



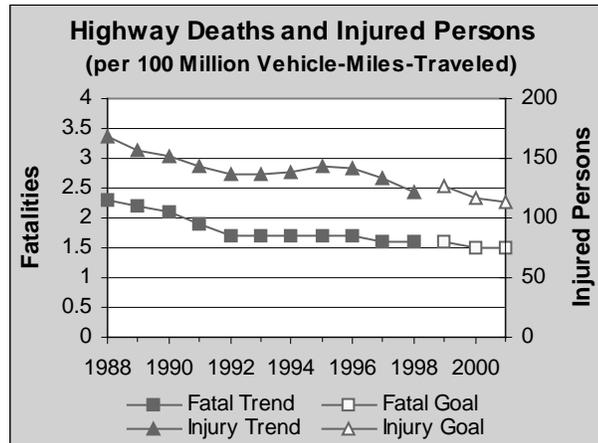
## MAJOR PROGRAM PERFORMANCE

### SURFACE

In surface transportation program performance, the Department had success in reducing highway fatalities and injuries, rail fatalities, pipeline failures and pipeline spills. DOT also made significant improvements in bridge conditions, Amtrak ridership, and wetland protection and recovery.

#### SAFETY

#### HIGHWAY FATALITY AND INJURY RATES



<b>Performance Measure:</b> Number of highway-related injured persons per 100 million vehicle miles traveled.
2001 Goal: 113
2000 Goal: 116
1999 Goal: 127
1998 Performance: 122

<b>Performance Measure:</b> Number of highway-related fatalities per 100 million vehicle miles traveled.
2001 Goal: 1.5
2000 Goal: 1.5
1999 Goal: 1.6
1998 Performance: 1.6

In 1994, 41,471 Americans died and over three million were injured in motor vehicle crashes, taking a heavy personal toll on American families and costing more than \$165 billion in medical costs. Highway crashes account for 94 percent of all transportation-related fatalities and 99 percent of transportation injured persons and are the leading causes of death for ages 5 through 29.

Vehicle travel is expected to grow at approximately 2.2 percent per year. In addition, the highest risk population groups -- older drivers and drivers between the ages 15 and 24 -- will grow at faster rates than the overall population.

Preliminary fatality data show a decrease of 1.2 percent in 1998. Fatalities per 100 million vehicle-miles-traveled (VMT data preliminary) were 1.6 for the second year and injured persons per 100 million VMT dropped to 122, meeting DOT's 1998 goals.

In 1998, nine agencies within DOT worked together to promote and implement a safer national transportation system by combining the best injury prevention practices into the Safe Communities approach to serve as a model throughout the nation. DOT established 426 safe community sites during 1998, exceeding our original goal of 400 sites.

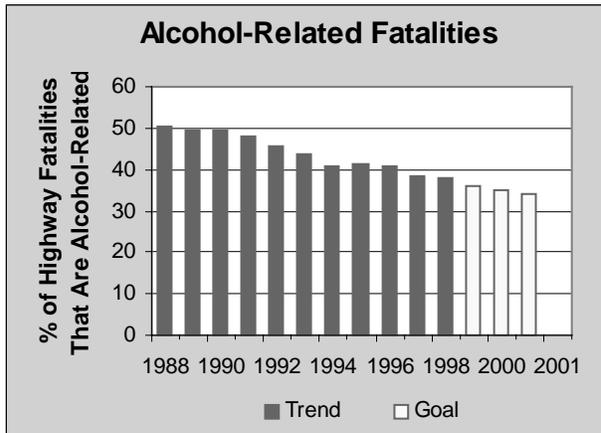
In 1998, NHTSA issued a proposed rulemaking which requires additional air bag system performance tests for passenger cars and light trucks, providing maximum protection for properly seated adults and reduced risks for infants, young children and adults who may be in close proximity to inflating air bags. NHTSA issued a final rule permitting automakers to install dynamically deploying interior head protection systems that will provide additional safety in side-impact crashes.

Two evaluations were completed in 1998:

Long-Term Effectiveness of Center High Mounted Stop Lamps in Passenger Cars and Light Trucks indicated that cars equipped with Center High Mounted Stop Lamps are 4.3 percent less likely to be struck in the rear than cars without the lamps. When all cars and light trucks on the road have the lamps, they will prevent an estimated 194,000-239,000 crashes, 58,000-70,000 nonfatal injuries and \$655 million in property damage per year.

The Highway Safety Assessment: A Summary of Findings in Ten States indicated that the Federal grant programs have achieved Congressional intent. Federal grants, amounting to less than two percent of total safety spending by States and communities, have acted as seed money to initiate programs to resolve important highway safety problems.

**ALCOHOL-RELATED HIGHWAY FATALITIES**



<b>Performance Measure:</b> Percentage of highway fatalities that are alcohol-related.
2001 Goal: 34
2000 Goal: 35
1999 Goal: 36
1998 Performance: 38

Driving while impaired is the most frequently committed violent crime in America. Alcohol-related fatalities account for almost 40 percent of all highway fatalities. While down from 25,000 in 1982, there were still 15,935 alcohol-related fatalities in 1998. Alcohol is the single biggest cause of fatal crashes. It takes a heavy, human toll – especially among young people – and it represents a serious breach of responsibility by those who drink and drive.

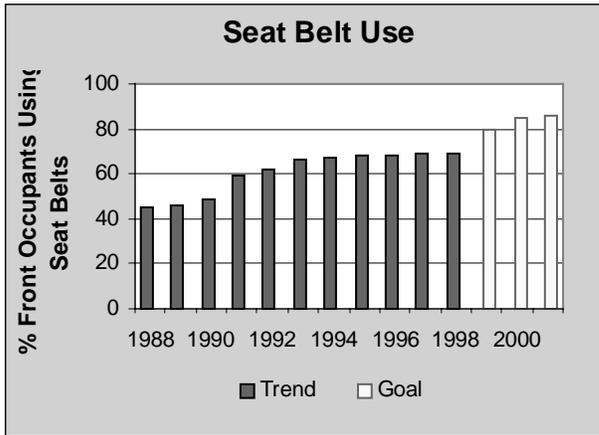
The magnitude of the drinking-and-driving problem is demonstrated by 27.4 percent of college students reporting that they drink and drive. There is also growing evidence that the use of drugs, a corollary problem, by young people is on the rise.

In 1998, there were 15,935 fatalities in alcohol-related crashes, 38 percent of the total fatalities for the year. This represents a 33 percent reduction from the 23,626 alcohol-related fatalities in 1988, 50 percent of the fatalities.

DOT, through Partners in Progress (PIP), works with Federal agencies, States and other organizations to reduce alcohol-related fatalities. TEA-21 created a new grant program, Section 163. This program focuses on reducing the incidence of intoxicated drivers by authorizing \$500 million over six years for incentive grants to States that enact and enforce laws that make operating a motor vehicle with a blood alcohol concentration, BAC, of 0.08 or greater illegal. Currently, 16 States have laws setting the blood alcohol limit to 0.08 percent BAC. In addition, 27 States have introduced or will likely introduce 0.08 legislation in their 1999 legislative sessions.

TEA-21 also authorized \$219.5 million over six years to continue the Section 410 alcohol-impaired driving countermeasures incentive grant program. To qualify for this grant, States must demonstrate that they have in place certain laws or programs, such as administrative license revocation laws and graduated licensing programs or States must meet certain performance criteria based on their alcohol-involved fatality rates.

**SEAT BELT USE**



<b>Performance Measure:</b> Percentage of front occupants using seat belts.
2001 Goal: 86
2000 Goal: 85
1999 Goal: 80
1998 Performance: 70

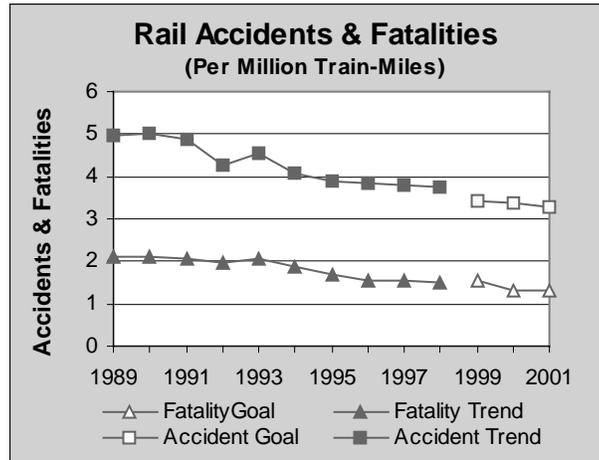
Over 30 percent of Americans do not use a seat belt when driving or riding in an automobile or truck. Seat belts save an estimated 9,500 lives each year. If seat belt use nationwide was to increase to 90 percent, approximately 5,500 lives, 132,600 injured persons and \$8.8 billion could be saved annually.

In 1998, seat belt use rate was at 70 percent, slightly higher than the rate of 69 percent in 1997. As of 1998, 14 state plus Puerto Rico, Washington, D.C., American Samoa, Guam, Marianas and the Virgin Islands have enacted primary seat belt laws. An additional 35 States have enacted secondary laws.

In 1998, NHTSA leveraged its efforts through a Network of Champions formed to serve as national spokespersons for the “Buckle Up America” campaign. Also in 1998, a leadership conference was held to benchmark the status of the Presidential Initiative and to explore ways to increase public support for seat belt use. Each of the ten NHTSA regional offices implemented a strategic plan for achieving “Buckle Up America” goals.

The Air Bag and Safety Belt Campaign (ABSBC), in partnership with NHTSA, conducted media campaigns and continued seat belt enforcement grants in six States. Two nationwide seat belt enforcement mobilizations were initiated by ABSBC around Memorial Day and Thanksgiving to emphasize the need to protect the nation's children.

**RAIL ACCIDENT AND FATALITY RATES**



<b>Performance Measure:</b> Number of rail-related accidents per million train-miles.
2001 Goal: 3.29
2000 Goal: 3.32
1999 Goal: 3.44
1998 Performance: 3.77

<b>Performance Measure:</b> Number of rail-related fatalities per million train-miles.
2001 Goal: 1.23
2000 Goal: 1.30
1999 Goal: 1.57
1998 Performance: 1.48

In 1998, 1,008 deaths were attributed to rail operations. Freight railroads account for 40 percent of the nation’s traffic measured by ton-miles. Economic projections indicate that this growth will continue at a rate of 1.4 percent per year for the foreseeable future. Passenger rail service is also experiencing significant growth as more travelers are turning to commuter and intercity rail as a viable transportation alternative.

The 1998 train accidents rate was 3.77, an increase over the 1997 rate of 3.54. Although total train-miles hauled in 1998 rose less than one percent over the previous year, total accidents increased by more than three percent, which accounted for the rise in the rate. This excludes highway-rail collisions.

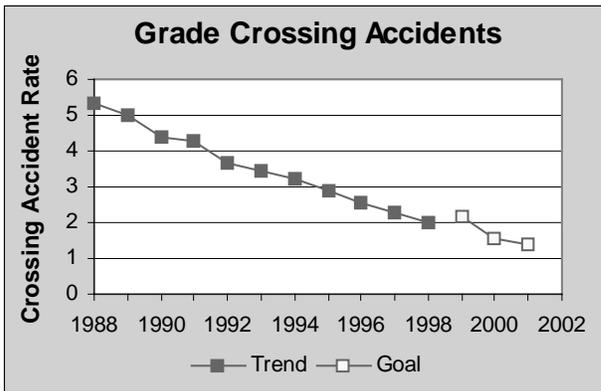
1998 data show train accidents increased primarily in two key areas. Those caused by human factors rose nine percent from the prior year, and accounted for 35 percent of the increase. Equipment-related causes rose 10 percent, accounting for 11 percent of all train accidents. Together, these two casual factors contributed to almost 50 percent of all accidents.

The rail fatality rate in 1998 was 1.48, compared to FRA’s goal of 1.61 or less. Not only did it surpass the goal, but it was the lowest in a decade. Grade crossing and trespasser fatalities are included in this rate, and together make up about 85 percent of rail-related fatalities.

1998 activities that contributed to these results included the work of the Safety Assurance and Compliance Program (SACP) and the Railroad Safety Advisory Committee (RSAC). In 1998, RSAC began development of standards for on-track equipment safety, locomotive crashworthiness specifications and event-recorder data survivability. FRA conducted SACP safety audits on all Class I railroads, Amtrak and many other of the nation’s commuter rail authorities. Smaller regional and local railroads underwent similar audits.

To counter the growing number of incidents involving human factors, FRA led in the research and development of fatigue countermeasures. In cooperation with the industry and the National Aeronautics and Space Administration, FRA developed a training course on fatigue countermeasures. FRA also conducted SACP-level compliance/assistance audits for drug and alcohol use on four railroads and published a Safety Advisory on the safe use of prescription and over-the-counter drugs.

**HIGHWAY-RAIL GRADE-CROSSING ACCIDENTS**



<b>Performance Measure:</b> Number of grade crossing accidents divided by the product of million train miles and trillion vehicle miles of travel.
2001 Goal: 1.39
2000 Goal: 1.57
1999 Goal: 2.19
1998 Performance: 1.98

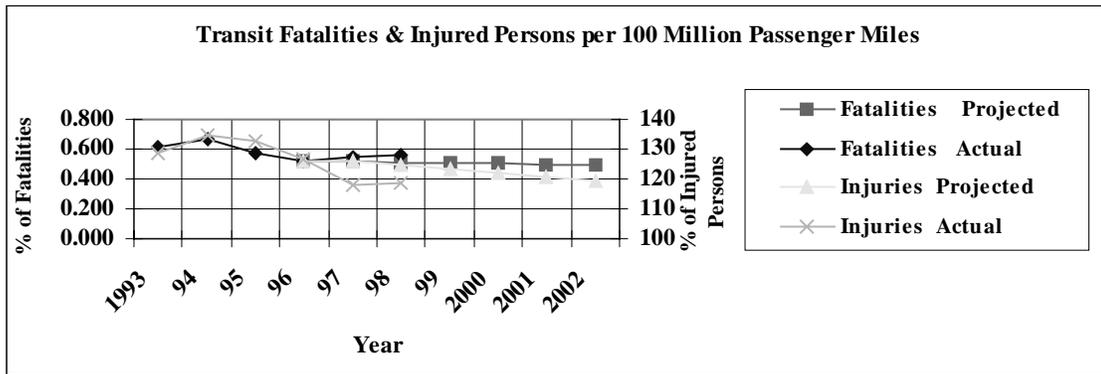
In 1998, 1,008 deaths were attributed to rail operations. Almost half of these fatalities were caused by collisions between automobiles or trucks and trains. Every day, people attempt to beat a train to the railroad crossing – endangering their lives, as well as those of train crewmembers and passengers.

The 1998 grade-crossing accident rate was 1.98, a significant decline from the 1997 rate of 2.27. Although train-miles and total vehicle-miles-traveled rose in 1998, partially due to lower gas prices and a robust economy, there was a significant drop in total grade-crossing accidents nationwide.

The rail grade crossing crash rate has declined each year since 1987, with the 1998 rate being the lowest since FRA began collecting data. With one exception – 1994 – the actual number of accidents has fallen every year since 1988. During the same period, train-miles rose 15 percent and vehicle-miles climbed 60 percent.

1998 activities that contributed to FRA's successful results include the work of SACP, which provides the overall umbrella for a healthy partnership with the rail industry. Also, FRA forged meaningful partnerships with railroads, States and local communities to produce effective outreach programs.

**TRANSIT FATALITY AND INJURED PERSONS RATE**



<b>Performance Measure:</b> Number of transit fatalities per 100 million passenger miles traveled.
2001 Goal: .497
2000 Goal: .502
1999 Goal: .507
1998 Performance: .565

<b>Performance Measure:</b> Number of transit injured persons per 100 million passenger miles traveled.
2001 Goal: 120.7
2000 Goal: 121.9
1999 Goal: 123.2
1998 Performance: 118.9

Public transit provides a flexible alternative to automobile and highway travel, offering a higher degree of safety as well. However, public expectations for safety are higher for transit than they are for highway travel.

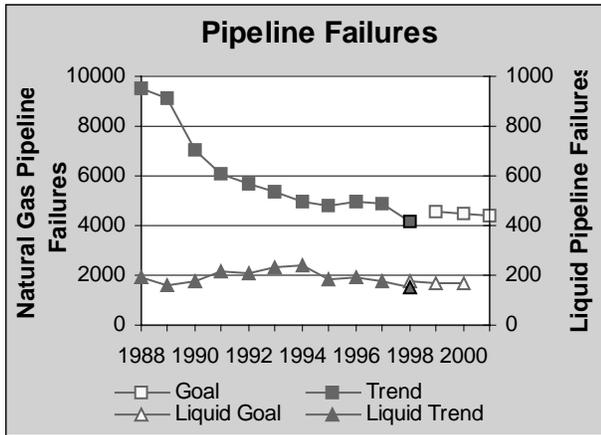
As the population grows, the use of public transit can also be expected to increase. Increased ridership of public transit would lead to an increase in the absolute number of fatalities and injuries even if the rate per 100 million passenger miles traveled does not change.

Injuries are defined as any physical damage or harm to a person requiring medical treatment caused by a transit collision, personal casualty, fire, derailment or bus going off the road. Data

includes both rider and employee injuries. Incidents are defined as collisions, personal casualties, derailments or left roadway, fires and property damage greater than \$1,000 associated with transit agency revenue vehicles and all transit.

DOT provides grants to improve the condition of transit infrastructure, and it works with States, local transit authorities and the transit industry to develop technology, provide training and supply technical assistance that advance safety. DOT also conducts research and collects data in order to provide valuable information on safety and standards.

**PIPELINE FAILURES**



<b>Performance Measure:</b> Reduce the failures of natural gas transmission pipelines.
2001 Goal: 4,375
2000 Goal: 4,451
1999 Goal: 4,528
1998 Performance: 4,160

A network of two million miles of pipelines transport natural gas to 55 million residential and commercial customers. While pipelines are among the safest modes for transporting liquids and gases, the nature of the cargo is inherently dangerous. Pipeline failures – whether due to material failure or outside force damage – can pose an immediate threat to people and communities.

RSPA estimates that 4,160 natural gas pipeline failures in 1998 met their goal of 4,606 or less. The 154 liquid pipeline leaks in 1998 were the lowest number in a decade and met RSPA's goal of 177 or less. About 27 percent of these failures were caused by outside force damage due to excavation or other reasons.

The 166 pipeline failures attributable to outside force damage in 1998 did not meet RSPA's goal of 139 or less. These data are based on actual leak reports submitted by operators within 30 days of an incident. The 10-year trend in outside force damage to pipelines is generally downward, but there has been a high level of year-to-year fluctuation. The 1998 number was the highest since 1993, with most of the increase attributable to natural gas distribution line damages.

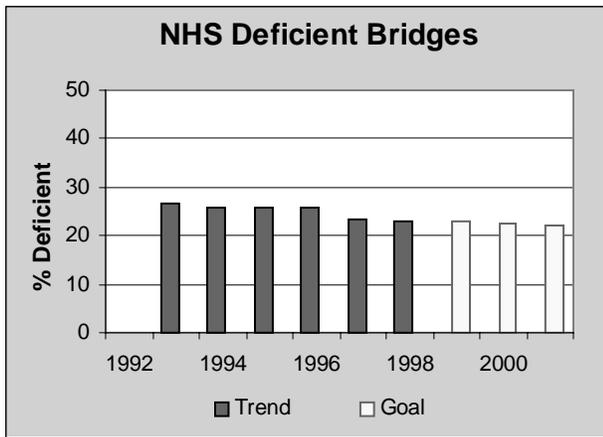
Distribution pipelines – typically in neighborhoods – are most susceptible to outside force damage from digging. DOT anticipates that Federal, State and industry efforts to raise awareness of one-call centers for alerting utilities before digging will lower the number of annual excavations-caused incidents. DOT has set a new goal of reducing “hits” to pipelines by 25 percent over the next three years.

In 1998, RSPA established the Damage Prevention Quality Action Team, DAMQAT, a joint government and industry team that unveiled a new "Dig Safely" campaign to educate the public on the prevention of damage to all underground facilities.

In other activities, RSPA, with Batelle, the Southwest Research Institute and Iowa State University, is working to determine how in-line inspection technologies may be used for early detection of mechanical damage such as dents, gouges and metal movement. The work is progressing and has established that this capability can be added to corrosion tools so only one survey will be needed to detect corrosion and mechanical damage.

**MOBILITY**

**HIGHWAY BRIDGE CONDITION**



<b>Performance Measure:</b> Percentage of bridges on the NHS that are deficient.
2001 Goal: 22.3
2000 Goal: 22.5
1999 Goal: 22.8
1998 Performance: 23.1

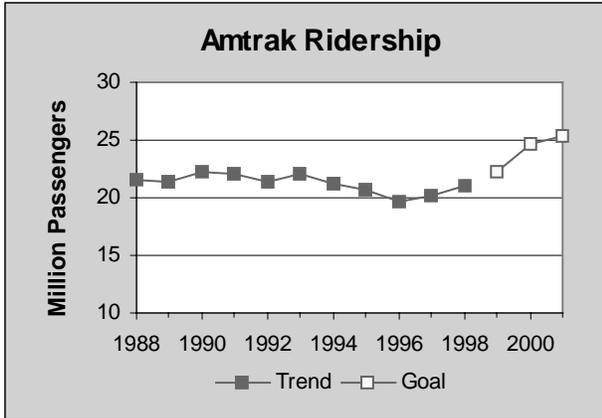
The National Highway System (NHS) includes 128,508 bridges serving major population centers, international border crossings, intermodal transportation facilities and major travel destinations. Almost 25 percent of these bridges are either structurally deficient or functionally obsolete, in terms of dimensions, load or other characteristics. Deficient bridges impair the public's access to activities, goods and services.

Growth in the U.S. economy has translated into over two percent annual growth in vehicle miles traveled, increasing the stress on bridges. In addition the four percent growth rate of combination truck traffic over the 1985 through 1995 period exceeded that for all types of vehicles by 0.7 percent. These trends directly contribute to structural and functional deterioration of the nation's bridges.

23.1 percent of bridges on the NHS were categorized as deficient in some form in 1998. This equals the FHWA target of reducing the percentage to 23.1 or less. From 1996 to 1998, the percentage of deficient NHS bridges decreased from 25.8 percent to 23.1 percent with a 2.4 percentage point drop between 1996 and 1997. The long-term rate of improvement in the nation's bridge inventory is expected to follow historical trends, and settle out to about 0.5 percent yearly by 2003.

In 1998 and again in 1999, solicitation packages were sent to the FHWA field offices requesting assistance in identifying candidate bridge projects for the construction portion of the Innovative Bridge Research and Construction program. The response to the request was excellent with several applications received from 50 percent of the States. In 1998, funds were provided for 60 projects in 20 different States. These projects were selected based on their potential to demonstrate the application of innovative material technology in bridge construction.

**AMTRAK RIDERSHIP**



<b>Performance Measure:</b> Number of intercity ridership, millions of passengers.
2001 Goal: 25.3
2000 Goal: 24.7
1999 Goal: N/A
1998 Performance: 19.9

Intercity rail passenger service helps to reduce highway and aviation congestion in many areas of the U.S. It can help decrease the need for more highway and aviation infrastructure, reduce air pollution and decrease the nation’s use of energy resources. But passenger rail service is capital intensive, and the many public benefits cannot be fully captured in individual rider fares. Ridership growth is a key component in achieving Amtrak’s financial viability.

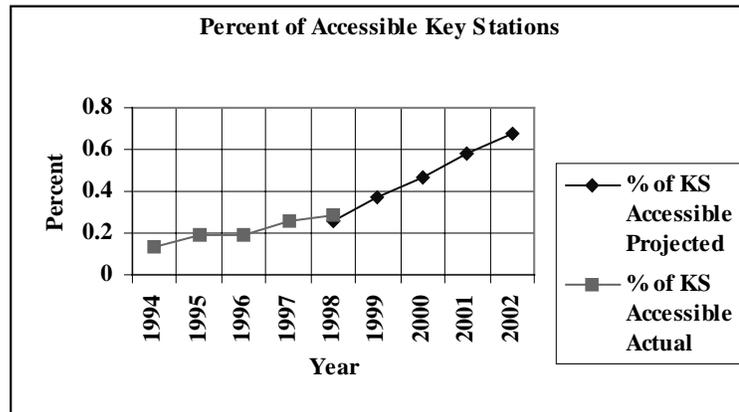
Amtrak is a for-profit corporation. DOT must work to ensure that Amtrak balances the conflicting pressures of generating short term cash, long term revenues and restoring Amtrak’s aging infrastructure.

On a system-wide basis, Amtrak reported a Customer Satisfaction Index (CSI) of 84 for FY 1998 – no change from FY 1997. The steady improvement, from 79 in 1995 to 84 in 1998, is partially influenced by Federal investment in the fixed plant, as well as by renewed management focus on providing superior services. Because the northeast corridor traffic accounts for over one-half of Amtrak’s total ridership, improvements in its CSI bolster system-wide performance.

An important element used in computing the CSI is train on-time performance. Amtrak directly controls train operations on only the northeast corridor, Washington, D.C. to Boston, the most significant market under 400 miles.

For the remainder of its markets, those under and over 400 miles, train operators are controlled by the freight railroads that own the rights-of-way. On these lines, Amtrak trains are sometimes delayed by normal freight train operations and less often by emergencies relating to freight operations. These events are outside Amtrak's control.

**TRANSPORTATION ACCESSIBILITY**



<b>Performance Measure:</b> Percentage of key rail stations that are ADA-compliant.
2001 Goal: 58
2000 Goal: 47
1999 Goal: 37
1998 Performance: 29

Transportation can be vital in maintaining independence for people with disabilities. However, despite important progress toward accessibility, transportation remains a major obstacle to employment and participation in the community for many people with disabilities. The Americans with Disabilities Act (ADA) requires that public transportation services must be accessible to individuals with disabilities, and DOT has set a goal which is more ambitious than the statutory requirements of ADA.

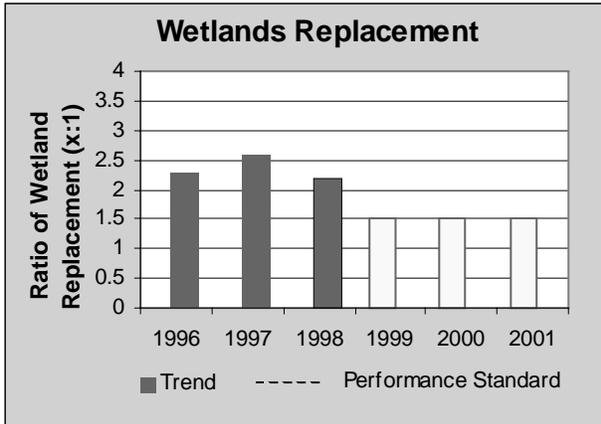
As the population ages, more people will require accessible public transit. DOT provides grants and technical assistance, but State and local agencies decide how to best allocate these resources to ensure ADA compliance.

The changes in the number of key stations represent changes in the status of stations. Although ADA legislation required all key stations to be accessible by July 26, 1993, the Act allowed the FTA Administrator to grant an extension of this completion date for key station accessibility up to July 26, 2020 for stations requiring extraordinarily expensive structural

modifications to bring them into compliance. FTA's goal is to have all key stations under agreement in full compliance by 2005, well within the statutory deadline.

**HUMAN & NATURAL ENVIRONMENT**

**WETLAND PROTECTION AND RECOVERY**



<b>Performance Measure:</b> Number of acres of wetlands replaced for every acre affected by Federal-aid Highway projects, where impacts are unavoidable. This is on a program-wide basis
2001 Goal: 1.5
2000 Goal: 1.5
1999 Goal: 1.5
1998 Performance: 2.2

Wetlands are an important natural resource. They provide natural filtration of pollutants, and they store and slow down the release of floodwaters, thereby reducing damage to downstream farms and communities. Wetlands also provide an essential habitat for biodiversity. But many of the nation's wetlands have been lost to development over the years, before their value was fully recognized. Highways and transportation facilities – siting, construction and operation – can be a significant factor affecting these ecosystems.

Wetland impacts are sometimes unavoidable, particularly in construction of bridge crossings. In addition, projects on existing alignments can cause wetlands degradation that is impractical to avoid. In areas where the concentration of wetlands is high – southern bottomlands, Midwestern prairie potholes and eastern pine flatwoods – transportation projects often must cross wetlands to provide accessibility to the area.

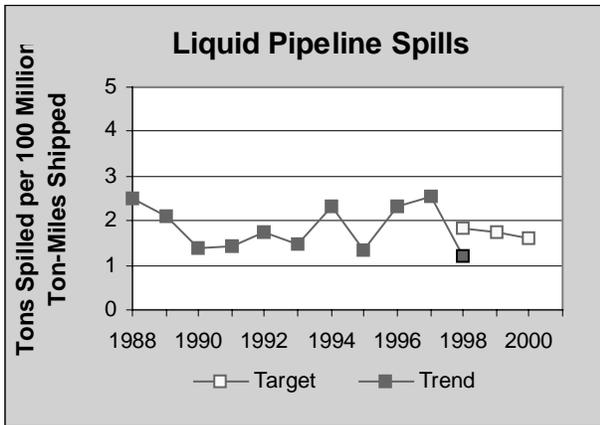
Federal-aid Highways projects avoided impacting wetlands wherever possible. Where wetlands impact was unavoidable, projects achieved a 2.2 to 1 ratio of wetlands replacement for every acre affected in 1998. This exceeded DOT's performance standard of 1.5 to 1.

Between 1982 and 1992, approximately 160,000 acres of wetlands per year were being converted to other land cover types by all sources of impacts. During that same period, only about 75,000 acres of wetlands were being restored or created each year – a deficit of about 85,000 acres per year.

Since 1992, an additional 68,000 acres per year have been restored or established as the result of the Wetlands Reserve and other new wetland conservation programs. FHWA programs contributed an average of over 3,500 to this annual total between 1996 and 1998.

The actual replacement ratio for highways represents about two percent of the estimated total nationwide wetland replacement rate, most of which comes from restoration of agricultural lands. These ratios suggest that the project eligibility and funding provisions for wetland mitigation in the Intermodal Surface Transportation Efficiency Act of 1991 have been effective in enhancing the natural environment. Those provisions, now continued in TEA-21, are important to maintaining this trend into the future, and should be effective in accomplishing the Nation’s environmental goals under the President’s Clean Water Action Plan initiatives and the Administration’s National Wetlands Plan.

**PIPELINE SPILLS**



<b>Performance Measure:</b> Number of tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines.
2001 Goal: .0151
2000 Goal: .0161
1999 Goal: .0171
1998 Performance: .0119

More than 616 billion ton-miles of petroleum and other hazardous liquids move across the country by pipeline. While this is usually the least costly way to transport these bulk cargoes, it also entails some risk. Because of the volume of liquid hazardous materials moved by pipelines, any spill into the environment is potentially a significant one.

Prevention and mitigation of pipeline spills requires improved site-specific knowledge of water and sensitive environmental areas to provide tailored actions to first prevent leaks, and, if they do occur, assure that appropriate and timely response is undertaken.

In 1998, the spill rate for liquid pipeline reached a ten-year low of 0.0119 tons per million ton-miles shipped. This reduction surpassed the DOT goal, and also reflects a sharp drop from 1997’s unusually high levels.

Activities in 1998 included initial work toward a new pipeline data system, with joint industry/State/Federal participation. The Office of Pipeline Safety, OPS, continued to work closely with the Coast Guard and the Environmental Protection Agency in implementing the Oil Pollution Act of 1990 as it applies to onshore oil pipelines. RSPA also worked in 1998 to increase awareness of one-call centers to reduce excavation damage of pipelines. This should help reduce spills caused by third-party hits to the pipelines, even in future years.