platform for quick and easy access.*

**High-floor vehicles** require riders to climb 2 or 3 steps from street level. Such vehicles accommodate wheelchair-bound and other riders who cannot climb steps by using a retractable lift (usually formed from the vehicle's steps) that raises and lowers persons and equipment between street and floor levels.

**Low-floor vehicles** eliminate the steps at the front entrance and have a level floor in the front part of the vehicle. Only a short retractable ramp is necessary to accommodate wheelchairs and those who cannot bridge the gap between vehicle and street level. Some models have a level floor the entire length of the vehicle and no steps at the rear door.

Both types may have a "kneeling" feature that lowers the entire front end of the vehicle several inches to aid in boarding.

Prior to the implementation of the Americans with Disabilities Act in 1990, almost all vehicles were high-floor. Now the majority of new vehicles are low-floor.



*This Pace bus, which services the suburbs of Chicago, Illinois, has a low floor and is equipped with a ramp.*

**TABLE 60: Bus and Trolleybus Accessibility, 2006**

	BUS	PER CENT	TROLLEYBUS	PER CENT
Total	57,616	100.0%	712	100.0%
Via on-board lift	34,395	59.7%	596	83.7%
Via on-board ramp	21,383	37.1%	54	7.6%
Non-accessible	1,838	3.2%	62	8.7%

Source: APTA survey. Bus data are about 70% and trolleybus data 100% of national totals.

**TABLE 61: New Bus and Trolleybus Market by Accessibility, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	2,995	100.0%	2,399	100.0%	7,143	100.0%
Via on-board lift	480	16.0%	288	12.0%	1,338	18.7%
Via on-board ramp	2,512	83.9%	2,111	88.0%	5,780	80.9%
Non-accessible	3	0.1%	0	0.0%	25	0.3%

Source: APTA survey. Bus data are about 70% and trolleybus data 100% of national totals.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

## Fixed Guideways

A **Fixed Guideway** is a mass transit facility using and occupying a separate right-of-way or rail for the exclusive use of mass transportation and other high-occupancy vehicles; or using a fixed catenary system useable by other forms of transportation.

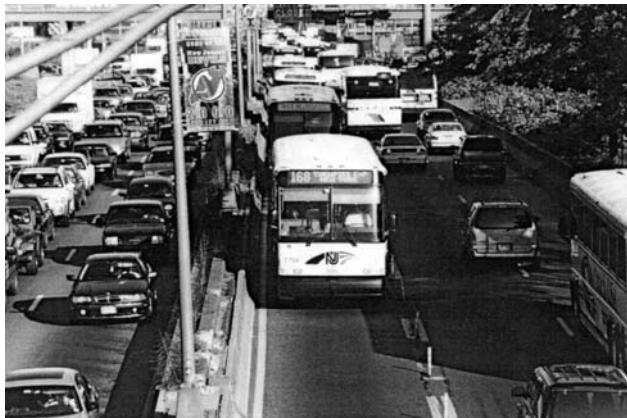
Fixed guideways are generally located only in large metropolitan areas where traffic congestion is worst. These rights of way may be restricted solely to buses and trolleybuses, or may be shared with vanpools, carpools, motorcycles, alternate-fuel vehicles, toll-paying vehicles, and emergency vehicles based on state law and local ordinance. They may also be reversible, operating toward the central business district in the morning and away from it in the afternoon.

Although almost exclusively located on the surface, short stretches of some of these roadways are in tunnels or elevated. In addition, as bus rapid transit lines are implemented, more surface streets are being converted to fixed guideways through restricted access and technology that allows buses to preempt or expedite traffic light cycles.

There are three types:

A **Busway (Bus Lane)** is a roadway reserved for buses only. It may be a grade-separated or controlled-access roadway.

A **Contraflow Lane** is a reserved lane for buses on which the direction of bus traffic is opposite to the flow of traffic on the other lanes.



New Jersey Transit operates many buses on the contraflow lane approaching the Lincoln Tunnel to New York City.

A **High-Occupancy Vehicle (HOV) Facility (Commuter Lane or Transitway)** Exclusive or controlled access right-of-way that is restricted to high occupancy vehicles (buses, passenger vans and cars carrying one or more passengers) for a portion or all of a day.

Fixed guideways are also classified by the time they are in effect.

**Controlled Access Right-of-Way**--Lanes restricted for at least a portion of the day for use by transit vehicles and/or other high occupancy vehicles. Use of controlled access lanes may also be permitted for vehicles preparing to turn. The restriction must be sufficiently enforced so that 95 percent of vehicles using the lanes during the restricted period are authorized to use them.

**Exclusive Right-of-Way**--Roadway or other right-of-way reserved at all times for transit use and/or other high occupancy vehicles. The restriction must be sufficiently enforced so that 95 percent of vehicles using the right-of-way are authorized to use it.

## Transit Centers

Many transit agencies utilize transit centers, where riders can easily transfer from one vehicle to another.

A **transit center** is a fixed location where passengers interchange from one route or vehicle to another that has significant infrastructure such as a waiting room, benches, restrooms, sales outlet, ticket or pass vending machines, and/or other services.



Many cities have built special transfer centers in their central business districts to make transferring between buses as easy as possible. Many also operate timed-transfer service, in which all routes converge on the center at the same time and depart simultaneously to minimize waiting time. This Regional Transportation Commission of Washoe County center is in Reno, Nevada.

A **bus station** is a type of transit center. A location that has very little infrastructure--such as shelters and/or benches at a street corner where two routes intersect--would be a **transfer point**.

A **park and ride facility** is a parking garage and/or lot used for parking passengers' automobiles, either free or for a fee, while they use transit agency facilities. Park-and-ride facilities are generally established as collector sites for rail or bus service. Park-and-ride facilities may also serve as collector sites for vanpools and carpools, and as transit centers.

A **kiss and ride facility** is a part of a park and ride facility where commuters who are passengers in non-transit vehicles are dropped off to board a mass transportation vehicle.

Such centers may be located at rail stations, intercity bus terminals, or ferry terminals, and may be shared with other transit agencies. Small and medium-sized agencies might have one center in the central business district; larger agencies might have several additional centers scattered throughout the suburbs at major shopping malls or park-and-ride lots. In some instances, a timed-transfer system is used, in which all buses converge on the transit center at a specific time to exchange passengers.

## Operating Practices

Schedules are determined by a combination of factors. Normally they are a function of demand, which is why 2-3 times as many buses are operated during peak commuting hours than at other times. Many routes in larger cities, in fact only operate during the peak hours.

The type of vehicle used on a route is determined by the maximum number of riders expected at any point on the route, with the result that at other points along the route--especially the beginning and ending points--the bus may be largely empty. Also, because of the peak-directional flow nature of commuting, where most traffic goes towards the central business district in the morning and away from it in the afternoon, buses operating in the opposite direction necessarily carry few people, but must be operated to get back out to the end of the line for the next peak-direction trip.

## Largest Bus and Trolleybus Transit Agencies

Each variable chosen to rank agencies by size will yield a different list. Vehicles vary widely in size; transfers result in double-counting some passengers; expenses are largely determined by wage rate and benefit levels; employee counts may include numerous part-time employees and do not include contract personnel. For these reasons, listed are the top 20 transit systems based on two categories: Unlinked Passenger Trips and Passenger Miles.

**TABLE 62: 20 Largest Bus and Trolleybus Agencies Ranked by Unlinked Passenger Trips, Fiscal Year 2004 (Thousands)**

	TRANSIT AGENCY	URBANIZED AREA (Primary City)	PASSENGER TRIPS
1	MTA New York City Transit (NYCT)	New York, NY	893,390.1
2	Los Angeles County Metropolitan Transportation Auth	Los Angeles, CA	329,875.3
3	Chicago Transit Authority (CTA)	Chicago, IL	294,030.8
4	Southeastern Pennsylvania Transportation Auth	Philadelphia, PA	187,530.0
5	San Francisco Municipal Railway (MUNI) Bus Trolleybus	San Francisco, CA	162,687.5 87,471.7 75,215.8
6	New Jersey Transit Corporation (NJ TRANSIT)	New York, NY	149,619.6
7	Washington Metropolitan Area Transit Authority	Washington, DC	146,010.3
8	Massachusetts Bay Transportation Authority Bus Trolleybus	Boston, MA	119,262.0 115,628.1 3,633.9
9	King County DOT - King County Metro Bus Trolleybus	Seattle, WA	98,250.2 75,472.7 22,777.5
10	Metropolitan Transit Authority of Harris County	Houston, TX	87,940.5
11	Maryland Transit Administration (MTA)	Baltimore, MD	86,818.8
12	Miami-Dade Transit (MDT)	Miami, FL	75,137.4
13	Denver Regional Transportation District (RTD)	Denver, CO	71,338.1
14	GTJC (Transit Alliance)	New York, NY	69,759.3
15	Orange County Transportation Authority (OCTA)	Los Angeles, CA	67,551.9
16	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	66,762.0
17	Tri-County Metropolitan Trp District of Oregon	Portland, OR	65,938.5
18	Alameda-Contra Costa Transit District	San Francisco, CA	64,663.4
19	City and County of Honolulu Dept of Trp Services	Honolulu, HI	61,298.0
20	Dallas Area Rapid Transit (DART)	Dallas, TX	58,901.9

Source: Federal Transit Administration National Transit Database

**TABLE 63: 20 Largest Bus and Trolleybus Agencies Ranked by Passenger Miles, Fiscal Year 2004 (Thousands)**

	TRANSIT AGENCY	URBANIZED AREA (Primary City)	PASSENGER MILES
1	MTA New York City Transit (NYCT)	New York, NY	1,574,309.0
2	Los Angeles County Metropolitan Transportation Auth	Los Angeles, CA	1,269,311.4
3	New Jersey Transit Corporation (NJ TRANSIT)	New York, NY	930,478.0
4	Chicago Transit Authority (CTA)	Chicago, IL	788,665.6
5	Southeastern Pennsylvania Transportation Authority	Philadelphia, PA	543,311.5
6	Metropolitan Transit Authority of Harris County, Texas	Houston, TX	504,902.6
7	King County DOT - King County Metro Bus Trolleybus	Seattle, WA	499,999.9 457,908.2 42,091.8
8	Washington Metropolitan Area Transit Authority	Washington, DC	436,436.7
9	Maryland Transit Administration (MTA)	Baltimore, MD	349,765.8
10	Denver Regional Transportation District (RTD)	Denver, CO	344,959.9
11	San Francisco Municipal Railway (MUNI) Bus Trolleybus	San Francisco, CA	302,066.3 190,034.6 112,031.7
12	Miami-Dade Transit (MDT)	Miami, FL	296,888.7
13	Massachusetts Bay Transportation Authority (MBTA) Bus Trolleybus	Boston, MA	290,675.0 282,327.4 8,347.5
14	Metropolitan Atlanta Rapid Transit Authority (MARTA)	Atlanta, GA	277,747.0
15	Orange County Transportation Authority (OCTA)	Los Angeles, CA	268,845.2
16	City and County of Honolulu DOT Services	Honolulu, HI	267,648.5
17	Port Authority of Allegheny County (Port Authority)	Pittsburgh, PA	250,052.9
18	Tri-County Metropolitan Trp District of Oregon	Portland, OR	241,598.4
19	Academy Lines, Inc.	New York, NY	226,488.7
20	Metro Transit	Minneapolis, MN	221,435.4

Source: Federal Transit Administration National Transit Database

**TABLE 64: 100 Largest Bus and Trolleybus Agencies Service and Usage Data, Fiscal Year 2004 (Thousands) (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Albany, NY	Capital District Transportation Authority (CDTA)	6,673.2	532.7	11,620.4	52,363.8
Albuquerque, NM	ABQ Ride	3,477.0	219.6	7,638.3	19,631.7
Atlanta, GA	Metropolitan Atlanta Rapid Transit Authority (MARTA)	25,646.1	2,058.0	66,762.0	277,747.0
Austin, TX	Capital Metropolitan Transportation Authority (CMTA)	13,829.1	1,105.0	35,062.6	112,921.8
Bakersfield, CA	Golden Empire Transit District (GET)	3,440.6	267.0	6,915.5	30,151.6
Baltimore, MD	Maryland Transit Administration (MTA)	23,672.9	1,894.8	86,818.8	349,765.8
Boston, MA	Massachusetts Bay Transportation Authority (MBTA) Bus Trolleybus	24,964.7 24,298.4 666.4	2,309.8 2,239.7 70.1	119,262.0 115,628.1 3,633.9	290,675.0 282,327.4 8,347.5
Buffalo, NY	Niagara Frontier Transportation Authority (NFT Metro)	8,441.6	752.3	17,590.5	55,707.6
Champaign, IL	Champaign-Urbana Mass Transit District (C-U MTD)	2,555.6	219.2	10,299.0	26,311.9
Charlotte, NC	Charlotte Area Transit System (CATS)	10,079.4	722.7	18,423.5	75,834.3
Chicago, IL	Chicago Transit Authority (CTA)	66,572.0	6,782.8	294,030.8	788,665.6
Chicago, IL	Pace - Suburban Bus Division (PACE)	20,507.3	1,447.3	31,441.0	205,155.9
Cincinnati, OH	Southwest Ohio Regional Transit Authority	11,291.3	858.6	23,052.4	133,255.7
Cleveland, OH	The Greater Cleveland Regional Transit Authority	20,471.9	1,634.1	47,631.2	176,055.3
Columbus, OH	Central Ohio Transit Authority (COTA)	8,270.6	649.0	14,544.0	48,218.2
Dallas, TX	Dallas Area Rapid Transit (DART)	28,666.6	2,018.2	58,901.9	218,457.1
Dayton, OH	Greater Dayton Regional Transit Authority (GDRTA) Bus Trolleybus	7,250.4 5,635.9 1,614.5	517.5 368.8 148.7	12,459.4 8,159.2 4,300.2	43,947.4 33,203.7 10,743.7
Denver, CO	Denver Regional Transportation District (RTD)	39,028.6	2,613.4	71,338.1	344,959.9
Detroit, MI	City of Detroit Department of Transportation (DDOT)	17,846.7	1,681.6	34,513.9	166,079.5
Detroit, MI	Suburban Mobility Authority for Regional Transportation	11,637.3	690.9	8,984.1	68,822.6
El Paso, TX	Mass Transit Department - City of El Paso (Sun Metro)	6,673.9	533.5	10,376.9	59,487.6
Eugene, OR	Lane Transit District (LTD)	3,581.2	276.2	8,207.8	32,313.6
Fresno, CA	Fresno Area Express (FAX)	3,957.5	302.2	10,854.9	30,868.3
Gainesville, FL	Gainesville Regional Transit System (RTS)	2,661.6	233.2	8,066.3	27,029.9
Hartford, CT	Connecticut Transit - Hartford Division (CTTransit)	6,183.3	463.9	12,789.6	47,817.1
Honolulu, HI	City and County of Honolulu DOT Services (DTS)	16,530.8	1,218.5	61,298.0	267,648.5
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	44,097.5	3,051.1	87,940.5	504,902.6

**TABLE 64: 100 Largest Bus and Trolleybus Agencies Service and Usage Data, Fiscal Year 2004  
(Thousands) (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Indianapolis, IN	Indianapolis and Marion County Public Transportation	6,179.0	429.4	8,966.1	44,155.4
Jacksonville, FL	Jacksonville Transportation Authority (JTA)	9,928.7	605.2	8,934.8	58,814.8
Kansas City, MO	Kansas City Area Transportation Authority (KCATA)	7,909.9	512.7	12,936.1	46,542.1
Lansing, MI	Capital Area Transportation Authority (CATA)	2,976.9	219.9	8,278.2	22,965.1
Las Vegas, NV	Regional Trp Commission of Southern Nevada (RTC)	14,772.3	1,230.5	50,581.2	180,514.0
Los Angeles, CA	City of Los Angeles Department of Transportation	7,199.7	630.9	28,368.9	77,876.6
Los Angeles, CA	Foothill Transit	12,501.3	760.3	15,044.1	100,130.7
Los Angeles, CA	LACMTA - Small Operators	4,599.3	407.0	9,407.5	20,739.6
Los Angeles, CA	Long Beach Transit (LBT)	7,382.5	685.4	26,775.5	70,687.3
Los Angeles, CA	Los Angeles County Metropolitan Transportation Auth	82,498.3	6,622.1	329,875.3	1,269,311.4
Los Angeles, CA	Montebello Bus Lines (MBL)	2,915.0	254.7	11,078.7	33,943.6
Los Angeles, CA	Orange County Transportation Authority (OCTA)	23,305.7	1,807.9	67,551.9	268,845.2
Los Angeles, CA	Santa Monica's Big Blue Bus (Big Blue Bus)	4,994.6	454.3	20,629.9	72,930.3
Louisville, KY	Transit Authority of River City (TARC)	7,538.9	593.8	15,171.4	53,848.9
Madison, WI	Madison Metro Transit System	4,675.2	365.8	10,962.3	33,579.8
Memphis, TN	Memphis Area Transit Authority (MATA)	7,059.5	445.1	11,452.2	68,717.6
Miami, FL	Board of County Commissioners, PalmTran, Inc.	6,900.3	415.6	7,654.3	47,040.8
Miami, FL	Broward County Mass Transit Division (BCT)	15,314.9	1,140.6	38,256.6	162,009.6
Miami, FL	Miami-Dade Transit (MDT)	31,100.5	2,535.8	75,137.4	296,888.7
Milwaukee, WI	Milwaukee County Transit System (MCTS)	17,543.4	1,351.6	53,742.8	154,727.5
Minneapolis, MN	Metro Transit	21,841.5	1,702.4	53,962.7	221,435.4
Minneapolis, MN	Metropolitan Council	5,949.4	354.0	8,429.5	63,006.4
New Haven, CT	Connecticut Transit - New Haven Division (CTTransit)	3,094.9	271.0	7,710.8	26,360.2
New Orleans, LA	New Orleans Regional Transit Authority (NORTA)	10,655.1	748.3	38,202.4	92,252.3
New York, NY	Academy Lines, Inc.	8,456.4	384.1	17,088.5	226,488.7
New York, NY	GTJC (Transit Alliance)	12,476.2	1,377.0	69,759.3	193,741.3
New York, NY	Liberty Lines Transit, Inc. (LLT)	8,014.4	700.3	34,462.1	161,672.3
New York, NY	Metropolitan Suburban Bus Authority	9,917.7	807.5	30,241.4	140,445.0
New York, NY	MTA New York City Transit (NYCT)	103,665.1	13,105.3	893,390.1	1,574,309.0
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	74,146.4	4,931.5	149,619.6	930,478.0
New York, NY	Orange-Newark-Elizabeth, Inc. (Coach USA)	2,280.7	252.4	12,581.9	40,778.3
New York, NY	Queens Surface Corporation (QSC)	5,553.6	564.6	25,691.1	109,573.6
New York, NY	Trans-Hudson Express	2,950.2	263.3	7,360.7	50,382.8
Orlando, FL	Central Florida Regional Transportation Authority (LYNX)	13,006.7	926.7	22,677.8	132,008.8
Philadelphia, PA	Delaware Transit Corporation (DTC)	5,677.2	401.2	7,792.6	42,565.8
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	40,133.9	3,871.4	187,530.0	543,311.5
Phoenix, AZ	City of Phoenix Public Transit Department (Valley Metro)	17,535.0	1,153.0	40,813.7	156,559.1
Pittsburgh, PA	Port Authority of Allegheny County (Port Authority)	28,049.9	2,170.5	58,297.8	250,052.9
Portland, OR	Clark County Public Transportation Benefit Area Auth	3,846.2	244.0	6,804.6	37,945.9
Portland, OR	Tri-County Metropolitan Transportation District of Oregon	24,013.6	1,887.6	65,938.5	241,598.4
Providence, RI	Rhode Island Public Transit Authority (RIPTA)	7,470.3	605.2	16,439.2	71,771.2
Reno, NV	Regional Transportation Commission of Washoe County	3,158.2	250.9	7,534.6	24,274.4
Richmond, VA	Greater Richmond Transit Company	4,787.6	424.5	11,345.7	32,293.9
Riverside, CA	Omnitrans (OMNI)	8,378.8	635.0	15,723.4	76,072.8
Riverside, CA	Riverside Transit Agency (RTA)	7,325.9	471.3	7,362.2	42,237.6
Rochester, NY	Regional Transit Service, Inc. and Lift Line, Inc.	5,909.0	474.9	12,648.3	44,438.2
Sacramento, CA	Sacramento Regional Transit District (Sacramento RT)	8,566.5	696.7	19,446.8	67,700.9
Salt Lake City, UT	Utah Transit Authority (UTA)	16,717.5	893.3	15,266.0	60,113.4
San Antonio, TX	VIA Metropolitan Transit (VIA)	17,750.9	1,328.3	42,213.1	153,459.9
San Diego, CA	MTS Contract Services (MCS)	9,511.6	760.8	17,887.4	67,735.1
San Diego, CA	North San Diego County Transit District (NCTD)	6,954.7	490.8	10,330.8	57,652.7
San Diego, CA	San Diego Metropolitan Transit System (MTS)	10,348.0	851.4	25,545.4	96,676.0
San Francisco, CA	Alameda-Contra Costa Transit District (AC Transit)	22,364.2	1,914.5	64,663.4	212,664.5
San Francisco, CA	Golden Gate Bridge, Highway and Transportation District	6,082.9	381.1	8,033.8	92,605.8
San Francisco, CA	San Francisco Municipal Railway (MUNI)	20,251.2	2,544.4	162,687.5	302,066.3
	Bus	13,032.4	1,488.4	87,471.7	190,034.6
	Trolleybus	7,218.8	1,056.0	75,215.8	112,031.7
San Francisco, CA	San Mateo County Transit District (SamTrans)	7,381.3	664.5	15,145.7	80,642.5
San Jose, CA	Santa Clara Valley Transportation Authority (VTA)	16,007.5	1,275.5	33,372.1	137,777.3
San Juan, PR	Metropolitan Bus Authority (MBA)	6,924.3	772.1	30,736.8	105,884.9
Santa Barbara, CA	Santa Barbara Metropolitan Transit District (SBMTD)	2,351.3	178.0	7,004.1	26,580.2
Seattle, WA	King County DOT - King County Metro	46,381.7	2,776.5	98,250.2	499,999.9
	Bus	42,855.6	2,409.0	75,472.7	457,908.2
	Trolleybus	3,526.1	367.5	22,777.5	42,091.8
Seattle, WA	Pierce County Transportation Benefit Area Authority	9,957.2	662.2	13,992.7	94,637.5
Seattle, WA	Snohomish County Transportation Benefit Area Corp	9,702.0	529.8	9,130.8	100,054.6
Spokane, WA	Spokane Transit Authority (STA)	4,839.1	355.0	7,740.4	34,500.0

**TABLE 64: 100 Largest Bus and Trolleybus Agencies Service and Usage Data, Fiscal Year 2004  
(Thousands) (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Springfield, MA	Pioneer Valley Transit Authority (PVTA)	4,548.6	366.2	10,644.0	37,805.3
St. Louis, MO	Bi-State Development Agency (METRO)	16,679.5	1,262.4	30,325.1	120,504.0
Syracuse, NY	CNY Centro, Inc. (CNY Centro)	3,563.0	296.1	9,502.9	26,520.3
Tampa, FL	Hillsborough Area Regional Transit Authority (HART)	6,396.7	514.9	9,818.6	49,069.0
Tampa, FL	Pinellas Suncoast Transit Authority (PSTA)	7,956.1	548.1	9,701.1	47,241.1
Tucson, AZ	City of Tucson (COT)	6,942.5	536.9	16,511.0	59,638.6
Virginia Beach, VA	Transportation District Commission of Hampton Roads	9,491.7	724.3	19,198.7	82,108.7
Washington, DC	Fairfax Connector Bus System (Fairfax Connector)	5,965.6	380.4	7,990.8	53,117.1
Washington, DC	Ride-On Montgomery County Transit	11,481.6	877.3	23,175.4	73,070.6
Washington, DC	Washington Metropolitan Area Transit Authority	38,901.3	3,458.7	146,010.3	436,436.7

Source: Federal Transit Administration National Transit Database

(a) Largest based on number of unlinked passenger trips.

**TABLE 65: 100 Largest Bus and Trolleybus Agencies Vehicle and Financial Data, Fiscal Year 2004 (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Albany, NY	Capital District Transportation Authority (CDTA)	244	13,516.3	9,215.6	41,606.2
Albuquerque, NM	ABQ Ride	134	11,264.2	2,847.9	20,297.9
Atlanta, GA	Metropolitan Atlanta Rapid Transit Authority (MARTA)	683	37,766.2	48,732.9	165,459.0
Austin, TX	Capital Metropolitan Transportation Authority (CMTA)	411	20,215.8	3,613.8	89,175.8
Bakersfield, CA	Golden Empire Transit District (GET)	79	6,008.0	3,604.4	15,519.4
Baltimore, MD	Maryland Transit Administration (MTA)	930	27,462.9	69,013.9	202,552.0
Boston, MA	Massachusetts Bay Transportation Authority (MBTA) Bus	1,202	279,842.6	57,808.8	260,345.4
	Trolleybus	1,162	188,241.3	56,132.1	248,207.8
		40	91,601.3	1,676.7	12,137.6
Buffalo, NY	Niagara Frontier Transportation Authority (NFT Metro)	321	2,484.1	18,266.7	64,610.6
Champaign, IL	Champaign-Urbana Mass Transit District (C-U MTD)	90	1,901.1	4,087.7	15,823.3
Charlotte, NC	Charlotte Area Transit System (CATS)	313	46,366.1	9,400.8	54,344.4
Chicago, IL	Chicago Transit Authority (CTA)	2,049	117,349.9	238,085.9	669,763.1
Chicago, IL	Pace - Suburban Bus Division (PACE)	736	14,820.2	31,137.2	114,806.0
Cincinnati, OH	Southwest Ohio Regional Transit Authority	432	10,916.5	19,433.0	63,318.3
Cleveland, OH	The Greater Cleveland Regional Transit Authority	544	33,161.8	30,604.8	159,993.4
Columbus, OH	Central Ohio Transit Authority (COTA)	276	11,417.0	11,501.4	65,656.4
Dallas, TX	Dallas Area Rapid Transit (DART)	1,047	42,649.4	24,566.0	187,612.8
Dayton, OH	Greater Dayton Regional Transit Authority (GDRTA) Bus	158	8,381.3	5,559.9	42,935.7
	Trolleybus	115	5,685.5	4,321.8	31,607.6
		43	2,695.8	1,238.1	11,328.1
Denver, CO	Denver Regional Transportation District (RTD)	1,099	10,324.6	47,091.2	221,113.0
Detroit, MI	City of Detroit Department of Transportation (DDOT)	570	29,433.1	23,842.8	182,807.8
Detroit, MI	Suburban Mobility Authority for Regional Transportation	293	22,578.8	8,367.9	71,880.2
EI Paso, TX	Mass Transit Department - City of EI Paso (Sun Metro)	174	4,008.1	6,282.0	31,285.1
Eugene, OR	Lane Transit District (LTD)	105	11,251.7	4,435.6	23,306.0
Fresno, CA	Fresno Area Express (FAX)	118	9,570.9	7,332.2	26,739.1
Gainesville, FL	Gainesville Regional Transit System (RTS)	105	277.0	6,325.2	12,609.0
Hartford, CT	Connecticut Transit - Hartford Division (CTTransit)	232	21,477.3	10,085.4	36,468.8
Honolulu, HI	City and County of Honolulu DOT Services (DTS)	525	35,286.5	33,652.2	118,938.5
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	1,434	151,195.8	49,450.6	244,638.8
Indianapolis, IN	Indianapolis and Marion County Public Transportation	157	1,723.6	7,236.3	30,784.3
Jacksonville, FL	Jacksonville Transportation Authority (JTA)	184	9,235.4	6,251.7	43,454.5
Kansas City, MO	Kansas City Area Transportation Authority (KCATA)	260	12,934.0	6,805.0	49,437.4
Lansing, MI	Capital Area Transportation Authority (CATA)	96	3,843.8	2,442.8	20,637.9
Las Vegas, NV	Regional Trp Commission of Southern Nevada (RTC)	293	19,732.0	36,348.9	77,450.1
Los Angeles, CA	City of Los Angeles Department of Transportation	273	2,106.2	6,683.4	35,288.6
Los Angeles, CA	Foothill Transit	302	21,333.5	14,233.3	52,728.7
Los Angeles, CA	LACMTA - Small Operators	185	2,789.5	2,393.8	21,645.2
Los Angeles, CA	Long Beach Transit (LBT)	221	8,126.8	12,515.5	53,135.9
Los Angeles, CA	Los Angeles County Metropolitan Transportation Auth	2,570	214,913.5	185,561.6	715,559.6
Los Angeles, CA	Montebello Bus Lines (MBL)	77	2,225.6	6,479.6	17,635.8
Los Angeles, CA	Orange County Transportation Authority (OCTA)	643	29,441.7	39,839.0	167,856.5
Los Angeles, CA	Santa Monica's Big Blue Bus (Big Blue Bus)	180	9,944.6	9,761.9	37,905.6
Louisville, KY	Transit Authority of River City (TARC)	214	528.9	76.8	42,527.1
Madison, WI	Madison Metro Transit System	198	8,464.0	6,295.6	31,732.2
Memphis, TN	Memphis Area Transit Authority (MATA)	228	8,599.5	8,466.3	39,210.5
Miami, FL	Board of County Commissioners, PalmTran, Inc.	147	2,572.3	5,525.8	34,182.9

**TABLE 65: 100 Largest Bus and Trolleybus Agencies Vehicle and Financial Data, Fiscal Year 2004 (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Miami, FL	Broward County Mass Transit Division (BCT)	354	9,670.5	17,164.6	82,717.6
Miami, FL	Miami-Dade Transit (MDT)	819	73,897.8	58,075.0	229,427.3
Milwaukee, WI	Milwaukee County Transit System (MCTS)	475	8,273.3	37,813.2	119,265.6
Minneapolis, MN	Metro Transit	852	51,408.9	48,785.7	186,088.9
Minneapolis, MN	Metropolitan Council	250	18,325.9	5,859.5	36,159.2
New Haven, CT	Connecticut Transit - New Haven Division (CTTransit)	108	22,022.0	5,679.8	21,339.7
New Orleans, LA	New Orleans Regional Transit Authority (NORTA)	367	899.5	28,325.1	90,494.1
New York, NY	Academy Lines, Inc.	307	0.0	25,140.4	34,815.1
New York, NY	GTJC (Transit Alliance)	677	0.0	66,252.3	170,358.5
New York, NY	Liberty Lines Transit, Inc. (LLT)	354	0.0	41,070.0	76,786.9
New York, NY	Metropolitan Suburban Bus Authority	333	24,393.4	37,049.3	96,040.9
New York, NY	MTA New York City Transit (NYCT)	4,509	175,435.8	705,568.9	1,678,850.9
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	2,287	83,582.8	241,946.2	587,419.0
New York, NY	Orange-Newark-Elizabeth, Inc. (Coach USA)	72	0.0	13,020.3	12,673.2
New York, NY	Queens Surface Corporation (QSC)	312	0.0	30,576.0	86,292.7
New York, NY	Trans-Hudson Express	108	0.0	11,413.0	10,239.3
Orlando, FL	Central Florida Regional Transportation Authority (LYNX)	230	21,950.9	14,201.8	62,436.6
Philadelphia, PA	Delaware Transit Corporation (DTC)	209	3,730.5	5,514.3	30,968.1
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	1,356	81,616.9	147,710.2	400,670.1
Phoenix, AZ	City of Phoenix Public Transit Department (Valley Metro)	490	19,725.6	22,163.5	107,315.3
Pittsburgh, PA	Port Authority of Allegheny County (Port Authority)	1,066	37,045.9	56,352.3	219,056.5
Portland, OR	Clark County Public Transportation Benefit Area Authority	112	5,048.4	3,876.0	19,724.1
Portland, OR	Tri-County Metropolitan Transportation District of Oregon	652	12,893.2	37,208.1	183,577.4
Providence, RI	Rhode Island Public Transit Authority (RIPTA)	222	5,503.5	13,930.8	64,183.8
Reno, NV	Regional Transportation Commission of Washoe County	69	5,989.2	5,967.2	18,998.5
Richmond, VA	Greater Richmond Transit Company	176	11,100.7	7,331.2	27,091.1
Riverside, CA	Omnitrans (OMNI)	176	16,277.5	11,097.9	52,569.1
Riverside, CA	Riverside Transit Agency (RTA)	152	4,672.1	5,366.6	31,606.8
Rochester, NY	Regional Transit Service, Inc. and Lift Line, Inc.	256	2,183.4	13,583.0	43,443.3
Sacramento, CA	Sacramento Regional Transit District (Sacramento RT)	274	26,718.0	14,150.1	74,544.7
Salt Lake City, UT	Utah Transit Authority (UTA)	512	14,560.7	12,091.0	87,535.8
San Antonio, TX	VIA Metropolitan Transit (VIA)	428	6,825.3	13,735.6	81,712.5
San Diego, CA	MTS Contract Services (MCS)	255	0.0	15,428.1	40,402.6
San Diego, CA	North San Diego County Transit District (NCTD)	174	13,174.1	8,753.4	39,660.4
San Diego, CA	San Diego Metropolitan Transit System (MTS)	275	0.0	22,500.7	75,525.8
San Francisco, CA	Alameda-Contra Costa Transit District (AC Transit)	674	52,445.0	44,700.2	225,462.6
San Francisco, CA	Golden Gate Bridge, Highway and Transportation District	208	27,834.8	14,327.7	59,375.0
San Francisco, CA	San Francisco Municipal Railway (MUNI)	861	43,892.2	77,312.2	285,001.9
	Bus	366	34,875.6	35,744.0	118,680.8
	Trolleybus	495	9,016.6	41,568.2	166,321.1
San Francisco, CA	San Mateo County Transit District (SamTrans)	363	32,712.3	14,159.5	78,506.3
San Jose, CA	Santa Clara Valley Transportation Authority (VTA)	546	26,639.7	26,257.6	184,718.2
San Juan, PR	Metropolitan Bus Authority (MBA)	266	4,087.3	5,949.5	54,707.4
Santa Barbara, CA	Santa Barbara Metropolitan Transit District (SBMTD)	97	8,670.7	6,175.0	15,249.8
Seattle, WA	King County DOT - King County Metro	1,398	231,989.8	73,596.6	352,096.0
	Bus	1,250	218,080.3	56,913.4	309,420.3
	Trolleybus	148	13,909.5	16,683.2	42,675.7
Seattle, WA	Pierce County Transportation Benefit Area Authority	285	16,907.8	7,358.4	59,821.7
Seattle, WA	Snohomish County Transportation Benefit Area Corp	288	6,048.5	12,153.2	64,649.0
Spokane, WA	Spokane Transit Authority (STA)	124	425.8	5,343.2	27,336.7
Springfield, MA	Pioneer Valley Transit Authority (PVTA)	187	3,490.0	4,955.3	21,728.8
St. Louis, MO	Bi-State Development Agency (METRO)	477	16,280.7	21,234.2	110,332.3
Syracuse, NY	CNY Centro, Inc. (CNY Centro)	154	2,523.5	6,797.8	28,268.7
Tampa, FL	Hillsborough Area Regional Transit Authority (HART)	184	5,351.4	7,428.3	38,412.5
Tampa, FL	Pinellas Suncoast Transit Authority (PSTA)	176	18,237.5	8,060.5	35,486.4
Tucson, AZ	City of Tucson (COT)	189	2,613.2	7,475.7	36,124.9
Virginia Beach, VA	Transportation District Commission of Hampton Roads	349	20,009.2	13,780.6	45,373.1
Washington, DC	Fairfax Connector Bus System (Fairfax Connector)	170	672.0	3,216.6	25,399.7
Washington, DC	Ride-On Montgomery County Transit	337	7,417.1	8,808.4	76,536.8
Washington, DC	Washington Metropolitan Area Transit Authority	1,437	46,937.2	96,633.2	395,725.5

Source: Federal Transit Administration National Transit Database

(a) Largest based on number of unlinked passenger trips.

# Paratransit

## Highlights.....

See National Totals on page 55.

Paratransit is the most widely available transit service, with over 5,000 transit agencies providing it. However, most of those agencies limit the service to persons with disabilities, their attendants and companions, and older Americans.

**Paratransit** (also called **demand response** or **dial-a-ride**) is comprised of passenger cars, vans or small buses operating in response to calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick up the passengers and transport them to their destinations. A paratransit operation is characterized by the following: (a) The vehicles do not operate over a fixed route or on a fixed schedule except, perhaps, on a temporary basis to satisfy a special need; and (b) typically, the vehicle may be dispatched to pick up several passengers at different pick-up points before taking them to their respective destinations and may even be interrupted en route to these destinations to pick up other passengers. The following types of operations fall under the above definitions provided they are not on a scheduled fixed route basis: many origins-many destinations, many origins-one destination, one origin-many destinations, and one origin-one destination.

## Types of Service

**Complementary paratransit service** is required by law for those persons with disabilities and others not able to use fixed-route service. Generally it must operate in the same areas and during the same hours. The fare is limited to twice the fixed-route fare. Service may be the fixed-route bus agency or by a completely separate agency.

**General paratransit service** is not required by law and is not subject to the restrictions imposed on complementary paratransit service. The transit agency may limit the service to certain people or it may be available to anyone. Some such services operate during late-night and weekend hours in place of fixed-route services.

**User-side subsidy service** is a transportation arrangement where the rider's cost of transportation is partially subsidized by the transit agency. The user is the rider who pays a reduced fare. A typical user-side subsidy program is operated through taxicab operators or a brokerage system which may charge a per-ride fee for handling the rider's transportation arrangements.

## Types of Vehicles

Almost all paratransit service is operated with vehicles less than 30 feet in length since generally only a few people are on board the vehicle at any time. Despite their small size, most such vehicles have two doors similar to transit buses, though the rear door (used for wheelchairs) may actually open behind the vehicle instead of towards the side.

A **van** has a typical seating capacity of 5 to 15 passengers and is classified as a van by vehicle manufacturers. A **modified van (body-on-chassis van)** is a standard van that has undergone some structural changes by another company, usually made to increase its size and particularly its height. The seating capacity of modified vans is approximately 9 to 18 passengers.

Small transit buses (see the Bus section for definitions) are also used by a small number of transit agencies.



Paratransit service uses vans and minibuses because very few people are on board at one time. This vehicle is part of the Omnitran fleet, serving the San Bernardino Valley in California.

**TABLE 66: Paratransit National Totals, Fiscal Year 2004**

Agencies, Number of	5,960
Fares Collected, Passenger	\$253,539,000
Fare per Unlinked Trip, Average	\$2.17
Expense, Operating Total (a)	\$2,523,937,000
Salaries and Wages (b)	\$437,637,000
Fringe Benefits (b)	\$204,344,000
Services (b)	\$104,401,000
Fuel and Lubricants (b)	\$54,681,000
Materials and Supplies, Other (b)	\$43,139,000
Utilities (b)	\$12,939,000
Casualty and Liability (b)	\$49,459,000
Purchased Transportation (b) (c)	\$1,596,661,000
Other (b)	\$20,677,000
Vehicle Operations (c)	\$607,720,000
Vehicle Maintenance (c)	\$131,635,000
Non-vehicle Maintenance (c)	\$27,956,000
General Administration (c)	\$159,965,000
Expense, Capital Total	\$243,939,000
Rolling Stock	\$130,538,000
Facilities, Stations, Administrative Buildings	\$81,742,000
Other	\$31,659,000
Trips, Unlinked Passenger, Annual	113,856,000
Miles, Passenger	962,355,000
Trip Length, Average (miles)	8.5
Miles, Vehicle Total	889,479,000
Miles, Vehicle Revenue	767,262,000
Hours, Vehicle Total	61,482,000
Hours, Vehicle Revenue	53,116,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	14.4
Revenue Vehicles Available for Maximum Service	37,078
Vehicles Operated at Maximum Service	30,409
Age, Average (years)	3.9
Air-conditioned	98.8%
Lifts, Wheelchair	85.0%
Ramps, Wheelchair	7.9%
Accessible Only via Stations	0.0%
Power Source, Diesel or Gasoline	93.7%
Power Source, Alternative	6.3%
Rehabilitated	1.1%
Employees, Operating	43,642
Vehicle Operations	34,603
Vehicle Maintenance	3,599
Non-vehicle Maintenance	766
General Administration	4,674
Employees, Capital	27
Diesel Fuel Consumed (gallons)	72,971,000
Other Fuel Consumed (gallons)	27,524,000
Electricity Consumed (kwh)	0

(a) Sum of (b) lines OR sum of (c) lines.

**TABLE 67: New Paratransit Vehicle Market by Type, 2005-2010**

CATEGORY	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	1,697	100.0%	1,236	100.0%	4,823	100.0%
Transit (27'6"-33'0")	16	0.9%	20	1.6%	16	0.3%
Small vehicle (<27'6")	1,678	98.9%	1,216	98.4%	4,795	99.4%
Suburban (27'6"-33'0")	3	0.2%	0	0.0%	12	0.2%

Source: APTA survey. Data are about 30% of national total. CAUTION: The small sample represents primarily larger urban areas; inclusion of rural and small urban areas might produce significantly different results.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

**TABLE 68: New Paratransit Vehicle Market by Power Source, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	1,697	100.0%	1,236	100.0%	4,823	100.0%
Biodiesel	3	0.2%	0	0.0%	47	1.0%
Clean Diesel	29	1.7%	0	0.0%	120	2.5%
Compressed natural gas	1	0.1%	0	0.0%	70	1.5%
Diesel fuel	934	55.0%	533	43.1%	2,863	59.4%
Diesel and electric	0	0.0%	0	0.0%	4	0.1%
Gasoline	717	42.3%	703	56.9%	1,316	27.3%
Propane	13	0.8%	0	0.0%	0	0.0%
Undecided	0	0.0%	0	0.0%	403	8.4%

Source: APTA survey. Data are about 30% of national total. CAUTION: The small sample represents primarily larger urban areas; inclusion of rural and small urban areas might produce significantly different results.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

**TABLE 69: Paratransit Fuel Consumption, Thousands of Gallons (a)**

FISCAL YEAR	DIESEL	COMPRESSED NATURAL GAS	GASOLINE	LIQUIFIED NATURAL GAS	PROPANE	OTHER	TOTAL NON-DIESEL
1994	29,949	1,726	39,868	311	1,599	21	43,525
1995	28,958	729	38,190	499	3,360	19	42,797
1996	30,923	3,565	37,202	584	4,640	6	45,997
1997	32,020	3,854	35,684	754	4,112	11	44,415
1998	38,725	4,647	29,508	2,256	5,749	32	42,192
1999	43,202	4,502	26,750	2,421	4,941	9	38,623
2000	48,088	4,311	23,911	2,103	4,261	0	34,586
2001	54,898	5,267	20,286	2,095	3,529	38	31,215
2002	61,569	3,231	17,360	1,737	3,783	311	26,422
2003	69,505	5,173	16,547	1,563	3,705	295	27,282
2004 P	72,971	5,095	16,715	850	3,927	936	27,524

P = Preliminary

(a) Data includes passenger vehicles; excludes non-passenger-vehicle and non-vehicle consumption.

## Accessibility

An **accessible vehicle** is a public transportation revenue vehicle that is usable and provides allocated space and/or priority seating for individuals who use wheelchairs.

**High-floor vans** require the rider to climb 2 or 3 steps from street level. Such vans accommodate people who use wheelchairs and other riders who cannot climb steps by using a retractable lift that raises and lowers persons and equipment between street and van floor levels.

**Low-floor vans** have a level floor in the entire passenger-seating area. Only a short retractable ramp is necessary to accommodate wheelchairs and those who cannot bridge the gap between van and street level.



*Wheelchair lift operating on a Pierce Transit van in Tacoma, Washington.*

**TABLE 70: Paratransit Accessibility, 2006**

	VEHICLES	PER CENT
Total	11,970	100.0%
Via on-board lift	10,178	85.0%
Via on-board ramp	942	7.9%
Non-accessible	850	7.1%

Source: APTA survey. Data are about 30% national total.

CAUTION: The small sample represents primarily larger urban areas; inclusion of rural and small urban areas might produce significantly different results. Most non-accessible vehicles are automobiles or unmodified vans.



*Minnesota's St. Cloud Metropolitan Transit Commission is one of many agencies operating low-floor paratransit vans.*

**TABLE 71: New Paratransit Vehicle Market by Accessibility, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	1,697	100.0%	1,236	100.0%	4,823	100.0%
Via on-board lift	1,350	79.6%	816	66.0%	3,844	79.7%
Via on-board ramp	116	6.8%	125	10.1%	59	1.2%
Non-accessible	231	13.6%	295	23.9%	920	19.1%

Source: APTA survey. Data are about 30% of national total. CAUTION: The small sample represents primarily larger urban areas; inclusion of rural and small urban areas might produce significantly different results.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

### Largest Paratransit Agencies

Each variable chosen to rank agencies by size will yield a different list. Vehicles vary widely in size; transfers result in double-counting some passengers; expenses are largely determined by wage rate and benefit levels; employee counts may include numerous part-time employees and do not include contract personnel. For these reasons, listed are the top 20 transit systems based on two categories: Unlinked Passenger Trips and Passenger Miles.

**TABLE 72: 20 Largest Paratransit Transit Agencies Ranked by Unlinked Passenger Trips, Fiscal Year 2004 (Thousands)**

	TRANSIT AGENCY	URBANIZED AREA (Primary City)	PASSENGER TRIPS
1	Access Services Incorporated (ASI)	Los Angeles, CA	2,339.5
2	Chicago Transit Authority (CTA)	Chicago, IL	2,003.5
3	Access Transportation Systems, Inc. (ACCESS)	Pittsburgh, PA	1,834.1
4	King County Department of Transportation - King County Metro	Seattle, WA	1,750.7
5	Southeastern Pennsylvania Transportation Authority (SEPTA)	Philadelphia, PA	1,634.5
6	Pace - Suburban Bus Division (PACE)	Chicago, IL	1,513.5
7	Metropolitan Transit Authority of Harris County, Texas (Metro)	Houston, TX	1,502.6
8	MTA New York City Transit (NYCT)	New York, NY	1,476.2
9	City of Los Angeles Department of Transportation (LADOT)	Los Angeles, CA	1,344.3
10	Broward County Mass Transit Division (BCT)	Miami, FL	1,326.4
11	Massachusetts Bay Transportation Authority (MBTA)	Boston, MA	1,309.4
12	San Francisco Paratransit (ATC)	San Francisco, CA	1,305.7
13	Advanced Transportation Solutions, LLC (ATS)	Miami, FL	1,288.3
14	Metro Mobility	Minneapolis, MN	1,154.0
15	Washington Metropolitan Area Transit Authority (WMATA)	Washington, DC	1,112.4
16	Orange County Transportation Authority (OCTA)	Los Angeles, CA	1,084.9
17	LACMTA - Small Operators	Los Angeles, CA	1,073.3
18	Milwaukee County Transit System (MCTS)	Milwaukee, WI	1,003.9
19	VIA Metropolitan Transit (VIA)	San Antonio, TX	996.5
20	New Jersey Transit Corporation (NJ TRANSIT)	New York, NY	994.8

Source: Federal Transit Administration National Transit Database

**TABLE 73: 20 Largest Paratransit Transit Agencies Ranked by Passenger Miles, Fiscal Year 2004 (Thousands)**

	TRANSIT AGENCY	URBANIZED AREA (Primary City)	PASSENGER MILES
1	Access Services Incorporated (ASI)	Los Angeles, CA	27,432.1
2	Advanced Transportation Solutions, LLC (ATS)	Miami, FL	17,562.1
3	Metropolitan Transit Authority of Harris County, Texas (Metro)	Houston, TX	16,996.1
4	Massachusetts Bay Transportation Authority (MBTA)	Boston, MA	16,801.2
5	MTA New York City Transit (NYCT)	New York, NY	16,313.8
6	Chicago Transit Authority (CTA)	Chicago, IL	16,125.8
7	Metro Mobility	Minneapolis, MN	12,887.1
8	King County Department of Transportation - King County Metro	Seattle, WA	12,475.8
9	Washington Metropolitan Area Transit Authority (WMATA)	Washington, DC	12,269.3
10	Access Transportation Systems, Inc. (ACCESS)	Pittsburgh, PA	12,249.5
11	Southeastern Pennsylvania Transportation Authority (SEPTA)	Philadelphia, PA	11,172.5
12	Pace - Suburban Bus Division (PACE)	Chicago, IL	10,916.5
13	Broward County Mass Transit Division (BCT)	Miami, FL	10,876.4
14	VIA Metropolitan Transit (VIA)	San Antonio, TX	10,874.0
15	Pee Dee Regional Transportation Authority (PDRTA)	Florence, SC	10,242.7
16	ATC / Vancom (ATC)	Dallas, TX	10,067.4
17	Orange County Transportation Authority (OCTA)	Los Angeles, CA	9,905.6
18	Space Coast Area Transit (SCAT)	Palm Bay, FL	9,184.4
19	City and County of Honolulu Department of Transportation Services	Honolulu, HI	9,019.0
20	Tri-County Metropolitan Transportation District of Oregon (TriMet)	Portland, OR	8,497.5

Source: Federal Transit Administration National Transit Database

**TABLE 74: 75 Largest Paratransit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands) (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Allentown, PA	Lehigh and Northampton Transportation Authority	3,704.5	191.9	486.2	3,938.4
Atlanta, GA	Metropolitan Atlanta Rapid Transit Authority (MARTA)	3,675.8	205.5	306.5	3,164.3
Austin, TX	Capital Metropolitan Transportation Authority (CMTA)	2,902.1	209.3	407.2	3,623.3
Baltimore, MD	Maryland Transit Administration (MTA)	4,204.6	295.7	623.3	4,889.4
Barnstable Town, MA	Cape Cod Regional Transit Authority (CCRTA)	2,362.2	136.9	313.7	1,954.1
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	10,385.4	809.4	1,309.4	16,801.2
Bremerton, WA	Kitsap Transit	2,044.0	124.1	463.1	3,102.8
Chicago, IL	Chicago Transit Authority (CTA)	11,583.0	1,074.0	2,003.5	16,125.8
Chicago, IL	Pace - Suburban Bus Division (PACE)	7,997.7	552.6	1,513.5	10,916.5
Cleveland, OH	Laketran	2,530.6	137.6	366.9	3,505.3
Cleveland, OH	The Greater Cleveland Regional Transit Authority	2,638.0	195.1	393.5	2,562.7
Dallas, TX	ATC / Vancom (ATC)	6,875.9	418.5	653.6	10,067.4
Dallas, TX	Fort Worth Transportation Authority (The T)	3,102.1	143.4	315.9	3,180.1
Daytona Beach, FL	County of Volusia, dba: VOTRAN (VOTRAN)	2,463.9	170.1	315.6	3,097.2
Denver, CO	Denver Regional Transportation District (RTD)	6,334.2	452.2	805.6	6,941.8
Detroit, MI	Suburban Mobility Authority for Regional Transportation	3,236.8	233.8	764.7	4,722.3
El Paso, TX	Mass Transit Department - City of El Paso (Sun Metro)	2,243.5	130.8	290.4	2,752.0
Flint, MI	Mass Transportation Authority (MTA)	4,085.1	231.7	534.6	5,896.9
Florence, SC	Pee Dee Regional Transportation Authority (PDRTA)	3,125.6	124.9	515.8	10,242.7
Grand Rapids, MI	Interurban Transit Partnership (The Rapid)	2,298.2	153.2	403.0	4,069.9
Hartford, CT	Greater Hartford Transit District (GHTD)	2,540.7	237.3	491.0	3,376.5
Honolulu, HI	City and County of Honolulu DOT Services (DTS)	4,256.0	293.6	746.3	9,019.0
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	13,977.8	752.0	1,502.6	16,996.1
Indianapolis, IN	Indianapolis and Marion County Public Transportation	2,716.7	170.3	333.4	3,099.3
Jacksonville, FL	Jacksonville Transportation Authority (JTA)	5,842.4	314.1	569.4	6,683.9
Kansas City, MO	Kansas City Area Transportation Authority (KCATA)	2,155.1	108.2	382.4	2,603.9
Lancaster, PA	Red Rose Transit Authority (RRTA)	1,644.1	109.8	360.4	3,259.1
Lansing, MI	Capital Area Transportation Authority (CATA)	2,222.1	149.5	410.1	2,947.1
Las Vegas, NV	Regional Trp Commission of Southern Nevada (RTC)	5,412.3	364.8	713.5	8,082.7
Leominster, MA	Montachusett Regional Transit Authority (MART)	1,741.6	127.0	364.6	3,209.1
Los Angeles, CA	Access Services Incorporated (ASI)	24,421.6	1,236.8	2,339.5	27,432.1
Los Angeles, CA	City of Los Angeles Department of Transportation	4,635.2	312.5	1,344.3	5,227.9
Los Angeles, CA	LACMTA - Small Operators	3,358.4	292.8	1,073.3	3,997.5
Los Angeles, CA	Orange County Transportation Authority (OCTA)	8,601.3	577.2	1,084.9	9,905.6
Louisville, KY	Transit Authority of River City (TARC)	3,052.2	212.0	351.8	3,417.7

**TABLE 74: 75 Largest Paratransit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands) (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Miami, FL	Advanced Transportation Solutions, LLC (ATS)	12,090.9	787.9	1,288.3	17,562.1
Miami, FL	Board of County Commissioners, PalmTran, Inc.	5,142.4	431.5	546.8	5,240.7
Miami, FL	Broward County Mass Transit Division (BCT)	10,411.5	882.2	1,326.4	10,876.4
Milwaukee, WI	Milwaukee County Transit System (MCTS)	4,839.1	343.6	1,003.9	6,377.2
Minneapolis, MN	Metro Mobility	9,031.3	566.6	1,154.0	12,887.1
Minneapolis, MN	Metropolitan Council	3,204.3	241.4	784.5	4,697.1
New Orleans, LA	New Orleans Regional Transit Authority (NORTA)	1,869.2	221.8	374.3	3,072.3
New York, NY	American Transit, Inc.	6,653.4	586.3	646.9	7,761.1
New York, NY	Atlantic Paratrans of NYC, Inc. (API)	7,172.4	594.3	514.3	7,260.3
New York, NY	Metropolitan Suburban Bus Authority	2,907.0	210.6	318.4	2,990.0
New York, NY	MTA New York City Transit (NYCT)	15,167.3	1,220.7	1,476.2	16,313.8
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	8,439.2	545.0	994.8	4,082.8
Orlando, FL	Central Florida Regional Transportation Authority	6,382.7	370.6	569.4	7,242.1
Palm Bay, FL	Space Coast Area Transit (SCAT)	2,024.7	129.0	520.1	9,184.4
Philadelphia, PA	Delaware Transit Corporation (DTC)	7,144.1	370.9	648.7	7,558.8
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	8,997.1	943.3	1,634.5	11,172.5
Phoenix, AZ	City of Phoenix Public Transit Department	4,441.9	313.7	523.5	4,292.8
Pittsburgh, PA	Access Transportation Systems, Inc. (ACCESS)	11,942.9	771.3	1,834.1	12,249.5
Port Huron, MI	Blue Water Area Transportation Commission	1,472.6	93.6	407.8	1,356.6
Portland, OR	Tri-County Metropolitan Trp District of Oregon (TriMet)	6,218.2	405.5	958.2	8,497.5
Providence, RI	Rhode Island Public Transit Authority (RIPTA)	4,040.8	304.1	730.0	6,724.7
Riverside, CA	Omnitrans (OMNI)	2,750.0	184.8	502.6	5,505.9
Sacramento, CA	Sacramento Regional Transit District (Sacramento RT)	2,623.3	167.5	281.1	2,322.2
Salt Lake City, UT	Utah Transit Authority (UTA)	4,239.3	280.5	504.4	6,353.2
San Antonio, TX	VIA Metropolitan Transit (VIA)	8,199.2	417.8	996.5	10,874.0
San Diego, CA	MTS Contract Services (MCS)	3,185.1	193.4	582.3	3,691.7
San Francisco, CA	ATC / Vancom	5,941.3	395.1	710.4	5,886.3
San Francisco, CA	San Francisco Paratransit (ATC)	4,992.5	391.2	1,305.7	8,336.4
San Francisco, CA	San Mateo County Transit District (SamTrans)	2,701.6	215.7	305.0	2,866.8
San Jose, CA	Santa Clara Valley Transportation Authority (VTA)	5,966.7	403.7	930.5	7,546.4
Seattle, WA	King County DOT - King County Metro	9,454.0	630.2	1,750.7	12,475.8
Seattle, WA	Pierce County Transportation Benefit Area Authority	2,436.2	155.9	428.7	3,855.2
Spokane, WA	Spokane Transit Authority (STA)	2,401.3	158.5	457.0	3,816.7
Springfield, MA	Pioneer Valley Transit Authority (PVTA)	3,029.8	227.6	407.4	2,915.8
St. Louis, MO	Bi-State Development Agency (METRO)	5,128.6	307.1	682.1	6,152.3
Tucson, AZ	City of Tucson (COT)	2,171.0	181.6	342.3	3,101.7
Washington, DC	Ride-On Montgomery County Transit	5,021.1	317.7	381.7	1,297.6
Washington, DC	Washington Metropolitan Area Transit Authority	11,030.4	698.4	1,112.4	12,269.3
Wichita, KS	Wichita Transit (WT)	1,900.1	100.9	355.2	1,731.3
Worcester, MA	Worcester Regional Transit Authority (WRTA)	1,502.3	107.2	269.6	1,681.0

Source: Federal Transit Administration National Transit Database

(a) Largest based on number of unlinked passenger trips

**TABLE 75: 75 Largest Paratransit Agencies Vehicle and Financial Data, Fiscal Year 2004 (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSES (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Allentown, PA	Lehigh and Northampton Transportation Authority	131	780.3	495.6	7,802.3
Atlanta, GA	Metropolitan Atlanta Rapid Transit Authority (MARTA)	110	1,294.6	403.5	10,094.4
Austin, TX	Capital Metropolitan Transportation Authority (CMTA)	88	11,998.4	430.6	20,790.6
Baltimore, MD	Maryland Transit Administration (MTA)	122	0.0	913.3	20,087.9
Barnstable Town, MA	Cape Cod Regional Transit Authority (CCRTA)	67	555.9	377.2	6,498.8
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	431	0.0	1,800.2	34,606.5
Bremerton, WA	Kitsap Transit	104	1,184.0	197.4	8,067.5
Chicago, IL	Chicago Transit Authority (CTA)	1,277	0.0	2,682.1	50,403.8
Chicago, IL	Pace - Suburban Bus Division (PACE)	435	2,773.5	9,139.6	27,188.8
Cleveland, OH	Laketran	90	1,315.9	367.2	6,925.3
Cleveland, OH	The Greater Cleveland Regional Transit Authority	99	2,677.7	276.4	16,992.8
Dallas, TX	ATC / Vancom (ATC)	190	0.0	1,452.4	15,713.5
Dallas, TX	Fort Worth Transportation Authority (The T)	71	2,131.5	717.8	7,745.4
Daytona Beach, FL	County of Volusia, dba: VOTRAN (VOTRAN)	95	638.1	2,544.6	5,784.0
Denver, CO	Denver Regional Transportation District (RTD)	273	879.2	970.7	24,391.1

**TABLE 75: 75 Largest Paratransit Agencies Vehicle and Financial Data, Fiscal Year 2004 (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSES (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Detroit, MI	Suburban Mobility Authority for Regional Transportation	156	1,874.3	1,099.6	17,969.1
El Paso, TX	Mass Transit Department - City of El Paso (Sun Metro)	99	25.2	286.2	7,659.5
Flint, MI	Mass Transportation Authority (MTA)	153	5,676.3	552.6	8,776.5
Florence, SC	Pee Dee Regional Transportation Authority (PDRTA)	129	12.5	3,664.7	4,912.0
Grand Rapids, MI	Interurban Transit Partnership (The Rapid)	110	660.4	572.4	5,972.9
Hartford, CT	Greater Hartford Transit District (GHTD)	151	1,157.0	300.9	9,517.9
Honolulu, HI	City and County of Honolulu DOT Services (DTS)	136	17,465.7	1,434.4	16,574.6
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	1,070	163.6	1,323.8	29,475.8
Indianapolis, IN	Indianapolis and Marion County Public Transportation	86	2,193.3	512.0	8,110.1
Jacksonville, FL	Jacksonville Transportation Authority (JTA)	129	13.3	12,312.7	17,841.8
Kansas City, MO	Kansas City Area Transportation Authority (KCATA)	146	0.0	475.1	6,132.4
Lancaster, PA	Red Rose Transit Authority (RRTA)	73	0.0	233.5	4,006.5
Lansing, MI	Capital Area Transportation Authority (CATA)	92	239.3	615.7	7,771.7
Las Vegas, NV	Regional Trp Commission of Southern Nevada (RTC)	194	5.8	939.1	22,074.5
Leominster, MA	Montachusett Regional Transit Authority (MART)	132	4,022.9	929.0	3,433.6
Los Angeles, CA	Access Services Incorporated (ASI)	571	2,652.8	3,664.4	63,278.7
Los Angeles, CA	City of Los Angeles Department of Transportation	197	370.8	822.2	14,646.7
Los Angeles, CA	LACMTA - Small Operators	205	333.4	690.0	15,847.6
Los Angeles, CA	Orange County Transportation Authority (OCTA)	268	2,398.6	2,917.3	28,119.4
Louisville, KY	Transit Authority of River City (TARC)	89	0.0	5,430.8	9,532.6
Miami, FL	Advanced Transportation Solutions, LLC (ATS)	290	0.0	3,240.7	30,947.3
Miami, FL	Board of County Commissioners, PalmTran, Inc.	335	0.0	902.6	13,353.0
Miami, FL	Broward County Mass Transit Division (BCT)	322	0.0	1,122.0	24,127.4
Milwaukee, WI	Milwaukee County Transit System (MCTS)	479	0.0	3,218.1	18,518.3
Minneapolis, MN	Metro Mobility	264	1,922.8	3,071.3	30,489.1
Minneapolis, MN	Metropolitan Council	202	381.3	1,323.7	12,201.3
New Orleans, LA	New Orleans Regional Transit Authority (NORTA)	115	4,973.8	234.5	11,489.6
New York, NY	American Transit, Inc.	230	0.0	1,343.9	26,630.6
New York, NY	Atlantic Paratrans of NYC, Inc. (API)	256	0.0	950.1	21,628.1
New York, NY	Metropolitan Suburban Bus Authority	86	1,120.4	990.9	9,837.4
New York, NY	MTA New York City Transit (NYCT)	572	0.0	3,318.3	157,808.2
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	294	885.6	939.8	36,218.9
Orlando, FL	Central Florida Regional Transportation Authority	159	13.4	689.4	14,677.9
Palm Bay, FL	Space Coast Area Transit (SCAT)	129	77.6	1,578.0	4,535.5
Philadelphia, PA	Delaware Transit Corporation (DTC)	201	4,474.6	926.3	24,286.7
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	425	2,775.3	5,031.6	42,442.5
Phoenix, AZ	City of Phoenix Public Transit Department	183	1,297.2	625.2	14,847.4
Pittsburgh, PA	Access Transportation Systems, Inc. (ACCESS)	457	0.0	6,979.7	29,738.5
Port Huron, MI	Blue Water Area Transportation Commission	127	836.9	1,781.0	4,686.4
Portland, OR	Tri-County Metropolitan Trp District of Oregon (TriMet)	254	181.7	112.3	22,047.6
Providence, RI	Rhode Island Public Transit Authority (RIPTA)	149	2,285.8	443.7	11,233.6
Riverside, CA	Omnitrans (OMNI)	101	629.0	977.8	7,963.5
Sacramento, CA	Sacramento Regional Transit District (Sacramento RT)	102	1,873.8	771.3	9,187.7
Salt Lake City, UT	Utah Transit Authority (UTA)	185	1,788.5	1,879.5	14,921.0
San Antonio, TX	VIA Metropolitan Transit (VIA)	226	23.3	1,178.1	19,405.5
San Diego, CA	MTS Contract Services (MCS)	126	0.0	1,736.2	9,482.6
San Francisco, CA	ATC / Vancom	199	0.0	1,571.2	24,572.2
San Francisco, CA	San Francisco Paratransit (ATC)	1,700	0.0	1,271.2	18,451.1
San Francisco, CA	San Mateo County Transit District (SamTrans)	115	13.2	407.4	10,536.2
San Jose, CA	Santa Clara Valley Transportation Authority (VTA)	296	0.0	2,345.3	34,255.6
Seattle, WA	King County DOT - King County Metro	468	2,559.1	718.8	44,555.7
Seattle, WA	Pierce County Transportation Benefit Area Authority	154	3,125.7	348.2	12,746.8
Spokane, WA	Spokane Transit Authority (STA)	101	1,596.4	192.0	8,425.9
Springfield, MA	Pioneer Valley Transit Authority (PVTA)	141	202.5	665.7	7,909.2
St. Louis, MO	Bi-State Development Agency (METRO)	101	3,586.9	2,831.7	19,556.2
Tucson, AZ	City of Tucson (COT)	101	6,209.2	309.2	8,761.6
Washington, DC	Ride-On Montgomery County Transit	104	0.0	272.7	4,803.1
Washington, DC	Washington Metropolitan Area Transit Authority	235	0.0	2,364.8	37,846.1
Wichita, KS	Wichita Transit (WT)	36	543.9	285.8	1,790.5
Worcester, MA	Worcester Regional Transit Authority (WRTA)	144	563.1	451.4	5,241.2

Source: Federal Transit Administration National Transit Database

(a) Largest based on number of unlinked passenger trips

# Ferryboat

## Highlights.....

See National Totals on page 62.

**Ferryboat** is a transit mode comprised of vessels carrying passengers and/or vehicles over a body of water, and that are generally steam or diesel-powered.

When at least one terminal is within an urbanized area, it is **urban ferryboat** service. Such service excludes international, rural, rural interstate, island, and urban park ferries.

Transit ferryboat service is provided in about 30 metropolitan areas and small cities, where offshore islands, bays, and wide rivers preclude any other type of service at a reasonable cost. In a few places, service may operate between two points on the same shore.

In a few far-northern areas, service does not operate in winter. Service may occasionally be curtailed during periods of heavy fog or severe storms for safety reasons. Ferry service is unique among public transit modes in that it is subject to U.S. Coast Guard operating and safety regulations.

## Types of Service

Most ferryboats operate non-stop over short distances in **local service**, but in a few cases, a stop may be made at an intervening island. A number of routes in the Boston, MA, New York, NY, Providence, RI, San Francisco, CA, and Seattle, WA areas are several miles long.

**Express service** may operate in peak-hours bypassing intervening islands. Alternatively, some trips may be operated by high-speed or passenger-only ferries compared to the regular ferry, which could be considered as express service of a sort.

## Fixed Guideways

By federal law, ferryboats are considered a form of fixed-guideway transit. Each trip may take a slightly different course due to water conditions, but the beginning and ending points are fixed.

## Types of Vehicles

A **ferryboat** is a vessel for carrying passengers and/or vehicles over a body of water. The vessel is generally a steam or diesel-powered conventional ferry vessel. It may also be a hovercraft, hydrofoil or other high speed vessel.

A wide range of boats are used in ferry service, but there are two basic types.

**Vehicle ferries** have at least one deck for vehicles, with additional decks for passengers. The largest are in the Seattle, WA area, and are over 460 feet long, accommodating 2,500 passengers and 218 vehicles. Such ferries are normally square-ended to allow vehicle access and egress.



PHOTO BY STEVE BROWN

*Washington State Ferries operates the nation's largest fleet of passenger-auto ferries on Puget Sound in the Seattle and Tacoma, Washington areas.*

**Passenger-only ferries** have only passenger decks, though they may also have space for bicycles. They can range from small boats about 50 feet long holding about 50 people up to the 310-foot long Staten Island ferries in New York, which can accommodate 6,000 people. Because they don't have vehicle decks, they need not be square-ended and may have pointed bows and side-loading. Catamaran (double hull) and hydrofoil (where the vehicle skims the surface of the water) styles may be used for high-speed services.



*This passenger-only ferry is operated by Golden Gate Bridge, Highway and Transportation District of San Francisco.*

**Water taxis** are very small passenger-only ferries (about 50 feet or less) that may operate in both fixed-route and on-demand service, depending on the time of day and patronage levels. They can load and unload very quickly and operate very frequently, sometimes to several different points around a harbor or along a river.

**TABLE 76: Urban Ferryboat National Totals, Fiscal Year 2004**

Agencies, Number of	47
Fares Collected, Passenger	\$111,442,000
Fare per Unlinked Trip, Average	\$1.69
Expense, Operating Total (a)	\$358,352,000
Salaries and Wages (b)	\$154,039,000
Fringe Benefits (b)	\$48,160,000
Services (b)	\$22,788,000
Fuel and Lubricants (b)	\$30,619,000
Materials and Supplies, Other(b)	\$26,204,000
Utilities (b)	\$3,801,000
Casualty and Liability (b)	\$11,844,000
Purchased Transportation (b) (c)	\$53,877,000
Other (b)	\$7,018,000
Vehicle Operations (c)	\$195,895,000
Vehicle Maintenance (c)	\$43,451,000
Non-vehicle Maintenance (c)	\$30,761,000
General Administration (c)	\$34,368,000
Expense, Capital Total	\$268,139,000
Rolling Stock	\$102,041,000
Facilities, Stations, Administrative Buildings	\$148,873,000
Other	\$17,225,000
Trips, Unlinked Passenger, Annual	64,865,000
Miles, Passenger	393,173,000
Trip Length, Average (miles)	6.1
Miles, Vehicle Total	4,074,000
Miles, Vehicle Revenue	3,983,000
Hours, Vehicle Total	480,000
Hours, Vehicle Revenue	473,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	8.4
Revenue Vehicles Available for Maximum Service	160
Vehicles Operated at Maximum Service	146
Age, Average (years)	22.9
Air-conditioned	22.4%
Lifts, Wheelchair	0.0%
Ramps, Wheelchair	32.8%
Accessible Only via Stations	10.4%
Power Source, Diesel or Gasoline	41.8%
Power Source, Alternative	58.2%
Rehabilitated	0.0%
Employees, Operating	5,862
Vehicle Operations	4,180
Vehicle Maintenance	413
Non-vehicle Maintenance	755
General Administration	514
Employees, Capital	108
Diesel Fuel Consumed (gallons)	35,120,000
Other Fuel Consumed (gallons)	0
Electricity Consumed (kwh)	0

(a) Sum of (b) lines OR sum of (c) lines.

## Power Sources and Fuel Consumption

Almost all ferries are powered by diesel, and because of their massive bulk, have relatively low fuel efficiency--about 0.07 miles per gallon in the year 2002. However, this is an average of widely varying sizes of boats with trips hindered by opposing currents.

## Operating Practices

The largest passenger-only ferries usually operate on 30-60 minute headways while smaller passenger-only ferries can operate more frequently. Multiple docks at the largest terminals allow frequencies as low as 10-15 minutes.

Water taxis, because of their very small size, may be able to operate every 5 minutes or so.

## Accessibility

A **station** is a public transportation passenger facility.

An **accessible station** is a station which provides ready access, and does not have physical barriers that prohibit and/or restrict access by individuals with disabilities, including individuals who use wheelchairs.

An **accessible vehicle** is a public transportation revenue vehicle that does not restrict access, is usable, and provides allocated space and/or priority seating for individuals who use wheelchairs.

Some ferries use floating docks that rise and fall with changing water levels. Where water levels are more

stable, the dock may be a permanent structure on land. In either case a gangway and a vehicle ramp must be deployed either from the boat or from the dock. On the busiest ferry routes, a terminal building may have multiple boarding levels, with gangways deployed for passengers from the building's upper levels in the same manner as is done at airports.

Wheelchair accessibility depends on the width and railings on the gangways, on the steepness of the slope on the gangways resulting from very high or low water levels, and on any small gaps in vehicle access ramps (if that is the only means of access). Special assistance may be necessary in some cases. When access is directly from a terminal building, elevators within that building would also be necessary. Some ferries are not accessible due to steps at the ends of gangways.

**TABLE 77: Urban Ferryboat Transit Agencies (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY
Balboa, CA	Balboa Island Ferry
Baytown, TX	Harris County Lynchburg Ferry
Boston, MA	Airport Water Shuttle
Boston, MA	Bay State Cruise Company
Boston, MA	Boston Harbor Cruises
Boston, MA	Harbor Express
Boston, MA	Massachusetts Bay Transportation Authority
Bremerton, WA	Kitsap Transit
Chicago, IL	Wendella RiverBus
Cincinnati, OH	Anderson Ferry Boat
Corpus Christi, TX	Corpus Christi Regional Transportation Authority
Fort Lauderdale, FL	Fort Lauderdale Water Bus
Galveston, TX	Texas Department of Transportation
Glastonbury, CT	Connecticut Department of Transportation
Harrisburg, IL	Rides Mass Transit District
Jersey City, NJ	Liberty Park Water Taxi
Long Beach, CA	Long Beach Transit
Mayport, FL	St. John's River Ferry
Miami, FL	Broward County Mass Transit Division
New Orleans, LA	Louisiana Department of Transportation, Crescent City Connection
New York, NY	MTA Metro-North Railroad
New York, NY	New York City Department of Transportation, Staten Island Ferry
New York, NY	New York Fast Ferry
New York, NY	New York Water Taxi
New York, NY	New York Waterway
New York, NY	Liberty Park Water Taxi
New York, NY	Seastreak America
Norfolk, VA	Transportation District Commission of Hampton Roads
Philadelphia, PA	Delaware River Port Authority RiverLink Ferry
Port Huron, MI	Champion's Auto Ferry
Portland, ME	Casco Bay Island Transit District
Portland, ME	Chebeague Transportation Company
Providence, RI	Rhode Island Public Transit Authority
Rock Island, IL	Rock Island County Metropolitan Mass Transit District
San Diego, CA	Coronado Ferry
San Diego, CA	The Wave
San Francisco, CA	Angel Island-Tiburon Ferry Company
San Francisco, CA	Blue and Gold Fleet
San Francisco, CA	City of Alameda Ferry Services, Alameda/Oakland Ferry
San Francisco, CA	City of Vallejo, Baylink Ferry
San Francisco, CA	Golden Gate Bridge, Highway and Transportation District
San Francisco, CA	Harbor Bay Ferry
San Juan, PR	Puerto Rico Ports Authority
Savannah, GA	Chatham Area Transit Authority
Seattle, WA	Elliott Bay Water Taxi
Seattle, WA	Washington State Ferries
Tacoma, WA	Pierce County Ferry

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

**TABLE 78: Ferryboat Transit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	541.7	41.8	1,312.5	11,048.9
Bremerton, WA	Kitsap Transit	43.9	5.7	388.7	630.9
Corpus Christi, TX	Corpus Christi Regional Transportation Authority	2.0	0.8	29.8	25.3
Miami, FL	Broward County Mass Transit Division (BCT)	149.4	36.5	745.0	2,548.8
New Orleans, LA	Crescent City Connection Division - Louisiana DOT	45.5	23.1	3,167.0	1,583.7
New York, NY	Metro-North Commuter Railroad Company	40.8	2.6	84.4	462.0
New York, NY	New York City Department of Transportation	173.5	16.7	19,346.0	100,599.4
New York, NY	Port Authority Trans-Hudson Corporation (PATH)	188.8	22.8	1,339.3	3,617.1
Portland, ME	Casco Bay Island Transit District (CBITD)	72.6	15.1	861.4	2,842.7
San Francisco, CA	City of Alameda Ferry Services	80.3	6.5	531.9	3,551.8
San Francisco, CA	Golden Gate Bridge, Highway and Trp District	184.4	13.7	1,660.4	18,814.9
San Juan, PR	Puerto Rico Ports Authority (PRPA)	196.5	17.1	2,026.5	3,384.2
Savannah, GA	Chatham Area Transit Authority (CAT)	8.4	5.4	336.4	111.7
Seattle, WA	Pierce County Ferry Operations	40.8	5.7	204.4	1,795.8
Seattle, WA	Washington State Ferries (WSF)	973.2	130.7	24,408.4	189,631.5
Vallejo, CA	City of Vallejo Trp Program (Vallejo Transit, Baylink)	231.9	8.4	633.1	16,151.4
Virginia Beach, VA	Transportation District Commission of Hampton Roads	12.5	6.2	368.0	184.1

Source: Federal Transit Administration National Transit Database; excludes transit agencies not reporting data to the NTD.

**TABLE 79: Ferryboat Transit Agencies Vehicle and Financial Data, Fiscal Year 2004**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	15	179.1	5,462.8	7,867.2
Bremerton, WA	Kitsap Transit	3	1,560.7	190.2	1,152.8
Corpus Christi, TX	Corpus Christi Regional Transportation Authority	1	0.7	48.5	178.1
Miami, FL	Broward County Mass Transit Division (BCT)	8	0.0	1,671.5	3,245.9
New Orleans, LA	Crescent City Connection Division - Louisiana DOT	6	1,548.4	0.0	7,712.6
New York, NY	Metro-North Commuter Railroad Company	1	0.0	101.3	2,157.8
New York, NY	New York City Department of Transportation	4	168,368.7	0.0	56,103.8
New York, NY	Port Authority Trans-Hudson Corporation (PATH)	9	0.0	7,606.5	9,189.8
Portland, ME	Casco Bay Island Transit District (CBITD)	5	0.0	1,637.9	3,127.0
San Francisco, CA	City of Alameda Ferry Services	5	974.6	2,155.4	4,428.8
San Francisco, CA	Golden Gate Bridge, Highway and Trp District	6	1,668.5	6,899.0	16,925.9
San Juan, PR	Puerto Rico Ports Authority (PRPA)	15	4,490.0	1,943.4	22,467.4
Savannah, GA	Chatham Area Transit Authority (CAT)	2	349.3	0.0	515.6
Seattle, WA	Pierce County Ferry Operations (Pierce County Ferry)	1	1,631.4	1,479.4	2,306.3
Seattle, WA	Washington State Ferries (WSF)	28	70,450.0	56,970.4	158,648.2
Vallejo, CA	City of Vallejo Transportation Program	3	5,829.9	4,358.2	7,347.6
Virginia Beach, VA	Transportation District Commission of Hampton Roads	3	0.0	319.0	674.6

Source: Federal Transit Administration National Transit Database; excludes transit agencies not reporting data to the NTD.

# Rail

## Highlights.....

Rail transit services exist in over 50 metropolitan areas and small cities, and the number grows almost yearly.

A **mode** is the system for carrying transit passengers described by specific right-of-way, technology and operational features. The most common rail modes are:

**Commuter rail** (also called **metropolitan rail**, **regional rail**, or **suburban rail**) is an electric or diesel propelled railway for urban passenger train service consisting of local short distance travel operating between a central city

and adjacent suburbs. Service must be operated on a regular basis by or under contract with a transit operator for the purpose of transporting passengers within urbanized areas, or between urbanized areas and outlying areas. Such rail service, using either locomotive hauled or self propelled railroad passenger cars, is generally 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. Intercity rail service is excluded, except for that portion of such service that is operated by or under contract with a public transit agency for predominantly commuter services, which means that for any given trip segment (i.e., distance between any two stations), more than 50% of the average daily ridership travels on the train at least three times a week.

**TABLE 80: Commuter Rail National Totals, Fiscal Year 2004**

Agencies, Number of	21
Fares Collected, Passenger	\$1,614,747,000
Fare per Unlinked Trip, Average	\$3.90
Expense, Operating Total (a)	\$3,442,413,000
Salaries and Wages (b)	\$1,326,573,000
Fringe Benefits (b)	\$1,038,392,000
Services (b)	\$262,922,000
Fuel and Lubricants (b)	\$81,098,000
Materials and Supplies, Other (b)	\$240,675,000
Utilities (b)	\$204,621,000
Casualty and Liability (b)	\$106,658,000
Purchased Transportation (b) (c)	\$207,129,000
Other (b)	\$25,655,000
Vehicle Operations (c)	\$1,292,715,000
Vehicle Maintenance (c)	\$794,749,000
Non-vehicle Maintenance (c)	\$608,859,000
General Administration (c)	\$538,961,000
Expense, Capital Total	\$2,585,873,000
Rolling Stock	\$728,686,000
Facilities, Guideway, Stations, Administrative Buildings	\$1,493,327,000
Other	\$363,860,000
Trips, Unlinked Passenger, Annual	414,061,000
Miles, Passenger	9,718,909,000
Trip Length, Average (miles)	23.5
Miles, Vehicle Total (d)	294,659,000
Miles, Vehicle Revenue (d)	268,901,000
Hours, Vehicle Total (d)	9,272,000
Hours, Vehicle Revenue (d)	8,532,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	31.5
Revenue Vehicles Available for Maximum Service	6,228
Vehicles Operated at Maximum Service	5,091
Age, Average (years) (d)	18.2
Air-conditioned (d)	92.0%
Lifts, Wheelchair (d)	9.3%
Ramps, Wheelchair (d)	30.1%
Accessible Only via Stations (d)	38.8%
Power Source, Diesel or Gasoline (d)	0.3%
Power Source, Alternative (d)	49.6%
Rehabilitated (d)	29.4%
Employees, Operating	25,296
Vehicle Operations	9,402
Vehicle Maintenance	7,174
Non-vehicle Maintenance	5,723
General Administration	2,997
Employees, Capital	2,747
Diesel Fuel Consumed (gallons)	71,999,000
Other Fuel Consumed (gallons)	0
Electricity Consumed (kwh)	1,449,032,000

(a) is the sum of (b) lines OR the sum of (c) lines.

(d) Commuter rail data includes passenger cars only.

**Heavy rail (metro, subway, rapid transit, or rapid rail)** is an electric railway with the capacity for a heavy volume of traffic. It is characterized by high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails; separate rights-of-way from

which all other vehicular and foot traffic are excluded; sophisticated signaling, and high platform loading. If the service were converted to full automation with no onboard personnel, the service would be considered an automated guideway.

**TABLE 81: Heavy Rail National Totals, Fiscal Year 2004**

Agencies, Number of	14
Fares Collected, Passenger	\$2,902,789,000
Fare per Unlinked Trip, Average	\$1.06
Expense, Operating Total (a)	\$4,734,151,000
Salaries and Wages (b)	\$2,641,663,000
Fringe Benefits (b)	\$1,729,623,000
Services (b)	\$253,901,000
Fuel and Lubricants (b)	\$5,483,000
Materials and Supplies, Other (b)	\$309,088,000
Utilities (b)	\$360,969,000
Casualty and Liability (b)	\$96,659,000
Purchased Transportation (b) (c)	\$0
Other (b)	-\$663,235,000
Vehicle Operations (c)	\$2,014,661,000
Vehicle Maintenance (c)	\$812,622,000
Non-vehicle Maintenance (c)	\$1,224,234,000
General Administration (c)	\$682,633,000
Expense, Capital Total	\$3,795,776,000
Rolling Stock	\$329,551,000
Facilities, Guideway, Stations, Administrative Buildings	\$2,737,745,000
Other	\$728,479,000
Trips, Unlinked Passenger, Annual	2,747,617,000
Miles, Passenger	14,354,281,000
Trip Length, Average (miles)	5.2
Miles, Vehicle Total	642,424,000
Miles, Vehicle Revenue	624,568,000
Hours, Vehicle Total	32,799,000
Hours, Vehicle Revenue	30,680,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	20.4
Revenue Vehicles Available for Maximum Service	10,858
Vehicles Operated at Maximum Service	8,887
Age, Average (years)	21.6
Air-conditioned	99.4%
Lifts, Wheelchair	0.0%
Ramps, Wheelchair	0.0%
Accessible Only via Stations	98.7%
Power Source, Diesel or Gasoline	0.0%
Power Source, Alternative	100.0%
Rehabilitated	41.3%
Employees, Operating	47,211
Vehicle Operations	19,530
Vehicle Maintenance	8,841
Non-vehicle Maintenance	13,596
General Administration	5,243
Employees, Capital	5,655
Diesel Fuel Consumed (gallons)	0
Other Fuel Consumed (gallons)	0
Electricity Consumed (kwh)	3,683,674,000

(a) is the sum of (b) lines OR the sum of (c) lines.

**Light rail (streetcar, tramway, or trolley)** is lightweight passenger rail cars operating singly (or in short, usually two-car, trains) on fixed rails in right-of-way that is not separated from other traffic for much of the way. Light rail

vehicles are typically driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph.

**TABLE 82: Light Rail National Totals, Fiscal Year 2004**

Agencies, Number of	29
Fares Collected, Passenger	\$232,833,000
Fare per Unlinked Trip, Average	\$0.67
Expense, Operating Total (a)	\$887,379,000
Salaries and Wages (b)	\$378,944,000
Fringe Benefits (b)	\$232,953,000
Services (b)	\$103,163,000
Fuel and Lubricants (b)	\$1,404,000
Materials and Supplies, Other (b)	\$55,723,000
Utilities (b)	\$61,247,000
Casualty and Liability (b)	\$24,681,000
Purchased Transportation (b) (c)	\$35,910,000
Other (b)	-\$6,647,000
Vehicle Operations (c)	\$352,926,000
Vehicle Maintenance (c)	\$199,446,000
Non-vehicle Maintenance (c)	\$153,647,000
General Administration (c)	\$145,450,000
Expense, Capital Total	\$2,441,266,000
Rolling Stock	\$380,844,000
Facilities, Guideway, Stations, Administrative Buildings	\$1,781,263,000
Other	\$279,160,000
Trips, Unlinked Passenger, Annual	349,916,000
Miles, Passenger	1,576,198,000
Trip Length, Average (miles)	4.5
Miles, Vehicle Total	67,362,000
Miles, Vehicle Revenue	66,645,000
Hours, Vehicle Total	4,427,000
Hours, Vehicle Revenue	4,306,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	15.5
Revenue Vehicles Available for Maximum Service	1,622
Vehicles Operated at Maximum Service	1,254
Age, Average (years)	16.7
Air-conditioned	91.0%
Lifts, Wheelchair	8.8%
Ramps, Wheelchair	24.7%
Accessible Only via Stations	51.6%
Power Source, Diesel or Gasoline	1.2%
Power Source, Alternative	98.8%
Rehabilitated	18.4%
Employees, Operating	8,184
Vehicle Operations	3,594
Vehicle Maintenance	1,971
Non-vehicle Maintenance	1,687
General Administration	933
Employees, Capital	697
Diesel Fuel Consumed (gallons)	7,000
Other Fuel Consumed (gallons)	0
Electricity Consumed (kwh)	553,025,000

(a) is the sum of (b) lines OR the sum of (c) lines.

Other modes are:

**Aerial tramway** is an electric system of aerial cables with suspended powerless passenger vehicles. The vehicles are propelled by separate cables attached to the vehicle suspension system and powered by engines or motors at a central location not on board the vehicle. Only two such transit operations exist in New York City and at Mountain Village, CO. All other aerial tramways are at ski areas or at tourist sites.

**Automated guideway transit (personal rapid transit, group rapid transit, people mover)** is an electric railway (single or multi-car trains) of guided transit vehicles

operating without an onboard crew. Service may be on a fixed schedule or in response to a passenger activated call button. The places with automated guideways are Detroit, MI, Indianapolis, IN, Jacksonville, FL, Las Colinas, TX, Miami, FL, and Morgantown, WV. Automated guideways in non-transit settings such as airports and hospital campuses are more common.

**Cable car** is an electric railway with individually controlled transit vehicles attached to a moving cable located below the street surface and powered by engines or motors at a central location not on board the vehicle. Only one cable car operation exists in San Francisco, CA.

**Inclined plane** is a railway operating over exclusive right-of-way on steep grades (slopes) with powerless vehicles propelled by moving cables attached to the vehicles and powered by engines or motors at a central location not on board the vehicle. The special tramway type of vehicles have passenger seats that remain horizontal while the undercarriage (truck) is angled parallel to the slope. Chattanooga, TN, Dubuque, IA, Johnstown, PA, and Pittsburgh, PA (2 inclines) are the only places with inclines used in regular transit service.

**Monorail** is an electric railway of guided transit vehicles operating singly or in multi-car trains. The vehicles are suspended from or straddle a guideway formed by a single beam, rail, or tube. Only two transit monorails exist in Las Vegas, NV and Seattle, WA. Their most common use is in the non-transit settings of amusement parks. If the trains do not have an onboard crew, they are considered automated guideways.

**TABLE 83: Other Rail National Totals, Fiscal Year 2004**

Agencies, Number of	16
Fares Collected, Passenger	\$26,461,000
Fare per Unlinked Trip, Average	\$1.04
Expense, Operating Total (a)	\$288,881,000
Salaries and Wages (b)	\$139,363,000
Fringe Benefits (b)	\$77,069,000
Services (b)	\$24,231,000
Fuel and Lubricants (b)	\$42,000
Materials and Supplies, Other (b)	\$22,883,000
Utilities (b)	\$9,589,000
Casualty and Liability (b)	\$7,581,000
Purchased Transportation (b) (c)	\$6,831,000
Other (b)	\$1,291,000
Vehicle Operations (c)	\$107,261,000
Vehicle Maintenance (c)	\$61,607,000
Non-vehicle Maintenance (c)	\$62,478,000
General Administration (c)	\$50,705,000
Expense, Capital Total	\$6,308,000
Rolling Stock	\$502,000
Facilities, Guideway, Stations, Administrative Buildings	\$1,994,000
Other	\$3,812,000
Trips, Unlinked Passenger, Annual	31,828,000
Miles, Passenger	31,739,000
Trip Length, Average (miles)	1.0
Miles, Vehicle Total	3,253,000
Miles, Vehicle Revenue	3,175,000
Hours, Vehicle Total	499,000
Hours, Vehicle Revenue	493,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	6.4
Revenue Vehicles Available for Maximum Service	331
Vehicles Operated at Maximum Service	254
Age, Average (years)	34.1
Air-conditioned	72.5%
Lifts, Wheelchair	2.1%
Ramps, Wheelchair	0.0%
Accessible Only via Stations	74.1%
Power Source, Diesel or Gasoline	0.0%
Power Source, Alternative	74.6%
Rehabilitated	6.2%
Employees, Operating	1,344
Vehicle Operations	577
Vehicle Maintenance	304
Non-vehicle Maintenance	310
General Administration	153
Employees, Capital	0
Diesel Fuel Consumed (gallons)	0
Other Fuel Consumed (gallons)	0
Electricity Consumed (kwh)	50,750,000

(a) is the sum of (b) lines OR the sum of (c) lines.

## Types of Service

**Local service**, in the rail context, means trains stop at every station on a route. For light rail and cable cars operating on city streets, local service would be analogous to local bus service, where stops are every block or two apart.

Most aerial tramway, automated guideway, inclined plane, and monorail routes are one mile or less long. New York City Transit also has a few very short heavy rail shuttle lines, and most heritage trolley lines are also only a few miles long. Some of these operations may operate in a loop and connect, often at a transfer center or rail station, to major routes for travel to more far-flung destinations

**Express service** speeds up longer trips, especially in major metropolitan areas during heavily-patronized peak commuting hours, by operating long distances without stopping. In New York, Chicago, and other areas, express trains even have separate tracks for at least part of their routes.

**Limited-stop service** is a hybrid between local and express service, where not all stations and stops are served. An example is a pair of closely-spaced trains that both stop at the most heavily-patronized stations on a line. For the other stations, the first train stops at every other station, while the following train stops at the stations missed by the first train.

## Types of Vehicles

Although most service is operated with vehicles purchased new, a small proportion is operated by vehicles rehabilitated or rebuilt when they are 10 to 20 years old.

**Rehabilitation** is the rebuilding of revenue vehicles to original specifications of the manufacturer. **Rebuilding** may include some new components but has less emphasis on structural restoration than would be the case in a **remanufacturing** operation, focusing on mechanical systems and vehicle interiors.

An **aerial tramway car** is an unpowered passenger cabin suspended from a system of aerial cables and propelled by separate cables attached to the vehicle suspension system. Engines or motors at a central location, not on board the vehicle, power the cable system.

An **automated guideway car** is a guided passenger car operating under a fully automated system without an onboard crew. One type is a **downtown people mover**, which operates on a loop or shuttle route within the central business district of a city.



*The Newark Airport AirTrain in New Jersey uses monorail technology, but is an automated guideway since the trains do not have operators.*

A **cable car** is a streetcar type of passenger car operating by means of an attachment to a moving cable located below the street surface and powered by engines or motors at a central location not on board the vehicle.



*Only San Francisco Municipal Railway operates cable cars.*

A **commuter rail car** is a commuter rail mode passenger car--either an unpowered **passenger coach** that is pulled or pushed by one or more locomotives, or a **self-propelled passenger car** that has an onboard power source or that draws power from overhead electric wires. A large proportion of commuter rail cars are double-decked with upper and lower seating levels.

A **locomotive** is a power unit vehicle that does not carry passengers that is used to pull or push commuter rail passenger coaches. Most locomotives use diesel fuel or are powered by overhead electric wires or an electrified third rail. A small number are dual-mode and can operate either as a diesel or electric vehicle.



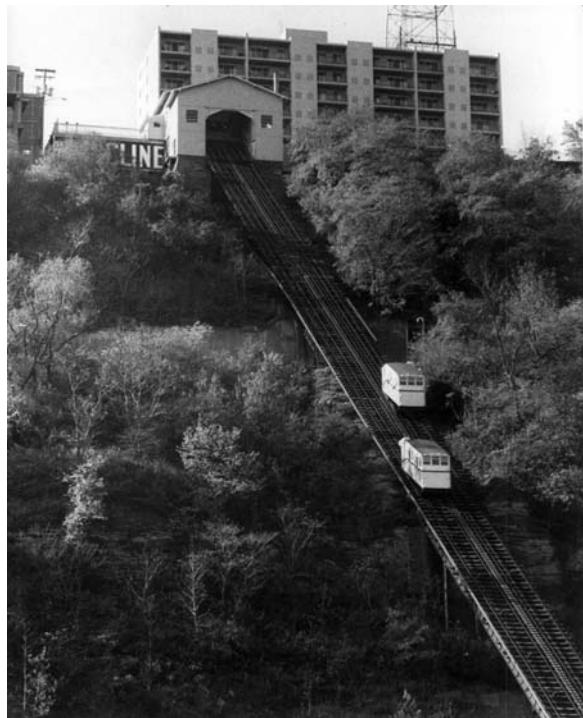
*This locomotive-hauled Caltrain commuter rail train which operates in the San Francisco area uses double-deck cars, as do all commuter rail agencies in western and southern states. Clearances on old tunnels and bridges in northeastern states, however, generally allow only single-deck cars.*

A **heavy rail car** has motive capability, is driven by electric power taken from a third rail or (rarely, overhead wires), and is usually operated on exclusive right-of-way.



*This MTA New York City Transit heavy rail train typifies this mode with very frequent service carrying very "heavy" numbers of people.*

An **inclined plane car** is a special type of passenger car operating up and down slopes on rails via a cable mechanism.



*The Monongahela Incline is operated by the Port Authority of Allegheny County in Pittsburgh, Pennsylvania.*

A **light rail car** (or **streetcar**, **tram**, or **trolley car**) has motive capability, is usually driven by electric power taken from overhead lines, and usually operates much or all of its route on non-exclusive right-of-way. Sometimes older cars are refurbished (vintage trolley cars) or newer cars are built to look like older cars (heritage trolley cars).



*Light rail trains carry "light" loads of people compared to heavy rail. This train is operated by Metro Transit in Minneapolis, Minnesota.*



*A vintage trolley at the Santa Clara Valley Transportation Authority in San Jose, California.*

**A monorail car** is a guided passenger car operating on or suspended from a single rail, beam or tube.



*The Las Vegas monorail in Nevada is not only a means of public transportation, but also an attraction for tourists.*

**TABLE 84: New Rail Car Market By Type, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	536	100.0%	1,746	100.0%	2,462	100.0%
1-level articulated	51	9.5%	242	13.9%	40	1.6%
1-level non-articulated	365	68.1%	1,219	69.8%	2,267	92.1%
2-level	120	22.4%	285	16.3%	155	6.3%

Source: APTA survey. Data are about 99% of national totals.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

**TABLE 85: Rail Vehicle Fuel and Power Consumption, Thousands of Gallons (a)**

FISCAL YEAR	DIESEL		ELECTRICITY (KWH) (000)				
	COMMUTER RAIL	LIGHT RAIL	COMMUTER RAIL	HEAVY RAIL	LIGHT RAIL	OTHER RAIL	TOTAL
1994	61,900	8	1,243,754	3,431,441	281,954	21,338	4,978,487
1995	63,064	8	1,253,112	3,401,499	288,027	24,418	4,967,056
1996	61,888	14	1,255,171	3,332,286	321,364	28,561	4,937,382
1997	63,195	18	1,270,259	3,252,510	361,312	24,876	4,908,957
1998	69,200	18	1,297,578	3,279,706	381,484	38,635	4,997,403
1999	73,005	17	1,321,828	3,384,494	415,626	38,859	5,160,807
2000	70,818	16	1,370,452	3,548,942	463,241	48,870	5,431,505
2001	72,204	14	1,353,800	3,645,943	487,138	47,857	5,534,738
2002	72,847	8	1,334,423	3,683,065	509,646	45,486	5,572,620
2003	72,264	8	1,383,342	3,631,574	506,696	50,750	5,572,362
2004 P	71,999	7	1,449,032	3,683,674	553,025	69,472	5,825,280

P = Preliminary

(a) Data includes passenger vehicles and locomotives only.

## Accessibility

A **station** is a public transportation passenger facility.

An **accessible station** is a station that provides ready access, and does not have physical barriers that prohibit and/or restrict access by individuals with disabilities, including individuals who use wheelchairs.

An **accessible vehicle** is a public transportation revenue vehicle that does not restrict access, is usable, and provides allocated space and/or priority seating for individuals who use wheelchairs.

Historically-protected vehicles, such as the San Francisco cable cars, have been exempted from accessibility regulations.

Rail cars accommodate wheelchair-bound and other riders who cannot climb steps in several different manners:

**Street-level boarding** is used primarily by light rail and cable car lines that stop on the street rather than at stations. Either a low-floor car with a retractable ramp or a high-floor car with a retractable lift would be required.



*Portland's Tri-County Metropolitan Transportation District of Oregon is one of several light rail agencies to operate low-floor light rail cars.*

**Low-level platforms** are generally about 12-18 inches above track level and are used primarily by some commuter rail and light rail lines. Either a low-floor car with a retractable ramp or a high-floor car with a retractable lift can be used. Alternatively, the platform can be level with the car floor or the platform may have a lift, ramp, or elevated mini-platform.

**High-level platforms** are generally 18-36 inches above track level and are used primarily by heavy rail, automated guideway, and some commuter rail lines. Only high-floor cars can be used. Platforms can be level with car floors, the cars could have a lift or a ramp, or the platform could have a lift, ramp, or mini-platform.



*This Memphis Area Transit Authority historic light rail car in Tennessee is a high-floor car with steps at both ends.*

Some commuter rail and light rail lines use a mixture of high-level and low-level platforms on the same line. Typically, all platforms were originally low-level, but the most heavily-used stations have been upgraded to high-level to speed loading and unloading. In such cases, the cars must have two accessibility options--one for high-level platforms and one for low-level platforms.

Other rail modes may use any of the accessibility arrangements.



*Heavy rail trains, like this one operated by the Toronto Transit Commission, are accessible via high-platform ramps.*

**TABLE 86: Commuter and Heavy Rail Cars by Type of Wheelchair Accessibility**

YEAR	COMMUTER RAIL					HEAVY RAIL				
	LIFT	RAMP	STATION	NONE	TOTAL	LIFT	RAMP	STATION	NONE	TOTAL
1993	10	63	1,359	3,117	4,549	0	0	8,614	1,779	10,393
1994	58	136	1,349	3,090	4,633	4	0	9,664	701	10,365
1995	58	234	1,717	2,643	4,652	4	0	9,655	698	10,357
1996	63	312	2,767	1,545	4,687	0	0	9,779	654	10,433
1997	87	660	2,662	1,429	4,838	0	0	9,740	651	10,391
1998	155	693	2,790	1,428	5,066	0	0	9,764	604	10,368
1999	197	664	2,332	1,917	5,110	0	0	10,240	180	10,420
2000	201	798	2,304	1,861	5,164	0	0	10,264	155	10,419
2001	211	1,294	1,842	1,725	5,072	0	0	10,442	149	10,591
2002	213	1,299	1,846	1,677	5,035	0	0	11,011	149	11,160
2003	217	1,353	1,997	1,645	5,212	0	0	11,103	142	11,245
2004	217	1,537	2,067	1,598	5,419	0	0	10,786	142	10,928
2005	424	1,372	2,256	1,306	5,358	0	0	10,829	142	10,971
2006 P	564	1,825	2,354	1,327	6,070	0	0	11,012	142	11,154
2006 % of Total	9.3%	30.3%	38.6%	21.8%	100.0%	0.0%	0.0%	98.7%	1.3%	100.0%

Source: APTA survey. Commuter rail data represent 99% of rail cars; heavy rail data are national totals. "Lift" and "ramp" columns refer to on-vehicle lifts and ramps; "station" column includes car-floor-level platform boarding and platform lifts.

**TABLE 87: Light and Other Rail Cars by Type of Wheelchair Accessibility**

YEAR	LIGHT RAIL					OTHER RAIL (a)				
	LIFT	RAMP	STATION	NONE	TOTAL	LIFT	RAMP	STATION	NONE	TOTAL
1993	71	0	435	738	1,244	0	0	37	46	83
1994	75	2	480	666	1,223	0	0	26	48	74
1995	96	11	498	624	1,229	0	0	35	48	83
1996	171	12	510	582	1,275	1	0	34	48	83
1997	123	65	549	575	1,312	1	0	42	45	88
1998	123	65	828	373	1,389	1	0	53	45	99
1999	123	17	914	369	1,423	1	0	52	46	99
2000	123	143	950	370	1,568	1	0	52	46	99
2001	131	200	874	357	1,562	1	0	58	46	105
2002	131	326	825	351	1,633	1	0	60	46	107
2003	137	333	905	297	1,672	1	0	93	46	140
2004	156	368	1,000	285	1,809	1	0	94	46	141
2005	172	371	927	214	1,684	4	0	130	41	175
2006 P	172	480	1,005	290	1,947	4	0	143	46	193
2006 % of Total	8.8%	24.7%	51.6%	14.9%	100.0%	30.3%	0.0%	52.8%	17.0%	100.0%

Source: APTA survey. Light rail data represent 98% and other rail data represent 60% of national totals. "Lift" and "ramp" columns refer to on-vehicle lifts and ramps; "station" column includes level-platform boarding and platform lifts.

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

**TABLE 88: New Rail Car Market by Accessibility, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	536	100.0%	1,746	100.0%	2,462	100.0%
Via on-board lift	92	17.2%	11	0.6%	62	2.5%
Via on-board ramp	273	50.9%	467	26.7%	106	4.3%
Via stations	171	31.9%	1,268	72.6%	2,294	93.2%
Non-accessible	0	0.0%	0	0.0%	0	0.0%

Source: APTA survey. Data are about 99% of national totals.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

## Fixed Guideways

All rail services are classified as fixed guideways.

A **Fixed Guideway** is a mass transit facility using and occupying a separate right-of-way or rail for the exclusive use of mass transportation and other high-occupancy vehicles; or using a fixed catenary system usable by other forms of transportation.

Fixed guideways are generally on the surface, but about half of heavy rail mileage and short distances of other types of rail are in tunnel or elevated.

**TABLE 89: Rail Route Mileage and Status of Future Projects (a)**

STATUS	MILES (b)
<b>AERIAL TRAMWAY</b>	
Design	1.5
Open	4.2
<b>TOTAL</b>	<b>5.7</b>
<b>AUTOMATED GUIDEWAY</b>	
Design	4.7
Open	30.9
Planning	3.2
Proposed	2.2
<b>TOTAL</b>	<b>41.0</b>
<b>CABLE CAR</b>	
Open	5.2
<b>TOTAL</b>	<b>5.2</b>
<b>COMMUTER RAIL</b>	
Construction	131.0
Design	213.8
Open	4,183.9
Planning	1,246.2
Proposed	1,041.7
<b>TOTAL</b>	<b>6,816.6</b>
<b>HEAVY RAIL</b>	
Open	1,284.6
Planning	93.8
Proposed	102.6
<b>TOTAL</b>	<b>1,481.0</b>
<b>INCLINED PLANE</b>	
Open	1.5
<b>TOTAL</b>	<b>1.5</b>
<b>LIGHT RAIL</b>	
Construction	148.5
Design	124.1
Open	658.7
Planning	405.1
Proposed	325.8
<b>TOTAL</b>	<b>1,662.2</b>
<b>MONORAIL</b>	
Open	1.1
Proposed	14.0
<b>TOTAL</b>	<b>15.1</b>

Source: APTA survey

(a) Data as of September 2005, plus updated information where known.

(b) Segments used by more than one route counted for each route using those segments. Mileage listed is end-to-end mileage. Excludes data for a few routes for which mileage was not reported



The Chicago Transit Authority operates all three types of rail fixed guideway--surface and elevated, shown here, and tunnel.

**TABLE 90: Rail Routes Under Construction (a)**

MODE AND LOCATION	MILES
<b>COMMUTER RAIL</b>	
Albuquerque, NM	51.0
Boston, MA	28.5
Salt Lake City, UT	43.5
Seattle, WA	8.0
<b>TOTAL</b>	<b>131.0</b>
<b>LIGHT RAIL</b>	
Charlotte, NC	10.0
Denver, CO	19.2
Little Rock, AR	0.9
Los Angeles, CA	6.0
Newark, NJ	6.2
Oceanside, CA	23.7
Phoenix, AZ	44.3
Portland, OR	0.6
Sacramento, CA	10.2
Saint Louis	8.0
San Francisco, CA	5.4
Seattle, WA	14.0
<b>TOTAL</b>	<b>148.5</b>

Source: APTA survey

(a) Data as of September 2005, plus updated information where known.

**TABLE 91: Rail Track Miles by Type**

MODE	ELEVATED	SURFACE	TUNNEL	TOTAL
Automated Guideway	17.7	0.0	0.0	17.7
Cable Car	0.0	8.8	0.0	8.8
Commuter Rail	525.5	6,719.6	39.0	7,284.1
Heavy Rail	586.4	828.7	794.4	2,209.5
Inclined Plane	0.0	1.8	0.0	1.8
Light Rail	120.7	1,134.4	66.1	1,321.2
Monorail	2.0	0.0	0.0	2.0
<b>TOTAL</b>	<b>1,252.3</b>	<b>8,693.3</b>	<b>899.5</b>	<b>10,845.1</b>

Source: Federal Transit Administration, 2004 National Transit Database.

Elevated mileage can be either on a structure or on fill dirt.

**TABLE 92: Airports With Direct Rail Public Transportation Access (a)**

CITY	AIRPORT	RAIL TYPE
Atlanta, GA	Hartsfield-Atlanta	HR
Baltimore, MD	Baltimore-Washington	LR
Chicago, IL	Midway	HR
Chicago, IL	O'Hare	HR
Cleveland, OH	Cleveland-Hopkins	HR
Los Angeles	Burbank	CR
Minneapolis, MN	Minneapolis-St. Paul	LR
New York, NY	Kennedy	AG
Newark, NJ	Newark	AG
Philadelphia, PA	Philadelphia	CR
Portland, OR	Portland	LR
Saint Louis, MO	Lambert-St. Louis	LR
San Francisco, CA	San Francisco	HR
South Bend, IN	Michiana	CR
Washington, DC	Reagan National	HR



*This elevated section of the St. Louis Metro light rail line terminates at the Lambert-St. Louis airport terminal.*

AG = automated guideway, HR = heavy rail, LR = light rail, CR = commuter rail

- (a) Excludes airports that require a bus or van ride between the station and terminal and airports that only have internal rail circulation systems.

**TABLE 93: Commuter Rail Transit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands)(a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Anchorage, AK	Alaska Railroad Corporation (ARRC)	101.0	4.9	96.5	2,069.5
Baltimore, MD	Maryland Transit Administration (MTA)	4,854.6	121.3	6,699.2	197,013.7
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	22,152.3	710.2	39,965.7	783,544.6
Chicago, IL	Northeast Illinois Regional Commuter Railroad Corp	38,467.7	1,240.5	67,677.9	1,518,710.2
Chicago, IL	Northern Indiana Commuter Transportation District	3,059.2	88.7	3,544.2	97,110.8
Dallas, TX	Dallas Area Rapid Transit (DART)	685.6	35.7	1,338.0	15,356.2
Dallas, TX	Fort Worth Transportation Authority (The T)	494.8	17.7	823.7	13,005.7
Hartford, CT	Connecticut Department of Transportation (CDOT)	565.3	12.3	398.9	8,058.0
Los Angeles, CA	Southern California Regional Rail Authority (Metrolink)	8,314.5	205.2	9,783.4	364,526.3
Miami, FL	South Florida Regional Transportation Authority	2,048.7	56.5	2,821.3	84,762.0
New York, NY	Metro-North Commuter Railroad Company (MTA-MNCR)	49,720.6	1,401.2	72,255.8	1,968,370.6
New York, NY	MTA Long Island Rail Road (MTA-LIRR)	58,240.3	1,991.5	96,202.0	1,994,484.8
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	54,188.4	1,759.8	68,794.1	1,890,460.2
Philadelphia, PA	Pennsylvania Department of Transportation (PENNDOT)	766.5	14.7	235.9	15,749.9
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	15,906.7	588.0	30,284.6	433,572.4
San Diego, CA	North San Diego County Transit District (NCTD)	1,137.3	26.1	1,428.8	40,392.7
San Francisco, CA	Peninsula Corridor Joint Powers Board (PCJPB)	5,170.3	172.4	6,625.4	132,958.9
Seattle, WA	Central Puget Sound Regional Transit Authority (ST)	456.4	12.3	955.3	24,030.8
Stockton, CA	Altamont Commuter Express (ACE)	749.3	18.5	616.0	29,519.9
Syracuse, NY	ON TRACK	NA	NA	NA	NA
Washington, DC	Virginia Railway Express (VRE)	1,778.7	52.8	3,447.9	103,651.1
TOTAL REPORTED (excludes "NA" entries)		268,858.1	8,530.5	413,994.8	9,717,348.4

Source: Federal Transit Administration National Transit Database. Agencies that do not participate in the NTD have "NA" entries.

- (a) Excludes commuter-type services operated independently by AMTRAK.

**TABLE 94: Commuter Rail Transit Agencies Mileage and Station Data (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	DIRECT- IONAL ROUTE MILES	TRACK MILES	CROSS- INGS	STA- TIONS	ADA ACCESS- IBLE STATIONS (b)
Anchorage, AK	Alaska Railroad Corporation (ARRC)	92.4	46.2	27	10	10
Baltimore, MD	Maryland Transit Administration (MTA)	400.4	471.0	40	42	22
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	702.1	648.4	233	126	82
Chicago, IL	Northeast Illinois Regional Commuter Railroad Corp	940.4	1,144.0	512	230	139
Chicago, IL	Northern Indiana Commuter Transportation District	179.8	130.4	117	20	12
Dallas, TX	Dallas Area Rapid Transit (DART)	29.0	20.7	15	4	4
Dallas, TX	Fort Worth Transportation Authority (The T)	40.5	22.6	19	5	5
Hartford, CT	Connecticut Department of Transportation (CDOT)	101.2	106.0	3	8	8
Los Angeles, CA	Southern California Regional Rail Authority	778.0	631.0	442	53	53
Miami, FL	South Florida Regional Transportation Authority	142.2	104.0	72	18	18
New York, NY	Metro-North Commuter Railroad Company	545.7	802.7	160	109	32
New York, NY	MTA Long Island Rail Road (MTA-LIRR)	638.2	701.1	395	124	99
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	1,070.2	1,016.4	329	167	68
Philadelphia, PA	Pennsylvania Department of Transportation	144.4	144.4	7	12	4
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	446.9	695.0	116	156	51
San Diego, CA	North San Diego County Transit District (NCTD)	82.2	83.7	34	8	8
San Francisco, CA	Peninsula Corridor Joint Powers Board (PCJPB)	153.7	136.7	49	34	24
Seattle, WA	Central Puget Sound Regional Transit Authority (ST)	146.9	146.0	34	9	9
Stockton, CA	Altamont Commuter Express (ACE)	172.0	90.0	127	10	10
Syracuse, NY	ON TRACK	3.5	3.5	NA	3	3
Washington, DC	Virginia Railway Express (VRE)	161.5	190.0	23	18	18
TOTAL REPORTED (excludes "NA" entries)		6,971.3	7,333.8	2,754	1,166	679

Source: Federal Transit Administration National Transit Database plus other sources.

(a) Excludes commuter-type services operated independently by AMTRAK.

(b) Additional stations may be wheelchair accessible, but not comply with other provisions of the Americans with Disabilities Act.

**TABLE 95: Commuter Rail Transit Agencies Vehicle and Financial Data, Fiscal Year 2004 (a)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Anchorage, AK	Alaska Railroad Corporation (ARRC)	97	8,506.2	927.8	1,920.5
Baltimore, MD	Maryland Transit Administration (MTA)	153	19,499.3	26,505.2	66,063.5
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	460	125,662.4	89,083.5	217,279.0
Chicago, IL	Northeast Illinois Regional Commuter Railroad Corp	1,151	415,461.2	191,762.2	439,438.1
Chicago, IL	Northern Indiana Commuter Transportation District	66	36,731.9	14,622.1	30,756.4
Dallas, TX	Dallas Area Rapid Transit (DART)	36	11,936.0	719.1	17,287.4
Dallas, TX	Fort Worth Transportation Authority (The T)	17	3,685.6	886.0	7,667.5
Hartford, CT	Connecticut Department of Transportation (CDOT)	31	0.0	1,161.0	7,172.6
Los Angeles, CA	Southern California Regional Rail Authority	159	39,536.5	44,588.3	99,527.5
Miami, FL	South Florida Regional Transportation Authority	30	142,176.4	6,408.1	25,244.8
New York, NY	Metro-North Commuter Railroad Company	1,013	426,282.3	403,045.4	674,706.9
New York, NY	MTA Long Island Rail Road (MTA-LIRR)	1,138	501,266.0	410,802.4	897,919.8
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	1,137	361,092.8	287,844.5	621,584.9
Philadelphia, PA	Pennsylvania Department of Transportation	12	8,170.4	2,693.0	8,612.8
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	357	78,532.7	87,894.4	186,242.8
San Diego, CA	North San Diego County Transit District (NCTD)	35	14,042.5	5,239.4	13,985.5
San Francisco, CA	Peninsula Corridor Joint Powers Board (PCJPB)	153	118,327.6	18,427.5	59,714.9
Seattle, WA	Central Puget Sound Regional Transit Authority (ST)	69	156,266.3	2,263.0	16,019.0
Stockton, CA	Altamont Commuter Express (ACE)	20	707.3	2,849.7	11,255.7
Syracuse, NY	ON TRACK	NA	NA	NA	NA
Washington, DC	Virginia Railway Express (VRE)	93	8,443.7	16,929.6	35,764.8
TOTAL REPORTED (excludes "NA" entries)		6,227	2,476,327.1	1,614,652.3	3,438,164.3

Source: Federal Transit Administration National Transit Database. Agencies that do not participate in the NTD have "NA" entries.

(a) Excludes commuter-type services operated independently by AMTRAK.

**TABLE 96: Heavy Rail Transit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Atlanta, GA	Metropolitan Atlanta Rapid Transit Authority	22,049.6	836.7	69,088.6	455,358.7
Baltimore, MD	Maryland Transit Administration (MTA)	4,535.4	182.7	12,425.7	59,594.9
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	21,110.1	959.6	157,502.5	581,114.5
Chicago, IL	Chicago Transit Authority (CTA)	64,328.2	3,448.3	178,716.5	1,074,812.5
Cleveland, OH	The Greater Cleveland Regional Transit Authority	2,397.2	108.8	7,282.8	47,439.9
Los Angeles, CA	Los Angeles County Metropolitan Transportation Auth	5,398.6	238.4	30,870.4	152,629.5
Miami, FL	Miami-Dade Transit (MDT)	9,112.3	386.5	15,637.5	121,823.0
New York, NY	MTA New York City Transit (NYCT)	339,818.8	18,601.2	1,760,778.9	8,344,226.5
New York, NY	Port Authority Trans-Hudson Corporation (PATH)	12,619.3	681.8	66,516.7	288,071.5
New York, NY	Staten Island Rapid Transit Operating Authority	2,176.6	103.8	3,358.3	21,521.2
Philadelphia, PA	Port Authority Transit Corporation (PATCO)	4,054.9	139.8	9,150.0	79,551.1
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	16,387.9	837.8	88,083.1	392,631.7
San Francisco, CA	San Francisco Bay Area Rapid Transit District (BART)	62,373.3	1,841.9	97,545.6	1,228,433.2
Washington, DC	Washington Metropolitan Area Transit Authority	58,205.4	2,312.5	250,660.0	1,507,072.9
TOTAL		624,567.8	30,679.9	2,747,616.6	14,354,281.1

Source: Federal Transit Administration National Transit Database.

**TABLE 97: Heavy Rail Transit Agencies Mileage and Station Data**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	DIRECT- IONAL ROUTE MILES	TRACK MILES	CROSS- INGS	STA- TIONS	ADA ACCESS- IBLE STATIONS (a)
Atlanta, GA	Metropolitan Atlanta Rapid Transit Authority	96.1	103.7	0	38	38
Baltimore, MD	Maryland Transit Administration (MTA)	29.4	34.0	0	14	14
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	76.3	108.0	0	53	42
Chicago, IL	Chicago Transit Authority (CTA)	206.3	287.8	25	144	72
Cleveland, OH	The Greater Cleveland Regional Transit Authority	38.1	41.9	0	18	10
Los Angeles, CA	Los Angeles County Metropolitan Transportation Auth	31.9	34.1	0	16	16
Miami, FL	Miami-Dade Transit (MDT)	45.0	55.9	0	22	22
New York, NY	MTA New York City Transit (NYCT)	493.8	835.0	0	468	54
New York, NY	Port Authority Trans-Hudson Corporation (PATH)	28.6	43.1	2	13	7
New York, NY	Staten Island Rapid Transit Operating Authority	28.6	32.7	0	23	4
Philadelphia, PA	Port Authority Transit Corporation (PATCO)	31.5	38.4	0	13	5
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	74.9	102.0	0	75	18
San Francisco, CA	San Francisco Bay Area Rapid Transit District	209.0	267.6	0	43	43
Washington, DC	Washington Metropolitan Area Transit Authority	206.6	225.3	0	83	83
TOTAL		1,596.1	2,209.5	27	1,023	428

Source: Federal Transit Administration National Transit Database.

(a) Additional stations may be wheelchair accessible, but not comply with other provisions of the Americans with Disabilities Act.

**TABLE 98: Heavy Rail Transit Agencies Vehicle and Financial Data, Fiscal Year 2004**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSE (000)
Atlanta, GA	Metropolitan Atlanta Rapid Transit Authority	302	145,181.3	43,614.4	123,208.3
Baltimore, MD	Maryland Transit Administration (MTA)	100	66,501.0	11,580.7	41,810.6
Boston, MA	Massachusetts Bay Transportation Authority	408	108,880.7	96,684.3	214,246.8
Chicago, IL	Chicago Transit Authority (CTA)	1,190	373,084.7	163,147.4	399,863.8
Cleveland, OH	The Greater Cleveland Regional Transit Authority	22	10,557.8	4,956.4	23,869.1
Los Angeles, CA	Los Angeles County Metropolitan Trp Auth	104	16,276.1	16,894.7	65,828.8
Miami, FL	Miami-Dade Transit (MDT)	136	16,032.3	10,026.6	61,437.7
New York, NY	MTA New York City Transit (NYCT)	6,162	2,144,106.6	1,837,633.0	2,537,639.7
New York, NY	Port Authority Trans-Hudson Corporation (PATH)	259	187,890.7	80,923.4	179,792.2
New York, NY	Staten Island Rapid Transit Operating Authority	64	1,834.6	4,439.6	26,374.9
Philadelphia, PA	Port Authority Transit Corporation (PATCO)	121	7,886.4	18,672.8	34,157.9
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	371	157,341.4	72,039.4	125,380.1
San Francisco, CA	San Francisco Bay Area Rapid Transit District	669	133,896.1	219,904.1	375,024.6
Washington, DC	Washington Metropolitan Area Transit Authority	950	404,168.1	322,272.0	525,516.2
TOTAL		10,858	3,773,637.8	2,902,788.9	4,734,150.7

Source: Federal Transit Administration National Transit Database.

**TABLE 99: Light Rail Transit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Baltimore, MD	Maryland Transit Administration (MTA)	2,060.3	122.6	6,067.1	41,180.2
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	5,677.7	378.5	70,558.1	178,887.8
Buffalo, NY	Niagara Frontier Transportation Authority (NFTA)	762.6	69.6	5,478.0	14,211.5
Cleveland, OH	The Greater Cleveland Regional Transit Authority	1,011.8	67.9	2,560.7	15,198.8
Dallas, TX	Dallas Area Rapid Transit (DART)	5,153.2	241.2	16,376.0	122,621.7
Dallas, TX	McKinney Avenue Transit Authority	NA	NA	NA	NA
Denver, CO	Denver Regional Transportation District (RTD)	3,869.3	216.1	10,028.5	43,341.3
Galveston, TX	Island Transit	35.0	5.8	40.6	42.0
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	473.4	41.2	5,349.7	13,757.6
Kenosha, WI	Kenosha Transit (KT)	20.6	2.9	58.9	66.5
Little Rock, AR	Central Arkansas Transit Authority (CATA)	6.4	1.3	44.5	62.7
Los Angeles, CA	Los Angeles County Metropolitan Transportation Auth	7,703.7	336.7	32,852.3	241,217.2
Memphis, TN	Memphis Area Transit Authority (MATA)	318.9	46.7	982.5	1,010.4
Minneapolis, MN	Metro Transit	510.2	39.5	2,938.8	12,120.4
New Orleans, LA	New Orleans Regional Transit Authority (NORTA)	969.8	121.6	8,919.7	17,450.2
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	1,634.6	138.9	9,868.9	35,874.8
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	3,320.0	351.2	25,158.1	63,064.2
Pittsburgh, PA	Port Authority of Allegheny County (Port Authority)	1,462.4	112.8	6,654.6	30,025.5
Portland, OR	Portland Streetcar	NA	NA	NA	NA
Portland, OR	Tri-County Metropolitan Trp District of Oregon (TriMet)	6,023.1	356.7	31,516.2	181,760.4
Sacramento, CA	Sacramento Regional Transit District	2,878.8	149.8	11,022.0	56,948.1
Salt Lake City, UT	Utah Transit Authority (UTA)	2,968.6	197.4	10,019.9	65,708.8
San Diego, CA	San Diego Trolley, Inc.	6,983.4	363.8	26,538.2	170,375.5
San Francisco, CA	San Francisco Municipal Railway (MUNI)	5,656.3	588.6	45,187.0	117,833.7
San Jose, CA	Santa Clara Valley Transportation Authority (VTA)	1,898.7	126.3	5,473.0	24,165.9
Seattle, WA	Central Puget Sound Regional Transit Authority (ST)	96.4	10.0	794.6	730.7
Seattle, WA	King County DOT – King County Metro	42.9	11.1	398.6	409.3
St. Louis, MO	Bi-State Development Agency (METRO)	5,024.2	189.9	14,509.5	127,210.2
Tampa, FL	Hillsborough Area Regional Transit Authority (HART)	82.9	17.5	519.6	922.0
TOTAL REPORTED (excludes "NA" entries)		66,645.3	4,305.8	349,915.5	1,576,197.7

Source: Federal Transit Administration National Transit Database. Agencies that do not participate in the NTD have "NA" entries.

**TABLE 100: Light Rail Transit Agencies Mileage and Station Data**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	DIRECT -IONAL ROUTE MILES	TRACK MILES	CROSS- INGS	STA- TIONS (a)	ADA ACCESS- IBLE STATIONS (a) (b)
Baltimore, MD	Maryland Transit Administration (MTA)	57.6	54.0	52	32	32
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	51.0	78.0	65	70	25
Buffalo, NY	Niagara Frontier Transportation Authority (NFT Metro)	12.4	14.1	8	15	7
Cleveland, OH	The Greater Cleveland Regional Transit Authority	30.4	33.0	22	34	8
Dallas, TX	Dallas Area Rapid Transit (DART)	87.7	98.4	98	34	34
Dallas, TX	McKinney Avenue Transit Authority	2.8	2.8	NA	0	0
Denver, CO	Denver Regional Transportation District (RTD)	31.6	32.1	39	23	23
Galveston, TX	Island Transit	11.8	5.0	57	3	3
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	14.8	20.0	68	16	16
Kenosha, WI	Kenosha Transit (KT)	1.9	1.9	19	2	1
Little Rock, AR	Central Arkansas Transit Authority (CATA)	2.8	2.5	0	NA	NA
Los Angeles, CA	Los Angeles County Metropolitan Transportation Auth	109.7	116.3	104	49	49
Memphis, TN	Memphis Area Transit Authority (MATA)	10.0	10.5	62	7	7
Minneapolis, MN	Metro Transit	24.4	24.2	45	17	17
New Orleans, LA	New Orleans Regional Transit Authority (NORTA)	25.3	26.0	238	9	9
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	99.9	67.1	88	49	42
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	66.2	171.0	1,702	46	1
Pittsburgh, PA	Port Authority of Allegheny County (Port Authority)	45.3	44.8	44	25	25
Portland, OR	Portland Streetcar	4.8	5.0	87	0	0
Portland, OR	Tri-County Metropolitan Trp District of Oregon (TriMet)	92.9	92.9	128	62	62
Sacramento, CA	Sacramento Regional Transit District	58.4	62.6	104	41	40
Salt Lake City, UT	Utah Transit Authority (UTA)	37.3	37.3	72	23	23
San Diego, CA	San Diego Trolley, Inc.	96.6	97.0	96	49	48
San Francisco, CA	San Francisco Municipal Railway (MUNI)	72.9	72.9	351	9	9
San Jose, CA	Santa Clara Valley Transportation Authority (VTA)	58.4	71.5	119	57	57
Seattle, WA	Central Puget Sound Regional Transit Authority (ST)	3.6	1.8	25	6	6
Seattle, WA	King County DOT - King County Metro	3.7	2.1	14	9	9
St. Louis, MO	Bi-State Development Agency (METRO)	75.8	81.0	24	28	28
Tampa, FL	Hillsborough Area Regional Transit Authority (HART)	4.8	3.2	21	8	8
TOTAL REPORTED (excludes "NA" entries)		1,194.7	1,329.0	3,752	723	589

Source: Federal Transit Administration National Transit Database plus other sources.

(a) Many light rail lines have numerous stops in the street that do not meet the definition of station.

(b) Additional stations may be wheelchair accessible, but not comply with other provisions of the Americans with Disabilities Act.

**TABLE 101: Light Rail Transit Agencies Vehicle and Financial Data, Fiscal Year 2004**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Baltimore, MD	Maryland Transit Administration (MTA)	53	82,078.4	5,432.4	33,687.9
Boston, MA	Massachusetts Bay Transportation Authority (MBTA)	185	85,383.2	52,704.8	107,082.0
Buffalo, NY	Niagara Frontier Transportation Authority (NFT Metro)	27	6,123.9	3,925.7	18,271.2
Cleveland, OH	The Greater Cleveland Regional Transit Authority	17	3,781.0	1,742.7	12,765.7
Dallas, TX	Dallas Area Rapid Transit (DART)	95	96,541.6	8,760.4	57,023.1
Dallas, TX	McKinney Avenue Transit Authority	NA	NA	NA	NA
Denver, CO	Denver Regional Transportation District (RTD)	49	205,997.5	8,050.7	21,689.1
Galveston, TX	Island Transit	4	0.0	22.8	355.3
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	18	81,744.5	1,486.9	14,134.7
Kenosha, WI	Kenosha Transit (KT)	5	0.0	0.0	301.6
Little Rock, AR	Central Arkansas Transit Authority (CATA)	3	9,926.6	9.9	224.3
Los Angeles, CA	Los Angeles County Metropolitan Transportation Auth	121	98,768.9	18,899.6	111,654.3
Memphis, TN	Memphis Area Transit Authority (MATA)	18	10,958.0	417.1	3,577.4
Minneapolis, MN	Metro Transit	22	91,882.5	2,568.0	8,367.9
New Orleans, LA	New Orleans Regional Transit Authority (NORTA)	66	21,606.1	6,028.5	14,275.0
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	55	284,879.4	8,924.7	54,713.6
Philadelphia, PA	Southeastern Pennsylvania Transportation Authority	141	35,329.5	14,787.8	46,088.3
Pittsburgh, PA	Port Authority of Allegheny County (Port Authority)	55	85,085.8	5,818.1	35,589.6
Portland, OR	Portland Streetcar	NA	NA	NA	NA
Portland, OR	Tri-County Metropolitan Trp District of Oregon (TriMet)	105	72,894.7	19,822.2	56,965.8
Sacramento, CA	Sacramento Regional Transit District	72	142,407.1	7,853.4	35,225.8
Salt Lake City, UT	Utah Transit Authority (UTA)	46	19,878.0	5,488.6	20,013.2

**TABLE 101: Light Rail Transit Agencies Vehicle and Financial Data, Fiscal Year 2004**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
San Diego, CA	San Diego Trolley, Inc.	123	12,668.0	24,196.9	41,830.5
San Francisco, CA	San Francisco Municipal Railway (MUNI)	181	122,830.6	21,473.7	105,899.5
San Jose, CA	Santa Clara Valley Transportation Authority (VTA)	80	206,508.5	4,367.7	45,752.5
Seattle, WA	Central Puget Sound Regional Transit Authority (ST)	3	247,714.4	0.0	2,543.8
Seattle, WA	King County DOT – King County Metro	5	102.4	226.3	1,426.8
St. Louis, MO	Bi-State Development Agency (METRO)	65	215,021.7	9,376.3	36,293.7
Tampa, FL	Hillsborough Area Regional Transit Authority (HART)	8	108.8	448.1	1,626.2
TOTAL REPORTED (excludes "NA" entries)		1,622	2,240,221.1	232,833.3	887,378.5

Source: Federal Transit Administration National Transit Database. Agencies that do not participate in the NTD have "NA" entries.

**TABLE 102: Other Rail Transit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands)**

M O D E (a)	URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
AG	Detroit, MI	Detroit Transportation Corporation	149.9	22.0	922.6	1,321.6
AG	Indianapolis, IN	Clarian Health People Mover	NA	NA	NA	NA
AG	Jacksonville, FL	Jacksonville Transportation Authority (JTA)	277.5	21.0	690.6	267.3
AG	Las Colinas, TX	Las Colinas Area Personal Transit	NA	NA	NA	NA
AG	Miami, FL	Miami-Dade Transit (MDT)	953.8	93.5	7,768.5	7,910.9
AG	Morgantown, WV	West Virginia University	NA	NA	NA	NA
CC	San Francisco, CA	San Francisco Municipal Railway (MUNI)	452.8	140.2	7,869.2	9,106.7
IP	Chattanooga, TN	Chattanooga Area Regional Transportation Auth	18.1	6.2	435.3	435.3
IP	Dubuque, IA	Fenelon Place Elevator	NA	NA	NA	NA
IP	Johnstown, PA	Cambria County Transit Authority (CamTran)	1.4	0.5	65.7	11.2
IP	Pittsburgh, PA	Port Authority of Allegheny County (Port Auth)	35.6	13.0	1,068.8	135.6
MO	Seattle, WA	City of Seattle - Seattle Center Monorail Transit	110.5	10.0	764.9	688.4
TR	Mountain Village, CO	Mountain Village Metro Dist	NA	NA	NA	NA
TR	New York, NY	Roosevelt Island Operating Corporation (RIOC)	23.2	8.0	696.0	348.0

Source: Federal Transit Administration National Transit Database. Agencies that do not participate in the NTD have "NA" entries.

(a) AG = automated guideway transit, CC = cable car, IP = inclined plane, MO = monorail, TR = aerial tramway

**TABLE 103: Other Rail Transit Agencies Mileage and Station Data**

M O D E (a)	URBANIZED AREA (Primary City)	TRANSIT AGENCY	DIRECT- IONAL ROUTE MILES	TRACK MILES	CROSS- INGS	STA- TIONS	ADA ACCESS- IBLE STATIONS (b)
AG	Detroit, MI	Detroit Transportation Corporation	2.9	2.9	0	13	12
AG	Indianapolis, IN	Clarian Health People Mover	2.8	2.8	0	3	3
AG	Jacksonville, FL	Jacksonville Transportation Authority (JTA)	5.4	5.4	0	8	8
AG	Las Colinas, TX	Las Colinas Area Personal Transit	2.8	1.4	0	4	4
AG	Miami, FL	Miami-Dade Transit (MDT)	8.5	9.4	0	21	21
AG	Morgantown, WV	West Virginia University	7.2	8.7	0	5	0
CC	San Francisco, CA	San Francisco Municipal Railway (MUNI)	8.8	8.8	77	0 (c)	0 (c)
IP	Chattanooga, TN	Chattanooga Area Regional Trp Auth	2.0	1.0	0	2	2
IP	Dubuque, IA	Fenelon Place Elevator	0.1	0.1	0	2	0
IP	Johnstown, PA	Cambria County Transit Authority (CamTran)	0.3	0.3	0	2	2
IP	Pittsburgh, PA	Port Authority of Allegheny County	0.5	0.5	0	4	3
MO	Seattle, WA	City of Seattle - Seattle Center Monorail Tran	1.8	2.0	0	2	2
TR	Mountain Village, CO	Mountain Village Metro Dist	5.0	2.5	0	4	0
TR	New York, NY	Roosevelt Island Operating Corporation	1.2	0.6	0	2	1
TOTAL			49.4	46.4	77	72	58

Source: Federal Transit Administration National Transit Database plus other sources.

(a) AG = automated guideway transit, CC = cable car, IP = inclined plane, MO = monorail, TR = aerial tramway

(b) Additional stations may be wheelchair accessible, but not comply with other provisions of the Americans with Disabilities Act.

(c) Cable cars stop in the middle of the street and do not have stations.

**TABLE 104: Other Rail Transit Agencies Vehicle and Financial Data, Fiscal Year 2004**

M O D E (a)	URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSE (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
AG	Detroit, MI	Detroit Transportation Corporation	4	3,323.4	367.0	11,307.7
AG	Indianapolis, IN	Clarian Health People Mover	NA	NA	NA	NA
AG	Jacksonville, FL	Jacksonville Transportation Authority (JTA)	10	1,266.6	325.9	4,812.7
AG	Las Colinas, TX	Las Colinas Area Personal Transit	NA	NA	NA	NA
AG	Miami, FL	Miami-Dade Transit (MDT)	29	339.7	0.0	18,672.9
AG	Morgantown, WV	West Virginia University	NA	NA	NA	NA
CC	San Francisco, CA	San Francisco Municipal Railway (MUNI)	40	1,192.2	15,469.8	40,472.2
IP	Chattanooga, TN	Chattanooga Area Regional Trp Auth	2	84.6	1,609.7	820.3
IP	Dubuque, IA	Fenelon Place Elevator	NA	NA	NA	NA
IP	Johnstown, PA	Cambria County Transit Authority (CamTran)	2	59.6	102.3	455.5
IP	Pittsburgh, PA	Port Authority of Allegheny County	4	0.0	1,042.3	961.0
MO	Seattle, WA	City of Seattle - Seattle Center Monorail Tran	8	0.0	1,010.9	1,485.2
TR	Mountain Village, CO	Mountain Village Metro Dist	NA	NA	NA	NA
TR	New York, NY	Roosevelt Island Operating Corporation	2	42.3	1,194.2	2,899.8

Source: Federal Transit Administration National Transit Database. Agencies that do not participate in the NTD have "NA" entries.

(a) AG = automated guideway transit, CC = cable car, IP = inclined plane, MO = monorail, TR = aerial tramway

# **Vanpool**

## *Highlights.....*

See National Totals on page 83.

Vanpool service operates primarily from rural and outer suburban areas into urban area central business districts or suburban employment centers. Most vanpools serve large urban areas, though a few states have statewide programs.

The vast majority of vanpools are privately-operated, are not available to the public, and are not considered public transportation, which is limited to the several dozen transit agencies that do fund and operate public vanpools.

**Vanpool** mode is comprised of vans (and very rarely, small buses and other vehicles) operating as a ridesharing arrangement, providing transportation to a group of individuals traveling directly between their homes and a regular destination within the same geographical area. The vehicles have a minimum seating capacity of seven persons, including the driver. It is considered mass transit service if it is operated by a public entity or is one in which a public entity owns, purchases, or leases the vehicle(s). Vanpool(s) must also be in compliance with mass transit rules including Americans with Disabilities Act (ADA) provisions, and be open to the public and that availability must be made known. Other forms of public participation to encourage ridesharing arrangements such as the provision of parking spaces, use of high occupancy vehicle (HOV) lanes, coordination or clearing house service, do not qualify as public vanpools.

## **Types of Service**

**Vanpool service** is operated in two ways. Either transit agency vehicles are leased to companies or directly to volunteer drivers, or the service is contracted to a vanpool management company that has its own vehicles and administers the service. Under either arrangement, many vanpools serve large private corporations or government agencies and consist solely of their employees.

Vanpool service generally serves areas far outside the normal bus service area, or intra-suburban trips where bus service cannot be justified. The average trip length is nearly 35 miles, and trips well over 50 miles are not uncommon.

Vanpool fares often vary depending on the number of people in the vanpool, the size of van used, and the distance traveled. The driver collects fares (unless there is a pay-by-mail program), operates the van, and arranges for maintenance. In return, the driver rides free, may keep the van at home overnight, and may often use it for personal use within prescribed limits.

The transit agency, or sometimes another local governmental unit, runs a vanpool matching service to recruit new riders and usually pays insurance, fuel, and maintenance costs. If the number of vans involved is large enough, the transit agency may perform the maintenance itself, though the usual procedure is for the driver to take the van to a local automobile dealer.

## **Types of Vehicles**

Almost all vanpool service is operated with vans less than 21 feet in length.

A **van** has a typical seating capacity of 5 to 15 passengers and is classified as a van by vehicle manufacturers. Very rarely, a **modified van (body-on-chassis van)**--a standard van that has undergone some structural changes by another company, usually made to increase its size and particularly its height--may be used. The seating capacity of modified vans is approximately 9 to 18 passengers.



*This vanpool van is operated by the Capital Metropolitan Transportation Authority in Austin, Texas. Many vanpools use even larger vans.*

**TABLE 105: Vanpool National Totals, Fiscal Year 2004**

Agencies, Number of	69
Fares Collected, Passenger	\$30,932,000
Fare per Unlinked Trip, Average	\$1.96
Expense, Operating Total (a)	\$64,249,000
Salaries and Wages (b)	\$11,256,000
Fringe Benefits (b)	\$6,650,000
Services (b)	\$10,019,000
Fuel and Lubricants (b)	\$7,115,000
Materials and Supplies, Other (b)	\$1,650,000
Utilities (b)	\$587,000
Casualty and Liability (b)	\$4,807,000
Purchased Transportation (b) (c)	\$16,990,000
Other (b)	\$5,175,000
Vehicle Operations (c)	\$13,183,000
Vehicle Maintenance (c)	\$8,647,000
Non-vehicle Maintenance (c)	\$998,000
General Administration (c)	\$24,432,000
Expense, Capital Total	\$14,316,000
Rolling Stock	\$10,504,000
Facilities, Stations, Administrative Buildings	\$1,411,000
Other	\$2,401,000
Trips, Unlinked Passenger, Annual	15,766,000
Miles, Passenger	486,356,000
Trip Length, Average (miles)	30.8
Miles, Vehicle Total	85,100,000
Miles, Vehicle Revenue	83,099,000
Hours, Vehicle Total	2,354,000
Hours, Vehicle Revenue	2,212,000
Speed, Vehicle in Revenue Service, Average (m.p.h.)	37.6
Revenue Vehicles Available for Maximum Service	5,915
Vehicles Operated at Maximum Service	5,074
Age, Average (years)	4.1
Air-conditioned	86.7%
Lifts, Wheelchair	2.8%
Ramps, Wheelchair	0.7%
Accessible Only via Stations	0.0%
Power Source, Diesel or Gasoline	99.2%
Power Source, Alternative	0.8%
Rehabilitated	0.0%
Employees, Operating	283
Vehicle Operations	39
Vehicle Maintenance	43
Non-vehicle Maintenance	6
General Administration	195
Employees, Capital	3
Diesel Fuel Consumed (gallons)	143,000
Other Fuel Consumed (gallons)	5,838,000
Electricity Consumed (kwh)	0

(a) is the sum of (b) lines OR the sum of (c) lines.

**TABLE 106: New Vanpool Vehicle Market by Power Source, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	749	100.0%	110	100.0%	1,548	100.0%
Diesel fuel	2	0.3%	0	0.0%	0	0.0%
Gasoline	747	99.7%	110	100.0%	1,548	100.0%

Source: APTA survey. Data are about 60% of national total.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

**TABLE 107: Vanpool Fuel Consumption, Thousands of Gallons**

FISCAL YEAR	DIESEL	COMPRESSED NATURAL GAS	GASOLINE	PROPANE	OTHER	TOTAL NON-DIESEL
1994	160	0	1,950	24	0	1,974
1995	182	0	2,282	57	0	2,339
1996	219	0	2,449	5	15	2,469
1997	202	2	3,141	4	0	3,147
1998	227	2	4,178	3	0	4,183
1999	238	35	4,547	4	0	4,586
2000	179	34	4,681	4	0	4,719
2001	97	31	4,849	3	0	4,883
2002	129	33	5,087	1	0	5,121
2003	153	18	5,073	0	51	5,143
2004 P	143	14	5,779	0	45	5,838

P = Preliminary

## Accessibility

Vanpool service is not required to be accessible by law, as are other modes, since the passengers are voluntary participants. Rather, a vanpool would be assigned an accessible van if a person in need of such a van became a vanpool participant.

An **accessible vehicle** is a public transportation revenue vehicle that does not restrict access, is usable, and provides allocated space and/or priority seating for individuals who use wheelchairs.

**TABLE 108: Vanpool Accessibility, 2006**

	VEHICLES	PER CENT
Total	4,261	100.0%
Via on-board lift	121	2.8%
Via on-board ramp	30	0.7%
Non-accessible	4,110	96.5%

Source: APTA survey. Data are about 60% of national total.

**High-floor vans** require all riders except the person next to the driver to climb into the van from street level through a sliding door on the side of the van. A few such vans accommodate wheelchair-bound and other riders who cannot climb steps by using a retractable lift that raises and lowers persons and equipment between street and van floor levels.

**Low-floor vans** generally use a side sliding door for passengers and have a level floor in the entire passenger-seating area. Only a short retractable ramp is necessary to accommodate wheelchairs and those who cannot bridge the gap between van and street level.

**TABLE 109: New Vanpool Vehicle Market by Accessibility, 2005-2010**

	BUILT IN 2005		ON ORDER JANUARY 2006		POTENTIAL ORDERS (a)	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	749	100.0%	110	100.0%	1,548	100.0%
Via on-board lift	12	1.6%	0	0.0%	9	0.6%
Via on-board ramp	0	0.0%	0	0.0%	10	0.6%
Non-accessible	737	98.4%	110	100.0%	1,529	98.8%

Source: APTA survey. Data are about 60% of national total.

(a) DATA ARE TENTATIVE; SOME POTENTIAL ORDERS MAY NOT OCCUR.

**TABLE 110: Vanpool Transit Agencies Service and Usage Data, Fiscal Year 2004 (Thousands)**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	ANNUAL VEHICLE REVENUE MILES	ANNUAL VEHICLE REVENUE HOURS	ANNUAL UNLINKED TRIPS	ANNUAL PASSENGER MILES
Anchorage, AK	Municipality of Anchorage (People Mover)	610.5	15.3	88.1	3,963.4
Atlanta, GA	Douglas County Rideshare (Rideshare)	408.9	11.6	71.7	1,968.5
Atlanta, GA	Georgia Regional Transportation Auth (GRTA)	623.9	14.7	169.6	3,165.9
Austin, TX	Capital Metropolitan Transportation Authority (CMTA)	1,235.5	44.9	242.4	4,791.8
Bremerton, WA	Kitsap Transit	1,074.0	38.9	232.4	5,068.6
Cape Coral, FL	Lee County Transit (LeeTran)	90.0	2.3	25.0	726.0
Charlotte, NC	Charlotte Area Transit System (CATS)	1,590.5	32.2	245.9	12,412.3
Chicago, IL	Pace - Suburban Bus Division (PACE)	6,889.4	251.1	1,416.3	31,913.7
Dallas, TX	Dallas - VPSI, Inc.	2,486.9	54.7	380.1	14,267.5
Dallas, TX	Dallas Area Rapid Transit (DART)	1,447.7	41.4	378.5	15,954.7
Davenport, IA	Rock Island County Metropolitan Mass Transit District	28.1	1.0	2.6	169.5
Daytona Beach, FL	County of Volusia (VOTRAN)	447.9	9.2	73.0	3,689.6
Denver, CO	Denver Regional Transportation District (RTD)	1,822.9	37.0	190.6	7,207.0
Des Moines, IA	Des Moines Metropolitan Transit Authority	1,288.1	23.9	184.2	7,803.7
Durham, NC	Research Triangle Regional Public Transportation Authority	868.6	24.7	320.8	11,398.7
Hartford, CT	Greater Hartford Ridesharing Corporation	5,139.9	124.1	1,071.6	0.0
Honolulu, HI	Honolulu - VPSI, Inc.	2,759.4	94.8	459.5	10,814.5
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	2,569.1	84.3	1,088.8	29,456.7
Kansas City, MO	Kansas City Area Transportation Authority (KCATA)	509.9	11.3	67.4	2,452.9
Milwaukee, WI	Milwaukee County Transit System (MCTS)	348.4	7.7	32.8	1,298.5
Minneapolis, MN	Metropolitan Council	830.7	19.5	129.2	4,573.0
Mount Vernon, WA	Skagit Transit (SKAT)	188.4	4.0	21.1	0.0
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	3,651.2	100.4	610.2	24,583.0
Olympia, WA	Intercity Transit (I.T.)	1,446.1	36.2	298.7	10,430.9
Orlando, FL	Central Florida Regional Transportation Authority (LYNX)	1,037.9	30.2	185.7	4,956.2
Palm Bay, FL	Space Coast Area Transit (SCAT)	1,002.4	18.4	127.0	6,745.5
Phoenix, AZ	Phoenix - VPSI, Incorporated	3,621.9	88.6	623.4	18,324.1
Pittsburgh, PA	Southwestern Pennsylvania Commission (SPC)	711.4	22.8	206.3	5,907.7
Portland, OR	Clark County Public Transportation Benefit Area Authority	62.5	1.9	26.3	360.0
Richmond, VA	Greater Richmond Transit Company	1,055.3	21.2	127.6	8,274.5
Salt Lake City, UT	Utah Transit Authority (UTA)	4,618.1	111.7	837.0	38,917.9
San Diego, CA	San Diego Association of Governments (SANDAG)	8,093.2	182.6	1,207.3	60,233.3
Santa Fe, NM	Santa Fe Trails - City of Santa Fe (SFT)	24.9	1.1	4.5	54.4
Sarasota, FL	Manatee County Area Transit (MCAT)	35.0	1.1	1.3	77.3
Seattle, WA	King County DOT (King County Metro)	8,767.2	246.3	1,689.0	40,424.5
Seattle, WA	Pierce County Transportation Benefit Area Authority	3,732.9	99.5	690.5	23,166.5
Seattle, WA	Snohomish County Transportation Benefit Area Corporation	3,062.8	55.6	581.5	15,389.3
Spokane, WA	Spokane Transit Authority (STA)	352.4	9.9	102.0	2,360.3
St. Louis, MO	Madison County Transit District (MCT)	2,537.5	61.4	389.9	16,917.0
Sumter, SC	Santee Wateree Regional Transportation Authority	104.5	3.3	31.9	0.0
Tampa, FL	Hillsborough Area Regional Transit Authority (HART)	266.2	6.5	33.1	1,302.2
Virginia Beach, VA	Transportation District Commission of Hampton Roads	641.7	32.5	171.7	6,829.9
Yakima, WA	Yakima Transit (YT)	276.8	6.2	30.7	273.8

Source: Federal Transit Administration National Transit Database; excludes agencies that do not participate in the NTD.

**TABLE 111: Vanpool Transit Agencies Vehicle and Financial Data, Fiscal Year 2004**

URBANIZED AREA (Primary City)	TRANSIT AGENCY	REVENUE VEHICLES	CAPITAL EXPENSES (000)	FARE REVENUE (000)	OPERATING EXPENSES (000)
Anchorage, AK	Municipality of Anchorage (People Mover)	27	0.0	320.0	437.1
Atlanta, GA	Douglas County Rideshare (Rideshare)	34	950.4	118.6	327.1
Atlanta, GA	Georgia Regional Transportation Authority (GRTA)	67	0.0	150.1	289.3
Austin, TX	Capital Metropolitan Transportation Authority (CMTA)	148	1,005.4	213.9	792.6
Bremerton, WA	Kitsap Transit	114	681.8	233.8	867.1
Cape Coral, FL	Lee County Transit (LeeTran)	7	0.0	0.0	91.8
Charlotte, NC	Charlotte Area Transit System (CATS)	90	5.8	423.6	727.8
Chicago, IL	Pace - Suburban Bus Division (PACE)	601	1,826.6	2,519.0	5,207.2
Dallas, TX	Dallas - VPSI, Inc.	123	0.0	313.8	809.5
Dallas, TX	Dallas Area Rapid Transit (DART)	66	0.0	310.4	1,209.1
Davenport, IA	Rock Island County Metropolitan Mass Transit District	9	0.0	22.0	18.3
Daytona Beach, FL	County of Volusia, dba: VOTRAN (VOTRAN)	24	271.5	106.8	137.9
Denver, CO	Denver Regional Transportation District (RTD)	99	0.0	0.0	453.6
Des Moines, IA	Des Moines Metropolitan Transit Authority	76	118.1	449.1	388.3
Durham, NC	Research Triangle Regional Public Transportation Auth	74	0.0	424.1	1,230.1
Hartford, CT	Greater Hartford Ridesharing Corporation	338	0.0	2,569.0	1,808.8
Honolulu, HI	Honolulu - VPSI, Inc.	184	0.0	1,151.3	1,682.0
Houston, TX	Metropolitan Transit Authority of Harris County, Texas	284	0.0	993.2	1,838.5
Kansas City, MO	Kansas City Area Transportation Authority (KCATA)	36	0.0	166.3	311.2
Milwaukee, WI	Milwaukee County Transit System (MCTS)	21	0.0	95.8	95.8
Minneapolis, MN	Metropolitan Council	58	0.0	392.6	882.2
Mount Vernon, WA	Skagit Transit (SKAT)	9	186.2	73.2	145.6
New York, NY	New Jersey Transit Corporation (NJ TRANSIT)	174	492.0	1,607.7	7,383.6
Olympia, WA	Intercity Transit (I.T.)	102	502.7	482.9	556.3
Orlando, FL	Central Florida Regional Transportation Authority (LYNX)	57	142.5	211.3	546.2
Palm Bay, FL	Space Coast Area Transit (SCAT)	40	84.0	342.0	342.0
Phoenix, AZ	Phoenix - VPSI, Incorporated	250	0.0	1,099.1	1,485.1
Pittsburgh, PA	Southwestern Pennsylvania Commission (SPC)	53	128.7	379.9	750.7
Portland, OR	Clark County Public Transportation Benefit Area Authority	10	0.0	47.2	43.0
Richmond, VA	Greater Richmond Transit Company	42	0.0	345.4	497.0
Salt Lake City, UT	Utah Transit Authority (UTA)	272	0.0	917.4	2,179.8
San Diego, CA	San Diego Association of Governments (SANDAG)	338	0.0	3,857.4	5,472.0
Santa Fe, NM	Santa Fe Trails - City of Santa Fe (SFT)	2	0.0	0.4	154.0
Sarasota, FL	Manatee County Area Transit (MCAT)	2	0.0	1.9	15.6
Seattle, WA	King County DOT - King County Metro	948	4,219.8	4,884.6	7,234.0
Seattle, WA	Pierce County Transportation Benefit Area Authority	284	1,153.7	1,661.8	2,919.8
Seattle, WA	Snohomish County Transportation Benefit Area Corp	276	14.1	1,236.4	2,270.2
Spokane, WA	Spokane Transit Authority (STA)	44	471.5	181.3	220.9
St. Louis, MO	Madison County Transit District (MCT)	116	207.4	649.0	1,500.1
Sumter, SC	Santee Wateree Regional Transportation Authority	2	51.4	5.4	85.8
Tampa, FL	Hillsborough Area Regional Transit Authority (HART)	17	0.0	102.3	96.3
Virginia Beach, VA	Transportation District Commission of Hampton Roads	46	0.0	0.0	147.4
Yakima, WA	Yakima Transit (YT)	14	0.0	108.1	78.5

Source: Federal Transit Administration National Transit Database; excludes agencies that do not participate in the NTD.

# Canadian Data

Data in this section are extracted from the **Summary of Canadian Transit Statistics** and predecessor documents published each year by APTA's Canadian counterpart, the Canadian Urban Transit Association (CUTA). Although definitions of terms are generally similar to U.S. terms, many are somewhat different, and comparison of Canadian and U.S. data can be misleading.

Public transportation use in Canada (as well as in the rest of the world) has historically been much greater than the U.S. because it has a less automobile-dependent culture. Consequently, measures of public transportation use will be considerably higher than the U.S.

For more Canadian statistical information, see CUTA's web site, [www.cutactu.on.ca](http://www.cutactu.on.ca).



*The Societe de Transport de Montreal operates the only rubber-tired rail system in Canada.*

**TABLE 112: Canadian Fixed-Route Summary Statistics, Millions**

YEAR	NUMBER OF AGENCIES (a)	REVENUE PASSENGER TRIPS	VEHICLE MILES	NON-GOVT OPERATING FUNDING (b)	OPERATING EXPENSE (b)
1990	77	1,532.4	487.1	1,312.9	2,451.4
1991	92	1,450.0	484.0	1,401.0	2,518.6
1992	92	1,398.7	479.8	1,404.8	2,644.0
1993	91	1,370.1	483.4	1,457.8	2,719.7
1994	88	1,353.2	482.2	1,465.0	2,707.4
1995	88	1,354.2	486.9	1,496.5	2,716.4
1996	86	1,348.6	479.3	1,576.2	2,754.3
1997	66	1,377.7	481.1	1,713.8	2,749.9
1998	68	1,387.2	474.9	1,743.8	2,755.5
1999	89	1,437.5	501.9	1,854.6	2,922.2
2000	90	1,486.9	513.8	2,000.0	3,107.8
2001	90	1,473.7	506.5	2,053.4	3,210.8
2002	90	1,531.0	532.7	2,197.1	3,445.6
2003	92	1,552.2	543.3	2,297.0	3,696.1
2004	93	1,592.0	551.2	2,440.0	3,908.7

Source: Canadian Urban Transit Association.

(a) Number of agencies reporting.

(b) Monetary data are Canadian Dollars.

**TABLE 113: Canadian Fixed-Route Revenue Vehicles by Mode**

YEAR	LIGHT RAIL	HEAVY RAIL (a)	COMMUTER RAIL (a)	TROLLEY BUS	BUS	OTHER	TOTAL
1990	532	1,381	NA	472	10,626	446	13,457
1991	527	1,379	NA	272	10,992	372	13,542
1992	500	1,724	NA	358	10,507	119	13,208
1993	547	1,679	NA	308	10,776	255	13,565
1994	547	1,381	331	345	10,560	179	13,343
1995	548	1,381	359	305	10,542	85	13,220
1996	520	1,373	359	320	10,506	102	13,180
1997	520	1,381	336	322	10,481	36	13,076
1998	520	1,395	346	315	10,888	35	13,499
1999	520	1,419	505	304	11,244	37	14,029
2000	521	1,431	531	303	11,502	47	14,335
2001	530	1,451	539	304	11,695	54	14,573
2002	594	1,451	579	293	11,712	36	14,665
2003	611	1,451	586	290	11,996	81	15,015
2004	613	1,443	613	284	12,202	81	15,236

Source: Canadian Urban Transit Association.

(a) Prior to 1994, heavy rail and commuter rail combined.

**TABLE 114: Canadian Fixed-Route New Revenue Vehicle Purchases by Mode**

YEAR	LIGHT RAIL	HEAVY RAIL	COMMUTER RAIL	TROLLEY BUS	BUS	OTHER	TOTAL
1990	0	0	0	0	487	67	554
1991	0	0	0	0	528	8	536
1992	16	0	0	0	549	60	625
1993	0	0	0	0	163	45	208
1994	0	0	0	0	250	37	287
1995	20	0	0	0	348	61	429
1996	0	18	0	0	517	64	599
1997	0	80	0	9	283	19	391
1998	0	80	0	0	651	58	789
1999	0	56	0	0	706	43	805
2000	0	82	7	0	358	54	501
2001	14	54	2	0	446	134	650
2002	21	0	0	0	490	59	570
2003	0	0	20	0	1,057	44	1,121
2004	1	0	25	0	1,026	155	1,207

Source: Canadian Urban Transit Association.

**TABLE 115: Canadian Fixed-Route Passenger Fares (a)**

YEAR	AVERAGE OPERATING REVENUE PER REVENUE PASSENGER TRIP	ADULT BASE CASH FARE		
		HIGH	LOW	AVERAGE
1990	0.86	1.75	0.50	1.07
1991	0.97	2.00	0.75	1.18
1992	1.00	2.50	0.75	1.22
1993	1.06	2.60	0.75	1.31
1994	1.08	2.60	0.05	1.35
1995	1.11	2.60	0.05	1.45
1996	1.17	3.00	0.05	1.57
1997	1.21	2.60	1.20	1.69
1998	1.22	2.60	1.25	1.78
1999	1.26	2.60	1.00	1.68
2000	1.31	2.75	1.00	1.70
2001	1.35	2.70	1.00	1.73
2002	1.40	3.00	1.00	1.81
2003	1.45	3.00	1.25	1.88
2004	1.50	3.25	1.25	1.95

Source: Canadian Urban Transit Association.

(a) Data reported in Canadian dollars.

**TABLE 116: Canadian Fixed-Route Employees by Type**

YEAR	VEHICLE OPERATORS	OTHER VEHICLE OPERATIONS	VEHICLE MAINTENANCE	NON-VEHICLE MAINTENANCE	GENERAL ADMINISTRATION	TOTAL
1990	21,040	3,223	7,336	3,569	4,560	39,728
1991	21,502	3,135	7,936	2,641	4,364	39,578
1992	21,316	2,621	7,195	2,820	5,378	39,330
1993	21,240	2,619	6,657	3,272	4,283	38,071
1994	21,475	2,806	6,845	3,282	4,747	39,218
1995	21,495	2,835	6,964	3,227	4,477	38,976
1996	20,878	2,786	6,982	3,324	4,564	38,531
1997	20,158	3,099	6,651	3,714	4,459	38,078
1998	20,521	2,976	6,621	3,608	3,589	38,357
1999	21,310	2,826	6,836	3,725	4,145	39,548
2000	21,784	2,890	6,908	3,803	4,133	40,373
2001	22,383	3,114	7,031	3,624	5,270	41,422
2002	23,150	3,093	7,219	3,672	4,813	41,947
2003	23,626	3,290	7,320	3,767	4,793	42,796
2004	23,867	3,383	7,471	3,850	4,959	43,530

Source: Canadian Urban Transit Association.

**TABLE 117: Canadian Specialized Transit Services Summary Statistics, Millions**

YEAR	NUMBER OF AGENCIES (a)	PASSENGER TRIPS	VEHICLE MILES	NON-GOVT OPERATING FUNDING (b)	OPERATING EXPENSE (b)
1991	47	4.6	17.0	15.9	64.4
1992	47	5.2	18.7	17.9	75.6
1993	50	7.2	29.3	19.2	118.3
1994	46	8.0	26.8	11.0	141.9
1995	49	8.6	28.8	12.9	144.9
1996	49	8.6	28.6	13.1	145.6
1997	51	8.8	29.1	14.5	146.2
1998	52	9.1	28.2	14.9	152.2
1999	59	10.4	31.5	33.0	170.8
2000	58	10.9	33.7	18.7	185.7
2001	60	11.1	32.6	18.8	197.4
2002	60	11.6	34.5	19.9	215.1
2003	61	11.8	34.6	20.6	231.4
2004	61	12.5	37.0	22.1	249.0

Source: Canadian Urban Transit Association.

(a) Number of agencies reporting.

(b) Monetary data are Canadian Dollars.

# Resources

American Association of State Highway and Transportation Officials	<a href="http://www.aashto.org">www.aashto.org</a>
American Public Transportation Association	<a href="http://www.apta.com">www.apta.com</a>
Americans for Transportation Mobility	<a href="http://www.a-t-m.org">www.a-t-m.org</a>
Bureau of Transportation Statistics	<a href="http://www.bts.gov">www.bts.gov</a>
Canadian Urban Transit Association	<a href="http://www.cutactu.on.ca">www.cutactu.on.ca</a>
Center for Transportation Excellence	<a href="http://www.ctfe.org">www.ctfe.org</a>
Community Transportation Association of America	<a href="http://www.ctaa.org">www.ctaa.org</a>
Federal Highway Administration	<a href="http://www.fhwa.dot.gov">www.fhwa.dot.gov</a>
Federal Railroad Administration	<a href="http://www.fra.dot.gov">www.fra.dot.gov</a>
Federal Transit Administration	<a href="http://www.fta.dot.gov">www.fta.dot.gov</a>
FTA National Transit Database	<a href="http://www.ntdprogram.com">www.ntdprogram.com</a>
International Union of Public Transport	<a href="http://www.uitp.com">www.uitp.com</a>
Light Rail Now	<a href="http://www.lightrailnow.org">www.lightrailnow.org</a>
National Alliance of Public Transportation Advocates	<a href="http://www.napta.net">www.napta.net</a>
PublicTransportation.org	<a href="http://www.publictransportation.org">www.publictransportation.org</a>
Surface Transportation Policy Project	<a href="http://www.transact.org">www.transact.org</a>
Texas Transportation Institute	<a href="http://tti.tamu.edu">tti.tamu.edu</a>
Transit Cooperative Research Program	<a href="http://www.tcrponline.org">www.tcrponline.org</a>
Transportation Research Board	<a href="http://www.trb.org">www.trb.org</a>
United States Department of Transportation	<a href="http://www.dot.gov">www.dot.gov</a>

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