

SAFETY STRATEGIC OBJECTIVE: *Promote the public health and safety by working toward the elimination of transportation-related deaths and injuries.*

Strategic Outcomes:

- Reduce the number of transportation-related deaths.
- Reduce transportation-related injuries.

Safety is our most important strategic objective. We strive to improve the benefits of transportation while constantly reducing the risk to their health and well being. In FY 2003, DOT safety programs continued to reduce transportation-related fatalities and injuries.

Performance Summary:

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 Target | Met | Not Met |
|---|-------|-------|---------|---------|-----------|-----------|--------|-------------|----------|----------|
| Highway fatalities/100 million vehicle-miles traveled (VMT) | 1.64 | 1.58 | 1.55 | 1.53 | 1.52 (r) | 1.50 | 1.47** | 1.4 | | P |
| Fatalities involving large trucks per 100 million truck VMT | 2.8 | 2.7 | 2.7 | 2.6 | 2.45 | 2.28* | 2.19# | 2.19 | P | |
| U.S. commercial fatal aviation accidents/100,000 departures (Last 3 years' average) | 0.057 | 0.046 | 0.051 | 0.037 | 0.037 | 0.026 | 0.024* | 0.033 | P | |
| Fatal general aviation accidents | 378 | 396 | 364 | 341 | 359 | 346 | 360* | 374 | P | |
| Train accidents and highway-rail grade crossing incidents per million train-miles | 9.25 | 8.91 | 8.78 | 8.97 | 8.80 (r) | 7.95 (r) | 7.64* | 7.90 | P | |
| Transit fatalities/100 million passenger-miles traveled | 0.545 | 0.564 | 0.530 | 0.499 | 0.482 (r) | 0.473 (r) | 0.398* | 0.492 | P | |
| Number of incidents for natural gas and hazardous liquid pipelines | 346 | 389 | 341 | 381 | 338(r) | 323(r) | 338* | 327 | | P |
| Serious hazardous materials incidents in transportation | 486 | 456 | 544 (r) | 576 (r) | 598(r) | 457(r) | 490# | 515 | P | |

(r) Revised; ** Early estimate based on a statistical forecasting model using historical fatality and vehicle- miles traveled data. This estimate will change when actual fatality and VMT data for 2003 are available in March 2004; # Projection from trends; * Preliminary estimate.

Highway Safety:

Highway crashes cause 95 percent of all transportation-related fatalities and 99 percent of transportation injuries, and are the leading cause of death for people ages 2 through 33. About 61 million people (21 percent) still do not use safety belts when driving or riding in motor vehicles. Alcohol is the single biggest contributing factor to fatal crashes – over 17,000 annually. About 11 percent of all people killed in motor vehicle incidents are involved in a crash with a large truck, yet trucks represent only 3 percent of registered vehicles and about 7 percent of the vehicle-miles of travel. Highway crashes place a considerable burden on our health care system – reaching \$230.6 billion in 2000, or 2.3 percent of the U.S. Gross Domestic Product. This translates to an annual average of \$820 for every person living in the United States.

Performance measures:

Fatalities per 100 million vehicle-miles traveled (VMT).

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|---------|------|-------|
| Target: | 1.5 | 1.5 | 1.4 | 1.4 |
| Actual | 1.53 | 1.52(r) | 1.50 | 1.47* |

Fatalities per 100 million truck VMT in crashes involving large trucks.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|-------|-------|
| Target: | N/A | N/A | 2.32 | 2.19 |
| Actual: | 2.6 | 2.45 | 2.28* | 2.19# |

(r) Revised; * Preliminary estimate; # Projection from trend data.

Note on data: 2003 fatality rates are based on fatalities forecasted by a time series Autoregressive Integrated Moving Average (ARIMA) model (see data details for more information). Inputs were monthly fatality counts from the Fatality Analysis Reporting System from 1975 to 2002. Vehicle-Miles Traveled data for 2002 are preliminary estimates provided by FHWA. 2003 VMT projection assumes a 0.5% increase from 2002 VMT estimates. Final figures for these measures will be reported in next year's report.

Data and estimates of vehicle-miles traveled (VMT) are provided by the Federal Highway Administration (FHWA) and can be viewed on the FHWA Web site at <http://www.fhwa.dot.gov>.

2003 Results: DOT did not meet the highway fatality rate target, and met the truck-related fatality rate target. As a direct result of DOT's programs, motor vehicle travel has become safer – the overall fatality rate declined from 3.3 in 1980 to an estimated 1.47 in 2003. While DOT is making some progress in achieving long-term performance goals, substantial progress still needs to be made to reach DOT's 2008 goal of 1.0 fatality per 100 million VMT.

NHTSA:

Deaths of passenger vehicle occupants increased 1.7 percent in 2002. People in pickup trucks, vans and sport utility vehicles (SUV) accounted for 83 percent of this increase, while the fatalities in passenger cars remained essentially the same. In 2002, the number of pedestrians, bicyclist, and others who were not occupants of moving motor vehicles killed in motor vehicle crashes declined by three percent. Fatalities for children 0-3 and 4-7 continued to decline, with both age groups reporting below 500 fatalities for the first time. However, fatalities for children 8 to 15 years old increased two percent in 2002. Alcohol-related fatalities essentially remained unchanged claiming over 17,000 lives and motorcycle fatalities increased for the fifth year in a row – over 50 percent growth since 1997.

Using a performance-based management process, NHTSA made available \$165 million in state and community highway safety formula grants. States used this and their own funds to reduce speed-related fatalities, encourage proper use of occupant protection devices; reduce alcohol- and drug-impaired driving; reduce crashes between motorcycles and other vehicles; reduce school bus crashes; improve police traffic services; improve emergency medical services and trauma care systems; increase

pedestrian and bicyclist safety; improve traffic record systems; and improve roadway safety. The grants also provided support for State data collection and reporting of traffic deaths and injuries.

FMCSA and its State partners have reduced fatalities in crashes involving large trucks five consecutive years, a 9 percent reduction during the period. The fatality rate for crashes involving large trucks, which takes into account increased risk exposure, has likewise been reduced five years in a row, 19 percent over the period. Comparing with the 1996 baseline fatality rate, FMCSA and Federal and State partner safety programs and interventions have contributed to an estimated 1,138 lives saved in 2002.

FMCSA is increasingly integrating findings and recommendations of General Accounting Office (GAO), DOT Office the Inspector General (OIG), and National Transportation Safety Board (NTSB) as integral components of the agency's safety strategy and operational guidance. In 2003, FMCSA successfully addressed all aspects of the GAO's large truck safety management challenge. FMCSA also successfully closed 7 open safety recommendations issued by the NTSB, as well as 20 audit recommendations issued by the DOT OIG.

FHWA's safe infrastructure approach helps minimize the most frequent types of crash-related fatalities and injuries.

Safety belts

Increasing the safety belt use rate is one of DOT's highest priorities. Most passenger vehicle occupants killed in motor vehicle crashes continue to be unrestrained – and many of these result in ejection of the unrestrained person from the vehicle during a rollover event. In 2002, passenger vehicle occupant fatalities in rollover crashes increased for all types of vehicles except vans – making up 61 percent of SUV occupant fatalities and 45 percent of occupants killed in pickup trucks. Overall passenger vehicle occupant fatalities in rollover crashes accounted for 82 percent of the total fatality increase.

Belt use increased four percentage points in 2003, reaching 79 percent, which is the highest rate yet observed and continues a relatively steady pattern of increase since use was first measured by a comprehensive national survey at 58 percent in 1994. States that allow more stringent enforcement of their belt use laws ("primary" states) reached a milestone of 83 percent belt use in 2003, and substantial gains were seen in every region of the country, with vans and SUVs registering the highest use rates.

NHTSA focused on at-risk populations whose safety belt use rates were below the national level, conducted two "*Click-It or Ticket*" campaigns emphasizing aggressive enforcement and ran national paid ads for the first time. NHTSA worked with partners and stakeholders to encourage remaining States to enact primary belt laws, a strategy that has proven to most dramatically raise safety belt use and save lives. In 2003, Illinois and Delaware enacted primary laws, for a total of 20 States, the District of Columbia, and Puerto Rico.

NHTSA made available \$25.7 million in Occupant Protection Incentive Grants to 31 States, the District of Columbia, Puerto Rico, and two U.S. Territories that implemented specific occupant protection laws and programs such as a safety belt law providing for primary enforcement, or a law requiring safety belt use in each vehicle seat.

Impaired drivers

Alcohol-related crashes and their related morbidity and mortality tolls continue to pose a significant public health challenge throughout the country. Alcohol-related fatalities per 100 million decreased

slightly from 0.63 in 2001 to 0.62 in 2002 (the most current data). NHTSA estimates that alcohol-impaired driving was involved in 41 percent of fatal crashes and in 6 percent of all crashes in 2002 - claiming 17,419 lives. Therefore, NHTSA continued to enhance its impaired driving program, with emphasis on assisting high-risk populations (e.g., underage drinkers, 21-34 year olds, blood alcohol concentration (BAC) and repeat offenders) in order to reverse the current trend.

NHTSA launched a Strategic Evaluation States (SES) initiative, involving 13 States with either high annual totals of alcohol-related fatalities or high alcohol-related fatality rates per 100 million vehicle-miles of travel. All 13 are combining sustained impaired driving enforcement campaigns, periodic high-visibility enforcement efforts, and media campaigns delivering the message "You Drink and Drive, You Lose." Finally, NHTSA provided ideas to States for more effective anti-impaired driving implementation strategies that emerged from previous demonstration programs, including those on traffic records system improvement. States conducted impaired driving enforcement crackdowns during the Christmas/New Year's holidays and again in the summer months of 2003.

NHTSA made available \$31.3 million in Alcohol-Impaired Driving Countermeasures Incentive Grants to 36 States having alcohol-impaired driving countermeasure laws or programs, such as administrative license revocation laws and graduated licensing programs, or meeting certain performance criteria based on their alcohol-related fatality rates. Additionally, 45 States, the District of Columbia and Puerto Rico received \$86.4 million in incentive grants for lowering the legal threshold for impaired driving to .08 percent BAC. In addition, NHTSA provided discretionary grants to States to demonstrate the effectiveness of a comprehensive approach to reducing impaired driving and to identify areas requiring improvement in a State's impaired driving control system.

Truck Safety

FMCSA issued Final Rules concerning Hours of Service of Drivers, Civil Penalties, Commercial Driver's License standards, requirements, and penalties, and Camionetas. FMCSA also issued a supplemental notice of proposed rulemaking (SNPRM) regarding safety performance history of new drivers, and notice of proposed rulemaking (NPRM) for minimum training requirements for commercial motor vehicles (CMV) operators and longer combination vehicle operators and driver-instructors. Federal and State safety enforcement operations to ensure compliance with Federal Motor Carrier Safety Regulations (FMCSRs) included:

- 900 border safety audits;
- 2,900 conditional carrier reviews;
- 7,000 new entrant safety audits;
- 9,500 safety compliance reviews;
- 300,000 border inspections; and
- 3,000,000 roadside inspections.

As a result, FMCSA initiated 5,800 enforcement cases.

FMCSA conducted Management and Performance Reviews of five state Motor Carrier Safety Assistance Programs (MCSAP) and reviewed 13 state CDL programs in 2003 for compliance, and awarded:

- \$164 million to States for motor carrier compliance and enforcement activities to extend and complement Federal operations; and
- \$11 million to States and stake holding partners to address CDL compliance and security issues.

To strengthen oversight of driver qualifications to operate, FMCSA issued a Notice of Final Determination concerning implementation of a diabetes exemption program. FMCSA reviewed 525 new and 150 renewal applications for vision exemptions in 2003.

FMCSA provided CMV safety instruction to more than 5,400 State and local law enforcement officers, and 1,100 enforcement personnel received New Entrant audit instruction. FMCSA and Transport Canada also made substantial progress in developing a comprehensive North American Fatigue Management Program for motor carriers.

Pedestrian and Non-Occupant Safety

FHWA established pedestrian safety programs in 2 of the 10 communities with the highest pedestrian fatality rates. In addition, FHWA partnered with State and local governments to showcase and evaluate new and innovative pedestrian safety technologies in Las Vegas, NV, Miami/Dade, FL, and San Francisco, CA; develop a prototype pedestrian expert system to assist safety practitioners in problem solving; develop, distribute and evaluate pedestrian safety public service information; and, develop and disseminate interactive pedestrian safety information and materials.

FHWA raised awareness of intersection safety and educated Federal-aid partners on the need for intersection safety plans. Seventeen States had adopted an Intersection Safety Plan based on the National Agenda for Intersection Safety. The Agency issued guidance for Using Red Light Cameras to inform community officials as to the development and operation of proper programs. A series of briefings were developed on various intersection safety topics, such as traffic control devices and work zones at intersections.

Safer Highway Infrastructure

FHWA continued to foster effective partnerships with the American Association of State Highway Transportation Officials (AASHTO), the American Traffic Safety Services Association (ATTSA), the International Association of Chiefs of Police (IACP), and other interested organizations to ensure a comprehensive approach to improve highway safety and to support implementation of the AASHTO strategic highway safety plan. Thirty-two States volunteered to participate as lead States. Safety Conscious Forums promoted highway safety in State and local planning programs.

To support the education of transportation professionals in safety, FHWA conducted on-site roadside design training in six States, reaching approximately 200 attendees. An educational video for law enforcement officers impressing the importance of collecting timely and accurate crash data was distributed to help improve safety data, identify the causes of crashes, and foster implementation of high-payoff crash reduction programs.

To prevent and mitigate the impact of run-off-the-road crashes, highway agencies in 33 States had adopted policies consistent with the FHWA's Roadway Shoulder Rumble Strips technical advisory. FHWA continued to emphasize the need for States to replace non-crashworthy hardware, such as turned-down ends on the National Highway System (NHS), and to implement a program to replace damaged hardware with crashworthy hardware. In addition, FHWA continued to act as a national clearinghouse for the identification of suitable crashworthy roadside hardware. FHWA proposed amendments to the Manual on Uniform Traffic Control Devices (MUTCD) for methods to maintain traffic sign retro-reflectivity, and to increase traffic sign brightness and visibility.

Safer Vehicles

To improve tire safety, NHTSA issued a new performance standard for passenger car and light truck tires, as well as a requirement for improved labels for tires. To encourage the use of child safety seats to better protect children in crashes, NHTSA started a new child safety seat ratings program, issued the first set of ratings to the public, and published a requirement for improved child safety seat labels.

Safety Information and Research

Data collection continued for the Large Truck Crash Causation Study (LTCCS), with preliminary results being issued in FY 2003. NHTSA and FMCSA continued collecting data for the 100 Car Naturalistic Driving Study, examining car-truck interaction.

Participation increased from 22 to 26 States in the Commercial Vehicle Analysis Reporting System (CVARS) program to improve reporting of commercial vehicle crashes. And, the number of States participating in the deployment step of Commercial Vehicle Information Systems Networks (CVISN) program increased from 34 to 38 in 2003, with an additional 3 states beginning the design step.

FHWA supported research and technology transfer efforts to implement the Interactive Highway Safety Design Model by participating in early training efforts. Also, efforts began to encourage States and local communities to use the Road Safety Audit tool to identify roadway safety issues.

FY 2004 Performance Plan Evaluation: DOT will be challenged to meet the highway fatality rate target in 2004, but will meet the large truck related fatality rate target.

Management Challenge – Motor Vehicle Safety (IG)

The IG and GAO state that despite efforts of Federal, State and local governments, safety belt use rates have risen slower than needed to strongly impact overall highway fatality rates. Another challenge NHTSA faces is to ensure the usefulness of the agency's information system which tracks vehicle defects and identifies situations requiring safety interventions.

NHTSA Actions:

Over the past 2 years, NHTSA has made substantial progress in meeting the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act requirements, completing 10 of 15 final rulemakings. Safety belt use increased to 79 percent—an all-time high, exceeding the 2003 target of 78 percent. TREAD actions included the development of rulemaking actions to update the tire safety standards and improve the safety standards of child restraint systems (released 6/23/03). To improve defect investigations, the routine submission of additional manufacturer data, pursuant to the requirements of the TREAD Act, will allow NHTSA access to a substantially increased amount of early-warning data that will be analyzed to determine whether a potential safety-related problem exists, giving the agency the ability to report any defects to the public in a more timely manner.

Management Challenge - Highway Safety at the Southern Border (IG)

The IG has stated that the key to a successful commercial motor vehicle safety oversight program will be effective use of safety inspection resources and implementation of procedures. The IG recommended that FMCSA re-evaluate its overall resource requirements for the U.S.-Mexico border as the number of Mexican motor carriers receiving authority to operate long-haul vehicles in the U.S. increases. The IG noted the need for better Federal and State inspector access to current, accurate, and timely information on driver, vehicles, and motor carriers.

FMCSA activities and initiatives:

- maintenance of staff, facilities, data systems, and equipment to extend safety compliance and enforcement operations at the border;
- completion, with state partners, of 900 border safety audits and 162,750 border vehicle and driver inspections;
- development of in-service training plans for border safety personnel;
- establishment of on-line capability for enforcement personnel to verify carriers' certificates of registration at the roadside;
- completion of 20 safety compliance seminars in southern border States and in Mexico for Mexican companies, and refresher training for Federal and State inspectors;
- assessment of border operations and border crossings where passenger buses are expected to enter to ensure sufficient inspection facilities are available; and
- invitation of on-line automated registration for Mexican-domiciled carriers on the DIY (Do-it-Yourself) website.

Management Challenge – Commercial Driver's License (CDL) Program (IG)

The IG has identified the challenge of improving the credibility and integrity of the CDL program. Fraudulent testing and licensing of commercial drivers compromises highway safety and necessitates costly retesting on the state level.

FMCSA strengthened and clarified CDL standards and required States to monitor driver examiners to counter fraudulent licensing by:

- issuance of a Final Rule on CDL standards, requirements, and penalties;
- organization of the nationwide CDL Fraud Symposium with American Association of Motor Vehicle Administrators (AAMVA);
- award of grant funding of \$11 million to States and stake holding partners to address CDL compliance and security issues;
- completion of compliance reviews of 13 state CDL programs; and
- increased participation in the Purchase Request Information System (PRISM) program.

Aviation Safety: Commercial aviation is one of the safest forms of transportation. While rare, aviation accidents can have catastrophic consequences, with large loss of life. The public demands a high standard of safety and expects continued improvement. General Aviation (GA) is also an important element of the U.S. transportation system and the U.S. economy. However, the majority of aviation fatalities have occurred in this segment of aviation. Since 1988, there has been a gradual trend downward in the number of general aviation accidents, but progress has not been steady.

Performance measures:

Fatal aviation accidents (U.S. commercial air carriers) per 100,000 departures (reported by 3-year average).

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|------|-------|
| Target: | .045 | .043 | .038 | .033 |
| Actual: | .037 | .037 | .026 | .024* |

Number of fatal general aviation accidents.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|------|------|
| Target: | 379 | 379 | 379 | 374 |
| Actual: | 341 | 359 | 346 | 360* |

* *Preliminary estimate.*

2003 Results:

DOT met the general aviation fatal accident and the commercial aviation fatal accident rate targets.

Commercial Air Carrier Safety

FAA, the aviation community, and other governmental agencies identify accident causal factors and prevention strategies in three areas – aircraft technology, pilot safety, and maintenance and fleet management practices which prevent small safety problems from growing into large ones. FAA's regulation and certification program establishes aviation safety standards, monitors safety performance, conducts aviation safety education and research, issues and maintains aviation certificates and licenses, and issues rules.

FAA continued to implement an integrated research plan with NASA to effectively leverage combined safety research and development resources to reduce the aviation fatal accident rate.

FAA and the aviation industry:

- continued to implement the Safer Skies initiative that uses the latest technology to help analyze U.S. and global data to find the primary causes of accidents and determine the best actions to break the chain of events that lead to accidents. The value of this program has been a great reduction or elimination of recurrent causes of commercial accidents;
- continued to implement Required Navigation Performance (RNP), the precision of which allows for more efficient airspace use. More than ever before, RNP allows more planes to safely fly in any given block of airspace;
- commissioned the Wide Area Augmentation System (WAAS) in July 2003. WAAS is a GPS-based navigation and landing system that immediately provided precision guidance to aircraft at hundreds of airports and airstrips where no precision landing capability existed; and
- met the April 2003 deadline for installing reinforced cockpit doors in more than 10,000 aircraft serving the United States, making air travel safer for passengers and crews.

General Aviation Safety

FAA works closely with the GA community to identify problems and improve safety under the rubric of "System Safety Approach for General Aviation". FAA encouraged the use of new technology and provided training and education to enhance safety. FAA introduced flight-training products for advanced, small general aviation aircraft. The FAA/Industry Training Standards Program (FITS) helped pilots keep pace with new aircraft and avionics technology, new airspace, and air traffic technology emerging in the general aviation community.

Runway Safety

A runway incursion is any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of separation with an aircraft taking off, intending to take off, landing, or intending to land. Reducing runway incursions lessens the probability of accidents that potentially involve fatalities, injuries, and significant property damage.

There were 32 serious runway incursions, a 10% decrease from last year's 37 such incidents, and significantly lower than FAA's target of 44 runway incursions.

One significant factor contributing to the decrease in runway incursions is lower traffic volume. Lower traffic volume alone, however, does not fully explain the downward trend. This is evident since the decline in runway incursions began in 1999, when traffic volume was increasing. FAA has focused significant resources, time and effort to tackle the problem of runway incursions, creating a variety of education and training programs focused on air traffic controllers, pilots and airports to help reduce the number of runway incursion incidents. Air traffic control memory aids, better airport surface markers, and celebrity public service announcements have all contributed to a significant reduction in runway incursions.

Operational Errors

When controllers fail to apply or follow aircraft separation standards and aircraft in flight pass too close, an operational error occurs.

FAA exceeded its target of 642 errors by almost 6%, reporting 680 Category A and B operational errors. There were 622 such errors last year. Controller situational awareness problems contributed most to this level of serious operational errors, primarily inappropriate use of displayed data. The second largest cause was lack of adequate aircraft separation planning. Miscommunication between controllers and pilots and adverse weather that caused pilots to deviate from or be unable to accept instruction from controllers were other causes.

FAA's tight resources led to management oversight and error reduction training programs not being fully implemented, including a prototype best practices course designed to increase controllers' skills. FAA was short by 126 of the required 1,715 Operational Supervisors. Only 150 of 600 planned evaluations of air traffic control facilities have been conducted over the past two years.

FAA did align managers' pay to this and other performance targets, and developed and implementing JANUS, a tool designed to identify causal factors in air traffic-related incidents.

FY 2004 Performance Plan Evaluation: DOT will meet the fatal aviation accident and general aviation accident performance targets in FY 2004.

Management Challenge – Commercial and General Aviation Safety (Operational Errors and Runway Safety) (IG/GAO)

The IG and GAO have suggested FAA take steps to reverse the trend in known safety risks such as runway incursions and operational errors, strengthen oversight and rulemakings, and manage the aviation safety and air traffic control workforce strategically over the long term. The IG stated that safety must take priority over the impact of increased demand, new technologies and budget cuts. The IG also listed several safety issues that the FAA must address.

The IG indicated that the trend in runway incursions and operational errors are critical management

challenges for DOT. Runway incursions and operational errors pose a significant safety risk, with an average of three operational errors per day and one serious error every 3 days (in which a collision was barely averted). FAA is continuing to pursue a number of initiatives to solve these problems, and as the IG reports, is identifying and evaluating technologies that can be quickly put to use in high-risk airports.

Rail Safety: Approximately 55 percent of the rail-related fatalities were trespasser-related, and more than 37 percent occurred at highway-rail grade crossings in 2002. To reduce rail fatalities, FRA is forging safety partnerships with the rail industry, strengthening educational outreach, and rigorously emphasizing compliance with safety standards, and enhancing its track and equipment inspection abilities.

Performance measures:

Train accidents and highway-rail grade crossing incidents per million train-miles.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|---------|---------|-------|
| Target: | N/A | N/A | N/A | 7.90 |
| Actual: | 8.97 | 8.80(r) | 7.95(r) | 7.64* |

(r) Revised; * Preliminary estimate

2003 Results: DOT met the performance target, based on preliminary data for the January-August period.

Although train accidents were higher in 2003 than the same 8-month period in 2002 (1,879 vs. 1,793), highway-rail grade crossing incidents fell by more than 10 percent (1,854 vs. 2,064). In addition, total train-miles increased by 0.5 percent, resulting in a decrease in the overall rate.

FRA also reduced rail-related fatalities from 1.3 per million train-miles in FY 2002 to 1.11 per million train-miles in FY 2003, meeting its performance target.

FY 2004 Performance Plan Evaluation: DOT will be challenged to meet the target in 2004.

Transit Safety: Public transit provides a flexible alternative to automobile and highway travel, offering a higher degree of safety as well. Currently transit is one of the safest modes of travel per passenger mile traveled. According to the National Safety Council, riding the bus is 47 times safer than car travel. By train, customers are 23 times safer than by car. The challenge is to further reduce the rate of fatalities and injuries even as the total number of people using transit increases.

Performance measure:

Transit fatalities per 100 million passenger-miles traveled.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|---------|---------|-------|
| Target: | .502 | .497 | .492 | .492 |
| Actual: | .499 | .482(r) | .473(r) | .398* |

*(r) Revised; * Preliminary estimate.*

2003 Results: DOT met the performance target.

Fatalities per 100 million passenger miles traveled were annualized from the estimated fatality rate for the first half of 2003.

In 2003, FTA's strategy for maintaining and further reducing the low rate of transit fatalities and injuries included FTA investments in public transit infrastructure through Formula Grants, Capital Investment Grants, and the Job Access and Reverse Commute Program. Part of that investment improves transit safety by replacing older bus and rail systems with newer, safer ones and by improving track and transit facility conditions. For new projects, safety continued to be a design consideration from the beginning. FTA planning and research funds assisted States, local transit authorities, and the transit industry by providing safety technical assistance, improving compliance with the Americans with Disabilities Act's safety requirements, and by improving technology and training programs.

FTA continued support for the Transportation Safety Institute's (TSI) safety and security training program, which resulted in over 200 offerings of 28 transit safety and security courses serving over 6,000 individuals. Additionally, FTA provided oversight of the States' programs for Safety Oversight of Rail Systems to ensure they are in compliance with the requirements of the State Safety Oversight Rule for Rail Fixed Guideway Systems. FTA also continued to audit alcohol and drug testing programs, and provided technical assistance and training focused on identified deficiencies and non-compliance trends.

In FY 2003, the estimated number of injured persons per 100 million passenger-miles traveled in transit systems was 30.77, which met FTA's target, and represented a slight improvement/decrease in performance from 36.68 in 2002.

For 2002 the definition of what constitutes a reportable transit "injury," was changed in the new National Transit Database (the source of the transit injury data). Only an injury involving immediate medical treatment away from the scene now qualifies as a reportable transit injury. The target for 2004 will be adjusted to reflect the revised definition of a reportable transit injury.

FY 2004 Performance Plan Evaluation: DOT will meet the target in FY 2004.

Pipeline Safety: Pipelines transport and supply the fuel to heat, cool and operate American homes, cars and businesses through a subterranean network of nearly of 2.1 million miles serving over 52 million residential and commercial customers. While pipelines are among the safest and least costly ways of transporting large quantities of oil products and natural gas, the nature of the cargo is inherently dangerous. Natural gas and hazardous liquid pipeline incidents can kill or injure people, damage property, disrupt energy supplies, and harm the environment, especially when these incidents occur in populated or unusually sensitive environmental areas. Excavation damage accounts for 30% on average of all pipeline incidents, corrosion for 18%, and natural forces for 8%. The remaining 44% results from incorrect operation, construction or material defects, equipment malfunction, failed pipe, and miscellaneous causes.

Performance measure:

Number of incidents for natural gas and hazardous liquid pipelines.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|--------|------|
| Target: | N/A | N/A | N/A | 327 |
| Actual: | 381 | 338 | 323(r) | 338* |

(r) Revised; * Preliminary estimate.

2003 Results: DOT did not meet the performance target.

DOT previously focused on minimum mechanical and pipeline operating standards, but found that compliance-based pipeline safety programs can result in piecemeal risk management that can sometimes overlook subtle relationships among failure causes. DOT began to apply risk-based solutions to ensure that pipeline operators' resources are applied in priority order to those areas where an accident could have the highest consequences (e.g., populated or unusually sensitive environmental areas, or commercial waterways). An effective enforcement program encourages industry to maintain pipeline integrity, provides incentives for using best practices, but pursues serious violations with penalties.

Beginning in January 2002, RSPA's integrity management regulations require all owners or operators of hazardous liquid pipelines to take additional safeguards in populated areas, unusually environmentally sensitive areas, and commercially navigable waterways. These regulations establish rigorous new testing requirements using internal inspection, pressure testing, or other equivalent technology. Equally important, it requires operators to combine those test results with other information they have about their pipelines, and to use that information to identify and address any threats their pipelines could pose to the public or the environment. The integrity management program (IMP) regulations raise the bar for pipeline safety standards more than any other regulation in the past 30 years.

The number of natural gas and hazardous liquid pipeline incidents for 2003 was slightly higher than RSPA's target. The trend line, however, continues a strong downward slope representing an improvement in safety performance. A higher than expected number of excavation damages to gas distribution pipelines was the major cause of the increased incidents this year. RSPA attributed the higher excavation incident rate to increases in construction activity (for example, housing starts, which have risen 57 percent over the past decade).

FY 2004 Performance Plan Evaluation: DOT will meet the target in FY 2004.

Hazardous Materials Safety: Many materials used in manufacturing and many retail products are hazardous materials. There are over 800,000 shipments of hazardous materials each day in the United States. Examples are gasoline, anhydrous ammonia, liquid nitrogen, compressed gas, dynamite, poisons, sulfuric acid, and radioactive material. While essential to our Nation's quality of life and economic vitality, release of these materials during transportation could result in serious injury or death, property damage or economic disruptions.

Performance measure:

Number of serious hazardous materials incidents in transportation.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|--------|------|
| Target: | N/A | N/A | 523 | 515 |
| Actual: | 576 | 598 | 457(r) | 490# |

(r) Revised; # Projection from trends

2003 Results: Based on projections, DOT met the performance target.

Road accidents leading to hazmat releases continue to dominate overall serious hazardous materials incident statistics, increasing from 81 percent of total serious incidents to 85 percent in 2003. Serious rail incidents accounted for approximately 15 percent of the total.

DOT has six long-term strategies for reducing serious hazardous materials transportation incidents:

- Develop and maintain national standards for the safe, secure transportation of hazardous materials;
- Obtain compliance with these standards through formal training, and by development and distribution of education materials on specific Hazardous Materials Regulation (HMR) requirements to shippers, carriers, enforcement personnel and the public;
- Implement a national safety inspection and enforcement program to determine compliance with the HMR; with [we estimate nearly 200,000 commercial motor vehicle (CMV) inspections] inspections per year;
- Provide funds to States for planning and training to minimize hazardous materials incident consequences;
- Publish and distribute the Emergency Response Guidebook, the principal source document used by State and local response personnel and industry to handle hazardous material incidents; and,
- Conduct R&D to analyze and monitor hazardous materials transportation safety issues.

FMCSA and its Federal and State partners reduced serious hazardous materials incidents on the highways, the vast majority of which involve commercial motor vehicles, from 497 in 2001 to 372 in 2002. Partial year data (January-July) for 2003 may indicate an increase from 2002.

In addition, FMCSA satisfactorily addressed and closed two significant hazardous materials safety recommendations issued by the National Transportation Safety Board (NTSB), including development of a nationwide hazmat route registry and a comprehensive evaluation of cargo tank rollover protection devices.

FMCSA issued an interim final rule that limits issuance of commercial driver licenses with HazMat endorsements, and a special notice of proposed rulemaking for hazardous materials safety permitting. Federal and State safety enforcement operations to ensure compliance with Federal Hazardous Materials Regulations (FHMRs) included:

- 60 cargo tank facility reviews;
- 300 hazardous materials shipper reviews;
- 2,400 hazardous materials compliance reviews;
- 6,250 hazardous materials package inspections; and
- 175,000 hazardous materials vehicle inspections.

Many of these operations were conducted in joint strike force activities with Federal and State partners.

FMCSA's hazardous materials Field Operational Test demonstrated approaches to improve safety and security of hazmat shipments from origin to destination. The test examined possible vulnerabilities and technology combinations in the hazmat transportation system. FMCSA also conducted studies of cargo tank stability and prioritization of hazardous materials shippers to insure efficient allocation of

compliance and enforcement resources.

FAA issued a Notice of Preliminary Rule Making (NPRM) proposing air carrier training standards for recognition and handling of hazardous materials and requiring repair stations to provide documentary evidence to FAA that persons handling hazardous materials for transportation have been trained as required by the DOT's Hazardous Materials Regulations. FAA is reviewing comments.

FAA and RSPA jointly performed an economic assessment of an NPRM imposing thermal protection and flame penetration standards for outer packaging of compressed oxygen cylinders and chemical oxygen generators being transported in aircraft cargo compartments.

Serious rail incidents declined by 16 percent since 1994, and by 8 percent over the last 2 years. Roughly 80 percent of serious rail hazmat incidents are due to derailments, which FRA reduced by 11 percent in the past year.

FY 2004 Performance Plan Evaluation: DOT will meet the target in FY 2004.