

Performance Measure Validity and Reliability

Exhibit IV

Department: Florida Department of Transportation

Program: Highway/Bridge Construction

Service/Budget Entity: Highway/Bridge Construction

Measure: Total budget for intrastate highway construction and arterial highway construction divided by the number of lane miles let to contract.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. This measure is the total budget for Intrastate Highway Construction and Arterial Highway Construction divided by the number of lane miles let to contract. The budget figures are obtained from the Program & Resource Plan less contingencies. The number of lane miles let to contract is obtained from the Program Objectives & Accomplishments Report (PO&A). Actual prior year and projected future year data is obtained from the July Adopted Work Program.

Validity: This measure does not provide a true indication of the department's average construction cost. Funds are included in the total budget portion which do not add lane miles. Examples of work funded out of this category which do not add lane miles include but are not limited to: interchanges, intersections, lanes reconstructed, landscaping, drainage improvements, rest areas, overhead signing, etc. In addition, the size and complexity of projects are just two factors which have a great effect on the actual cost of a particular project. As a result, the figures reported may vary significantly from year to year.

Reliability: The measure is reliable in that the measuring procedure, obtaining data from the PO&A, will yield the same results on repeated trials.

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Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Intrastate highway lane miles contracted for highway capacity improvements (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.”

Validity: The measure is valid with regard to the number of intrastate highway lane miles (excluding the Turnpike) to be constructed to increase highway capacity.

The Work Program Administration (WPA) system contains the projects and schedules for capacity improvements. The WPA system also provides other project information and costs. Districts select capacity improvement projects based on 1) local government priority and 2) department-determined needs.

Procedures are documented for maintaining the Adopted Work Program, developing the work program, amending the work program and work program Instructions for programming and coding information correctly for inclusion in the work program. Source documents are authorized and projects in the work program are subjected to extensive review. Only work program development staff in the Districts and Central Office with valid user IDs and passwords have access to input or change data in WPA. A review committee and Office of work program staff validate the data entered into the system. Automated measures are in place to detect errors and provide a trail of activity in the systems. Data output is also reviewed and exceptions are reported.

Reliability: The information is reliable and consistent due to the controls discussed above that are in place and its use in the Program Objectives and Accomplishments Report and the Transportation Commission’s Performance and Production Review.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Arterial highway lane miles contracted for highway capacity improvements.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.”

Validity: The measure is valid with regard to the number of arterial highway lane miles to be constructed to increase highway capacity.

The Work Program Administration (WPA) system contains the projects and schedules for capacity improvements. The WPA system also provides other project information and costs. Districts select capacity improvement projects based on 1) local government priority, and 2) department-determined needs.

Procedures are documented for maintaining the adopted work program, developing the work program, amending the work program and work program instructions for programming and coding information correctly for inclusion in the work program. Source documents are authorized and projects in the work program are subjected to extensive review. Only work program development staff in the Districts and Central Office with valid user IDs and passwords have access to input or change data in WPA. A review committee and Office of Work Program staff validate the data entered into the system. Automated measures are in place to detect errors and provide a trail of activity in the systems. Data output is also reviewed and exceptions are reported.

Reliability: The information is reliable and consistent due to the controls discussed above that are in place and its use in the Program Objectives and Accomplishments Report and the Transportation Commission’s Performance and Production Review.

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Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Lane miles contracted for resurfacing (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Includes lane miles let to contract which are off the State Highway System. Actual prior year and projected future year data from the July 1 Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.”

Validity: The measure is valid with regard to the number of lane miles let to contract for resurfacing (excluding the Turnpike).

The Pavement Condition Survey (PCS), Roadway Characteristics Inventory (RCI) system, and Pavement Management Reporting System (PAVMARS) contain information related to pavement condition and characteristics. They are used to develop projects which are entered into the Work Program Administration (WPA) system. The WPA system contains the projects and schedules for the Resurfacing Program. The WPA also includes other project information and costs. The Districts prioritize resurfacing projects for inclusion in the work program from Pavement Condition Survey reports which identify deficient pavement segments.

Procedures are documented for maintaining the Adopted Work Program, developing the work program, and amending the work program and work program instructions for collecting the appropriate information for inclusion in the work program. There are also user manuals for the systems used to collect the data for these measures. Source documents are authorized and projects in the work program are subjected to extensive review. Only work program development staff in the Districts and Central Office with valid user IDs and passwords have access to input or change data in WPA. A review committee, district and Office of Work Program staff validate the data entered into the system. Automated measures are in place to detect errors and provide a trail of activity in the systems. Data output is also reviewed and exceptions are reported.

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Reliability: The information is reliable and consistent due to the controls discussed above that are in place and its use in the Program Objectives and Accomplishments Report and in the Transportation Commission's Performance and Production Review.

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Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Bridges contracted for repair or replacement (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. The figure includes local bridges as well as those on the State Highway System. Actual prior year and projected future year data from the July 1 Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.”

Validity: The measure is valid as an indicator of agency use of contracts for bridge repair and replacement (excluding bridges repaired or replaced on the Turnpike). It should be noted that the size, complexity, and cost of bridge replacement projects vary widely. Thus, this measure is not valid as a direct workload indicator for workload or budget needs.

The number of bridges let to contract for repair or replacement is compiled from the FDOT Work Program Administration computer system, which is the department’s source of commitment and financial information for projects undertaken by the department. The measure refers to both a) the number of bridges (excluding Turnpike bridges) that are committed to construction contract for either repair or rehabilitation work to correct structural deterioration related problems, and b) the number of bridges (excluding Turnpike bridges) let to contract for replacement which includes bridges that are structurally deficient, posted for weight restriction, or are more economical to replace than they are to repair or rehabilitate.

Reliability: The measure is reliable and consistent due to the elaborate review process employed in developing the work program.

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Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Right-of-way parcels acquired (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Right-of-Way Office, Florida Department of Transportation. Data is obtained from the Right-of-Way Management System (RWMS).

It is important to note that the standard used for FY 2009/10 is developed from the second year of a two-year projection developed at the beginning of FY 2008/09. Because the projection is well in advance of the time when detailed project information is available, it is subject to change. This change is noticeable in the difference between these standards and the plan published by the Transportation Commission that is completed immediately prior to publication. The projection for parcels to be acquired in the second year is based on estimates of right of way needs. Typically, at the time the department is making the projection for the second year, the associated construction projects are in the fourth or fifth year of the work program. The projects are still in the preliminary engineering phase and design work has not yet or has just recently been started. Right of way requirements have not yet been set, title work has not been completed, and right of way maps including the designation of parcels have not been prepared. As design work progresses, right of way requirements are better defined and better estimates of the number of parcels necessary for each project can be made. Additionally, since the associated construction projects are in the outer years of the work program, the schedules frequently change due to local government input or funding constraints. This impacts the schedule for the right of way segment of these projects. The department anticipates requesting an update to the standard immediately prior to the beginning of FY 2009/10 when better information is available and the standard can be made more meaningful.

Validity: The measure is valid as an indicator of the total number of right-of-way parcels acquired (excluding Turnpike projects) but not of the amount of effort or funding needed to acquire them. Other data are needed to evaluate the number of actual acquisitions compared to the number needed to let projects on time.

Since no construction contract is let, with the exception of design-build contracts, until all right-of-way parcels needed for the project are acquired and certified as "clear"

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(ready for construction to proceed), an efficient and economically effective right-of-way program is an essential component of productivity. On design-build contracts, the right of way necessary for construction of the project or any portion thereof, must be certified as “clear” prior to the start of construction activities.

In the usual production cycle of a road or bridge, the necessary right-of-way is acquired immediately prior to the start of construction. When feasible, the department acquires needed right-of-way farther in advance of construction - purchasing now, rather than later when value has appreciated, land that will be needed for planned future roads or for widening existing roads.

Reliability: Based on the importance of this information, there are extensive reviews by Central Office and District staff of the monthly results published in the Production Management Report. These reviews ensure the reliability of the data.

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Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Number of motor vehicle fatalities per 100 million miles traveled.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Safety Office, Florida Department of Transportation (FDOT). The annual traffic facts book, "Traffic Crash Facts," from the Florida Department of Highway Safety and Motor Vehicles provides the data. There is a 10 - 11 month lag in when this information is available as this report is published annually by a third party in the summer following the calendar year covered. The relevant data element in that document is derived from two sources: 1) long-form crash reports submitted by local and state law enforcement agencies and 2) an estimate for total highway travel by vehicles submitted by FDOT.

Local and state law enforcement agencies supply copies of relevant crash reports to the department of Highway Safety and Motor Vehicles year-round. Relevant crashes include only those more severe crashes which, by law, must be reported using the so-called long form. A long-form report must be filed when a motor vehicle crash: (1) resulted in death or personal injury; or (2) involved one or more of the following conditions; (a) leaving the scene of a crash involving damage to an occupied vehicle or property, or (b) driving while under the influence of alcoholic beverages, chemical substances, or controlled substances, or with an unlawful blood alcohol level. Other crashes may be reported using a long-form. For 1998 data and prior, a highway crash fatality, under state rules, must be the direct result of a motor vehicle crash and occur within 90 days of the crash. Federal rules establish a 30-day time period for crash-related deaths, so federal reports normally show a slightly smaller number of fatalities. The state recently modified its definition of what constitutes a highway crash fatality to make it consistent with the federal definition. Beginning with 1999 data, a highway crash fatality must be the direct result of a motor vehicle crash and occur within 30 days of the crash.

The number of fatalities alone is not a good measure as it fails to take into account the role of exposure. The nationally recognized way to compensate for exposure, or the level of risk, is to report the number of fatalities in reference to the amount of travel. To produce a number that is convenient to use, the fatality measure is reported as the number of fatalities per 100 million miles of travel. It is the rate, not the number, of

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fatalities being examined by this measure. The required normative denominator is vehicle miles of travel (VMT).

Daily VMT (DVMT) is the product of multiplying the length of a highway segment by the annual average daily traffic (AADT) estimate for the segment. AADT is the estimate for total annual traffic divided by 365 and may not be an actual volume observable on any day. For example, it could be the average of busy weekdays and low volume weekend days in a central business district, or an opposite pattern near a beach resort. AADT is a point estimate; i.e., it is estimated for a given place on the road based on traffic counts taken at the point, with some adjustments. The highway segment for which the AADT estimate is applicable is determined according to perceived homogeneous traffic conditions. The statewide annual VMT estimate is the sum of all highway segment DVMT estimates multiplied by 365.

In most cases, the process of making an AADT estimate begins when one- and two-day traffic counts are taken once a year. The location of these counts is held fairly constant from year to year. The raw traffic count must be adjusted to derive an AADT estimate. For the State Highway System, the agency uses an AADT estimating method endorsed by the Federal Highway Administration and covered by an American Society for Testing and Materials standard. For the State Highway System, each distinct highway segment must have one traffic counting location which is monitored for two days at least once every three years. District staffs determine homogeneous highway segments and counting locations following established guidelines. Years in which a traffic count is not taken at a given location have AADT estimated based on changes in traffic along adjacent highway segments. Most Districts count every site every year in order to fully address any local travel changes. Since the statistical variance at almost all sites is greater than the average annual change in traffic, one-year changes in AADT estimates are usually not statistically significant.

Each point in the AADT estimating process adds an amount of uncertainty to the final result. The national standard is to have 90% of AADT estimates within 10% of their true value. The agency checks to see if the standard is met by taking sample counts and producing AADT estimates at sites which are continuously monitored to see if the same result is derived. The agency has consistently met the standard for the State Highway System. At worst, then, the VMT-based fatality rate for the State Highway System is off no more than 10%. Of course, the selected performance measure is not limited to the State Highway System; it includes all roads in the state. State roads comprise about 10% of the public roads in the state. VMT estimates for roads off the state system are not developed with the same level of statistical sophistication. The statistical accuracy of AADT estimates for higher classification roads under local jurisdiction is not as good as those on the State Highway System, but overall still meets established accuracy standards. AADT estimates for lower classification roads under local jurisdiction are estimated using functional classification guidelines.

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It is also important to note that while the State Highway System comprises a little more than 10% of the total public road mileage in the state, it carries approximately 2/3 of the traffic.

Validity: The department is responsible for designing, constructing and maintaining more than 12,000 miles of state roads. Approximately 103,000 miles of road are the responsibility of cities and counties and about 2,000 miles are the responsibility of various federal agencies. Outside the State Highway System, the department provides only leadership and financial assistance, not actual performance of safety activities. Nevertheless, a comprehensive measure of highway safety is important in defining where agency efforts should be applied.

The overall objective of the State Highway System is to move people and goods safely within the state. This outcome measure is a direct monitor of how safely the highway system meets that objective. It is also an ultimate outcome measure for the net impact of keeping the roads and bridges on the State Highway System in good condition. The measure goes beyond agency responsibilities to cover all public roads and is thus an effective tool for monitoring needs throughout the entire roadway network.

Reliability: The number of persons killed in motor vehicle crashes is highly reliable given the thoroughness of law enforcement investigations. However, the number of fatalities alone is not a good measure as it fails to take into account the role of exposure. The nationally recognized way to compensate for exposure, or the level of risk, is to report the number of fatalities in reference to the amount of travel. To produce a number that is convenient to use, the measure is reported as the number of fatalities per 100 million vehicle miles of travel (VMT).

Even though there are shortcomings in the VMT estimates, the fatality rate performance measure is reliable. To the extent that the problem of VMT estimation is historical and is expected to extend into the foreseeable future, it is relatively constant and does not detract from the ability of this performance measure to indicate state trends.

It is important to note that the method of calculating VMT on public roads that are not on the State Highway System has been improved. The result was a larger off-system VMT (and lower fatality rate) than would be expected from historical trends.

An independent variable to use as a "reality check" is the number of fatalities and the number of fatal crashes. Since all states use the same methodology, VMT estimation issues are not considered significant when making state-to-state comparisons, which is another form of quality checks.

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Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Percent of state highway system pavement meeting department standards.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation, using reports prepared by the Pavement Maintenance Section of the latest annual Pavement Condition Survey (PCS). The State Materials Office (SMO) in Gainesville collects the PCS data. The condition of Florida pavements is measured annually through the Pavement Condition Survey conducted by the Pavement Evaluation Section of the SMO. Pavements are rated on a scale of 0 to 10 (with 10 being the best) in each of three categories: ride smoothness, pavement cracking, and wheel path rutting.

The condition rating scales were set by a statewide committee of pavement engineers so that a rating of six or less in any of the three rating categories would constitute a deficient pavement segment. The lone exception to this is that, with a posted speed limit of 45 mph or less, a segment's ride rating must be five or below to be considered deficient. Priority scheduling is given to roads with the most severe deficiencies. Good condition is defined as meeting department standards and there is no immediate need for resurfacing.

Validity: The measure is a valid indicator of the percentage of State Highway System pavement in good condition. Road pavements require periodic resurfacing; however, the frequency of resurfacing depends on the volume of traffic, type of traffic (heavier vehicles cause more "wear and tear"), pavement material variability and weather conditions.

Resurfacing preserves the structural integrity of highway pavements and includes pavement resurfacing, pavement rehabilitation, and minor reconstruction. Failure to timely resurface a road results in damage to the road base, necessitating costly reconstruction work in addition to resurfacing.

Reliability: Good condition is defined as meeting department standards. A separate pavement evaluation process done for federal reporting purposes provides a range of descriptive terms based on a scale of 0-5: very good, good, fair, mediocre, and poor.

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This single-number rating method relies heavily on ride condition, which is a generally poor indicator of structural pavement integrity in Florida due to our lack of freeze-thaw cycles. Thus, direct comparison to national data as a reliability check is not always reliable given the differences in methodology and rating scale. Any such comparison would require that 'poor' be related to 'bad' and other pavements be considered 'good' (i.e. acceptable) under the state definition.

External reality checks, such as comparisons to national data, are not necessary due to internal quality controls. Pavement condition is determined by a statewide team, thereby eliminating any bias and chance for District-to-District variations in rating methods. The present agency short range objective is to keep the proportion of State Highway System road pavements which meet department standards at 80%.

The agency long range objective is to preserve the State Highway System. Improvements in survey methodology and instrumentation may occur as technology increases the accuracy of measurements. The data on which the pavement condition outcome is based should remain reliable.

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Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Percent of FDOT-maintained bridges which meet department standards.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development and the State Maintenance Office, Florida Department of Transportation. The data is derived from the annual bridge inventory from the State Maintenance Office. Meeting standards: The percentage of structures on the State Highway System having a condition rating of either good or excellent – for bridge components of substructure, superstructure and deck; or the culvert condition rating.

Validity: The measure is valid as an indicator of the percentage of state-maintained bridges in good condition. No FDOT-maintained bridge will ever remain open to traffic with a known structural defect that renders it unsafe. Thus, there are no FDOT-maintained bridges in an unsafe condition, only bridges that may need work to prolong their useful life, or bridges that must be replaced because they have exhausted their useful life. This performance measure directly monitors the success of agency Bridge Repair and Replacement Programs, the objective of which is to keep FDOT-maintained bridges in good condition.

Reliability: The measure is reliable in that the mechanics of the data collection process are uniform throughout the state and the data is accurately and consistently recorded.

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Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Percent increase in number of days required for completed construction contracts over original contract days (less weather days).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Construction Office, Florida Department of Transportation. The department tracks construction contract data through its computerized Contracts Reporting System. Once the department and construction firm contract for construction of a road or bridge project and construction commences, the contract time (number of days to complete the project established by the department) and contract amount (cost of the project established by lowest responsible bid) may be adjusted due to a variety of factors. These factors include time lost due to rain or other inclement weather conditions, unanticipated environmental or soil conditions (e.g. discovery of hazardous waste on site), design changes or omissions, and equipment, material, or workforce-related problems of the construction contractor.

The original contract time will predictably increase due to time extensions granted for inclement weather conditions. These increases are excluded from the performance measure since they are unavoidable. Beyond “weather days,” additional time is granted for a variety of other reasons, including extra work, special events (i.e. parades), plan or design changes, material testing delays, and utility relocation delays. Additional days are granted by the department through time extensions, which grant additional time only, and through supplemental agreements, which authorize additional work and often necessitate additional days. The bulk of added days are authorized through supplemental agreements.

Validity: The comparison of final contract time to original contract time is a valid indicator of overall construction contracts management.

The Contract Reporting System (CRS), the Supplemental Agreement (SA) Tracking System, and the Time Tracking System are used to collect information for this performance measure. The purpose of the CRS is to facilitate the preparation of itemized construction progress payments, supplemental agreements to contracts and final estimates while providing management reports that show construction progress by contractor, district, fund, etc. The purpose of the SA Tracking System and the Time

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Tracking System is to provide the department with documentation on the reason for a specific amount for the SA as well as identifying and documenting the party that should share in the responsibility for the additional cost. For the purpose of this performance measure, a completed project is a project for which the “passed date” has been entered into the system by the District Final Estimates staff. The “passed date” is the date the job was, in effect, paid for, which means all contract items have been paid out and there are no outstanding issues such as claims.

Information is collected from the CRS, the SA Tracking System, and the Time Tracking System to obtain the percentage increase in the number of days required for completed construction contracts over original contract days (less weather days). Using these systems, the Office of Construction tracks the contract number, work program item number, lead project number, original days, present days, days used, number of time extensions, contractor (name and vendor number), letting date, final accepted date, and passed date. CRS and the SA Tracking System are used to determine the percent increase in amount paid for construction over original contract amount. The SA Tracking system lists out the work orders making up any supplemental agreements. This includes the amount of the work order, the number of days, the premium cost for the work done, the responsible party for the premium cost, and the reason for the work order. The Time Tracking system lists the time extension work orders with the days and a “reason code” for the work order. Using these systems, the Office of Construction tracks the contract number, WPI number, lead project number, original contract amount, present contract amount, total of approved SAs, regular work to date, contractor (name and vendor number), letting date final accepted date, and passed date.

A monthly edit report is generated to check for inconsistencies between the SA Tracking and Time Tracking systems and CRS. This checks to determine if the total amount and days in CRS match the information in the SA Tracking and Time Tracking system. It also checks the validity of the reason code and if the responsible party has been identified. Quarterly, a detailed report is sent to the districts for their review. Any needed changes are made in the district. Once the changes have been made by the district, the information is closed out. Changes can be made for the next quarter, but they will not be reflected in the current quarterly report. Only appropriate staff with valid user IDs and passwords have access to input or change data in the systems that gather data for these measures. Quality Assurance Reviews are performed which review the actual documents to ensure accuracy of data entry.

Reliability: The data reflected in this measure is captured in the department’s Contract Reporting System. The system is stable and has been in use for a number of years. Data from this system can be expected to be consistent and reliable over time.

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Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Percent increase in final amount paid for completed construction contracts over original contract amount.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Construction Office, Florida Department of Transportation. The department tracks construction contract data through its computerized Contracts Reporting System. Once the department and construction firm contract for construction of a road or bridge project and construction commences, the contract time (number of days to complete the project established by the department) and contract amount (cost of the project established by lowest responsible bid) may be adjusted due to a variety of factors. These factors include time lost due to rain or other inclement weather conditions, unanticipated environmental or soil conditions (e.g. discovery of hazardous waste on site), design changes or omissions, and equipment, material or workforce-related problems of the construction contractor.

This measure compares the original contract amount to the final project cost. Increases in cost frequently occur due to authorization of additional work as the project progresses. Significant cost increases could result in delaying planned projects and could indicate a problem in quality of design plans and specifications or in contract management.

The public expects that a project will be delivered “within budget and on schedule.” It is important to assess how well the department manages its construction contracts as it relates to containment of cost and time increases. As explained above, however, some increases are beyond the department’s control.

Validity: The comparison of final contract cost to original contract cost is a valid indicator of overall construction contract management.

The Contract Reporting System (CRS), the Supplemental Agreement (SA) Tracking System, and the Time Tracking System are used to collect information for this performance measure. The purpose of the CRS is to facilitate the preparation of itemized construction progress payments, supplemental agreements to contracts and final estimates while providing management reports that show construction progress by

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contractor, district, fund, etc. The purpose of the SA Tracking System and the Time Tracking System is to provide the department with documentation on the reason for a specific amount for the SA as well as identifying and documenting the party that should share in the responsibility for the additional cost. For the purpose of this performance measure, a completed project is a project for which the “passed date” has been entered into the system by the District Final Estimates staff. The “passed date” is the date the job was, in effect, paid for, which means all contract items have been paid out and there are no outstanding issues such as claims.

Information is collected from the CRS, the SA Tracking System, and the Time Tracking System to obtain the percentage increase in the number of days required for completed construction contracts over original contract days (less weather days). Using these systems, the Office of Construction tracks the contract number, work program item number, lead project number, original days, present days, days used, number of time extensions, contractor (name and vendor number), letting date, final accepted date and passed date. CRS and the SA Tracking System are used to determine the percent increase in amount paid for construction over original contract amount. The SA Tracking system lists out the work orders making up any supplemental agreements. This includes the amount of the work order, the number of days, the premium cost for the work done, the responsible party for the premium cost and the reason for the work order. The Time Tracking system lists the time extension work orders with the days and a “reason code” for the work order. Using these systems, the Office of Construction tracks the contract number, WPI number, lead project number, original contract amount, present contract amount, total of approved SAs, regular work to date, contractor (name and vendor number), letting date, final accepted date and passed date.

A monthly edit report is generated to check for inconsistencies between the SA Tracking and Time Tracking systems and CRS. This checks to determine if the total amount and days in CRS match the information in the SA Tracking and Time Tracking system. It also checks the validity of the reason code and if the responsible party has been identified. Quarterly, a detailed report is sent to the districts for their review. Any needed changes are made in the district. Once the changes have been made by the district, the information is closed out. Changes can be made for the next quarter, but they will not be reflected in the current quarterly report. Only appropriate staff with valid user IDs and passwords have access to input or change data in the systems that gather data for these measures. Quality Assurance Reviews are performed which review the actual documents to ensure accuracy of data entry.

Reliability: The data reflected in this measure is captured in the department’s Contract Reporting System. The system is stable and has been in use for a number of years. Data from this system can be expected to be consistent and reliable over time.

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Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Number of lane miles let to contract for highway capacity improvements (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.” Lane miles let to contract for highway capacity improvements on the Turnpike are not included in this measure.

Validity: The measure is valid with regard to the number of lane miles to be constructed to increase capacity on the State Highway System (excluding the Turnpike).

The Work Program Administration (WPA) system contains the projects and schedules for capacity improvements. The WPA system also provides other project information and costs. Districts select capacity improvement projects based on 1) local government priority and 2) department-determined needs.

Procedures are documented for maintaining the Adopted Work Program, developing the work program, amending the work program and work program instructions for programming and coding information correctly for inclusion in the work program. Source documents are authorized and projects in the work program are subjected to extensive review. Only work program development staff in the Districts and Central Office with valid user IDs and passwords have access to input or change data in WPA. A review committee and Office of Work Program staff validate the data entered into the system. Automated measures are in place to detect errors and provide a trail of activity in the systems. Data output is also reviewed and exceptions are reported.

Reliability: The information is reliable and consistent due to the controls discussed above that are in place and its use in the Program Objectives and Accomplishments Report and the Transportation Commission’s Performance and Production Review.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Percent of construction contracts planned for letting that were actually let.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Work Program, Florida Department of Transportation.

Validity: The measure is valid as an indicator of overall progress in completing planned work program construction projects.

Data for the percent of construction contracts planned for letting that were actually let is captured to ensure the department is delivering the projects contained in the current year of the Adopted Work Program. The data collected for this measure is used in the preparation of the Performance Report used in the Executive Board Meeting. The information is also used in the Florida Transportation Commission's Performance and Production Review of the Department of Transportation which reports the status of this performance measure.

"Projects planned for letting" is based on the construction projects included in the current year of the Adopted Work Program. Staff in the Production Management Office review the Adopted Work Program to determine which construction projects are planned for letting. The districts inform Production Management Office staff which construction projects should not be included in the list because of concerns about being able to produce them in the current year. Based on these decisions, the construction projects planned for letting are included in the Production Management Performance Report. Any construction projects included in the Adopted Work Program but not in the list of construction projects planned for letting are included in the August report as "Adopted, but Excluded" projects.

Production Management Office staff receive and review an Executive Bid Summary package monthly. District and Design/Build contracts are also tracked and commitments recorded when the reports show approved amounts. This package identifies which construction projects have been let in the current month.

Performance Validity and Reliability

Exhibit IV

Procedures are documented for maintaining the Adopted Work Program, developing the work program, and amending the work program and work program instructions for collecting the appropriate information in the work program. There is also a procedure for Production Performance reporting. Source documents are authorized and projects in the work program are subjected to extensive review. Only appropriate staff with valid user IDs and passwords have access to input or change data in the systems that gather the data for this measure. Additionally, the Florida Transportation Commission is required by statute to monitor, at least quarterly, the efficiency, productivity, and management of the department, using performance and production standards developed by the Commission. One of the measures the Florida Transportation Commission monitors is the percent of construction contracts planned for letting that were actually let.

The Office of Inspector General verified the information included in the Florida Transportation Commission's Performance and Production Review of the Department of Transportation matches the information in the year-end Production Management Performance Report.

Reliability: The information is reliable and consistent due to the controls in place and its use in the Transportation Commission's Performance and Production Review.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Number of bridges contracted for repair (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.” Turnpike bridges are not included in this measure.

Validity: The measure is valid as an indicator of agency use of contracts for bridge repair (excluding Turnpike bridges).

The number of bridges let to contract for repair is compiled from the FDOT work program Administration computer system, which is the department’s source of commitment and financial information for projects undertaken by the department. The term “number of bridges let to contract for repair (Turnpike not included)” refers to the number of bridges committed to construction contract for either repair or rehabilitation work to correct structural deterioration related problems.

Reliability: The measure is reliable and consistent due to the elaborate review process employed in developing the work program.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Number of bridges contracted for replacement (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. The figure includes local bridges as well as those on the State Highway System. Actual prior year and projected future year data from the July 1 Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.” Turnpike bridges are not included in this measure.

Validity: The measure is valid as an overall indicator of the agency use of contracts for bridge replacement (excluding Turnpike bridges). It should be noted that the size, complexity, and cost of bridge replacement projects vary widely. Thus, this measure is not valid as a direct workload indicator for workload or budget needs.

The number of bridges let to contract for replacement is compiled from the FDOT work program Administration computer system, which is the department’s source of commitment and financial information for projects undertaken by the department. The number of bridges let to contract for replacement includes bridges scheduled for replacement because the bridge is structurally deficient, posted for weight restriction or is more economical to replace rather than repair or rehabilitate.

Reliability: The measure is reliable and consistent due to the elaborate review process employed in developing the work program.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway/Bridge Construction

Service: Highway/Bridge Construction

Measure: Number of projects certified ready for construction (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Right-of-Way Office, Florida Department of Transportation. Data is obtained from the Central Office Right-of-Way files containing documents which certify readiness of projects for construction.

It is important to note that the standard used for FY 2009/10 is developed from the second year of a two-year projection developed at the beginning of FY 2008/09. Because the projection is well in advance of the time when detailed project information is available, it is subject to change. This change is noticeable in the difference between these standards and the plan published by the Transportation Commission that is completed immediately prior to publication. The projection for projects to be certified in the second year is based on associated construction projects typically in the third or fourth year of the work program and sometimes later. The projects are still in the design phase and right of way requirements may not yet have been established, title work may not yet be completed, and right of way maps may not yet have been prepared. As design work progresses, right of way requirements are better defined and a better estimate for certification of the right of way can be made. Additionally, since the associated construction projects are in the outer years of the work program, the schedules frequently change due to local government input or funding constraints. This impacts the schedule for the right of way segment of these projects. The department anticipates requesting an update to the standard immediately prior to the beginning of FY 2009/10 when better information is available and the standard can be made more meaningful.

Validity: The measure is valid as an indicator of the total number of projects (excluding Turnpike projects) certified as ready for construction but not of the amount of effort or funding needed to acquire the parcels needed for each project.

Since no construction contract is let, with the exception of design-build contracts, until all right-of-way parcels needed for the project are acquired and certified as "clear" (ready for construction to proceed), an efficient and economically effective right-of-way program is an essential component of productivity. On design-build contracts, the right

Performance Validity and Reliability

Exhibit IV

of way necessary for construction of the project or any portion thereof, must be certified as “clear” prior to the start of construction activities.

In the usual production cycle of a road or bridge, the necessary right-of-way is acquired immediately prior to the start of construction. When feasible, the department acquires needed right-of-way in advance of construction - purchasing now, rather than later when value has appreciated, land that will be needed for planned future roads or for widening existing roads.

Reliability: Based on the importance of this information, there are extensive reviews by central office and district staff of the monthly results published in the Production Management Report. These reviews ensure the reliability of the data.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Public Transportation

Service: Public Transportation

Measure: Ratio of transit ridership growth to population growth.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Public Transportation Office, Florida Department of Transportation. Population data is from the Florida Legislature's Office of Economic and Demographic Research, the U.S. Census Bureau and the Bureau of Economic and Business Research (BEBR) at the University of Florida. Population data used to calculate the requested standards are from the Office of Economic and Demographic Research projections.

Local transit agencies collect ridership data. Data for this measure is extracted from reports required by the Federal Transit Administration.

It is important to note that there is about a 15 to 17 month lag in the data. That is, the actual transit ridership data for the federal fiscal year which just ended is not available until December of the next year. Population data for the calendar year which just ended is not available until the following February.

Validity: One of the major transportation development concerns is responding to the need for transportation systems to support the state's growing population. A comparison of the transit ridership growth to the growth rate of the population as a whole is a logical way to address this concept. It will demonstrate whether the use of public transit is keeping up with or exceeding population growth.

Reliability: The population data for prior years is an estimate that decreases in reliability as time passes since the last decennial census. Projections for future years are similarly degraded by the passage of time and are generally less reliable than estimates.

The ridership data is validated by the federal government.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Public Transportation

Service: Public Transportation

Measure: Number of one-way public transit passenger trips.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Public Transportation Office, Florida Department of Transportation. Local transit agencies collect ridership data. Data for this measure is extracted from reports required by the Federal Transit Administration.

It is important to note that there is a 12 month lag in the data. That is, the actual data for the calendar year which just ended is not available until December.

Validity: Transit ridership is a common measure of transit performance, but it may not measure the department's performance. The department acts as a partner in the provision of transit service, but does not operate transit systems.

Reliability: While we have no reason to question the reliability of the measure, source documentation or standards, we were not able to verify data outside the control of FDOT. The data are subject to a lag time for audited reports of up to three years. The data is validated by the federal government.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Public Transportation

Service: Public Transportation

Measure: Number of one-way trips provided (transportation disadvantaged).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Commission for the Transportation Disadvantaged. Each county in Florida has a Community Transportation Coordinator (CTC) that is required to submit an Annual Operating Report to the Commission by September 15 each year. Each CTC Report includes information related to the number of trips provided for the transportation disadvantaged in their service area.

Each CTC logs the number of trips provided according to the following categories: fixed route, ambulatory, non-ambulatory, stretcher, and school bus. This measure includes only those requested trips provided with funds from the Transportation Disadvantaged Trust Fund.

It is important to note that there is a 5 – 6 month lag in the data. That is, the actual data for the fiscal year which just ended is not available until December or January.

Validity: The measure is a valid indicator of the number of trips provided for the transportation disadvantaged. However, it is important to note that the department is only one of a variety of entities which provide funding to the Community Transportation Coordinators who provide transportation services for the transportation disadvantaged in their area.

Reliability: The commission has a system of checks and balances to ensure the financial information reported by the CTCs is accurate and reliable.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Public Transportation

Service: Public Transportation

Measure: Number of passenger enplanements.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Public Transportation Office, Florida Department of Transportation. department estimates are based on actual historical data from the Federal Aviation Administration, U.S. Department of Transportation.

It is important to note that there is a 21 month lag in the data. That is, the actual data for the calendar year 2002 will not be available until the Fall of 2004.

Validity: We have no reason to question the validity of the measure, source documentation or standards.

It is important to note that the work done by the Department of Transportation has very little, if any, impact on the number of passenger enplanements. As a result, it is not a valid measure of the Public Transportation Program.

Reliability: We have no reason to question the reliability of the measure, source documentation or standards.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Public Transportation

Service: Public Transportation

Measure: Number of cruise embarkations and disembarkations at Florida ports.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Public Transportation Office, Florida Department of Transportation. The data is obtained from the annual Florida Seaport Mission Plan published by the Florida Seaport Transportation and Economic Development Council and the individual seaports located in Florida.

It is important to note that there is a five to six month lag in the data. That is, the actual data for the fiscal year which just ended is not available until January 2004.

Validity: We have no reason to question the validity of the measure, source documentation or standards, but we were not able to verify data outside the control of the Florida Department of Transportation.

It is important to note that this measure is not within the control of the department. As a result, it is not a valid measure of the Public Transportation Program.

Reliability: We have no reason to question the reliability of the measure, source documentation or standards, but we were not able to verify data outside the control of the Florida Department of Transportation.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Public Transportation

Service: Public Transportation

Measure: Average cost per requested one-way trip for transportation disadvantaged.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Commission for the Transportation Disadvantaged. Each county in Florida has a Community Transportation Coordinator (CTC) that is required to submit an Annual Operating Report to the Commission by September 15 each year. The Annual Operating Report includes information related to the costs incurred and the number of trips provided by the CTC and its contractors in providing trips for the transportation disadvantaged. Each CTC logs the number of trips provided according to the following categories: fixed route, ambulatory, non-ambulatory, stretcher, and school bus. Requested trips include all categories mentioned above except for fixed route.

The measure is the total costs incurred by CTCs and coordination contractors in providing requested trips for the transportation disadvantaged in their area divided by the number of requested trips provided. This measure does not include administrative costs associated with the Commission for the Transportation Disadvantaged. It is important to note that Community Transportation Coordinators receive funding from various entities, examples include: US Department of Transportation; Department of Children and Families; Agency for Health Care Administration; Department of Elder Affairs; Department of Education; etc.

The Commission for the Transportation Disadvantaged compiles the information included in each Annual Operating Report into their Annual Performance Report.

It is important to note that there is a 5 – 6 month lag in the data. That is, the actual data for the fiscal year which just ended is not available until December or January.

Validity: The measure is a valid measure of the average cost per paratransit trip.

Reliability: The Commission has a system of checks and balances to ensure the financial information reported by the CTCs is accurate and reliable.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway Operations

Service: Highway Operations

Measure: Maintenance condition rating of state highway system as measured against the department's maintenance standards.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Maintenance Office, Florida Department of Transportation. The quality and effectiveness of the agency's routine maintenance program is systematically and uniformly evaluated by the Maintenance Rating Program (MRP). The department's objective is to achieve and maintain an annual maintenance rating of 80.

Validity: The measure is a valid indicator of the maintenance condition of the State Highway System. The Maintenance Rating Program has been used by the department since 1985.

Florida law requires the department to provide routine and uniform maintenance of the State Highway System. Routine maintenance encompasses highway repair (e.g. repairing potholes, patching), roadside upkeep (e.g. mowing, litter removal), drainage management, and traffic services (e.g. road signs, striping). Adequate and uniform road maintenance on a statewide basis is essential for ensuring the optimum safety, preservation and aesthetic condition of the transportation system.

Reliability: The maintenance condition rating is a long-standing internal management tool. A formal statistical review of the MRP by Florida State University found that the Maintenance Rating Program produces statistically valid indicators of the overall condition of the State Highway System. The rating is reliable.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway Operations

Service: Highway Operations

Measure: Commercial vehicle weighings.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Motor Carrier Compliance Office, Florida Department of Transportation. The source of commercial vehicle weight law enforcement data is the agency's Motor Carrier Compliance Office, which operates fixed weigh stations on major highways and whose field patrol officers use portable scales to weigh trucks on other roads. Truck weight laws apply to all vehicles, commercial or otherwise; however, the term 'commercial vehicle' is used to indicate that the area of emphasis is the large trucks used by businesses. Counts are maintained on a daily basis on both total number of vehicles weighed and the number of enforcement actions taken.

Validity: The measure is a valid indicator of that which it purports to measure: the number of commercial vehicle weighings performed. Officers weigh commercial vehicles by two methods. First, weight inspectors operating weigh stations provide a "screening" service for the enforcement program, weighing more than 99 percent of the total trucks weighed and accounting for approximately 62 percent of the dollar amount of overweight penalties (fines) collected. This is because truck operators who know that their routes will take them through a weigh station do not intentionally overload; therefore, the amounts of excess weights and resulting penalties are comparatively small, with few exceptions.

Second, patrol officers, working bypasses and other routes without fixed scales, may apprehend those operators who do not necessarily expect to be weighed. Thus, the remaining weighings (less than 1% of the total weighings) results in the other 38 percent (approximately) of penalty dollars collected. These two methods of weighing vehicles complement one another and weight enforcement would be ineffective without both of them functioning.

Not all commercial motor vehicles operating on bypass routes are weighed. Officers are trained to detect commercial vehicles which are overweight.

Performance Validity and Reliability

Exhibit IV

All patrol officers are equipped with portable scales. They inspect commercial vehicles for weight violations on fixed-scale bypass routes and in other geographic areas where routing of such traffic does not include any fixed-scale sites.

Reliability: The data supporting this performance measure is reliable because of the process controls that are in place. The controls ensure that data is consistently reported.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway Operations

Service: Highway Operations

Measure: Lane miles maintained on the State Highway System (Turnpike not included).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Transportation Statistics Office, Florida Department of Transportation. December Mileage Report for the State Highway System. The figure for out-years are estimated based on the number of new lane miles on the State Highway System (excluding the Turnpike).

Validity: The measure is a valid indicator of the number of lane miles on the State Highway System (excluding the Turnpike).

Reliability: Data supporting the performance measure is reliable. Procedures are in place to ensure accurate data collection, and quality control activities are conducted on an ongoing basis.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway Operations

Service: Highway Operations

Measure: Percent of commercial vehicles weighed that were overweight: fixed and WIM scales; portable scales.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Motor Carrier Compliance Office, Florida Department of Transportation. These measures are derived by dividing the number of trucks cited for weight law violations by the total number of vehicles weighed at fixed enforcement sites and vehicles weighed using portable scales. The source of commercial vehicle weight law enforcement data is the agency's Motor Carrier Compliance Office, which operates fixed weigh stations on major highways and whose field patrol officers use portable scales to weigh trucks on other state roads. Truck weight laws apply to all vehicles, commercial or otherwise; however, the term "commercial vehicle" is used to indicate that the area of emphasis is the large trucks used by businesses. Counts are maintained on a daily basis on both total number of vehicles weighed and the number of enforcement actions taken.

Validity: The measure reports the percent of commercial motor vehicle weighings which showed the vehicle was overweight. It is important to note that vehicles observed with the Weigh in Motion technology as being overweight are weighed via a fixed scale to confirm the vehicle is actually overweight. It should also be noted that not all commercial vehicles on the highway are weighed.

Initially, the number of cited overweight vehicles may go up as enforcement efforts take effect. Later, as the increased risk of discovery becomes widely known, the number of overweight vehicles—and, thus, the number of citations—should decline. However, since it is likely that the number of weighed vehicles is expected to increase more rapidly due to technological advances, the measure as stated is likely to decline. Comparison of this measure to others will be necessary to provide a complete picture.

The program provides enforcement of laws and agency rules which regulate the weight, size, safety, and registration requirements of commercial vehicles operating on the highway system. Through the use of a statewide network of weigh station facilities and patrol personnel utilizing portable scales, commercial vehicle traffic is monitored for compliance with legislatively established requirements.

Performance Validity and Reliability

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Reliability: Collection of the necessary input data is a long-established process with substantial supervisor review. The input data are considered to be reliable. Rapid increases in vehicle weighings due to technical advances (e.g. weigh-in-motion devices) are likely to reduce the percent of vehicles found in violation even if the number of such vehicles increases. This causes the measure to be incomplete if presented without also reporting the input data values and their trends over time.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway Operations

Service: Highway Operations

Measure: Number of commercial vehicle safety inspections performed.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Motor Carrier Compliance Office, Florida Department of Transportation.

Validity: The measure is a valid indicator of that which it purports to measure: the number of commercial vehicle safety inspections performed. However, it is important to note that safety inspections are not conducted on all commercial motor vehicles. Patrol Officers are trained to spot commercial motor vehicles that may have weight or length violations and/or suffer from safety problems. Safety inspections are conducted during traffic stops, often initiated by other than safety-related observations.

The program provides enforcement of laws and agency rules which regulate the weight, size, safety, and registration requirements of commercial vehicles operating on the highway system. Through the use of a statewide network of weigh station facilities and patrol personnel utilizing portable scales, commercial vehicle traffic is monitored for compliance with legislatively established requirements.

All patrol officers are equipped with the necessary equipment for performing safety inspections. They inspect commercial vehicles and drivers for safety and hazardous materials violations in all geographic areas including most weigh stations and bypass routes.

Safety and hazardous materials enforcement activities consist of: (a) Comprehensive inspections of trucks and drivers on the road; (b) Inspections of buses and drivers at selected sites (because of inherent hazards in bus inspections); and (c) Terminal audits at motor carrier office facilities. Constraints on available manpower resources require a careful selection of vehicles for roadside inspections.

Vehicles, found to be imminently hazardous, and drivers, determined to be unqualified, are removed from service immediately. Vehicles remain out of service until equipment defects are corrected; drivers remain out of service until they become qualified.

Performance Validity and Reliability

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Reliability: The data supporting this performance measure is reliable because of the process controls that are in place. The controls ensure that data is consistently reported.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Highway Operations

Service: Highway Operations

Measure: Number of portable scale weighings performed.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Motor Carrier Compliance Office, Florida Department of Transportation. The source of commercial vehicle weight law enforcement data is the agency's Motor Carrier Compliance Office, which operates fixed weigh stations on major highways and whose field patrol officers use portable scales to weigh trucks on other roads. Truck weight laws apply to all vehicles, commercial or otherwise; however, the term "commercial vehicle" is used to indicate that the area of emphasis is the large trucks used by businesses. Counts are maintained on a daily basis on both total number of vehicles weighed and the number of enforcement actions taken.

Validity: The measure is a valid indicator of that which it purports to measure: the number of portable scale weighings performed. However, not all commercial motor vehicles operating on bypass routes are weighed. Officers are trained to detect commercial vehicles which are overweight.

Officers weigh commercial vehicles by two methods. First, weight inspectors operating weigh stations provide a "screening" service for the enforcement program, weighing more than 99 percent of the total trucks weighed and accounting for approximately 62 percent of the dollar amount of overweight penalties (fines) collected. This is because truck operators who know that their routes will take them through a weigh station do not intentionally overload; therefore the amounts of excess weights and resulting penalties are comparatively small, with few exceptions.

Second, patrol officers, working bypasses and other routes without fixed scales, may apprehend those operators who do not necessarily expect to be weighed. Thus the remaining weighings (less than 1% of total weighings) results in the other 38 percent (approximately) of penalty dollars collected. These two methods of weighing vehicles complement one another and weight enforcement would be ineffective without both of them functioning.

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The program provides enforcement of laws and agency rules which regulate the weight, size, safety, and registration requirements of commercial vehicles operating on the highway system. Through the use of a statewide network of weigh station facilities and patrol personnel utilizing portable scales, commercial vehicle traffic is monitored for compliance with legislatively established requirements.

Reliability: The data supporting this performance measure is reliable because of the process controls that are in place. The controls ensure that data is consistently reported.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Operational cost per toll transaction.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Toll Operations, Florida Department of Transportation. The data is from standard reporting systems. The measure is calculated by dividing the total cost of toll operations by the number of vehicle toll transactions during a given fiscal year.

Validity: The measure is a valid indicator of that which it purports to measure: the operational cost per toll transaction. The operational cost for toll facilities as it relates to the volume of transactions at these facilities is a direct measure of the efficiency of operations.

This measure will allow the agency to monitor collection costs relative to demand. Lower operational costs means that more funds are available for maintenance, debt service payments and improvements to the system.

Reliability: This measure is the result of dividing the total operational cost of toll collection activities (capital costs are not included) by the number of transactions (which is the output measure). An indicator of the validity and reliability of operational cost is the on-going process of reviewing expenditures in relation to the operating budget and to planned expenditures. Variances are reported to the Disbursement Office for review. An indicator of the validity and reliability of toll transaction data is the process used to balance estimated toll collections to the number of toll transactions and the daily bank deposit. Significant variances are reported to the Office of Toll Transactions and are reviewed and audited.

A significant change that may affect our measures relates to the cost of purchasing SunPass transponders. Beginning July 1, 2001, the costs for purchasing SunPass transponders is charged by the department as a cost of operations. Because this equipment is sold to the patron at a price significantly less than the department's purchase price, this action will increase operating costs without a commensurate increase in either traffic or revenue. Although we don't know at this time what the

Performance Validity and Reliability

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overall impact will be on our measures, it may cause us to change our requested standard at some future date.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Toll transactions.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Toll Operations, Florida Department of Transportation. Data is obtained from the Toll Collections System Data Base.

Validity: The measure is a valid indicator of that which it purports to measure: the number of toll transactions. This measure is one of the data elements used in calculating the operational cost per toll transaction, which is a direct measure of the efficiency of operations.

The measure appropriately captures the number of toll transactions. It is used in calculating the operational cost per toll transaction, which is a direct measure of the efficiency of toll operations.

Toll revenues are used to pay debt service on bonds issued for construction and maintenance of a facility. After the bonds are paid off, toll revenues are used for facility maintenance and other transportation purposes. To the extent that operational costs to collect tolls increase, less net toll revenue is available for debt service or other purposes.

Since tolls are fees paid by toll facility users who have an expectation that the maximum amount of tolls collected be used to pay off the debt or for other transportation improvements, toll collection costs should be contained and carefully managed.

Reliability: An indicator of the validity and reliability of toll transaction data is the process used to balance estimated toll collections to the number of toll transactions and the daily bank deposit. Significant variances are reported to the Office of Toll Transactions and are reviewed and audited.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Number of intrastate highway lane miles contracted for highway capacity improvements (Turnpike only).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.”

Validity: The measure is valid with regard to the number of intrastate highway lane miles to be constructed to increase highway capacity on the Turnpike.

The Work Program Administration (WPA) system contains the projects and schedules for capacity improvements. The WPA system also provides other project information and costs. Districts select capacity improvement projects based on 1) local government priority, and 2) department-determined needs.

Procedures are documented for maintaining the Adopted Work Program, developing the work program, amending the work program and work program instructions for programming and coding information correctly for inclusion in the work program. Source documents are authorized and projects in the work program are subjected to extensive review. Only work program development staff in the districts and central office with valid user IDs and passwords have access to input or change data in WPA. A review committee and Office of Work Program staff validate the data entered into the system. Automated measures are in place to detect errors and provide a trail of activity in the systems. Data output is also reviewed and exceptions are reported.

Reliability: The information is reliable and consistent due to the controls discussed above that are in place and its use in the Program Objectives and Accomplishments Report and the Transportation Commission's Performance and Production Review.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Number of lane miles let to contract for resurfacing (Turnpike only).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term “contracted” refers to the moment the contract is “let” or “committed.”

Validity: The measure is valid with regard to the number of lane miles (on the Turnpike) let to contract for resurfacing.

The Pavement Condition Survey (PCS), Roadway Characteristics Inventory (RCI) system, and Pavement Management Reporting System (PAVMARS) contain information related to pavement condition and characteristics. They are used to develop projects which are entered into the Work Program Administration (WPA) system. The WPA system contains the projects and schedules for the Resurfacing Program. The WPA also includes other project information and costs. The Districts prioritize resurfacing projects for inclusion in the work program from Pavement Condition Survey reports which identify deficient pavement segments.

Procedures are documented for maintaining the Adopted Work Program, developing the work program, and amending the work program and work program instructions for collecting the appropriate information for inclusion in the work program. There are also user manuals for the systems used to collect the data for these measures. Source documents are authorized and projects in the work program are subjected to extensive review. Only work program development staff in the districts and central office with valid user IDs and passwords have access to input or change data in WPA. A review committee, district and Office of Work Program staff validate the data entered into the system. Automated measures are in place to detect errors and provide a trail of activity in the systems. Data output is also reviewed and exceptions are reported.

Performance Validity and Reliability

Exhibit IV

Reliability: The information is reliable and consistent due to the controls discussed above that are in place and its use in the Program Objectives and Accomplishments Report and in the Transportation Commission's Performance and Production Review.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Number of bridges contracted for repair or replacement (Turnpike only).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. The figure includes local bridges as well as those on the State Highway System. Actual prior year and projected future year data from the July 1 Adopted Work Program.

For the purposes of this report, the term "contracted" refers to the moment the contract is "let" or "committed."

Validity: The measure is valid as an indicator of agency use of contracts for Turnpike bridge repair and replacement. It should be noted that the size, complexity, and cost of bridge replacement projects vary widely. Thus, this measure is not valid as a direct workload indicator for workload or budget needs.

The number of Turnpike bridges let to contract for repair or replacement is compiled from the FDOT Work Program Administration computer system, which is the department's source of commitment and financial information for projects undertaken by the department. The measure refers to both a) the number of Turnpike bridges that are committed to construction contract for either repair or rehabilitation work to correct structural deterioration related problems, and b) the number of Turnpike bridges let to contract for replacement which includes bridges that are structurally deficient, posted for weight restriction, or are more economical to replace than they are to repair or rehabilitate.

Reliability: The measure is reliable and consistent due to the elaborate review process employed in developing the work program.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Lane miles maintained on the State Highway System (Turnpike only).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Transportation Statistics Office, Florida Department of Transportation. December Mileage Report for the Turnpike portion of the State Highway System. Figure for out-years are estimated based on the number of new lane miles on the Turnpike expected to be open to traffic.

Validity: The measure is a valid indicator of the number of lane miles on the Turnpike portion of the State Highway System.

Reliability: Data supporting the performance measure is reliable. Procedures are in place to ensure accurate data collection, and quality control activities are conducted on an ongoing basis.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Operational cost per dollar collected.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Toll Operations, Florida Department of Transportation. The data is from standard reporting systems. The measure is calculated by dividing the total cost of toll operations by the total amount collected during a given fiscal year.

Validity: The measure is a valid indicator of that which it purports to measure: the operational cost per dollar collected. Any fluctuations in this measure will be primarily a result of toll rate changes and not operational factors. As a result, the measure is not a valid indicator of Toll Operations performance.

Reliability: An indicator of the validity and reliability of operational cost is the on-going process of reviewing expenditure in relation to the operating budget and to planned expenditures. Variances are reported to the Disbursement Office for review. There are a number of sources for determining the reliability of dollars collected, including bank statements, deposit transmittal forms and FLAIR revenue reports.

A significant change that may affect our measures relates to the cost of purchasing SunPass transponders. Beginning July 1, 2001, the costs for purchasing SunPass transponders is charged by the department as a cost of operations. Because this equipment is sold to the patron at a price significantly less than the department's purchase price, this action will increase operating costs without a commensurate increase in either traffic or revenue. Although we don't know at this time what the overall impact will be on our measures, it may cause us to change our requested standard at some future date.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Number of lane miles let to contract for highway capacity improvements (Turnpike only).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term "contracted" refers to the moment the contract is "let" or "committed."

Validity: The measure is valid with regard to the number of lane miles to be constructed to increase highway capacity on the Turnpike.

The Work Program Administration (WPA) system contains the projects and schedules for capacity improvements. The WPA system also provides other project information and costs. Districts select capacity improvement projects based on 1) local government priority, and 2) department-determined needs.

Procedures are documented for maintaining the Adopted Work Program, developing the work program, amending the work program and work program instructions for programming and coding information correctly for inclusion in the work program. Source documents are authorized and projects in the work program are subjected to extensive review. Only work program development staff in the districts and central Office with valid user IDs and passwords have access to input or change data in WPA. A review committee and Office of Work Program staff validate the data entered into the system. Automated measures are in place to detect errors and provide a trail of activity in the systems. Data output is also reviewed and exceptions are reported.

Reliability: The information is reliable and consistent due to the controls discussed above that are in place and its use in the Program Objectives and Accomplishments Report and the Transportation Commission's Performance and Production Review.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Florida's Turnpike Systems

Service: Florida's Turnpike Enterprise

Measure: Bridges let to contract for repair (Turnpike only).

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Sources And Methodology: Office of Financial Development, Florida Department of Transportation. Data obtained from the Program Objectives and Accomplishments Report. Actual prior year and projected future year data from the July Adopted Work Program.

For the purposes of this report, the term "contracted" refers to the moment the contract is "let" or "committed."

Validity: The measure is valid as an indicator of agency use of contracts for Turnpike bridge repair.

The number of Turnpike bridges let to contract for repair is compiled from the FDOT Work Program Administration computer system, which is the department's source of commitment and financial information for projects undertaken by the department. The term "number of Turnpike bridges let to contract for repair" refers to the number of Turnpike bridges committed to construction contract for either repair or rehabilitation work to correct structural deterioration related problems.

Reliability: The measure is reliable and consistent due to the elaborate review process employed in developing the annual work program.

Performance Validity and Reliability

Exhibit IV

Agency: Florida Department of Transportation

Program: Executive Direction/Support Services

Service: Executive Direction/Support Services

Measure: Percent of agency administration and support costs and positions compared to total agency costs and positions.

Action:

- Requesting revision to approved performance measure.
- Change in data sources or measurement methodologies.
- Requesting new measure.
- Backup for performance measure.

Data Source and Methodology: Budget Office, Florida Department of Transportation. The first part of this measure is the percent of the agency administration and support costs compared to total agency costs. The second part of the measure is the percent of the agency administration and support positions compared to total agency positions.

Data are obtained from the Legislative Appropriations System/Planning and Budgeting Subsystem (LAS/PBS).

Validity: The measure is a valid indicator of that which it purports to measure: the percent of agency administration and support costs and positions compared to total agency costs and positions.

Reliability: The data supporting this performance measure is reliable because of the process controls that are in place. The controls ensure that data is consistently reported.