



EXHIBIT
PERFORMANCE MEASURE COMPLETENESS AND RELIABILITY
(DETAIL)

Each table includes a description of a performance measure and associated data provided by the agencies in charge of the measure. The Scope statement gives an overview of the data collection strategy for the underlying data behind the performance measure. The Source statement identifies the data system(s) from which the data for each measure was taken. The Statistical Issues statement has comments, provided by the Bureau of Transportation Statistics (BTS) and the agency in charge of the measure that discuss variability of the measure and other points. The Completeness statement indicates limitations due to missing data or availability of current measures; methods used to develop projections are also provided, as appropriate. The Reliability statement gives the reader a feel for how the performance data are used in program management decision making inside DOT.

For further information about the source and accuracy (S&A) of these data, and DOT's data quality guidelines in accordance with 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (P.L. 106-554), please refer to the BTS S&A compendium available at www.bts.gov/statpol/SAcompendium.html.

Details on DOT Safety Measures

Highway fatality rate

Measure:	Fatalities per 100 million vehicle-miles of travel (VMT) (CY)
Scope	<p>The number of fatalities is a count of occupant and non-motorist deaths that occur within 30 days of a crash involving motor vehicle traffic traveling on a trafficway customarily open to the public within the 50 States and Washington, D.C.</p> <p>Vehicle-Miles of Travel (VMT) represent the total number of vehicle miles traveled by motor vehicles on public roadways within the 50 States and Washington, D.C.</p>
Sources	<p>Motor vehicle traffic fatality data are obtained from NHTSA's Fatality Analysis Reporting System (FARS). The FARS database is a census of roadway fatalities, based on police crash reports and other state data.</p> <p>VMT data for 2003 are derived from FHWA's Traffic Volume Trends (TVT); a monthly report based on hourly traffic count data in the Highway Performance Monitoring System (HPMS). VMT data for 2002 and prior years is final estimate data from the HPMS system based on state samples of road segments.</p>
Statistical Issues	<p>The primary source of uncertainty in the fatality rate measure is the denominator, VMT. While the estimate of total fatalities used in the numerator is relatively accurate, the VMT estimate in the denominator has far more variability.</p> <p>The TVT data used for the 2003 VMT are an early estimate of the VMT. These data,</p>

	<p>collected at approximately 4,000 continuous traffic counting locations nationwide, are used to determine the percentage change in traffic for the current month from the same month of the previous year. The percentage change is applied to the nationwide travel for the same month of the previous year to obtain an estimate of nationwide travel for the current month.</p> <p>The 2002 and earlier VMTs are compiled from data provided to FHWA from each State. They are estimates based on a sample of road segments, so the numbers have associated sampling errors. The methodology used by each of the States to estimate VMT varies and may introduce additional non-sampling error. Although States provide VMT estimates on an annual basis, they are only required to update their traffic counts at all sampling sites once every three years. Thus, an annual VMT estimate from a particular State may be based, in part, on data collected during a previous year.</p>
Completeness	<p>The FARS has been in use for many years and is generally accepted as a complete measure for describing safety on the Nation's highways. Total annual fatalities are available through CY 2002. The fatality estimates used to calculate the 2003 rates shown in this report were forecasted using a time series ARIMA model. Inputs were monthly fatality counts from the FARS from 1975 to 2002. NHTSA's first official estimates for 2003, the Early Assessment, will be completed in early April 2004. Differences between the official Early Assessment estimates and those in this report are to be expected.</p> <p>VMT data for 2002 are preliminary estimates provided by the Federal Highway Administration (FHWA). VMT data used to calculate the 2003 rates shown in this report are projected assuming an increase rate of 0.5% from the 2002 VMT estimate. The final measure of VMT for CY 2003 from the HPMS system will not be available until October 2004.</p>
Reliability	<p>The measure informs and guides NHTSA highway safety policy, safety program planning, regulatory development, resource allocation, and operational mission performance, and tracks progress toward the goal of saving lives by preventing highway crashes.</p>

Large truck-related fatalities

Measure:	Fatalities involving large trucks per 100 million truck VMT. (CY)
Scope:	The measure includes all fatalities (e.g., drivers and occupants of passenger cars, motorcycles, large trucks, or pedestrians) associated with crashes involving trucks with a gross vehicle weight rating of 10,000 pounds or more. Truck Vehicle Miles of Travel (TVMT) represents the total number of vehicle miles traveled by large trucks on public roadways within the 50 states and Washington, D.C.
Sources	The number of fatalities comes from NHTSA's Fatality Analysis Reporting System (FARS) data, a census of fatal traffic crashes within the 50 states and Washington, D.C. The TVMT data are derived from the FHWA's Highway Performance Monitoring System (HPMS).
Statistical Issues:	The fatality counts in FARS are generally quite accurate. The major sources of error are underreporting by some precincts and inconsistent use of the definition of a truck.

	Because the TVMT data provided to FHWA from each state are estimates based on a sample of road segments, the numbers have associated sampling errors. The methodology used by each of the states to estimate TVMT varies and may introduce additional non-sampling error. Although states provide TVMT estimates on an annual basis, they are only required to update their traffic counts at all sampling sites once every three years. Thus, an annual TVMT estimate from a particular state may be based, in part, on data collected during a previous year.
Completeness	The Fatality Analysis Reporting System (FARS) has been in use for many years and is generally accepted as a complete measure for describing safety on the Nation's highways. Truck-related fatality data is complete through 2002. For 2003, the FARS data for crashes involving large trucks are not available. The value used for the 2003 rate is projected from 1997 – 2002 trend data. The actual fatality count for 2003 will be available in October 2004. The TVMT is complete through 2001. For 2002 and 2003, it is projected using the historical trend with adjustments for observed change in the total VMT in 2002. The final TVMT estimate for 2002 will be available in December 2003, and the final TVMT estimate for 2003 will be available in December 2004.
Reliability	The measure informs and guides FMCSA highway safety policy, safety program planning, regulatory development, resource allocation, and operational mission performance, and tracks progress toward the goal of saving lives by preventing truck and bus crashes.

Air carrier fatal accident rate

Measure:	Fatal aviation accidents (U.S. commercial air carriers) per 100,000 departures. (FY)
Scope:	This measure includes both scheduled and nonscheduled flights of large U.S. air carriers (14 CFR Part 121) and scheduled flights of regional operators (14 CFR Part 135). It excludes on-demand (i.e., air taxi) service and general aviation.
Sources:	<p>Fatal aviation accidents: The data on commercial and general aviation fatalities come from the National Transportation Safety Board's Aviation Accident Database. The data are developed by aviation accident investigators under the auspices of the National Transportation Safety Board.</p> <p>Departures Performed: The data are collected by the Office of Airline Information (OAI) within the Bureau of Transportation Statistics (BTS) on the Form 41, Schedule T-100 -- U.S. Air Carrier Traffic and Capacity Data By Nonstop Segment and On-flight Market and Form 41, Schedule T-100(f) -- Foreign Air Carrier Traffic and Capacity Data by Nonstop Segment and On-flight Market.</p>
Statistical Issues:	<p>The joint government/industry group working on improving the level of safety for U.S. commercial aviation has determined that the number of departures is a better denominator measure to use for determining accident rates and the General Accounting Office recommended that FAA use departures.</p> <p>Both accidents and departures are censuses, having no sampling error. However, missing data, particularly in the departure counts will result in bias to some degree.</p>

Completeness	<p>The FAA does comparison checking of the departure data collected by BTS; however, FAA has no independent data sources against which to validate the numbers submitted to BTS. FAA compares its list of carriers to the DOT list to validate completeness of the reporting list and places the carriers in the appropriate category (i.e., Part 121 or Part 135). NTSB and FAA's Office of Accident Investigation meet regularly to validate the accident count.</p> <p>To overcome reporting delays of 60 to 90 days, FAA must rely on historical data, partial internal data sources, and Official Airline Guide (OAG) scheduling information to project at least part of the fiscal year activity data. Due to reporting procedures in place, it is unlikely that calculation of future fiscal year departure data will be markedly improved. Lacking complete historical data on a monthly basis and independent sources of verification increases the risk of error in the activity data.</p>
Reliability	<p>Results are considered preliminary based on projected activity data. FAA uses performance data extensively for program management and personnel evaluation and accountability. Most accident investigations are a joint undertaking. NTSB has the statutory responsibility, but, in fact, most of the accident investigations related to general aviation are conducted by FAA Aviation Safety Inspectors without NTSB direct involvement. FAA's own accident investigators and other FAA employees participate in all accident investigations lead by NTSB investigators.</p>

General aviation fatal accidents

Measure:	Number of fatal general aviation accidents. (FY)
Scope:	<p>The measure includes on-demand (non-scheduled FAR Part 135) and general aviation. General aviation comprises a diverse range of aviation activities. The range of general aviation aircraft includes single-seat homebuilt aircraft, helicopters, balloons, single and multiple engine land and seaplanes including highly sophisticated extended range turbojets.</p>
Sources:	<p>The data on commercial and general aviation fatalities come from the National Transportation Safety Board's Aviation Accident Database. The data are developed by aviation accident investigators under the auspices of the National Transportation Safety Board.</p>
Statistical Issues:	<p>There is no major error in the accident counts. Random variation in air crashes results in a significant variation in the number of fatal accidents over time.</p>
Completeness	<p>NTSB and FAA's Office of Accident Investigation meet regularly to validate information on the number of accidents. It would be preferable to use fatal accident rates rather than fatal accidents as the performance measure. However, general aviation flight hours are based on an annual survey conducted by the FAA. Response to the survey is voluntary. The accuracy of the flight hours collected is suspect and there is no readily available way to verify or validate the data. For this reason, the General Aviation community is unwilling to use a rate measure until the validity and reliability of the survey data can be assured. Results are considered preliminary. NTSB continues to review accident results from FY 2003.</p>
Reliability	<p>FAA uses performance data extensively for program management and personnel evaluation and accountability. Most accident investigations are a joint undertaking.</p>

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Train Accident rate

Measure:	Train accidents and incidents per million train-miles. (FY)
Scope:	Railroad transportation is any form of non-highway ground transportation that runs on rails or electro-magnetic guideways. Train accidents and incidents include all collisions between trains and other on track equipment and highway users on the tracks, at a public highway-rail grade crossing that is in use, at an at-grade rail crossing that is in use, on a bridge over a public road or waters used for commercial navigation, or within a common corridor with a railroad, that is, its operations are within 30 feet of those of any railroad.
Sources:	<p>Train accidents: Federal Railroad Administration (FRA) Rail-Equipment Train Accident Data Base.</p> <p>Train miles: FRA Railroad Operations Data Base.</p>
Statistical Issues:	Data represent a census of all of the serious Rail-Equipment Train Accidents, most of the minor accidents including derailments, collisions, acts of God, and other events. None of the very minor accidents are recorded. Railroad operations data are also a census.
Completeness	<p>Railroads are required by regulation (49 CFR 225) to file monthly reports to the FRA of all Rail-Equipment Train Accidents that meet a dollar threshold (currently \$6600). They are also required to file monthly operations reports of train-miles, employee hours, and passenger train-miles.</p> <p>Reports must be filed within 30 days after the close of the month. Data must be updated when the costs associated with the accident are 10% higher than initially reported.</p> <p>Railroad systems that do not connect with the general rail system are excluded from reporting to the FRA Casualty or Railroad Operations Databases. These include Intercity Rapid Rail (i.e., Washington, D.C. Metro, New York City subway, San Francisco BART, etc.), track existing inside an industrial compound, and insular rail (e.g., rail that is not connected to the general system and does not have a public highway rail crossing or go over a navigable waterway).</p> <p>The reported estimates are an extrapolation of 10 months of reported data from 2003.</p>
Reliability:	FRA uses these data in prioritizing its inspections and safety reviews, and for more long-term strategic management of its rail safety program

Transit fatality rate

Measure:	Transit fatalities per 100 million passenger-miles traveled. (CY)
Scope:	<p>Transit fatality data includes passengers, revenue facility occupants, trespassers, employees, and other transit workers (contractors). A transit fatality is a death within 30 days after the incident, which occurs under the collision, derailment, personal casualty (not otherwise classified), fire, or bus going off the road categories of National Transit Database (NTD) reporting. Previous to 2002, transit involved parties were defined as patrons, employees, and others; the safety data was collected on a fiscal as opposed calendar year basis. Fatalities for the performance measurement use only transit agency Directly Operated (DO) mode data. Purchased Transportation (PT) data is not part of this measure.</p> <p>Certain fatalities are excluded as they are not considered to be directly related to the operation of transit vehicles. Those include suicides and fatalities occurring in parking facilities and stations, as well as fires in right-of-ways and stations.</p> <p>The passenger-miles traveled on public transit vehicles (buses, heavy and light railcars, commuter railcars, ferries, paratransit vans, vanpools, etc.) only refer to miles while in actual revenue service to the general public. These data are reported annually by operators to the NTD. NTD data are an input to FTA's <i>Transit Safety & Security Statistics & Analysis</i> program (formerly SAMIS).</p>
Sources:	<p>The <i>Transit Safety & Security Statistics & Analysis Annual Report</i>, formerly known as <i>Safety Management Information Statistics (SAMIS)</i>, is a compilation and analysis of transit accident, casualty, and crime statistics reported under the Federal Transit Administration's (FTA's) NTD Reporting System by transit systems that were beneficiaries of FTA Urbanized Area Formula funds during 2000. Starting in 2002, Commuter Rail safety data are being collected from the FRA Rail Accident Reporting System (RAIRS) in order to avoid redundant reporting to NTD.</p>
Statistical Issues:	<p>The fatality counts in FTA's <i>Transit Safety & Security Statistics & Analysis</i> are a census. The major source of uncertainty in the measure relates to passenger-miles traveled.</p> <p>Passenger-miles are an estimate derived from reported passenger trips and average trip length. Passenger-miles are the cumulative sum of the distances ridden on passenger trips. Transit authorities have accurate counts of unlinked passenger trips and fares. An unlinked trip is recorded each time a passenger boards a transit vehicle, even though the rider may be on the same journey. Transit authorities do not routinely record trip length. To calculate passenger-miles, total unlinked trips are multiplied by average trip length. To obtain an average trip length for their bus routes and rail routes, transit authorities use a FTA approved sampling technique. Passenger-miles are the only data element that is sampled in the NTD.</p>
Completeness	<p>The information for this measure comes from the FTA's <i>Transit Safety & Security Statistics & Analysis</i> program, formerly FTA's Safety Management Information System (SAMIS), which uses data reported by transit operators to the NTD.</p> <p>Many categories and definitions have been added or changed in the new NTD in 2002, and will allow for improvements and more timely analysis of trends and contributing factors.</p>

	The 2003 measure is an extrapolation of partial year data, particularly of passenger-miles traveled.
Reliability	An independent auditor and the transit agency's CEO certify that data reported to the NTD are accurate. Using data from the NTD to compile the <i>Transit Safety & Security Statistics & Analysis</i> program (formerly SAMIS) data, the USDOT Volpe National Transportation Systems Center compares current safety statistics with previous years, identifies questionable trends, and seeks explanation from operators.

Natural Gas and Hazardous Liquid Pipeline Incidents

Measure:	Incidents for natural gas and hazardous liquid pipelines. (FY)
Scope:	This measure is based on reported hazardous liquid and natural gas accidents that meet federal reporting criteria as defined in 49 CFR 191.1 and 191.15 for natural gas transmission pipeline incidents and in 49 CFR 195.50 for hazardous liquid pipelines.
Source:	Office of Pipeline Safety (OPS) Incident and Accident Reports
Statistical Issues:	Reports are required to be submitted by the responsible operators within 30 days of an incident or face penalties for non-compliance. OPS routinely cross-checks incident/accident reports against other sources of data, such as the telephonic reporting system for incidents requiring immediate notification provided to the National Response Center (NRC). Compliance is very high and most incidents that meet reporting requirements are submitted. A response percentage cannot be calculated as the actual population of reportable incidents cannot be precisely determined.
Completeness	<p>The reported estimates are based upon partially reported data from 2003. In reporting pipeline safety, there is both a safety and environmental measure. There is a 60 day lag in reporting. Operators have 30 days to report incidents. There are more incidents in the summer than the winter. By the end of October, there were 7 months of data through the end of July. The CY 2003 estimate is based on a straight line extrapolation of that data (i.e., multiplying the cumulative incidents reported through October by 12/7ths. This estimate is adjusted that total for seasonal variability to account for the higher level of incidents in the summer months.</p> <p>Projection of the environmental measure is less precise due to the nature of pipeline spills. A single large spill (10,000 barrels or more) can easily dwarf the total for all other CY spills combined. These large spills cannot be factored into a projection model due to their magnitude and infrequent and unpredictable occurrences. Thus, projections for the remaining five months of this CY assume that there will be no large spills. Last year, for example, the extrapolation resulted in a projection that we would meet the goal. However, in October there was a large, 33,000 barrel highly volatile liquid (HVL) spill that was not reported until it was too late to make the printed Performance Plan.</p>
Reliability	RSPA uses these data in prioritizing its inspections and safety reviews, and for more long-term strategic management of its pipeline safety program

Hazardous Materials Incidents

Measure:	Number of serious hazardous materials incidents in transportation. (CY)
Scope:	Serious reported hazardous materials incidents were initially defined by RSPA to be those that result in a fatality or major injury (for most purposes, an injury resulting in hospitalization) due to a hazardous material, closure of a major transportation artery or facility, or evacuation of six or more persons due to the presence of a hazardous material, or a vehicle accident or derailment resulting in the release of a hazardous material. For the 2003 Plan, the definition was revised to include those incidents resulting in a fatality or major injury, the evacuation of 25 or more employees or responders or any number of the general public, the closure of a major transportation artery, the alteration of an aircraft flight plan or operation caused by the release of a hazardous material, or the exposure of hazardous material to fire; plus any release of radioactive materials from Type B packaging, Risk Group 3 or 4 infectious substance, over 11.9 gallons or 88.2 pounds of a severe marine pollutant, or a bulk quantity (over 119 gallons or 882 pounds) of a hazardous material. This measure tracks only transportation- related releases of hazardous materials that are in commerce. Volume of spills is not tracked, as this does not necessarily indicate risk.
Sources:	Hazardous Material Information System (HMIS) – Office of Hazardous Materials Safety (OHM) on Form DOT F 5800.1.
Statistical Issues:	Data are collected by the carrier involved in each reportable incident and submitted to DOT's Office of Hazardous Materials Safety (OHM) on Form DOT F 5800.1. Carriers are required by regulation to report incidents and face significant penalties for failing to do so. Incident reports are received continuously by OHM. Carriers are required to submit incident reports to DOT within 30 days of an incident. Once received by OHM, it takes approximately one month for incident reports to be processed and verified. The data are then made available in the HMIS database during the next monthly update. Although the number of incidents may be underreported, such recording error is probably small in comparison to the annual variation due to chance.
Completeness	RSPA continues to receive reports from calendar year 2003. By the end of October 2003 actual incident data was received through 9/30/03. RSPA is projecting the remainder of the calendar year using the actual number of incidents that occurred during October, November, and December of 2002—the previous calendar year. This methodology for projecting the CY 2003 estimate is expected to be within 2-4% of the final estimate which becomes available during the second quarter of CY 2004.
Reliability	Annual hazmat incident data are used to track program performance, plan regulatory and outreach initiatives, and provide a statistical basis for research and analysis. The data is also used on a daily basis to target entities for enforcement efforts, and review of applications for exemption renewals.

Details on DOT Mobility Measures

Highway infrastructure condition

Measure:	Percentage of travel on the National Highway System (NHS) meeting pavement performance standards for acceptable ride. (CY)
Scope:	Data include vehicle-miles traveled on the HPMS reported NHS sections and pavement

	ride quality data reported using the International Roughness Index (IRI). IRI is a quantitative measure of the accumulated response of a "quarter-car" vehicle suspension experienced while traveling over a pavement. Vehicle-Miles of Travel (VMT) represents the total number of vehicle-miles traveled by motor vehicles on public roadways within the 50 states and Washington, D.C.
Source:	Data for this measure is collected by the State Highway Agencies and reported to FHWA for the Highway Performance Monitoring System (HPMS). They are obtained from calibrated measurement devices that meet industry set standards. Measurement procedures are included in the HPMS Field Manual. The VMT data are derived from the FHWA's Highway Performance Monitoring System (HPMS).
Statistical Issues:	The major source of error in the percentages is probably the sampling error from selecting the segments of highway tested for smoothness. VMT data are subject to sampling errors, whose magnitude depends on how well the locations of the continuous counting locations represent nationwide traffic rates. HPMS is also subject to estimating differences in the states, even though FHWA works to minimize such differences and differing projections on growth, population, and economic conditions that impact driving behavior.
Completeness	Data up to 2002 are final estimates. The 2003 measure is not available, as states report highway performance data to FHWA some months after the end of the calendar year. The measure given is a projection from 1999 – 2002 trend data using least squares regression.
Reliability	In FY 2002, senior managers in FHWA, including the Executive Director, adopted the Administrator's objectives from her Executive Accountability Contract as their own performance objectives in their Individual Performance Agreements. The FHWA Administrator and the Senior Leadership Team have used a "Corporate Dashboard," which incorporates performance measures from the DOT and FHWA FY 2003 performance plans. Beginning in December 2002, they began referring to the dashboard in quarterly meetings to discuss progress towards achieving Agency strategic and performance objectives. Individual managers will report progress on planned initiatives and dashboard updates will be noted as the performance data becomes available throughout the year. The highway infrastructure condition is one such measure.

Highway congestion

Measure:	Of total annual urban-area travel, percentage that occurs in congested conditions (CY)
Scope:	Data stemmed from approximately 400 urban areas. The data reflects the travel conditions of the freeway and principal arterial street networks. Definitions: <ol style="list-style-type: none"> 1. Urban area: Developed area with a density of greater than 1000 persons per square mile. 2. Congested travel: Traveling below the posted speed limit(s).
Source:	Data collected and provided by the State Departments of Transportation from existing

	State or local government databases, including those of Metropolitan Planning Organizations. FHWA's Highway Performance Monitoring System (HPMS) serves as the repository of the data. The Texas Transportation Institute utilizes HPMS data to derive the above measures.
Statistical Issues:	Methodology used to calculate performance measures has been developed by the Texas Transportation Institute and used in their annual Mobility Study. A detailed description of TTI's methodology is best described on their website at http://mobility.tamu.edu/ .
Completeness	<p>The 2001 and prior measures are final. The 2002 measure is preliminary, as partial 2002 HPMS data was used to construct the estimates. 2003 data is not available. HPMS data is compiled from the states and verified approximately 10 months from the base year, e.g., 2003 actual numbers will not be available from HPMS until October 2004. The 2004 measure is a projection using a quadratic regression and 1996 – 2002 trend data.</p> <p>To accurately and reliably manage the transportation system, real-time (minute-by-minute) measurement of system speeds is needed and can only be achieved with automated instrumentation. As the Intelligent Transportation System network is put in place, reliability will become a barometer of this strategic goal. Ten cities have been identified with sufficient instrumentation to permit the development of a reliability measure. This is a first step in migrating from HPMS data to real-time, ITS-based data.</p>
Reliability	In FY 2002, senior managers in FHWA, including the Executive Director, adopted the Administrator's objectives from her Executive Accountability Contract as their own performance objectives in their Individual Performance Agreements. The FHWA Administrator and the Senior Leadership Team have used a "Corporate Dashboard," which incorporates performance measures from the DOT and FHWA FY 2003 performance plans. Beginning in December 2002, they began referring to the dashboard in quarterly meetings to discuss progress towards achieving Agency strategic and performance objectives. Individual managers will report progress on planned initiatives and dashboard updates will be noted as the performance data becomes available throughout the year. Highway congestion is one such measure.

Transit ridership

Measure:	Average percent change in transit passengers per transit market, adjusted for employment. (CY)
Scope:	<p>The metric is average percent change in transit passenger-miles traveled adjusted for employment levels. The components are transit passenger-miles and employment levels within a transit market.</p> <p>The modes covered are: Motor Bus (MB), Heavy Rail (HR), Light Rail (LR), Commuter Rail (CR), Demand Response (DR), Vanpool (VP), and Automated Guideway (AG).</p> <p>Employment data are collected and reported by the Bureau of Labor Statistics.</p>
Sources	Transit Passengers : Data derived from counts made on bus and rail routes by transit agencies that are beneficiaries of FTA Urbanized Area Formula funds as part of their

	<p>monthly National Transit Database (NTD) Reporting System submissions. Data is expected from the 150 largest transit systems.</p> <p>Employment: Bureau of Labor Statistics Current Employment Statistics (CES) Survey.</p>
<p>Statistical Issues:</p>	<p>The sources of uncertainty include coverage errors and auditing issues. These data are validated by FTA Office of Oversight’s NTD contractor staff.</p> <p>By statute, every FTA formula grant recipient in an urbanized area (defined by the Census as having a population of 50,000 or more) must report to the National Transit Database (NTD). In cities of this size, virtually every transit authority receives FTA funding, and there are only a few cities of over 50,000 persons that do not provide public transit service. Publicly funded transit service can be directly operated or purchased transportation.</p> <p>Transit authorities have accurate counts of unlinked passenger trips and fares. An unlinked trip is recorded each time a passenger boards a transit vehicle, even though the rider may be on the same journey. The sources of uncertainty include coverage errors and auditing issues. Until 2002, reports were required only on an annual basis. Beginning in 2002, monthly reports were required of the largest 150 transit operators (covering 94 percent of the nation’s transit utilization) on certain safety, service level, and service utilization statistics. It is taking some time for all transit agencies to report on a monthly basis. Through June 2003, data had been reported on a monthly basis for both 2002 and 2003 by 114 of the largest 150 transit operators. Operators reporting data represent 88 percent of nationwide transit utilization; all 150 operators represent 94 percent of nationwide transit utilization.</p> <p>Employment data are reported by Bureau of Labor Statistics. The Current Employment Statistics (CES) Survey is a monthly survey of business establishments that provides estimates of employment, hours, and earnings data by industry for the nation as a whole, all States, and most major metropolitan areas. The CES survey is a Federal-State cooperative endeavor in which State employment security agencies prepare the data using concepts, definitions, and technical procedures prescribed by the Bureau of Labor Statistics. All estimates from a sample survey are subject to sampling and other types of errors. Survey data are also subject to nonsampling errors, such as those that can be introduced into the data collection and processing operations. Estimates not directly derived from sample surveys are subject to additional errors resulting from the special estimation processes used.</p>
<p>Completeness</p>	<p>DOT has revised this measure to better account for the impact of economic conditions on transit use by adjusting for changes in the level of employment in each urbanized area and to improve timeliness. An increase in the average transit ridership per market, adjusted for changes in employment, represents an increase in transit’s share of the personal travel market.</p> <p>In order to improve the timeliness of the data reported, and to make the period being reported more comparable across areas, in the future, the measure will utilize data on transit unlinked passenger trips (used as a surrogate for passenger-miles) from the new monthly National Transit Database that was initiated in 2002. This data is to be available for the largest 150 transit operators, which account for about 94 percent of all transit ridership. Thus, for 2003, the indicator will compare transit ridership for the</p>

	urbanized areas containing the 150 largest transit agencies (normalized for employment levels) for the year ending in September, 2003 with the year ending in September, 2002. Data on employment is based on monthly employment levels for metropolitan statistical areas reported by the Bureau of Labor Statistics.
Reliability	<p>An independent auditor and the transit agency's CEO certify that data reported to the NTD are accurate. FTA also compares data to key indicators such as vehicle revenue-miles, number of buses in service during peak periods, etc.</p> <p>FTA has undertaken a major initiative to increase ridership nationwide. This measure has been built into all FTA senior executive performance accountabilities.</p>

Aviation Delay

Measure:	Percentage of on-time flights. (FY)
Scope:	<p>Percentage of all flights arriving at the 35 Operational Evolution Plan (OEP) airports equal to or less than 15 minutes late.</p> <p>A flight is considered on-time if it arrives no later than 15 minutes after the scheduled arrival time. This definition is used in the joint Bureau of Transportation Statistics/FAA Airline Service Quality Performance (ASQP) and Aviation System Performance Metrics (ASPM) reporting systems.</p> <p>The time of arrival of completed, scheduled passenger flights to and from the OEP 35 airports is compared to their scheduled time of arrival. The sum of flights arriving on or before 15 minutes of scheduled arrival time is divided by the total number of completed flights.</p> <p>The FAA measures its performance in a number of ways. For years the FAA provided the number of flights delayed 15 minutes or more from carrier-filed flight plans as a measure of the FAA's ability to provide services to an accepted flight plan (OPSNET). However, carrier flight plans often did not match what was being held out to the public, and comparison of multiple-stage flight plan elapsed times to filed flight plan times could result in multiple delays being reported for a single flight. In addition, DOT collected a flight performance measure comparing actual arrival time compared to scheduled arrival time (ASQP). While designed for different purposes, the different performance measures of flight delay created confusion. With the advent of the ASPM database, the FAA can compare carrier flight plan times to scheduled times, similar to the ASQP reporting system.</p>
Sources:	The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Aviation Policy and Plans, provides the data for on-time arrivals. By agreement with the FAA, ASPM flight data is filed by certain major air carriers for all flights to and from most large and medium hubs, and is supplemented by flight records contained in the Enhanced Traffic Management System (ETMS) and flight movement times provided by Aeronautical Radio, Inc. (AIRINC). Data are sufficient to complete ASPM data files for 55 airports. The 35 OEP airports are a sub-set of these 55 airports.
Limitations:	None, all flight data to/from the 35 OEP airports are reported.

Completeness	2003 data are complete.
Reliability	Flight schedule data is extracted from the Official Airline Guide (OAG) and compared to data from carrier records supplied under ASPM, which contains carrier computer reservation flight schedule data. Summary data are compared and supplemented with data filed monthly with DOT under 14 CFR Part 234, Airline Service Quality Performance Reports, which separately requires reporting by major air carriers on flights to and from all large hubs.

St. Lawrence Seaway System Availability

Measure:	Percentage of days in the shipping season that the U.S. sectors of the St. Lawrence Seaway are available, including the two U.S. Seaway locks in Massena, N.Y. (CY)
Scope:	The availability and reliability of the U.S. sectors of the St. Lawrence Seaway, including the two U.S. Seaway locks in Massena, N.Y., are critical to continuous commercial shipping during the navigation season (late March to late December). System downtime due to any condition (weather, vessel incidents, malfunctioning equipment) causes delays to shipping, affecting international trade to and from the Great Lakes region of North America. Downtime is measured in hours/minutes of delay for weather (visibility, fog, snow, ice); vessel incidents (human error, electrical and/or mechanical failure); water level and rate of flow regulation; and lock equipment malfunction.
Sources:	Saint Lawrence Seaway Development Corporation (SLSDC) Office of Lock Operations
Statistical Issues:	None.
Completeness	As the agency responsible for the operation and maintenance of the U.S. portion of the St. Lawrence Seaway, SLSDC's lock operations unit gathers primary data for all vessel transits through the U.S. Seaway sectors and locks, including any downtime in operations. Data is collected on site, at the U.S. locks, as vessels are transiting or as operations are suspended. This information measuring the System's reliability is compiled and delivered to SLSDC senior staff and stakeholders each month. In addition, SLSDC compiles annual System availability data for comparison purposes. Since SLSDC gathers data directly from observation, there are no limitations. Historically, the SLSDC has reported this performance metric for its entire navigation season (late March to late December). Unfortunately due to reporting timelines, system availability data is only reported through September in this report.
Reliability:	SLSDC verifies and validates the accuracy of the data through review of 24-hour vessel traffic control computer records, radio communication between the two Seaway entities and vessel operators; and video and audiotapes of vessel incidents.

Transportation accessibility

Measure:	1. Percentage of bus fleets that are Americans with Disabilities Act (ADA)
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	compliant.
	2. Percentage of key rail stations that are ADA compliant. (both CY)
Scope:	<p>Accessibility for bus fleet means that vehicles are equipped with wheelchair lifts or ramps.</p> <p>Transit buses are buses used in urbanized areas to provide public transit service to the general public. Transit buses do not include private intercity buses (e.g., Greyhound), private shuttle buses, charter buses, or school buses.</p> <p>The percentage of bus fleets that are equipped with lifts or ramps is only a partial measure of overall accessibility under the ADA as it measures only the availability of transit buses in our national fleet that can accommodate wheelchairs through the use of mechanical lifts or ramps. Accessibility for transit vehicles under the ADA includes other equipment and operational practices that are not reflected in this indicator.</p> <p>Accessibility for key rail facilities is determined by standards for ADA compliance.</p> <p>Transit systems were required to identify key stations. A key station is one designated as such by public entities that operate existing commuter, light, or rapid rail systems. Each public entity determined which stations on its system to designate as key by using the planning and public participation process, and taking into consideration the criteria specified by FTA (see Source and Accuracy statement). All new rail stations are required to be ADA compliant upon completion and must meet standards for new rail stations, not key stations.</p>
Sources:	Compliant bus fleets: National Transportation Database (NTD). Compliant rail stations: Rail Station status reports to the FTA.
Statistical Issues:	Data is obtained from a census of publicly funded transit buses in urbanized areas. Information on the ADA key rail stations is reported to FTA by transit authorities. These data are not based on a sample.
Completeness	At a transit authority, vehicle purchases are significant capital expenditures. Vehicles purchased with FTA funds must have a useful life of 12 years. Whether a bus is purchased or leased, the equipment on the bus is recorded, including lifts and ramps. For the last 20 years, transit agencies have reported on the equipment in their bus fleets to the FTA in their annual NTD submissions. There is a census of publicly funded transit buses in urbanized areas. It is not a sample. Urbanized areas have more than 50,000 persons, and are defined by the Census Department. By statute, every FTA formula grant recipient in an urbanized area must report to the NTD. In cities of this size, virtually every transit authority receives FTA funding. There are only a few cities of over 50,000 persons that do not provide public transit service. Publicly funded transit service can be directly operated or purchased transportation.
Reliability	All data in the National Transit Data (NTD) is self-reported by the transit industry. The transit agency's Chief Executive Officer and an independent auditor for the transit agency certify the accuracy of this self-reported data. The data is also compared with fleet data reported in previous years, and crosschecked with other related operating /financial data in the report. Fleet inventory is also reviewed as part of FTA's Triennial Review, and a visual inspection is made at that time.

Information on the ADA key rail stations is reported to FTA by transit authorities. The FTA's Office of Civil Rights conducts oversight assessments to verify the information on key rail station accessibility. Quarterly rail station status reports, and key rail station assessments have significantly increased the number of key rail stations that have come into compliance over the last several years.

FTA will primarily influence the goal through Federal transit infrastructure investment, which speeds the rate at which transit operators can transition to ADA-compliant facilities and equipment, oversight, and technical assistance.

Access to jobs

Measure:	Number of employment sites (000s) that are made accessible by Job Access and Reverse Commute transportation services. (FY)
Scope:	This measure assesses one part of the Job Access and Reverse Commute (JARC) program – the number of employment sites made accessible that were not previously accessible. An employment site is a new stop reaching employers not previously reached either directly by demand-responsive service or that are within ¼ mile of the new service stop for fixed route service. Services that make an employment site accessible may include, but are not limited to, carpools, vanpools, and other demand-responsive services as well as traditional bus and rail public transit. The measure cannot account for those Job Access and Reverse Commute activities that encourage riders to use already existing sources of public transit.
Sources:	FTA Grantees
Statistical Issues:	FTA has had difficulty in getting complete information from its grantees. An analysis of this issue has been undertaken by FTA and changes are expected to be made for FY 2004.
Completeness	<p>Previous Methodology: The FTA's goal of new employment sites reaches by JARC grantees was calculated as a projection of data collected from JARC grantees in FY 2001. JARC grantees were asked to report new employment sites reached by the transportation services initiated under the grant. With about 38% of JARC grantees reporting usable data, FTA projected a goal number by determining the percentage of JARC grantees reporting in relation to the total number of active JARC grantees in large urban, medium urban and rural and small urban areas. A total calculation was made for each category and then summed for the performance figure. The new employment sites represented new sites connected geographically by the new service or new employment sites reached during time periods not previously covered (late night and weekend service). A new employment site was defined for fixed route service as a new stop with employers within ¼ mi. of the stop. A new employment site for demand-responsive services was defined as the employers actually reached by the service or the number of employers that could be served by the demand-responsive service.</p> <p>New Methodology: FTA intends to improve on the methodology described above by identifying a representative number of grantees and then projecting these results in new employment sites served to the total grantees. The calculation methodology will be based on the expenditures of selected grantees when compared to the total expenditures</p>

	of all grantees during the same two-fiscal-year period. In subsequent years, FTA further proposes to supplement this approach by simplifying the data-reporting process, developing profiles of all grantees, and conducting on-site surveys to collect qualitative information about program performance from selected grantees. The preliminary methodology for projecting the number of employment sites reached in FY 2003 has two elements. Phase I will use existing data collected for FY 2001 to project employment sites reached, based on expenditure level. Phase 2 will involve projections based on FY 2002 and FY 2003 data that will be available in early- to mid-November, additional data will be used to scale the results to reflect the more recent data.
Reliability	Oversight contractors review the data and contact grantees to ascertain methodologies on a sample basis, or when the information warrants review.

International air service

Measure:	Number of passengers (in millions) in international markets with open skies aviation agreements. (FY)
Scope:	These data are collected by DOT for all flight segments to/from a U.S. point. The data for this measure include all passengers on U.S. and foreign carrier flights to and from "open-skies" countries and Canada. This indicator reflects (barring significant, unrelated macroeconomic and political influences) the extent to which the competitive environment promoted by DOT increases travel opportunities.
Source:	U.S. air carriers file domestic and foreign data in the DOT Office of Airline Information (OAI) T-100 system. Foreign carrier data are from the T-100F database. Foreign air carriers file data for all nonstop flight segments involving a U.S. point.
Statistical Issues:	Like other counts of aviation-related activities, there are no major sources of systematic error in these data that have been quantified. However, random variation in the number and distribution of airline passengers, as well as the changes in the number of "open-skies" agreements, results in variation in the measure over time.
Completeness	Actual data is available for FY 2003 through July 2003. A projection for FY 2003 was calculated using the sum of regional projections (e.g., Central America, Africa) produced by "power" modeling 12-month totals from December 2001 through April 2003 (May – July 2003 appeared suspect due to missing data).
Reliability	DOT uses this performance data in managing its international aviation program, and in deciding a priority order for aviation bi-lateral agreement negotiations.

Details on DOT Environmental Stewardship Measures

Wetland protection and recovery

Measure:	On a program-wide basis, acres of wetlands replaced for every acre affected by Federal-aid Highway projects (where impacts are unavoidable). (FY)
Scope:	Measure includes wetlands associated with all Federal-aid highway projects each fiscal year. To be included, wetland replacement (or investment in a wetland bank) must have begun.

Source:	State DOTs input Federal-aid related wetland degradation and replacement data into either locally developed wetland mitigation databases or the FHWA Wetlands Management Database. FHWA compiles the final data.
Statistical Issues:	Non-uniformity of the data is problematic.
Completeness	All Federal agencies (including FHWA and other modes) must comply with National Environmental Policy Act (NEPA) and the Clean Water Act (specifically section 404 (b) (1) of the CWA) regarding disruption of wetlands. These laws require agencies to identify project alternatives that would avoid or minimize impacts to wetlands as a first consideration. These alternatives are subjected to analysis under both NEPA and the Clean Water Act. Under the law, these alternatives must be chosen unless the project sponsors clearly demonstrate that they are not viable because they do not meet the project purpose and need, or will lead to other more significant environmental impacts. If, in compliance with the law, wetland disruption is unavoidable, FHWA then works to achieve this goal of wetland replacement. This measure is current and has no missing data.
Reliability	In FY 2002, senior managers in FHWA, including the Executive Director, adopted the Administrator's objectives from her Executive Accountability Contract as their own performance objectives in their Individual Performance Agreements. The FHWA Administrator and the Senior Leadership Team have used a "Corporate Dashboard," which incorporates performance measures from the DOT and FHWA FY 2003 performance plans. Beginning in December 2002, they will begin referring to the dashboard in quarterly meetings to discuss progress towards achieving Agency strategic and performance objectives. Individual managers will report progress on planned initiatives and dashboard updates will be noted as the performance data becomes available throughout the year.

DOT facility cleanup

Measure:	Percentage of DOT facilities categorized as No Further Remedial Action Planned (NFRAP) under the Superfund Amendments and Reauthorization Act (SARA). (FY)
Scope:	EPA maintains a Federal Facility Hazardous Waste docket (docket), which contains information regarding Federal facilities that manage hazardous wastes or from which hazardous substances have been or may be released. DOT facilities listed on the docket are discussed in the Annual SARA report sent to Congress each year. EPA regional offices make the determination to change facility status to NFRAPs on the docket.
Statistical Issues:	None.
Completeness	The primary criterion for NFRAP is a determination that the facility does not pose a significant threat to the public health or environment. NFRAP decisions may be reversed if future information reveals that additional remedial actions are warranted. The Operating Administrations' activities are controlled, to a degree, by interaction and decisions made by EPA Regional personnel. This measure is current and has no missing data.

Reliability	DOT uses this data to prioritize cleanup activities and attendant resource levels.
Management Discussion	The number of obsolete vessels removed from the National Defense Reserve Fleet (NDRF) sites for subsequent disposal.(FY)
Scope:	As of October 2003, there were over 130 vessels in the NDRF designated for disposal. MARAD estimates this number will increase, as more Ready Reserve Force (RRF) merchant-type vessels become obsolete. This increase is primarily due to obsolescence of additional non-combatant, merchant-type vessels from MARAD's RRF, but also from other Federal agencies (e.g., Coast Guard, NOAA, etc.) for disposal. MARAD notified the Navy in October 2001 that it would not accept titles to obsolete Navy merchant-type ships until significant progress is made in disposing of MARAD's current backlog of obsolete ships. A vessel is not removed from the list of vessels awaiting disposal until it is physically removed from the NDRF sites.
Statistical Issues:	None
Completeness	2003 data is complete; nothing is considered preliminary.
Reliability	MARAD's data is reasonably reliable and useful in managing its ship disposal program.

Mobile Source Emissions

Measure:	Number of area transportation emissions conformity lapses, 12 month moving average. (FY)
Scope:	The transportation conformity process is intended to ensure that transportation plans, programs, and projects will not create new violations of the National Ambient Air Quality Standards (NAAQS), increase the frequency or severity of existing NAAQS violations, or delay the attainment of the NAAQS in designated non-attainment (or maintenance) areas.
Source:	FHWA and FTA jointly make conformity determinations within air quality non-attainment and maintenance areas to ensure that Federal actions conform to the purpose of State Implementation Plans (SIPs). With DOT concurrence, the EPA has issued regulations pertaining to the criteria and procedures for transportation conformity, which were revised based on stakeholder comment.
Statistical Issues:	None.
Completeness	If conformity cannot be determined within certain time frames after amending the SIP, or if three years have passed since the last conformity determination, a conformity lapse is deemed to exist and no new non-exempt projects may advance until a new determination for the plan and TIP can be made. This affects transit as well as highway projects. During a conformity lapse, FHWA and FTA can only make approvals or grants for: projects that are exempt from the conformity process (pursuant to '93.126 and '93.127 of the conformity rule) such as safety projects, and transportation control measures (TCMs) that are included in an approved SIP. Only those project phases that have received approval of the project agreement, and transit projects that have received a full funding grant agreement (FFGA), or equivalent approvals, prior to the conformity lapse may proceed during a conformity lapse. This measure is current and

	has no missing data.
Reliability	In FY 2002, senior managers in FHWA, including the Executive Director, adopted the Administrator's objectives from her Executive Accountability Contract as their own performance objectives in their Individual Performance Agreements. The FHWA Administrator and the Senior Leadership Team have used a "Corporate Dashboard," which incorporates performance measures from the DOT and FHWA FY 2003 performance plans. Beginning in December 2002, they began referring to the dashboard in quarterly meetings to discuss progress towards achieving Agency strategic and performance objectives. Individual managers will report progress on planned initiatives and dashboard updates will be noted as the performance data becomes available throughout the year.

Hazardous materials spills

Measure:	Tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines. (CY)
Scope:	<p>The Hazardous Materials Information System (HMIS) data includes spills, releases, or other incidents involving hazardous materials in commerce during the course of transportation. All modes of transportation are included except pipeline and bulk marine transportation. Data represent a census of all incidents reportable to the U.S. Department of Transportation (DOT). U.S. federal regulations require all spills meeting the following criteria to be reported, in writing, to DOT's Office of Hazardous Materials Safety:</p> <ol style="list-style-type: none"> 1. As a direct result of hazardous materials: <ol style="list-style-type: none"> a. a person is killed or receives injuries requiring hospitalization; or b. estimated property damage exceeds \$50,000; or c. More than 50 barrels spilled. (A rulemaking proposes to lower the reporting threshold for spill amount from 50 barrels to five gallons.); or d. an evacuation of the general public lasts for one or more hours; or e. a major transportation artery or facility is closed for one or more hours; or f. the operational flight pattern or routing of an aircraft is altered; or 2. Fire, breakage, spillage, or suspected contamination occurs involving shipment of radioactive materials or infectious substances; or 3. There as been a release of a marine pollutant exceeding 450 L or 400 kg; or 4. Any unintentional release of a hazardous material from a package or any quantity of hazardous waste discharged during transportation.

	<p>This measure tracks only releases from hazardous liquid pipelines to the environment. Natural gas pipeline releases vaporize into the atmosphere and do not have long-term significant impact on the environment, and thus are not included in this measure.</p> <p>Ton-miles shipped is derived from a database maintained by the Oil Pipeline Research Institute base on annual filings by pipeline companies with the Federal Energy Regulatory Commission (FERC). (Sources of further information on pipeline rates and data, http://www.aopl.org/pubs/interest.html, link Federal Energy Regulatory Commission.)</p>
Sources:	<p>Tons hazardous liquid materials spilled:Office of Hazardous Materials Safety (OHM) on Form DOT F 5800.1.</p> <p>Pipeline ton-miles: Post-1985 data are calculated using a base figure reported in a 1982 USDOT study entitled <i>Liquid Pipeline Director</i> and then combined with data from the Association of Oil Pipe Lines and the Oil Pipeline Research Institute. (NTS 2002)</p>
Statistical Issues:	<p>Spill data are collected by the carrier involved in each reportable incident and submitted to DOT's Office of Hazardous Materials Safety (OHM) on Form DOT F 5800.1. Carriers are required by regulation to report incidents and face significant penalties for failing to do so. Carriers are required to submit incident reports to DOT within 30 days of the incident. Any incident discovered by OHM to be reportable and for which an incident report was not submitted is referred to the Office of Hazardous Materials Enforcement, which ensures compliance with the reporting requirement. While OHM acknowledges that there is some level of under-reporting, it believes that the under reporting is limited to small, non-serious incidents. As the severity of an incident increases, it is more likely that the incident will come to OHM's attention and will ultimately be reported. These spill incidents are rare and probably not independent events.</p> <p>Post-1985 ton-mile data are calculated using a base figure reported in a 1982 USDOT study entitled <i>Liquid Pipeline Director</i> and then combined with data from the Association of Oil Pipe Lines and the Oil Pipeline Research Institute. Lack of additional information raises definitional and methodological uncertainties about the data's reliability. Moreover, the three different information sources introduce data discontinuities, making time comparisons unreliable. (NTS 2002)</p> <p>The performance measure is a ratio, so uncertainty in the denominator can have a large effect on the overall uncertainty.</p>
Completeness	<p>The data for this measure fluctuate year to year. RSPA is studying the spill data to determine the nature of this fluctuation and improve this measure. The 2003 measure is projected by extrapolating partial year reported data.</p>
Reliability	<p>RSPA uses this data in conjunction with pipeline safety data in prioritizing compliance and enforcement plans and in strategic management of the pipeline safety program.</p>

Aircraft noise exposure

Measure:	Number of people in the U.S. (in thousands) who are exposed to significant noise levels (65 decibels or more). (FY)
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Scope:	<p>Residential population exposed to aircraft noise above Day Night Sound Level of 65 decibels around U.S. airports with the greatest number of commercial jet take-offs and landings.</p> <p>In 1981, the FAA issued 14 CFR part 150, <i>Airport Noise Compatibility Planning</i>, and as part of that regulation, formally adopted Day Night Sound Level. Day Night Sound level, abbreviated as DNL and symbolized as L_{dn}, is the 24-hour average sound level, in decibels (dB), obtained from the accumulation of all events with the addition of 10 decibels to sound levels in the night from 10 PM to 7 AM. The weighting of the nighttime events accounts for the increased interfering effects of noise during the night when ambient levels are lower and people are trying to sleep. In the promulgation of 14 CFR part 150, the FAA also published a table of land uses that are compatible or incompatible with various levels of airport noise exposure in DNL. This table established that levels below DNL 65 dB are considered compatible for all indicated land uses and related structures without restriction.</p> <p>In 1997, the FAA initiated a project to collect airport noise analysis databases for a large number of the world's airports. The objective was to develop a tool that could be used by the Committee on Aviation Environmental Protection (CAEP) under the International Civil Aviation Organization (ICAO). Previous attempts by CAEP to globally assess aircraft noise exposure had limited success. The proposed FAA methodology had much more promise, as the number of sample databases was large and has since grown to around 200. Furthermore, a generalized methodology was included to account for airports for which noise databases did not exist. Based on the initial success of the FAA activity, the fourth meeting of CAEP (CAEP4) recommended that a task group be formed to complete the development of this tool for CAEP analysis.</p> <p>This group and subsequently the model became known as MAGENTA (Model for Assessing Global Exposure form Noise of Transport Airplanes). The MAGENTA population exposure methodology has been thoroughly reviewed by this ICAO task group and was validated for several airport specific cases. MAGENTA played an important role in the setting of new international aircraft noise standards by CAEP in 2001. CAEP used MAGENTA to assess the benefits (reduction in number of people exposed to aircraft noise) of several noise stringency proposals. FY 2000 was the first year MAGENTA was used to track the aircraft noise exposure goal in the DOT Performance Plan.</p>
Sources:	<p>The MAGENTA model is applied using U.S. population data from the Department of Commerce Census Data for 2000, locally developed traffic distribution (route and runway utilization), and aircraft distributions developed using the Official Airline Guide (OAG), Terminal Area Forecast (TAF) and current aircraft registration databases. The local traffic utilization data is available for the busiest U.S. airports in the form of studies developed for the FAA's Integrated Noise Model (INM). For smaller airports, a generic statistical procedure was employed.</p>
Statistical Issues:	<p>This measure is derived from model estimates that are subject to errors in model specification.</p>
Completeness	<p>The Integrated Noise Model has been validated with actual acoustic measurements at both airports and other environments such as areas under aircraft at altitude. External forecasts data are from primary sources. The MAGENTA population exposure</p>

	methodology has been thoroughly reviewed by an ICAO task group and was validated for several airport specific cases. Results are preliminary, based on projection of aircraft operations.
Reliability	FAA uses this data in determining operational capacity limits for times of day at airports.

Details on DOT Homeland and National Security Measures

Strategic Mobility

Measure:	Percentage of DOD-required shipping capacity complete with crews available within mobilization timelines (FY)
Scope:	As of October 2003, this measure is based on the material availability of 71 ships in the Maritime Administration's Ready Reserve Force (RRF) and 125 ships enrolled in the Voluntary Intermodal Sealift Agreement (VISA) program, which includes 47 ships enrolled in the Maritime Security Program (MSP). A second factor pertinent to this measure is the availability of sufficient licensed and unlicensed mariners to operate the available ships. The performance measure represents the number of available ships (compared to the total number of ships in the RRF and VISA) that can be fully crewed within the established readiness timelines. While other Government (primarily Military Sealift Command) owned or controlled sealift type vessels are not included in this measure, they draw their crews from the same pool of mariners. Accordingly, the availability measure is adjusted to reflect expected requirements during the early stages of a military crisis.
Sources:	Mariner availability data is compiled and measured based on data obtained from the U.S. Coast Guard Mariner Licensing and Documentation data, MARAD's Office of Sealift Support estimates of the size of the sailing workforce and their availability for duty during a mobilization, and Department of Defense requirements.
Statistical Issues:	None
Completeness	2003 data is complete; nothing is considered preliminary.
Reliability	MARAD's data is reasonably reliable and useful in managing its reserve fleet readiness program.

DOD-designated port facilities

Measure:	Percentage of DOD-designated commercial strategic ports for military use that are available for military use within DOD established readiness timelines.
Scope:	The measure consists of the total number of DOD-designated commercial strategic ports for military use that are assessed as able to meet DOD-readiness requirements on 48-hour notice, expressed as a percentage of the total number of DOD-designated commercial strategic ports. Presently there are 14 DOD-designated commercial strategic ports. Port readiness is based on monthly reports submitted by the ports and semi-annual port readiness assessments by MARAD in cooperation with other NPRN

	partners. The MARAD/DOD semi-annual port assessments provide data or other information on a variety of factors, including the following: the capabilities of channels, anchorages, berths, and pilots/tugboats to handle larger ships; rail access, rail restrictions, rail ramp offloading areas, and rail storage capacities; the availability of trained labor gangs and bosses; number and capabilities of available cranes; long-term leases and contracts for the port facility; distances from ports to key military installations; intermodal capabilities for handling containers; highway and rail access; number of port entry gates; available lighting for night operations; and number and capacity of covered storage areas and marshalling areas off the port.
Sources:	Data consists of the responses received from representatives of the port authorities for those commercial ports designated by the Department of Defense as strategic ports. Letters of inquiry are specifically addressed to senior port representatives with the most knowledge of the National Shipping Authority Port Planning Order (NSPO) issued by the Maritime Administration (MARAD). Responses are requested on a monthly basis and are due within two business days of receipt of MARAD's request. 100% of the strategic ports respond. The MARAD Office of National Security Plans maintains continuing dialog between reports with respondents.
Statistical Issues:	None.
Completeness	2003 data are current with no missing data.
Reliability	MARAD's data is reasonably reliable and useful in managing its port readiness program.

Details on DOT Organizational Excellence Measures

DOT Major System Acquisition Performance

Measure:	For major DOT systems acquisitions, percentage of cost, schedule, and performance goals established in acquisition project baselines that are met. (FY)
Scope:	This performance measure encompasses acquisition management data for all of DOT's major systems acquisition contracts, primarily in the FAA, but also from any office procuring a major system as defined in OMB Circular A-11, and DOT's Capital Programming and Investment Control order.
Source:	Acquisition program management data from each DOT organization procuring major systems.
Statistical Issues:	Performance is measured by calculating the number of cost and schedule milestones met divided by the total cost and schedule milestones possible. This method allows each milestone within a project to be tracked separately.
Completeness	This measure is current with no missing data. Each DOT organization maintains its own quality control checks for cost, schedule, and performance data of each major systems acquisition in accordance with OMB Circulars A-11, A-109, and A-130, Federal Acquisition Regulations, and Departmental orders implementing those directives and regulations.
Reliability	Each DOT organization having major system acquisitions uses the data during periodic acquisition program reviews, for determining resource requests during the annual

budget preparation process, and for reporting progress made in the President's budget.

Major DOT Infrastructure Project Cost and Schedule Performance

Measure:	<p>1. Achieve 95% of schedule milestones for major Federally-funded transportation infrastructure projects, or miss those milestones by less than 10% (FY)</p> <p>2. Achieve 95% of cost estimates for major Federally-funded infrastructure projects, or miss them by less than 10% (FY)</p>
Scope:	Active FTA New Starts projects with Full Funding Grant Agreements larger than \$1 billion; FHWA projects with a total cost of \$1 billion or more; and FAA runway projects with a total cost of \$1 billion or more.
Sources:	<p>FTA: measures are calculated monthly by an FTA Headquarters Engineer, checked by the Team Leader and re-checked by the Office Director. FTA uses independent reviews and third-party assessments such as the Corps of Engineers and other oversight contractors to validate the accuracy of project budgets and schedules before grantees are awarded Full Funding Grant Agreements.</p> <p>FHWA: uses essentially the same process as FTA. FAA enters into a project agreement with airport sponsors, and closely manages the project in a fashion similar to managing a direct FAA contract.</p>
Statistical Issues:	Schedule milestone achievement is measured by the difference between the actual Revenue Operations Date and the date of the execution of the Full Funding Grant Agreement divided by the difference between the Revenue Operations Date in the Full Funding Grant Agreement and the date of execution of the Full Funding Grant Agreement. Cost estimate achievement is measured by the actual Total Project Cost divided by the Total Project Cost in the Full Funding Grant Agreement.
Completeness:	This measure is current with no missing data. The information is currently tracked with an in-house MS Access database. A web-based database, FASTTrak, is being developed to track this type of project information in the future. The measures are calculated monthly by an FTA Headquarters Engineer, checked by the Team Leader and re-checked by Office Director.
Reliability:	<p>FTA: Calculations of schedule achievement are based on month of this report, and not on projected Revenue Operations Date. Re-calculations of schedule and cost baselines are made to reflect amendments to the Full Funding Grant Agreements. FTA uses independent reviews and third party assessments such as the Corps of Engineers and other oversight contractors to validate the accuracy of project budgets and schedules before grantees' are awarded Full Funding Grant Agreements. FTA continues to work to improve its rigorous oversight program and has made project cost and budget performance a core accountability of every senior manager in the agency.</p> <p>FHWA: In FY 2002, senior managers in FHWA, including the Executive Director, adopted the Administrator's objectives from her Executive Accountability Contract as their own performance objectives in their Individual Performance Agreements. The FHWA Administrator and the Senior Leadership Team have used a "Corporate Dashboard," which incorporates performance measures from the DOT and FHWA FY 2003 performance plans. Beginning in December 2002, they will begin referring to the dashboard in quarterly meetings to discuss progress towards achieving Agency strategic</p>

and performance objectives. Individual managers will report progress on planned initiatives and dashboard updates will be noted as the performance data becomes available throughout the year.

Transit Grant Process Efficiency

Measure:	Percentage of transit grants obligated within 60 days after submission of a completed application. (FY)
Scope:	FTA grants obligated during a fiscal year period for major programs: Urbanized area, non-Urbanized area, and Elderly and Persons with Disabilities formula grants; Capital grants; Job Access and Reverse Commute grants; Over-The-Road Bus grants; and Planning grants.
Sources:	FTA internal databases including the Transportation Electronic Award Management (TEAM) system.
Statistical Issues:	Processing time is calculated from submission date to obligation date. \$0 dollar, non-funding grant amendments are excluded from analysis.
Completeness	Data are current with no missing data, since FTA uses internal databases, including the Transportation Electronic Award Management (TEAM) system. All grants obligated during the Fiscal Year for the selected programs (see scope) are included in the original data set. In rare cases where the submission date is omitted (which prevents processing time calculation), missing dates are researched and added to the database prior to reporting. The "\$0" amendments are excluded because they are not representative of the grant processing action being tested.
Reliability	The files that contain raw data from TEAM have been tested to ensure that all fiscal-year-to-date obligated grants are included and that data is current. Report programs screen various date fields to identify any missing or out-of sequence dates that would skew averages; dates are corrected prior to reporting. FTA accomplished several key activities essential to improving processing time, including the streamlining of the grant closeout process to expedite the availability of old unused funds for new grants, improvements to TEAM, expedited notification of certification by the Department of Labor, and streamlined paperwork for Congressional release process. Monthly reconciliation of TEAM data initiated in FY 2002 contributed to a speedier year-end closing that reduced delays in grant processing at the beginning of FY 2003 and is expected to provide the same benefit at the beginning of FY 2004. Detailed monthly grant processing progress reports provide management tools to the Regional Administrators, who continue to make this goal a top priority. The addition of a data element in the TEAM database to capture the date discretionary grants enter the congressional release process beginning in FY 2004 will provide still another tool for managing an aspect of grant processing.

Small disadvantaged and women-owned small business

Measure:	1. Percent share of the total dollar value of DOT direct contracts that are awarded to women-owned businesses. (FY)
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	2. Percent share of the total dollar value of DOT direct contracts that are awarded to small disadvantaged businesses. (FY)
Scope:	Includes contracts awarded by DOT operating administrations through direct procurement. It does not include FAA contracts exempt from the Small Business Act.
Sources:	<p>Prior to October 1, 2003, these data are derived from the USDOT Contract Information System (CIS). The CIS included all USDOT contracting activities reported to the Federal Procurement Data Center (FPDC). The new Federal Procurement Data System (FPDS) enabled the removal of all agency feeder systems government-wide. New data will come directly from FPDS.</p> <p>Data are compiled by USDOT Contracting staff from Department contract documents. Selected information is data-keyed into the FPDS computer database, which can be queried to compute the needed statistics. Data are entered into the database upon contract approval and are available for query on an as-needed basis. All USDOT contracts are enumerated.</p>
Statistical Issues:	There are no major errors present in the data. However, random variation in the number of DOT contracts as well as the number of women-owned and small-disadvantaged businesses each year results in some random variation in these measures from year to year.
Completeness	The Federal Procurement Data System (FPDS) is prescribed by regulations as the official data collection mechanism for DOT acquisitions. Measures from the system reflected in the measure have no missing data.
Reliability:	There is extensive regulatory coverage to ensure data reliability. The system is used to prepare many reports to Congress, the Small Business Administration and others.

Environmental Justice

Measure:	Number of environmental justice (EJ) cases that remain unresolved after one year. (FY)
Scope:	Data will cover complaints filed with DOT under Title VI of the Civil Rights Act of 1964 and that have had environmental justice elements, such as allegations of substantially adverse environmental or health impact on a minority or low-income community by a transportation project. Case resolutions are actions that end or administratively close out complaints. These include such actions as determinations of no jurisdiction, withdrawals by complainants, resolutions achieved through alternative dispute resolution, findings of no violation, and negotiated settlements after discrimination findings under Title VI.
Sources:	<p>Data are collected from the entire population of interest. Data for XTRAK (External Complaint Tracking System) will cover all complaints filed with the Department of Transportation (DOT) that involve allegations of discrimination by an entity that received DOT funding, or in situations where DOT has statutory enforcement authority. Valid bases for allegations of discrimination include: age, color, disability, ethnicity, national origin, race, religion, and sex.</p> <p>Upon receipt of information alleging discrimination, data will be entered by DOCR</p>

	<p>staff and DOT Civil Rights office personnel . Data will be entered continuously by DOOCR as cases are filed and as the responsible DOT Civil Rights office processes the case. XTRAK includes information on all external administrative civil rights complaints filed with DOT.</p>
Statistical Issues:	None.
Completeness	<p>This indicator does not measure the impact of DOT's efforts to prevent the conditions that give rise to complaints. It does provide an initial measure of response timeliness, which is important to the public. The measure was expanded in 2000 to include the percent of cases that remain unresolved after one year as a further indicator of the timeliness of resolution. All environmental justice cases by definition relate to the concerns of a community of low-income and/or minority people. In addition, the number of cases indicates the pervasiveness of community perception of significantly adverse environmental and health concerns.</p> <p>It should be noted that environmental justice complaints can include allegations of discrimination on the basis of low income, which is not covered by Federal civil rights statutes. Thus, although most EJ complaints are also under Title VI of the Civil Rights Act of 1964, not all are. Finally, there is no firm definition of what constitutes an EJ complaint, and thus, views can differ on what should be entered into XTRAK as an EJ complaint.</p> <p>The measure is current with no missing data.</p>
Reliability	Performance data are used by the Office of Civil Rights and other DOT operating administrations in strategic management of this program.