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***PERFORMANCE AND  
PRODUCTION REVIEW  
OF THE  
DEPARTMENT OF TRANSPORTATION  
YEAR-END FY 1992/93***

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***FINAL REPORT***



# FLORIDA TRANSPORTATION COMMISSION

Commissioners  
David Kerr, Chairman  
Burnett Bloodworth  
John Browning, Jr.  
Donald Estes  
Art Kennedy  
Jim Kimbrough  
Malcolm Kirschenbaum  
Wayne Mixson  
Phil Reece



Governor  
Lawton Chiles

October 28, 1993

Honorable Lawton Chiles  
Governor  
The Capitol  
Tallahassee, Florida

Honorable Pat Thomas  
President of the Senate  
Room 409, The Capitol  
Tallahassee, Florida

Honorable Bolley L. Johnson  
Speaker of the House  
Room 420, The Capitol  
Tallahassee, Florida

Dear Governor Chiles, President Thomas, and Speaker Johnson,

At its public meeting on August 12, 1993, the Commission conducted the *FY 1992/93 Performance and Production Review of the Department of Transportation*.

The Commission has reviewed Department performance in each of the past five years; however, this year marked the second application of comprehensive transportation measures developed under statutory mandate and allowed meaningful comparisons with prior year performance in many areas for the first time.

Following the first application of the comprehensive measures last year, the Auditor General undertook a review of the measures for compliance with law, usefulness, accuracy and reliability of data, and relationship to transportation policy. The Commission acknowledged that the measures were not a final product and that they were the first step in a development process which would continually improve and refine measures over time. Thus, the Auditor General's constructive recommendations were accepted and will be incorporated as part of the ongoing

refinement effort. The Working Group on Transportation Performance Measures, a 13-member multi-disciplinary team convened in Fall of 1990 to develop the measures, met three times since last year's review to address several areas needing improvement, and will continue to meet in the future.

In response to audit criticism that the measures did not assess the cost-effectiveness of Department operations, a seminar on Cost-effectiveness Measures was co-sponsored by the Commission and Florida TaxWatch and presented by a nationally recognized authority in the field. From the seminar, it was evident that although the theory of cost-effectiveness measures is well developed, meaningful practical applications are just beginning to emerge. We were advised to keep "pushing the envelope," and recognize that these are uncharted waters.

Since last year's report, the 1993 Legislature streamlined the performance measure statute and, in response to Auditor General recommendations, repealed the sanction requiring rollback of the Department's budget to FY 1989/90 levels as retribution for unsatisfactory performance. However, general authority for sanctions still exists, in that the Commission is directed to recommend actions to be taken to improve Department performance in the event of an unsatisfactory evaluation. The Commission feels it has sufficient direction and authority under the revised law to perform its obligations well.

In major production areas, Department performance was again excellent this year, with notable improvement in right of way projects certified, an area of concern during last year's review. Continued improvement was demonstrated in use of minority consultants. Last year's significant improvement in right of way negotiations was not repeated this year and unfortunately, some ground gained last year was lost.

Once again, plans in all areas were more ambitious than the preceding year, making exceptional performance all the more difficult to achieve. For major production areas, the Commission now has substantial experience in judging whether programs are sufficiently ambitious, having five years of history from which to draw comparisons.

It is essential, of course, that achievement of these ambitious plans contribute to the advancement of long-range transportation goals. The Commission is beginning to correlate the work program with the Florida Transportation Plan, which will ensure that when the Commission assesses performance in a given production area, there is a direct, documented link with attainment of statewide transportation goals.

In consultant acquisition for engineering and design of roads and bridges, the Department achieved 93% of plan. This year's plan was 54% larger than last year's and performance was slightly better (1%) than last year.

The new measure for right of way acquisition tracks number of projects certified as "ready for construction to commence." The Department achieved 89% of plan, with a plan that was 35% larger than the prior year. Further, performance this year showed improvement of 12% over last year.

To the extent the Department successfully negotiates purchase of right of way and avoids litigation, high costs associated with condemnation are avoided. Improvements in this area were noted last year, reversing a disturbing downward trend in negotiated purchases during the previous four-year period. Unfortunately, the Department's negotiation rate did not continue to improve, with this year ending at 56% negotiated acquisitions, 9% lower than last year. However, some of the decrease is attributable to heavy condemnation activity by the Turnpike Office on a toll facility funded with bonds -- where the overriding objective of opening the facility to traffic and initiating toll collection as early as possible often precludes lengthy negotiations. Nevertheless, the Commission is concerned about the decline and feels that the Department should strive to improve its success in negotiations to the extent it can, given the litigious nature of right of way acquisition activities.

In construction contract lettings, the Department achieved 97% of plan. Excellent performance by any account, this year's achievement was measured to a plan that was 10.5% bigger than the prior year, when the Department attained 96% of plan.

With one-quarter of the federal fiscal year remaining, the Department has committed 93% of federal funds subject to forfeiture if not committed by federal fiscal year end. The Department plans to commit the remaining balance and has

requested an additional \$64.9 M. in federal funds (of which it received \$9.8 M.). The Department continues to have an outstanding record in this area.

Disadvantaged business enterprise (DBE) participation in construction and consultant contracts funded in part by federal funds, was 13.4%, exceeding the statutorily mandated goal of 10% and falling slightly short of last year's achievement. We noted last year that participation of DBE's in consultant contracts only (including 100% state funded) had improved dramatically over previous years (in FY 1989/90, participation of DBE's was 1.9%). Performance continued to improve this year, with the Department achieving 13.1%, or 3.4% higher than last year.

In the areas of financial management and administration, the Commission reviewed Department administrative costs, cash management, toll facility operational costs, payments to contractors and vendors, bond program management, and information technology. Although the Commission has no concerns requiring comment, we are now able to make meaningful comparisons based on one year of historical data.

In the area of quality initiatives and cost-saving programs, the Commission feels that Department performance was excellent, having saved almost \$112 Million through value engineering recommendations this year. The Department is commended for pursuing recent quality initiatives of pre-construction partnering and post-construction reviews. The Commission encourages the Department to continue its strong emphasis and management support of these programs.

The Department's role in safety is now comprehensive and far reaching, with programs in the areas of engineering, enforcement, public education and emergency medical services -- all geared to reducing the frequency of crashes and severity of injuries sustained. The Department hosted the first statewide highway safety symposium, demonstrating a leadership role. In only one aspect of the program -- commitment of highway safety funds -- do we note concern, and again it is that the Department was unable to commit all available funds. We anticipate that funds "rolled forward" will be committed to needed safety projects next year.

With repeated application of the measures, the Commission has identified areas needing more work, and has requested the Working Group to include them in its

Performance and Production Review

October 28, 1993

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ongoing efforts to refine the measures. One such area is construction contract condition -- time and cost adjustments made to the original contract time and budget. Because cost and time overruns on projects are of paramount concern to the Legislature, taxpayers and affected businesses, reliable data must be developed and reported in a manner amenable to measurement. During the ensuing year, this measure and others will be improved.

We hope that you find this evaluation both meaningful and clear. Your comments or suggested improvements would be welcomed.

Respectfully,



Florida Transportation Commission

David C. G. Kerr, Chairman

cc: Honorable Buddy MacKay, Lieutenant Governor  
Honorable Ken Jenne, Chairman, Senate Appropriations Committee  
Honorable John Long, Chairman, House Appropriations Committee  
Honorable James Hargrett, Chairman, Senate Transportation Committee  
Honorable Ed Healey, Chairman, House Transportation Committee  
Members, Senate Transportation Committee  
Members, House Transportation Committee  
Honorable W.D. Childers, Chairman, Senate Appropriations Sub A  
Honorable Sam Mitchell, Chairman House Appropriations Subcommittee on  
Transportation  
Members, Senate Appropriations Sub A  
Members, House Appropriations Subcommittee on Transportation  
State Senators  
State Representatives  
Secretary Ben G. Watts, Department of Transportation

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**Consultant Acquisition:** The statewide plan was to execute 534 consultant contracts. During the year, a total of 497 were executed, 93% of the total planned. A total of 35 consultant contracts were added to the plan and executed during the year.

## **STATEWIDE SYNOPSIS**

**FY 1992/93**

Actual dollar commitments of \$268.7 M. were 91% of the total consultant acquisition plan of \$296.9 M., leaving \$28.2 M. uncommitted. However, additions totaling \$9.6 M. were executed.

**Right of Way Acquisition:** The statewide right of way plan was to certify 89 projects. During the year, a total of 79 projects were certified, 89% of the total planned. Of the 10 projects not certified on schedule, 5 have resulted in delays to planned contract letting dates. Two projects were advanced from future years and certified during the year, and 12 projects were added and certified during the year.

Of total parcels acquired during the year, 56% were negotiated purchases, while 44% proceeded to condemnation. Of parcels acquired by negotiation, 65% were acquired at or within 10% of the Department's appraisal. Of parcels condemned, 95% were settled prior to trial.

**Construction Contract Lettings:** The statewide construction plan was to let 453 contracts. During the year, a total of 438 contracts were let, 97% of the total planned. Five contracts were advanced from future years to letting during the year, and 41 projects were added to the plan and let during the year.

In dollars, the Department achieved 90% of plan, letting \$858.6 M. of a planned \$956.9 M. in construction, with the uncommitted amount largely due to bids that were \$62 M. lower than Department programmed amounts. Advanced and added projects let (totaling \$34.3 M.) increased the year's letting to a grand total of \$892.9 M. and reduced the uncommitted amount to \$64.0 M. at year-end.

**Construction Contract Letting Levels:** Of the total dollar amount of bids received at contract lettings, the percentage let during each quarter was as follows:

1st Quarter:	14%
2nd Quarter:	25%
3rd Quarter:	36%
4th Quarter:	25%

**Construction Contract Management - Time Extensions:** Of 194 contracts completed during the year, the total contract time increased by 16.5% during the life of the contracts. Of total days added, 66% were due to time extensions granted, 31% were due to weather conditions, and 3% were due to delinquent performance by contractors. Unused contract days (early completion) comprised 9.3% of total days for the 194 contracts.

**Construction Contract Management - Supplemental Agreements:** Of 194 contracts completed during the year, the total original contract amount was \$349.1 M. The final amount paid was \$367.7 M., or 5.3% higher than the original contract amount.

**Commitment of Federal Funds:** At the end of the third quarter of the federal fiscal year (6/30/93), the Department had committed \$444.3 M. of a total of \$480.1 M. in federal funds subject to forfeiture at federal fiscal year end if not committed. Thus, \$35.8 M. or 7% remains to be committed during the 4th quarter ending 9/30/93.

**Disadvantaged Business Enterprise (DBE) Achievement:** For all construction and consultant contracts financed in part by federal funds, DBE participation was 13.4%, exceeding the 10% goal.

For all consultant contracts (including 100% state funded), DBE participation was 13.1%.

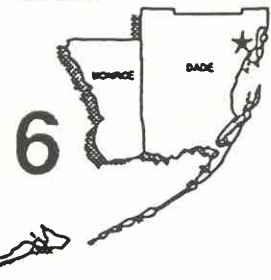
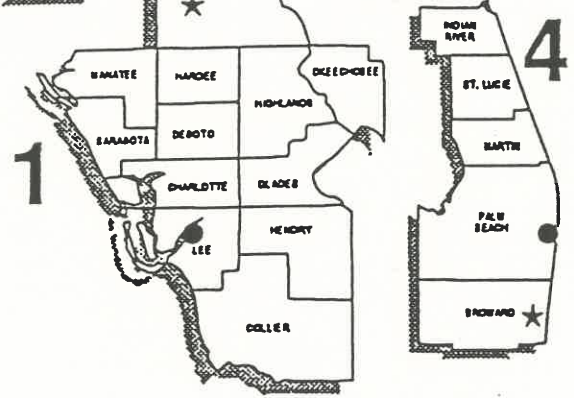
**Management of Administrative Costs:** Department administrative costs were 2.1% of the total program for the year, or \$55 M. of a total program of almost \$2.7 B.

**Management of Bond Programs:** Two (2) bond series, for turnpike expansion projects, were active during FY 1992/93. The first, bonds issued in January 1991 (interest rate of 7.2%), financed right of way and construction on the Seminole Expressway and right of way on the Northwest Hillsborough Expressway. Of the total commitment plan of \$324.9 M., actual commitments totaled \$278.9 M., with the remaining balance of \$46.0 M. reserved to pay final judgments on right of way and construction cost overruns.

The second, bonds issued in June 1992 (interest rate of 6.34%), financed construction of the Northwest Hillsborough Expressway. Of the 3-year commitment plan of \$186.5 M., actual commitments totaled 140.9 M., with the remaining balance of \$45.6 M. reserved for construction cost overruns.

**Management of Toll Facility Operational Costs:** The Department's cost to operate toll facilities during the year was **14.4 cents** per toll transaction.

Of total toll revenue, **20.1%** was used to defray direct operational costs of collecting tolls. Including indirect operational costs, **28.9%** of total toll revenue was used to defray operational costs of collecting tolls.



#### *District 1*

Charlotte  
Collier  
De Soto  
Glades  
Hardee  
Hendry  
Highlands  
Lee  
Manatee  
Okeechobee  
Polk  
Sarasota

#### *District 2*

Alachua  
Baker  
Bradford  
Clay  
Columbia  
Dixie  
Duval  
Gilchrist  
Hamilton  
Lafayette  
Levy  
Madison  
Nassau  
Putnam  
St. Johns  
Suwannee  
Taylor  
Union

#### *District 3*

Bay  
Calhoun  
Escambia  
Franklin  
Gadsden  
Gulf  
Holmes  
Jackson  
Jefferson  
Leon  
Liberty  
Okaloosa  
Santa Rosa  
Wakulla  
Walton  
Washington

#### *District 4*

Broward  
Indian River  
Martin  
Palm Beach  
St. Lucie

#### *District 5*

Brevard  
Citrus  
Flagler  
Lake  
Marion  
Orange  
Osceola  
Seminole  
Sumter  
Volusia

#### *District 6*

Dade  
Monroe

#### *District 7*

Hernando  
Hillsborough  
Pasco  
Pinellas

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***COST-EFFICIENT &  
EFFECTIVE BUSINESS  
PRACTICES:  
PRODUCTION***

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**Narrative:** The production cycle of a road or bridge begins with the preliminary engineering and design phases. Although the Department employs engineers who perform these functions, it presently contracts with private-sector engineering consultants to produce approximately 65% of design plans. Unlike the construction contracting process in which the firm with the lowest responsible bid receives the contract, the consultant acquisition process is carried out pursuant to state law requiring competitive negotiations. Selection of consultants is based primarily on quality of the technical proposal, with price being secondary.

## ***Consultant Acquisition***

In order for a project to progress on schedule to right of way acquisition and construction, the design consultant contract must be negotiated and signed (executed) in a timely manner. Further, delays in right-of-way acquisition and construction usually mean increased project cost.

<b>Primary Measure</b>	<b>Number of Consultant Contracts Executed vs. Total Contracts Planned.</b>
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	This Measure assesses Department performance in initiating project engineering and design in accordance with the schedule committed to in the work program.
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<b>Explanatory Data</b>	<b>Actual Dollar Amount of Consultant Contracts Executed vs. Total Plan Amount.</b>
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**Synopsis:** *The Department achieved 93% of plan, having executed 497 of 534 contracts planned for the year. A total of 35 consultant contracts were added and executed during the year.*

*Actual dollar commitments of \$268.7 M. were 91% of the total consultant acquisition plan of \$296.9 M. A total of \$9.6 M. in contracts were added to the plan and executed during the year.*

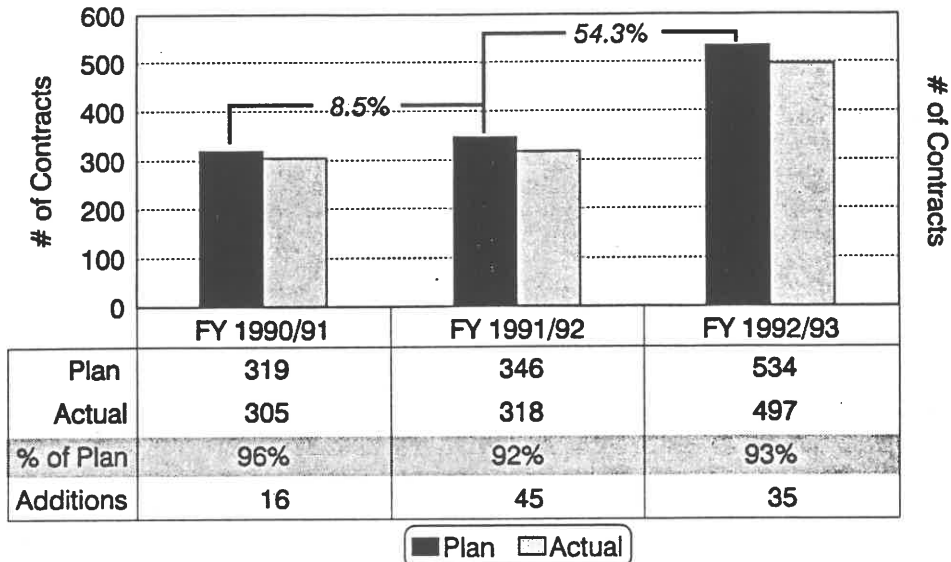
**Comparison with FY 1991/92:**

- *The plan for FY 1992/93 was 54% larger than the plan for FY 1991/92. Department achievement of plan was 1% higher in FY 1992/93 than in FY 1991/92.*
- *The total (includes additions) of 532 consultant contracts executed in FY 1992/93 was a 47% increase over FY 1991/92 (363 contracts).*



## STATEWIDE CONSULTANT ACQUISITION

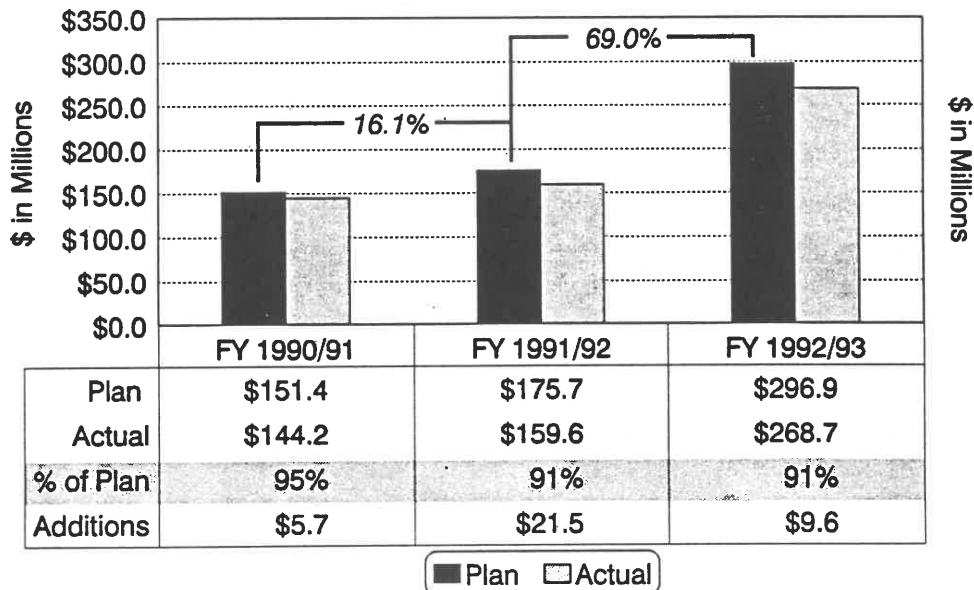
*# of Contracts by Fiscal Year*



Consultant Acquisition Includes: Design, R/W Support, and Construction engineering Inspection (CEI)

## STATEWIDE CONSULTANT ACQUISITION

*\$ Amount by Fiscal Year*

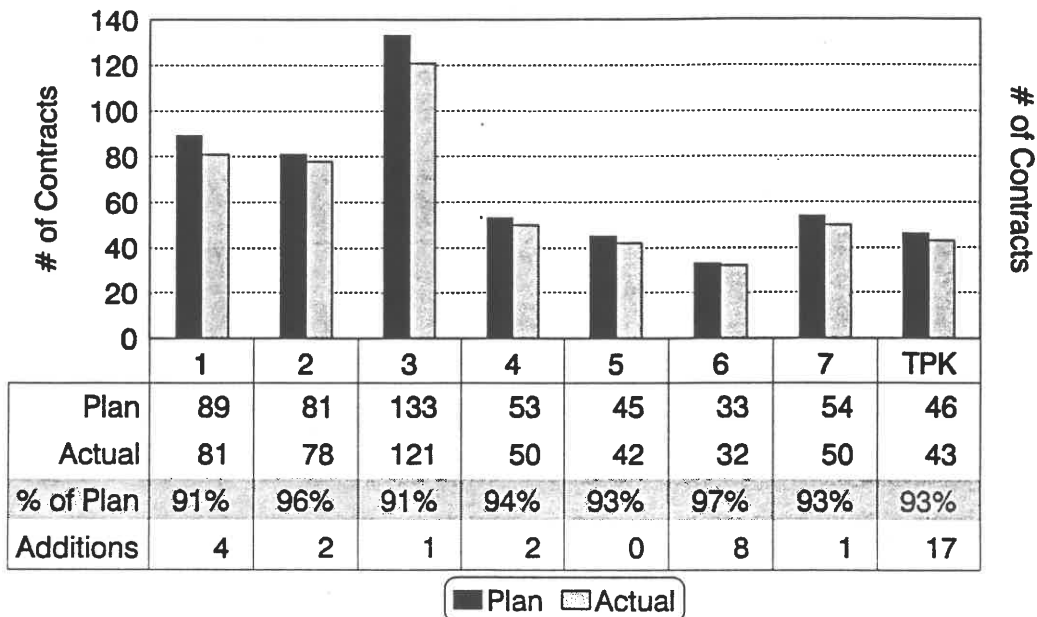


Consultant Acquisition Includes: Design, R/W Support, and Construction engineering Inspection (CEI)

## CONSULTANT ACQUISITION

Districts & Turnpike

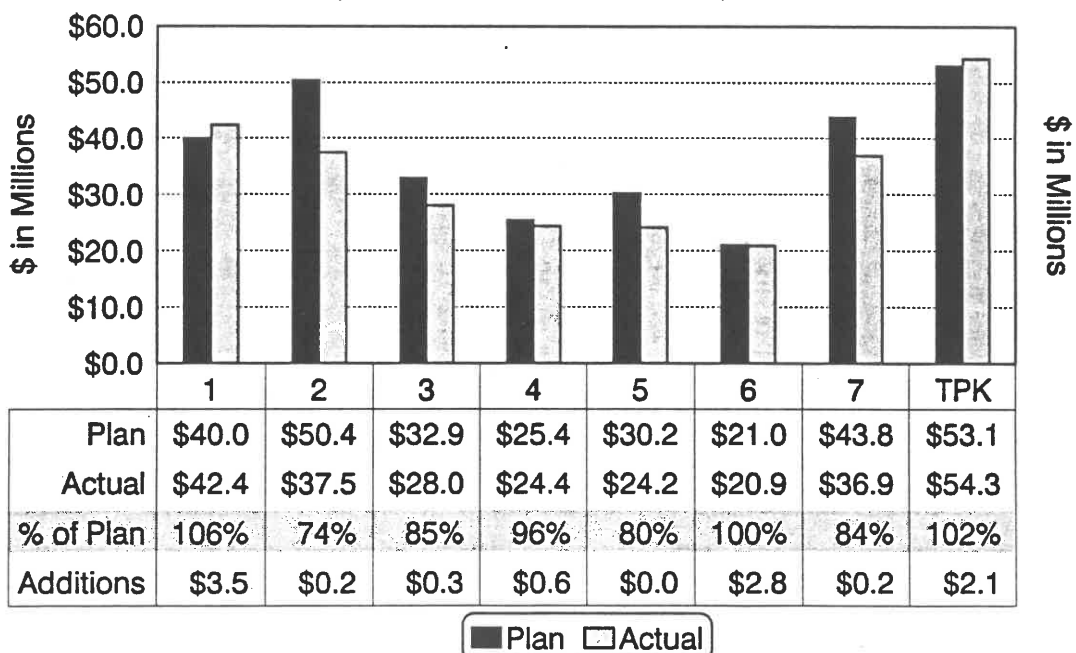
# of Contracts for FY 1992/93



## CONSULTANT ACQUISITION

Districts & Turnpike

\$ Amount for FY 1992/93





## **1992/93 END OF YEAR PERFORMANCE & PRODUCTION REVIEW**

### ***CONSULTANT ACQUISITION***

**District 1:** The district planned to execute 89 consultant contracts. During the year, 81 consultant contracts were executed, 91% of the total number planned. Actual dollar commitments of \$42.4 M. were 106% of planned commitments totaling \$40.0 M.

***Explanation of 8 Planned Contracts (\$2.2 M.) Not Executed:***

- Five right-of-way support contracts deferred to FY 1993/94. These contracts for right-of-way agents were programmed too early in project schedules and are actually needed six months after fee appraisers are hired.
- One right-of-way support contract deleted as result of priority change in local government plan downgrading project from 6-lane to 4-lane with a 22 ft. raised median, due to improvements to a parallel facility. DOT ceased design work and returned to PD&E. Right-of-way phase rescheduled to FY 1997/98.
- One right-of-way support contract deleted due to programming change. Will be accomplished by in-house staff in FY 1993/94.
- One right-of-way support contract deferred to FY 1993/94 due to MPO plan revision of typical section from 6-lane to 4-lane project. DOT has combined PD&E with design.

**District 2:** The district planned to execute 81 consultant contracts. During the year, 78 consultant contracts were executed, 96% of the total number planned. Actual dollar commitments of \$37.5 M. were 74% of planned commitments totaling \$50.4 M.

***Explanation of 3 Planned Contracts (\$0.7 M.) Not Executed:***

- One design contract deferred to FY 1993/94 due to Jacksonville Port Authority decision not to match federal demonstration project funds, as required. Match is authorized for FY 1993/94.
- One materials testing contract not needed and deferred to FY 1993/94.
- One interstate corridor study contract deleted, to be rescheduled later. This is part of I-75 Master Plan Study. Six-laning of corridor is underway. The study will evaluate long-term corridor needs beyond six lane capacity.

**District 3:** The district planned to execute **133** consultant contracts. During the year, **121** consultant contracts were executed, **91%** of the total number planned. Actual dollar commitments of \$28.0 M. were 85% of planned commitments totaling \$32.9 M.

***Explanation of 12 Planned Contracts (\$4.7 M.) Not Executed:***

- Three contracts for PD&E on Capital Circle projects in Leon Co. deleted at request of MPO due to local controversy.
- Two geotechnical support contracts deleted; not needed because in-house staff was able to handle workload.
- Consultant contract for portion of I-10 Master Plan deferred to FY 1993/94. Changes to the planned schedule were necessary to balance the workload for DOT's professional services staff, with priority given to consultant work that was directly production-related.
- Design contract for I-110 project, a high local priority, was deferred to late in FY 1993/94 pending completion of two studies: results of the I-10/I-65 Connector Study mandated by Congress and completion of the Master Plan Study. The I-65 issue and the Interstate policy issue emerged after this project was programmed.
- Preliminary engineering (PE) contract for Bay Bridge widening project deferred to FY 1993/94. Since construction phases were deferred at request of MPO, the PE phase was deferred to FY 1993/94 to balance workload of DOT's professional services staff.
- One right-of-way support contract delayed because right-of-way documents were not completed in time to get consultant on board by fiscal year end. Will not delay project.
- One contract for geotechnical work (soil testing, scour analysis, etc.) deleted. In-house staff was able to manage workload on the project.
- Design contract for demolition of old bridge pilings delayed so that it can be incorporated with a FY 1993/94 project to add protective dolphins to replacement bridge, using rubble from old pilings to construct dolphins, for a savings.
- Districtwide contract to perform traffic studies deleted. The district has decided that it is no longer needed. These are annual contracts and last year's contract for traffic studies is still active.

**District 4:** The district planned to execute **53** consultant contracts. During the year, **50** consultant contracts were executed, **94%** of the total number planned. Actual dollar commitments of \$24.4 M. were 96% of planned commitments totaling \$25.4 M.

***Explanation of 3 Planned Contracts (\$0.8 M.) Not Executed:***

- One PD&E contract deferred to August, 1993, due to budget needs to fund consultant supplemental agreements.
- One traffic operations contract deferred to FY 1993/94; it is a signalization system job on which scope was expanded greatly.
- Design contract at Interstate rest area for expanded parking deferred to FY 1993/94. This contract was converted late in the year from in-house to consultant. Workload underway by consultant management staff required deferral.

**District 5:** The district planned to execute **45** consultant contracts. During the year, **42** consultant contracts were executed, **93%** of the total number planned. Actual dollar commitments of \$24.2 M. were 80% of planned commitments totaling \$30.2 M.

***Explanation of 3 Planned Contracts (\$1.8 M.) Not Executed:***

- One design contract deleted; was planned before its time and deleted pending further evaluation of other road improvements.
- I-4 weigh station design contract deleted; following determination that this station is not needed.
- One CEI contract deferred to July, 1993, due to delay of construction phase.

**District 6:** The district planned to execute **33** consultant contracts. During the year, **32** consultant contracts were executed, **97%** of the total number planned. Actual dollar commitments of \$20.9 M. were 100% of planned commitments totaling \$21.0 M.

***Explanation of 1 Planned Contract (\$0.5 M.) Not Executed:***

- One CEI contract not executed due to delay in construction phase. Deferred to FY 1993/94.

**District 7:** The district planned to execute **54** consultant contracts. During the year, **50** consultant contracts were executed, **93%** of the total number planned. Actual dollar commitments of \$36.9 M. were 84% of planned commitments totaling \$43.8 M.

***Explanation of 4 Planned Contracts (\$1.2 M.) Not Executed:***

- Four right-of-way support contracts deferred to fall in line with actual completion of right-of-way maps, which consumed more schedule than originally anticipated. Execution will occur in FY 1993/94.

**Turnpike:** The district planned to execute **46** consultant contracts. During the year, **43** consultant contracts were executed, **93%** of the total number planned. Actual dollar commitments of \$54.3 M. were 102% of planned commitments totaling \$53.1 M.

***Explanation of 3 Planned Contracts (\$0.1 M.) Not Executed:***

- Three right-of-way support contracts for the Southern Connector Extension deferred pending approval by FHWA of the Interchange Justification Report (IJR). The Turnpike Office cannot execute these contracts until the project is determined to be economically feasible and that cannot be done until the IJR is approved. Construction is now deferred to FY 1994/95.

**Narrative:** Since no construction contract is let 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.

## *Right of Way Acquisition*

Although the Department successfully negotiates the purchase of about 56% of right of way parcels, costly and lengthy condemnation proceedings must be pursued on the remaining 44% of needed parcels (title to a parcel is acquired by the State a few months after filing suit allowing construction to commence; however, court proceedings to determine the amount of compensation to be paid to the property owner may occur 2 or 3 years later). Federal and state constitutional provisions, as well as state statutes, provide safeguards for the property owner whose land is being taken, including payment of his attorney fees and costs, and the right to a 12-member jury trial to determine just compensation. The timing of required court proceedings and the amount ultimately paid for the property are subject to many factors beyond the Department's control.

A successful right of way program is one that maximizes cost avoidance strategies during negotiation and condemnation, and completes parcel acquisition in a timely manner, avoiding delays in letting the project to construction.

In the usual production cycle of a road or bridge referred to above, the necessary right of way is acquired immediately prior to the start of construction. By contrast, the Department's "advance acquisition" program, approved by voters as a constitutional amendment and subsequently authorized by the 1990 Legislature, allows the Department to acquire right of way several years in advance of the proposed construction date.

Using bond proceeds to finance the program, the Department will buy now, rather than later when value has appreciated, land that will be needed for planned future roads or for widening existing roads. In many cases, not only will the State receive the benefit of today's lower prices, but it will also buy land before commercial or residential development has occurred, thereby avoiding large sums paid to property owners in damages and relocation expenses.

<b>Primary Measure</b>	<b>Number of Projects Certified vs. Number of Projects Scheduled for Certification.</b>  This Measure assesses how well the Department performs in certifying as "clear" or ready for construction, all parcels needed for construction letting. Failure to certify on schedule all parcels for a given project may delay the project and therefore increase project cost.
<b>Explanatory Data</b>	Number of Parcels and dollar value of parcels acquired by negotiation vs. condemnation.
<b>Explanatory Data</b>	Actual land value negotiated vs. appraised value: Number and dollar value of parcels acquired at appraised value, 0-10% over appraisal, 10-20% over, and 20% plus, over. Average value per parcel for each category.
<b>Explanatory Data</b>	Final judgment amounts vs. total DOT estimated compensation vs. total property owner's claim.
<b>Explanatory Data</b>	Total costs of right of way acquisition (land value plus all court costs, attorney fees, appraisal fees, expert witnesses, etc.) vs. land value only.

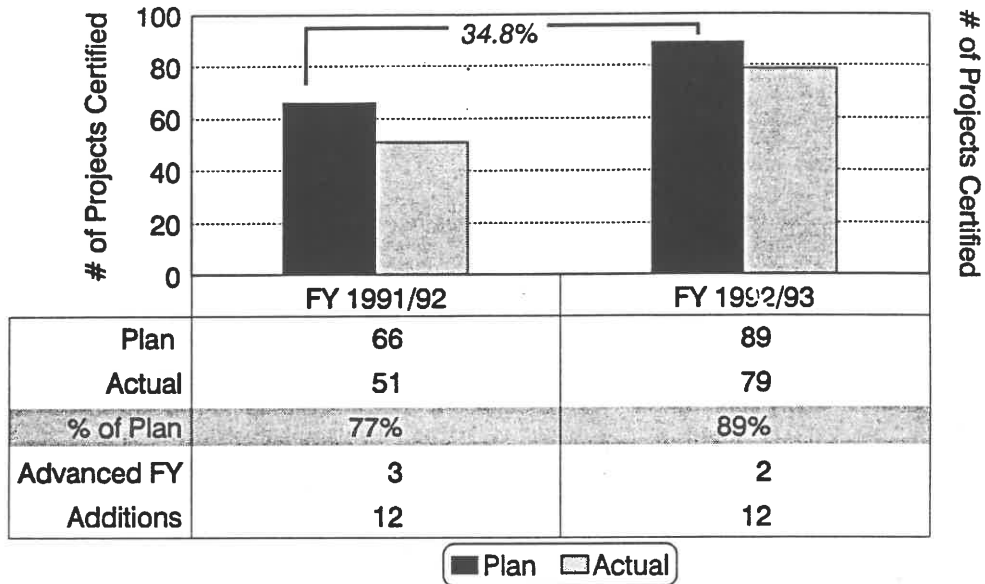
**Synopsis:** *The Department achieved 89% of plan, having certified right of way on 79 of 89 projects planned for the year. Of the 10 projects not certified, 5 have delayed planned construction lettings. Two (2) projects planned for certification in future years were advanced to certification in FY 1992/93. Twelve (12) projects were added and certified during the year.*

**Comparison with FY 1991/92:**

- *The plan for FY 1992/93 was 35% larger than the plan for FY 1991/92. Department achievement of plan was 12% higher in FY 1992/93 than in FY 1991/92.*
- *Of the total parcels acquired during FY 1992/93, 56% were negotiated purchases, which is 9% lower than the negotiation rate in FY 1991/92 of 65%.*
- *Of parcels acquired by negotiation during FY 1992/93, 65% were acquired at or within 10% of the Department's appraisal, only slightly lower than FY 1991/92, when 67% were acquired at or within 10% of Department appraisal.*
- *Of parcels acquired by condemnation during FY 1992/93, 95% were settled prior to trial, 1% higher than the FY 1991/92 settlement rate. The caseload of condemned parcels was almost 88% larger in FY 1992/93 than in FY 1991/92.*

## STATEWIDE RIGHT OF WAY ACQUISITION

*# of Projects Certified by Fiscal Year*

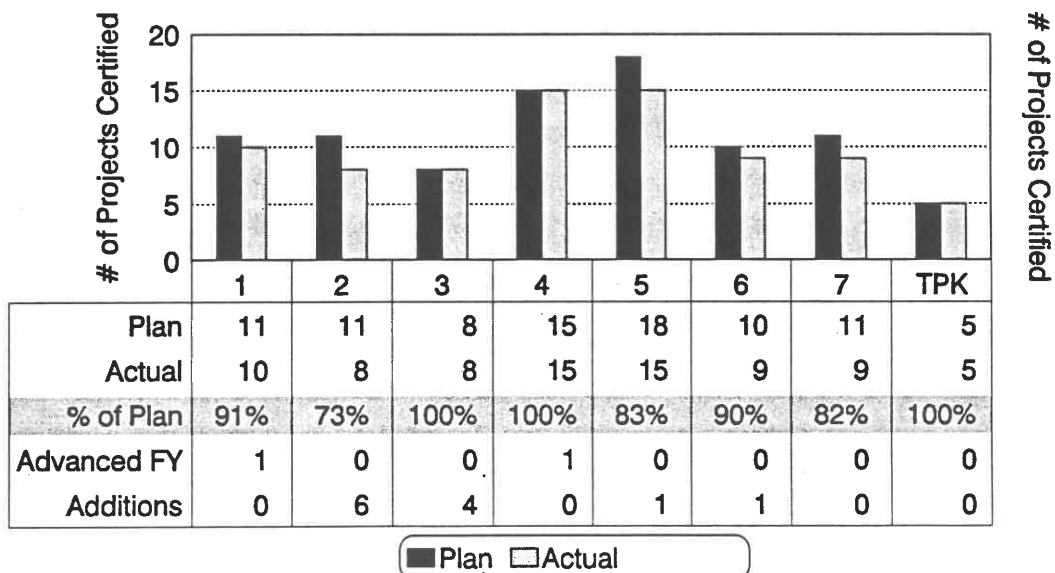


"Certified" is when all parcels are acquired on a project and the construction phase is ready to proceed.

## RIGHT OF WAY ACQUISITION

*Districts & Turnpike*

*# of Projects Certified for FY 1992/93*



"Certified" is when all parcels are acquired on a project and the construction phase is ready to proceed.

**1992/93 END OF YEAR PERFORMANCE & PRODUCTION REVIEW**  
***RIGHT OF WAY CERTIFICATION***

**District 1:** The district planned to certify right of way for **11** projects. During the year, **10** projects were certified, **91%** of the total number planned.

***Explanation of 1 Planned Project Not Certified:***

- One project delayed due to additional right-of-way required for unanticipated mitigation of temporary detour route. Will not be certified until FY 1993/94 and will delay letting until March, 1994.

**District 2:** The district planned to certify right of way for **11** projects. During the year, **8** projects were certified, **73%** of the total number planned.

***Explanation of 3 Planned Projects Not Certified:***

- One project (I-95 Yulee Weigh Station) delayed primarily due to wetlands mitigation requirements now being negotiated. Letting delayed until FY 1994/95.
- One project was not certified as planned due to absence of Right of Way Administrator from office. Was certified in July, 1993. Construction phase unfunded.
- One project (I-75 Weigh-in-Motion Station) delayed when District staff became aware that parcels on planned station site would require about \$3 M. for fill. Location moved to south to avoid fill costs, redesign underway. Right-of-way acquisition has not begun. Letting delayed until FY 1994/95.

**District 3:** The district planned to certify right of way for **8** projects. During the year, **8** projects were certified, **100%** of the total number planned.

**District 4:** The district planned to certify right of way for **15** projects. During the year, **15** projects were certified, **100%** of the total number planned.



**District 5:** The district planned to certify right of way for **18** projects. During the year, **15** projects were certified, **83%** of the total number planned.

***Explanation of 3 Planned Projects Not Certified:***

- One project not certified as planned due to decision to improve project by constructing off-street bus stops. This change added parcels. July, 1994 letting not delayed.
- One project delayed slightly during acquisition of last parcel. Will be certified in July, 1993. Letting not delayed.
- One project delayed due to addition of parcel during acquisition to save in severance damages. Planned certification in January, 1994 and will not delay letting in December, 1994.

**District 6:** The district planned to certify right of way for **10** projects. During the year, **9** projects were certified, **90%** of the total number planned.

***Explanation of 1 Planned Project Not Certified:***

- Eight (8) parcels of this project were designated by the Department as test cases for the Whole Take (Fortune Federal) Statute. This effort has lengthened acquisition time. Certification will occur in late July. Letting will be delayed until September, 1993.

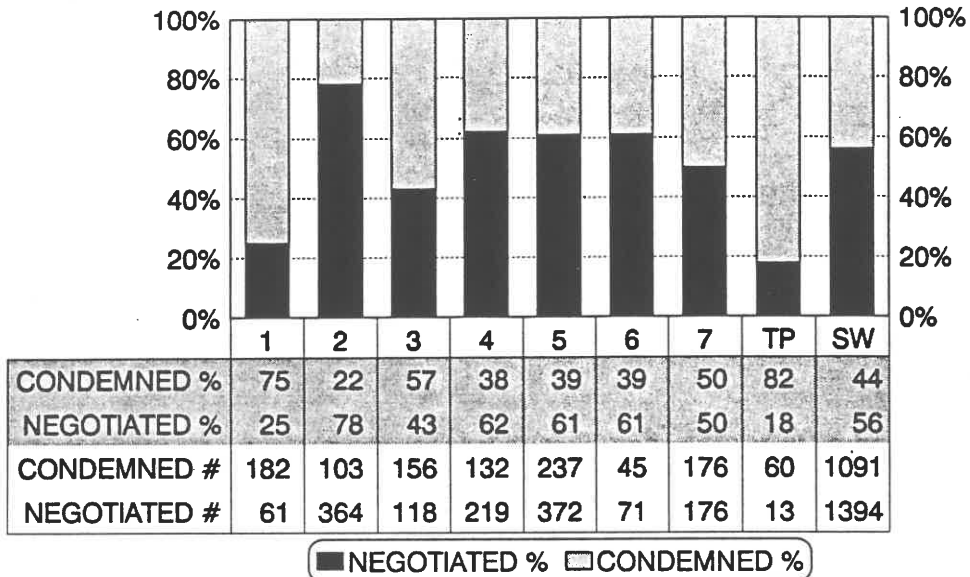
**District 7:** The district planned to certify right of way for **11** projects. During the year, **9** projects were certified, **82%** of the total number planned.

***Explanation of 2 Planned Projects Not Certified:***

- One joint state/local project not certified as planned due to delays encountered by local government during acquisition of right-of-way. Delays precluded certification as scheduled. Letting delayed until September, 1993.
- One project delayed due to decision during the design and right-of-way stages that relocation of water retention area could save right-of-way dollars. The move delayed certification until July, 1993. Letting will not be delayed.

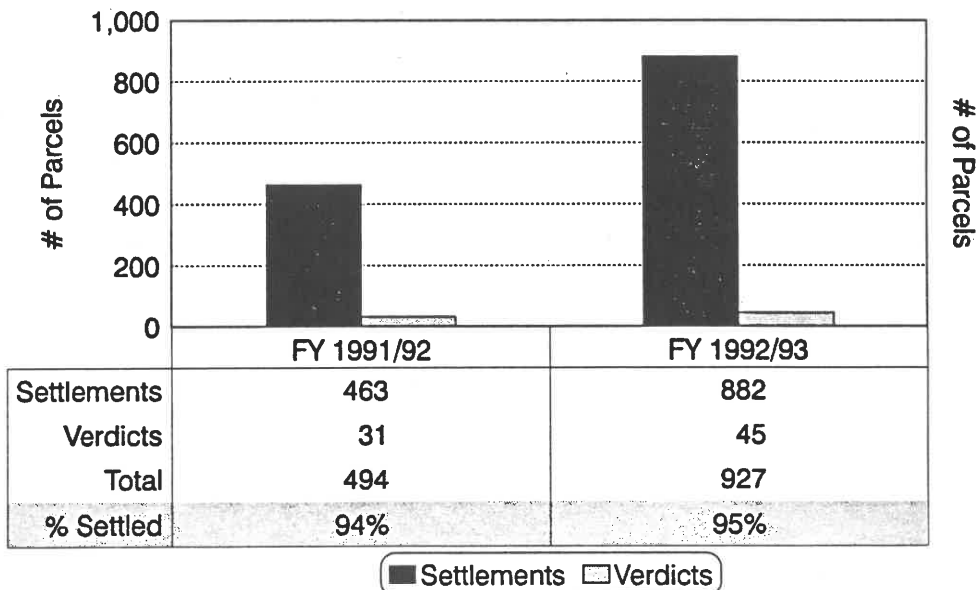
**Turnpike:** The district planned to certify right of way for **5** projects. During the year, **5** projects were certified, **100%** of the total number planned.

### NEGOTIATED AND CONDEMNED PARCELS PERCENTAGE RATES FY 1992/93



Note: Includes 173 parcels acquired by donation.  
Does not include voided parcels.

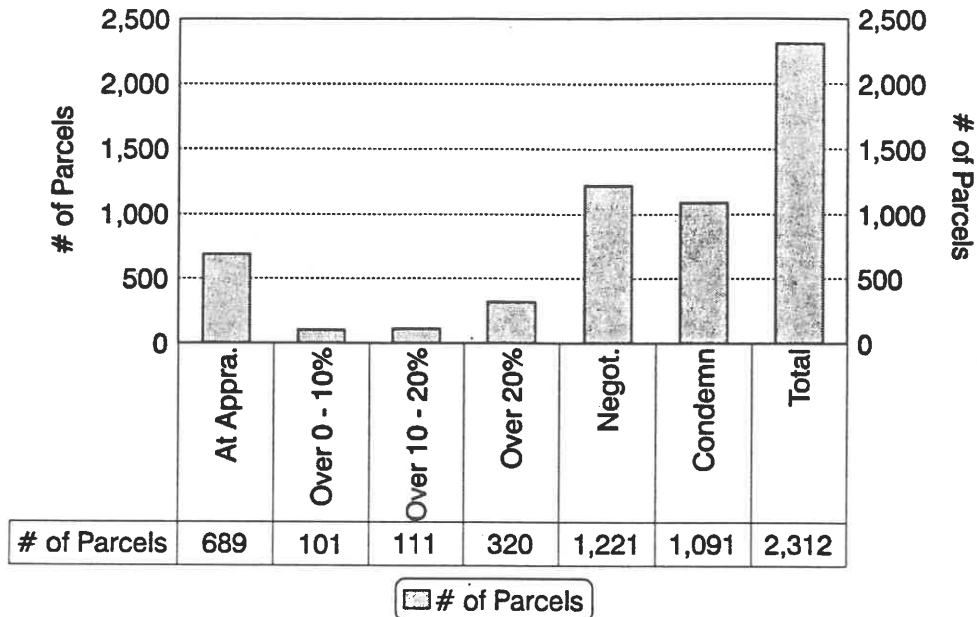
### CONDEMNED PARCELS Settlements and Verdicts by Fiscal Year



Note: "Settlement" is a final judgment wherein all interests in a parcel are resolved prior to trial. "Verdict" is a final judgment following trial.

## RIGHT OF WAY LAND ACQUISITION

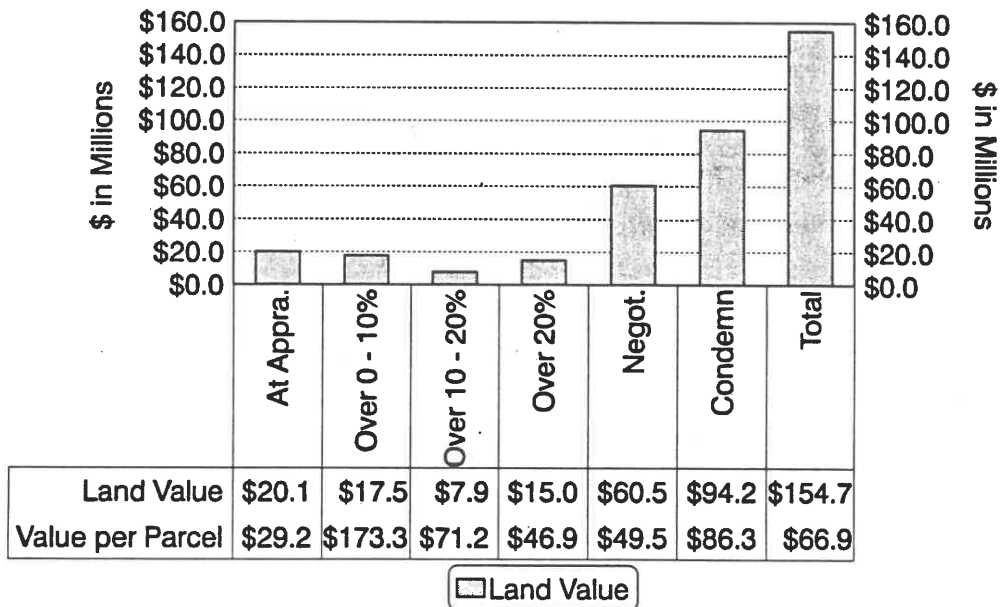
Progress for FY 1992/93



Note: In addition, 173 parcels were acquired by donation.

## RIGHT OF WAY LAND VALUE

Progress for FY 1992/93



Condemnation amount equals \$ deposited at Order of Taking.  
Value per Parcel dollars in thousands.

**Narrative** Each year, the Department develops a detailed plan (work program) of the transportation projects it has committed to undertake during the next and ensuing 4 years. The Department schedules each project by phase (e.g., design, right-of-way,

## *Construction Contracts*

construction) and estimates the cost of each phase. The construction phase cannot begin until the Department lets the project (carries out the bidding process) and awards a construction contract to the lowest responsible bidder, the construction firm that will actually build the facility, be it a road, bridge or other structure.

The construction phase results in the final, tangible product of the Department and the construction program comprises 37% of total dollars in the work program. The public's foremost concern is "Did the Department build the projects it committed to build, and did it do so *when* it promised to?" The following measure and data, collectively, assess the department's performance in keeping its commitments to initiate the construction of planned roads, bridges and other transportation facilities.

<b>Primary Measure</b>	<b>Number of Projects Let vs. Planned for Letting</b>
	This Measure assesses how well the Department performed in letting construction contracts on the projects it committed to let to construction during the year. For contracts <i>not</i> let, explanation will be supplied and categorized as <i>within</i> or <i>not within</i> the Department's control.
<b>Explanatory Data</b>	Actual Contract Amount of Projects Let vs. Total Plan Amount
<b>Explanatory Data</b>	Actual Contract Amount of Planned Projects Let vs. Plan

*Synopsis: The Department achieved 97% of plan, having let 438 of 453 projects planned for the year. Five (5) projects were advanced from future fiscal years to letting in FY 1992/93. Forty-one (41) projects were added and let during the year.*

*From a dollar standpoint, actual commitments of \$858.6 M. were 90% of total planned construction lettings of \$956.9 M., leaving \$98.3 M. uncommitted for the fiscal year. This is largely due to bids that were \$62 M. lower than Department programmed amounts.*

*The 438 projects let were estimated to cost a total of \$921 M., and were let at an actual cost of \$859 M., or 7% under estimated cost.*

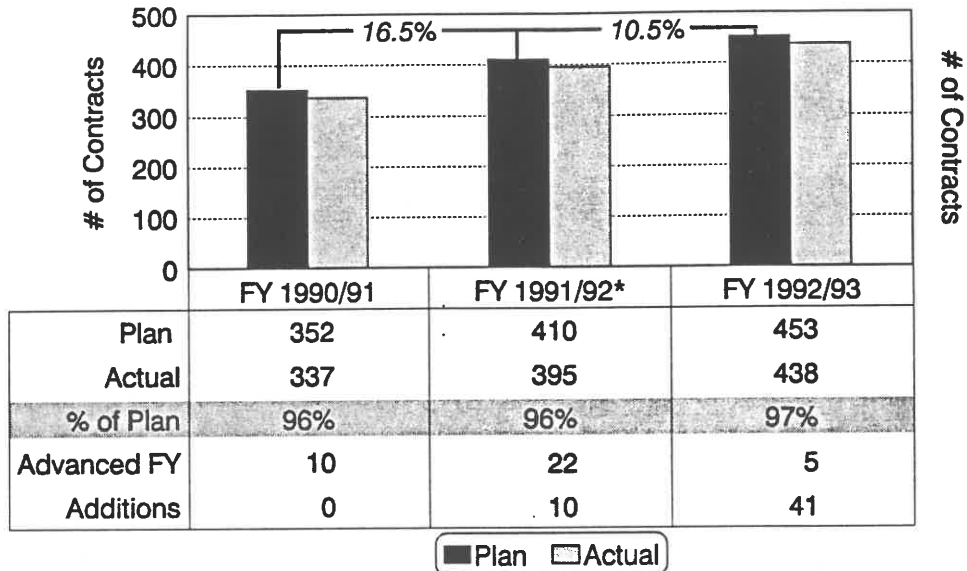
*A total of \$3.6 M. in projects were advanced from future years to letting in FY 1992/93 and \$30.7 M. in projects were added to the plan and let during the year, reducing the uncommitted amount to \$64.0 M.*

***Comparison with FY 1991/92:***

- *The plan for FY 1992/93 was 10.5% larger than the plan for FY 1991/92. Department achievement of plan was 1% higher in FY 1992/93 than in FY 1991/92.*
- *From a dollar standpoint, the plan for FY 1992/93 was 4.2% smaller than the plan for FY 1991/92.*
- *The total dollar volume let (includes additions and advances) during FY 1992/93 (\$892.9 M.) was a decrease of 3% from the amount let in FY 1991/92 (\$923.9 M.).*
- *With regard to advancements, the Department advanced 5 projects during FY 1992/93 compared to 22 projects advanced to letting from future years in FY 1991/92.*

## STATEWIDE CONTRACT LETTINGS

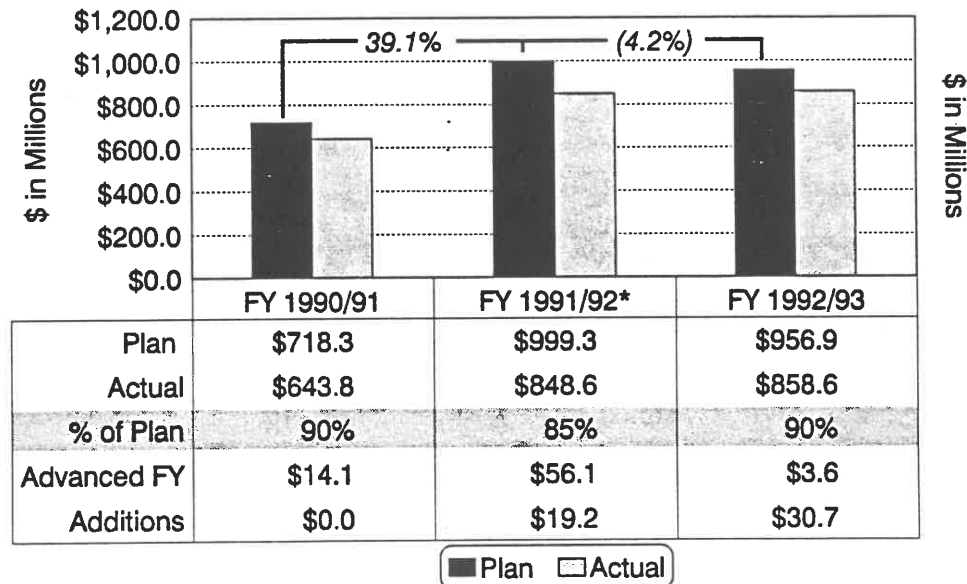
*# of Contracts by Fiscal Year*



\* Number of contracts (FY 1991/92) adjusted to include those with an estimated value of less than \$250,000.

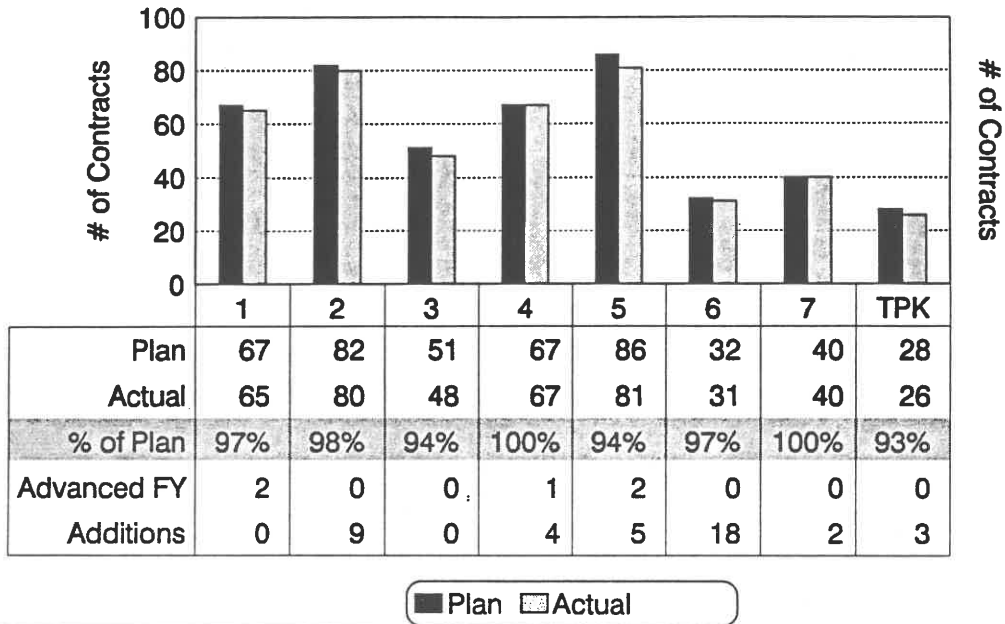
## STATEWIDE CONTRACT LETTINGS

*\$ Amount by Fiscal Year*

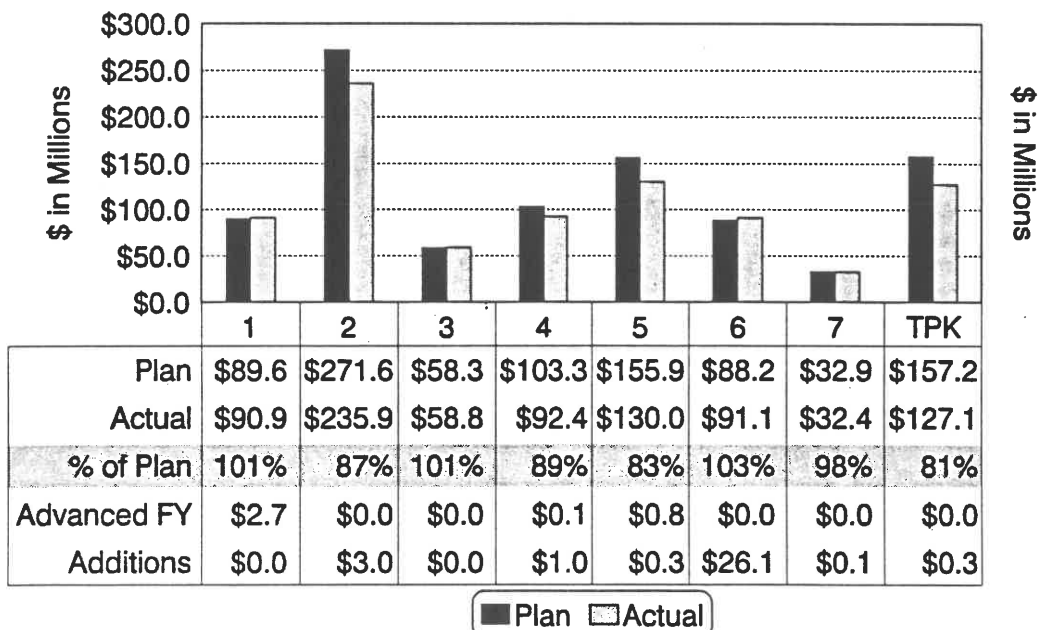


\* Dollar amount of contracts (FY 1991/92) adjusted to include those with an estimated value of less than \$250,000.

**CONTRACT LETTINGS**  
Districts & Turnpike  
*# of Contracts for FY 1992/93*



**CONTRACT LETTINGS**  
Districts & Turnpike  
**\$ Amount for FY 1992/93**



**1992/93 END OF YEAR PERFORMANCE & PRODUCTION REVIEW  
CONSTRUCTION CONTRACT LETTINGS**

**District 1:** The district planned to let **67** contracts. During the year, **65** contracts were let, **97%** of the total number planned. Actual dollar commitments of \$90.9 M. were 101 % of planned construction lettings of \$89.6 M.

***Explanation of 2 Planned Contracts (\$2.7 M.) Not Let:***

- One road lighting contract delayed because local government declined to fund lighting agreement due to budget constraints. Contract deleted at County request.
- One contract delayed to FY 1993/94 due to additional right-of-way requirements for mitigation of temporary detour route.

**District 2:** The district planned to let **82** contracts. During the year, **80** contracts were let, **98%** of the total number planned. Actual dollar commitments of \$235.9 M. were 87 % of planned construction lettings of \$271.6 M.

***Explanation of 2 Planned Contracts (\$8.9 M.) Not Let:***

- One off-system project delayed. Local government acquiring right-of-way. Acquisition not accomplished in time for June, 1993 letting. Delayed letting until July, 1993.
- One project deferred due to right-of-way delays associated with required mitigation of wetlands. Letting now scheduled for FY 1994/95.

**District 3:** The district planned to let **51** contracts. During the year, **48** contracts were let, **94%** of the total number planned. Actual dollar commitments of \$58.8 M. were 101 % of planned construction lettings of \$58.3 M.

***Explanation of 3 Planned Contracts (\$2.6 M.) Not Let:***

- One project for intersection improvements in Leon Co. deferred to FY 1993/94 due to denial of tree permit by local government. Revised plans now under consideration.



- One project delayed due to problems with quarterly Federal-aid authorizations. This project was not authorized until late February, 1993. Consultant design now underway. Will be let in January, 1994.
- One project for repair of bridge drainage system delayed due to necessity for added consultant contract to handle this job. No adverse safety implications.

**District 4:** The district planned to let 67 contracts. During the year, 67 contracts were let, 100% of the total number planned. Actual dollar commitments of \$92.4 M. were 89% of planned construction lettings of \$103.3 M.

**District 5:** The district planned to let 86 contracts. During the year, 81 contracts were let, 94% of the total number planned. Actual dollar commitments of \$130.0 M. were 83% of planned construction lettings of \$155.9 M.

***Explanation of 5 Planned Contracts (\$19.0 M.) Not Let:***

- One contract (City of Orlando bike path project) deferred to FY 1993/94 for further coordination with city on how \$500,000 state funds are to be used.
- One contract delayed due to faulty title search which resulted in missed ownerships and additional parcels being acquired. Title search company fired. Certified in July, 1993 and will be let in December, 1993.
- One project delayed to FY 1993/94 due to substitution of an emergency bridge fender system repair project.
- One contract delayed due to programming error -- this job should have been scheduled for letting with five others in FY 1993/94.
- One contract (I-95/11th St. Interchange) delayed. Following approval of Interchange Justification Report, the plans were modified to improve project and save dollars. Will be let in July, 1993.

**District 6:** The district planned to let 32 contracts. During the year, 31 contracts were let, 97% of the total number planned. Actual dollar commitments of \$91.1 M. were 103% of planned construction lettings of \$88.2 M.

***Explanation of 1 Planned Contract (\$2.7 M.) Not Let:***

- One project delayed due to right-of-way acquisition time being lengthened by "Fortune Federal" test case analyses on eight parcels. The district reports that the difference between total property owner claims on the eight parcels and settlement amounts was almost \$4.4 M. (Note: In the Fortune Federal case the Florida Supreme Court upheld the statute allowing the Department to condemn more property than is needed for the project where it would cost more to condemn only part of the property.)

**District 7:** The district planned to let 40 contracts. During the year, 40 contracts were let, 100% of the total number planned. Actual dollar commitments of \$32.4 M. were 98% of planned construction lettings of \$32.9 M.

**Turnpike:** The district planned to let 28 contracts. During the year, 26 contracts were let, 93% of the total number planned. Actual dollar commitments of \$127.1 M. were 81% of planned construction lettings of \$157.2 M.

***Explanation of 2 Planned Contracts (\$0.3 M.) Not Let:***

- One contract deleted; visitor information center will not be built since the site will be used for a new operations building.
- One project deferred until FY 1993/94 because of Hurricane Andrew. This is a toll booth replacement project in which design consultant needed for emergency Hurricane Andrew work.

**Narrative:** The Department lets construction contracts eleven times during the year (during November, no contract letting is held). To the extent that lettings are "level," that is, maintained at relatively uniform dollar volumes throughout the year, competition among construction firms

is maximized and workloads both for industry and Department staff are distributed evenly throughout the year. It is generally thought that "level" lettings contribute significantly to a higher quality product at the lowest cost to taxpayers.

## *Construction Contract Letting Level*

**Secondary Measure**    *Dollar Volume of Projects Let Per Quarter.*

This Measure assesses the degree to which the dollar value of lettings are evenly distributed throughout the year.

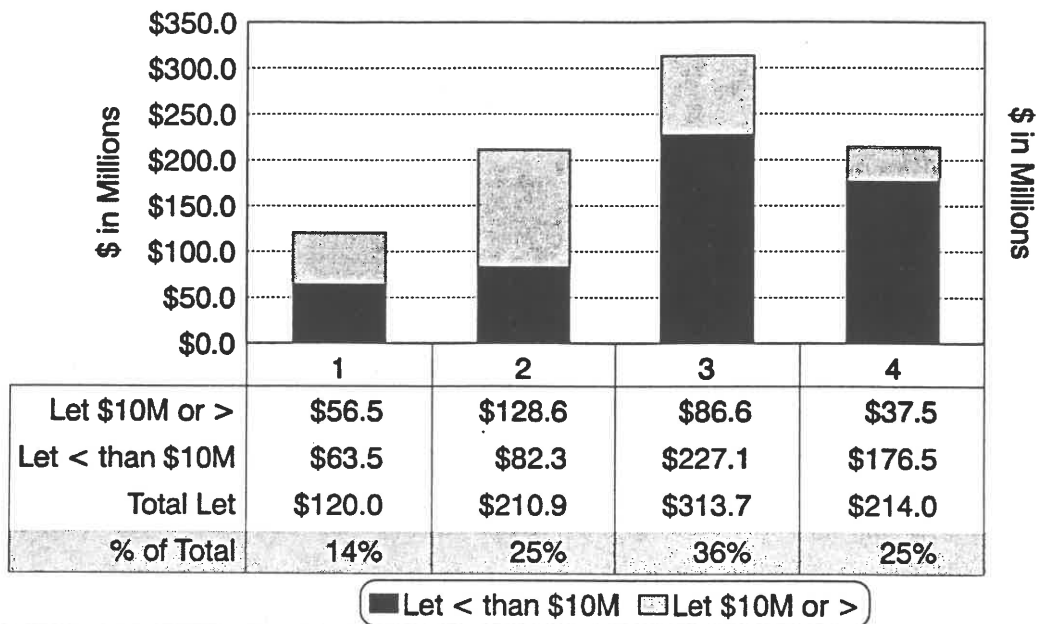
**Synopsis:** *Of the total dollar amount of bids received at contract lettings, the percentage let during each quarter was as follows:*

<i>1st Quarter:</i>	<i>14%</i>
<i>2nd Quarter:</i>	<i>25%</i>
<i>3rd Quarter:</i>	<i>36%</i>
<i>4th Quarter:</i>	<i>25%</i>

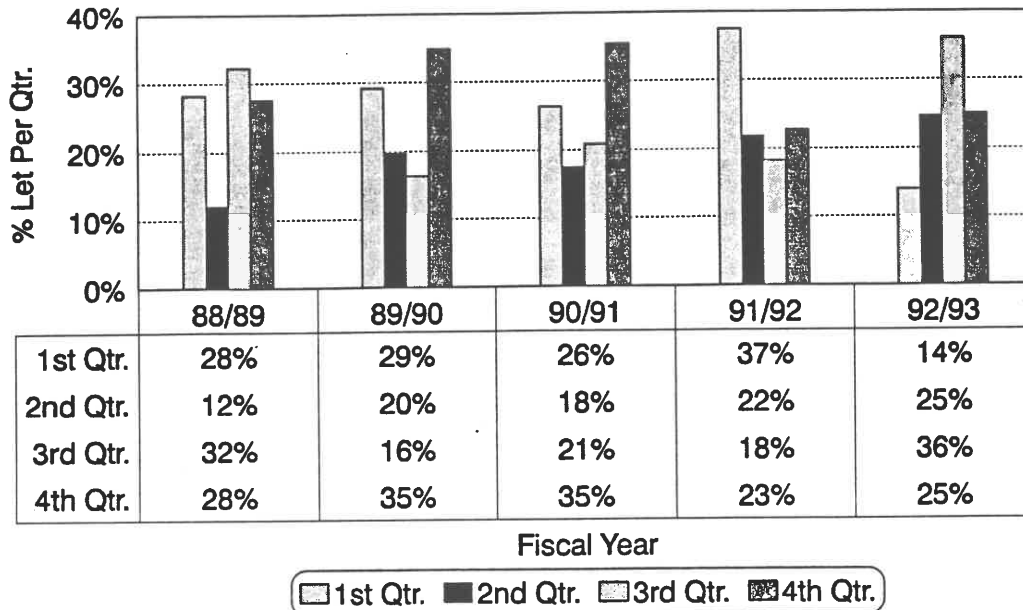
### **Comparison with FY 1991/92:**

- *The percentage of dollar volume let during the 1st Quarter of FY 1992/93 decreased 62.6% from FY 1991/92; in fact, FY 1992/93 was the lowest 1st Quarter in the last 5 years, during which period 1st quarter percentage of dollar volume averaged 27.5%.*
- *2nd Quarter of FY 1992/93 showed a small increase of 13.4% over FY 1991/92, continuing a 6-year trend of an increasing 2nd Quarter share of percentage of dollar volume. Average 2nd quarter percentage of dollar volumes was 16.1% during the 5-year period from FY 1987/88 through FY 1991/92.*
- *The percentage of dollar volume for the 3rd Quarter increased 97.8% over FY 1991/92, for the highest 3rd Quarter in the last 6 fiscal years.*
- *4th Quarter showed a slight increase of 9.7% over FY 1991/92. Although the 4th quarter average for the previous 5-year period is 32.5%, FY 1992/93 volume is in keeping with the general trend toward lower 4th quarter levels.*

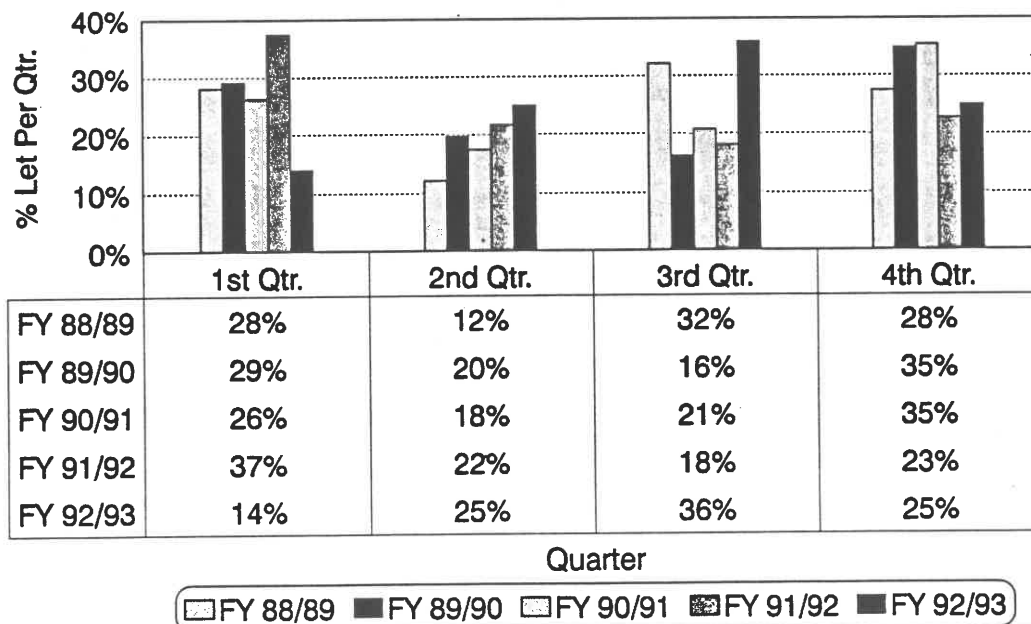
**CONTRACT LETTING LEVELS  
FISCAL YEAR 1992/93  
By Quarter**



## CONTRACT LETTING LEVELS By Fiscal Year



## CONTRACT LETTING LEVELS By Quarter



**Narrative:** After 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

## *Construction Contract Condition*

of the project established by lowest responsible bid) agreed to in the contract are subject to adjustment 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 a site), design plan defects or omissions, and economic or workforce-related problems of the construction contractor.

Some extension of time beyond the original contract time is anticipated due to unfavorable weather conditions. However, when a contractor fails to complete the project within the original contract time plus any authorized time extensions, he is declared delinquent by the Department and must pay liquidated damages for each day he is delinquent.

It is generally accepted in the construction industry that the contract amount may increase by a small percentage of the original low bid amount due to a variety of unanticipated conditions and unexpected events. Such cost increases are authorized by "supplemental agreement" (contract amendment authorizing contractor to perform additional work and to receive additional payment). In the event that the Department disagrees with a request for additional payment by the contractor, the contractor files a claim, which when resolved (through administrative or legal channels), may be paid in part or in full and may also add to project cost.

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 schedule overruns. As explained above, however, some causes of overruns are beyond the Department's control.

On the following pages, Contract Time Adjustments and Contract Cost Adjustments are covered in detail.

**Narrative:** The original contract time will predictably increase due to time extensions granted for inclement weather conditions. Beyond additional "weather days," extensions are granted for a variety of other reasons, including extra work, special events

(parades, etc.), plan or design errors, material testing delays, and utility relocation delays. As noted earlier however, failure by the contractor to complete work within the allowed time results in a determination of delinquency and payment of liquidated damages in a daily amount established by law.

### ***Contract Time Adjustments Extensions/Delinquencies***

***Secondary Measure*** *For all Construction Contracts Completed during the Fiscal Year, the Original Contract Time vs. Number of Days Added due to Authorized Time Extensions vs. Days Added due to Delinquent Performance by Contractor.*

This Measure assesses the Department's performance in containing schedule overruns and will indicate, for those factors within the Department's control, where Department performance can improve. The measure also shows the number of days added due to contractor delinquency.

***Synopsis:*** *For the 194 contracts completed during FY 1992/93, the original contract time was increased by 16.5% as a collective result of weather conditions, authorized time extensions and delinquent performance by contractors. A little over 31% of time increases was due to weather conditions, while delinquent performance accounted for 2.8% of added days. The remaining 66% of added days was due to time extensions granted by the Department.*

***Data indicate that the bulk (43%) of time extensions are due to utility delays and extra work delays. The "Miscellaneous" category accounts for 35.6% of extensions; however this category will require further definition and analysis.***

#### ***Comparison with FY 1991/92:***

- *The increase in original contract time for FY 1992/93 was 0.7% higher than in FY 1991/92.*

	Days	%
<b>Original Contract (194 Contracts)</b>	<b>34,690</b>	<b>100.0</b>
<b>Weather Conditions</b>	<b>2,795</b>	<b>8.1</b>
<b>Time Extensions</b>	<b>5,919 *</b>	<b>17.1</b>
<b>Delinquent Performance</b>	<b>247</b>	<b>0.7</b>
<b>Unused Contract Days</b>	<b>(3,236)</b>	<b>(9.3)</b>
<b>TOTAL</b>	<b>40,415</b>	<b>116.5</b>

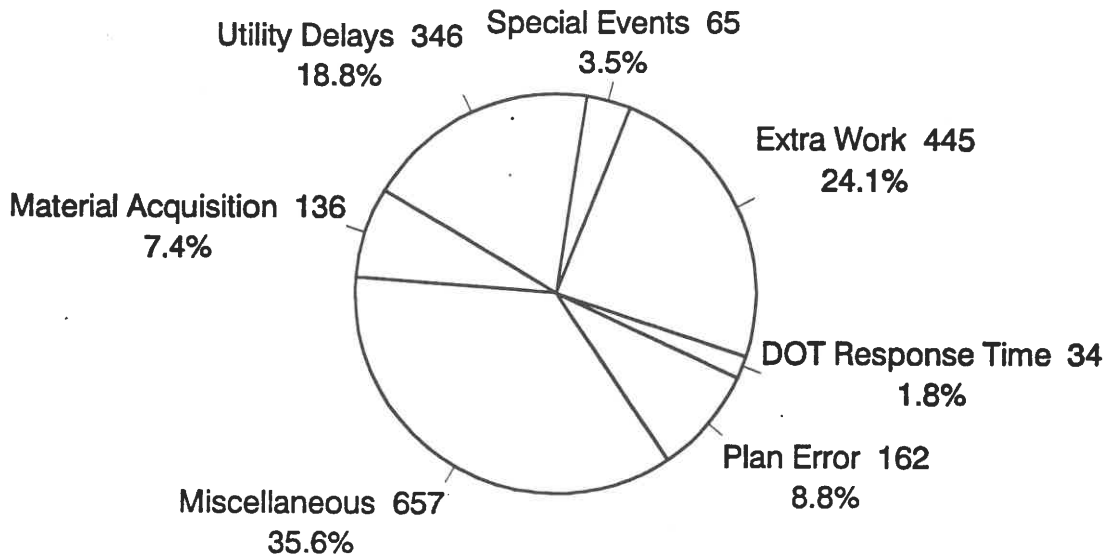
- \* Includes 4,074 days added as part of supplemental agreements and 1,845 days added other than supplemental agreements (see chart on next page for details).

**Notes:**

- o "Contracts completed" are contracts on which final payment was made during the fiscal year.
- o The report includes only those contracts that do not contain "weather days" as part of the original contract time (all contracts let after June 30, 1988).
- o Currently, authorized time extensions cannot be categorized as "within DOT's control" or "outside DOT's control." Until this information is available, authorized time extensions will be categorized by the 7 types of delays presently recorded by the Department.



## TIME EXTENSIONS Total - 1,845 Days



### REASONS FOR TIME EXTENSIONS

Plan/Design Error	Station error may cause completed work to be removed and redone.
DOT Response Time	Excessive time for the Department to provide test results, approval of shop drawings, erection plans, anchorage plans, demolition plans or giving contractor directions due to Plan/Design error.
Extra Work	Significant overrun in quantity requiring additional installation time to complete or add features to make a project functional.
Utility Delays	Time lost to mitigate unforeseen utility conflicts or beyond time scheduled in contract documents.
Material Acquisition	Unavailability of materials due to area wide shortages and strikes or wrong quantities or items specified that require long delivery time.
Special Events	Construction work may be delayed by unanticipated traffic congestion due to major sporting events or political events such as presidential visit.
Miscellaneous	Time granted in order to settle a dispute that would otherwise result in a monetary claim.

DOT 7/14/92

**Narrative:** The measure below compares original project cost to final project cost. Increases in cost frequently occur due to authorization of additional work as the project progresses and due to payment, in part or in full, of claims filed by the contractor. Even though a small percentage increase in cost is generally expected (less than 5%), and the Department reserves contingencies for cost increases, significant cost overruns could result in delaying planned projects to cover prior overruns and could indicate a problem in quality of design plans and specifications or in contract management.

### *Contract Cost Adjustments Supplemental Agreements*

*Secondary Measure    Original Contract Amount vs. Final Amount Paid on all Construction Contracts Completed during the Fiscal Year.*

This Measure assesses contract management from a cost standpoint by contrasting the original contract amount with the final contract amount following acceptance of work by the Department and final payment to the contractor. The data shows the percentage increase in cost due to supplemental agreements.

*Synopsis: For the 194 contracts completed during the fiscal year, the total original contract amount of \$349.1 M. increased by 6.5% due to supplemental agreements, for a final total contract amount of \$371.9 M. The final amount paid (after overruns and underruns) was \$367.7 M., or 5.3% higher than the original contract amount.*

*Data indicate that 83% of supplemental agreements were necessary due to "plan errors," "changed conditions" and "claim settlements."*

#### **Comparison with FY 1991/92:**

- *The percentage increase in original contract amount due to supplemental agreements for FY 1992/93 was 3.4% higher than in FY 1991/92.*

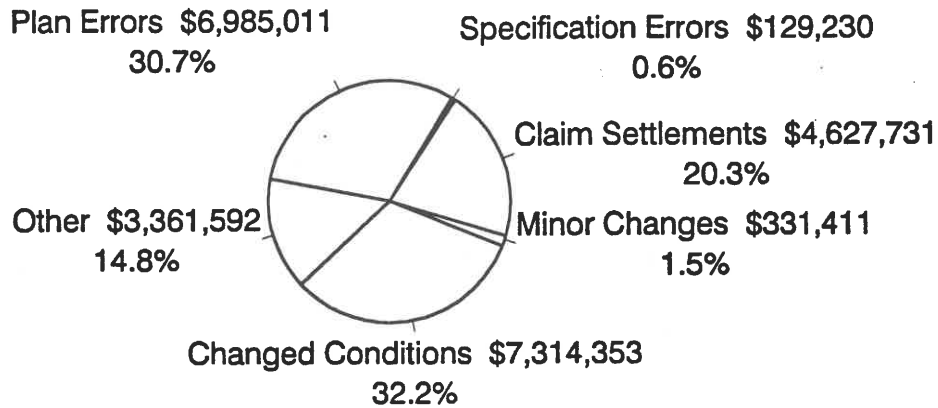
	# of	\$ Amount	% \$'s
<b>Original Contracts</b>	<b>194</b>	<b>\$349,115,595</b>	<b>100.0</b>
<b>Supplemental Agreements</b>		<b>\$ 22,749,329</b>	<b>6.5</b>
<b>Adjusted Contract Amount</b>		<b>\$371,864,924</b>	<b>106.5</b>
<b>Contract Amount Paid</b>		<b>\$367,735,651</b>	<b>105.3</b>

**Note:**

- o "Contracts completed" are contracts on which final payment was made during the fiscal year.
- o Currently, supplemental agreements cannot be categorized as "within DOT's control" or "outside DOT's control." Until this information is available supplemental agreements will be categorized by the 6 reasons presently recorded by the Department.

## SUPPLEMENTAL AGREEMENTS

**Total - \$22,749,329**



## REASONS FOR SUPPLEMENTAL AGREEMENTS

<b>Changed Conditions</b>	Physical conditions or changes encountered that could not have reasonably been anticipated in the contract such as discovery of unsuitable subsoil materials, subsurface changes such as hidden utility conflicts or other similar unanticipated changes.
<b>Plan Error</b>	Necessary pay items, permits or quantities missing or incorrect, feature locations inaccurate or insufficient and incorrect information or methods indicated that require correction in order to construct the projects as intended.
<b>Specification Error</b>	Specifications incomplete or missing to describe, direct and pay for work necessary to construct the project with the intended scope.
<b>Minor Changes/Overruns</b>	Minor changes in the contract amounting to less than five (5) percent of the original contract amount that <i>do not</i> require changes to specifications or new pay items or changes to the scope of the contract.
<b>Claim Settlement</b>	Payment for negotiated or arbitrated settlement of claims that often include both time and money.
<b>Other</b>	Some sensitive time extensions or necessary changes in contract provisions are formally documented with a Supplemental Agreement.

DOT 7/14/92

**Narrative:** With some degree of frequency, fluctuation occurs in the revenues available to the Department for construction of transportation projects, with the result that federal or state funds either are less than or more than the amount projected to be available at the time the Department developed its 5-year work program. A major reduction in revenues compels the

## *Advance Production*

Department to delay or delete projects from the work program. The availability of *additional funds*, on the other hand, places the Department in a position to *advance* projects from later years of the program, up to the level of additional revenues available.

Advance Production is the mechanism that allows the Department to immediately (within a few months) let projects to consume additional funds. Advance production projects are those scheduled beyond the first year in the Department's work program that are ready to be let to construction (design and right of way phases complete) and thus could be advanced into the current year should additional funds become available. When additional funds do become available, the Department "uses" its advance production and lets those projects to construction. There are times when, due to a large revenue increase, the Department depletes its advance production and must rebuild the inventory. Advance production is an important strategic tool given the sensitivity of revenues to a variety of rapidly changing economic factors.

Florida Law enacted in 1992 acknowledges the importance of advance production and requires that the Department maintain an inventory of "projects on which construction could begin immediately if additional sources of revenue become available."

Subsequent to the Commission's FY 1991/92 report, in which a measure was proposed for Advance Production subject to further deliberation, the Performance Measures Working Group discussed Advance Production at length, without reaching consensus on a measure. At that time, it was decided to postpone a recommendation until the Department adopted a policy.

During FY 1992/93, the Department formed a committee to recommend policy on advance production, and in June, 1993, the Committee submitted its report to the Secretary of Transportation. The recommendations separate production-ready product into two categories: Advance Production, which is funded in the 5-year work program, and Extra Production, which is unfunded. District targets (by fund category) are established consistent with current program levels and measurement

is required against targets. Following a 3-year transition period, all advance production would be complete and ready six months in advance of normal funding. Since this policy proposal has not yet been adopted by the Department, and has not been discussed by the Performance Measures Working Group and recommended to the Commission, it is not presented as a proposed measure in this report.

For informational purposes, at the end of FY 1992/93, the Department's production-ready product totaled \$246 M., of which \$149 M. is advance production and \$97 M. is extra production.

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***COST-EFFICIENT &  
EFFECTIVE BUSINESS  
PRACTICES:  
FINANCE & ADMINISTRATION***

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**Narrative:** Federal motor fuel taxes paid by Floridians and visitors are deposited in the Federal Highway Trust Fund and a portion of the total tax amount deposited is returned to Florida as federal funds to be matched by State revenues and used for various

transportation purposes (e.g., the matching share for Interstate highway construction is 90% federal funds, 10% State funds).

### ***Commitment of Federal Funds***

Today, federal funds comprises about 30% of Florida's total transportation revenues and thus plays an important role in the State's ability to meet transportation needs.

With few exceptions, the Department is responsible for ensuring that all available federal funds is committed to qualifying projects in a timely manner and that all federal requirements are met.

Federal funding must be committed to projects within a specified time period; otherwise, unused funds "lapse" (are forfeited) and are pooled and "redistributed" to other states that have exhausted their federal funds and have the ability to consume additional funds.

With transportation needs that far exceed available revenues, it is imperative that the Department manage federal funds in such a manner as to avoid forfeiture.

<b>Primary Measure</b>	<b>Of Federal Funds Subject to Forfeiture at the End of the Federal Fiscal Year, the Percent that was Committed.</b>
	This measure assesses how well the Department manages federal funds to avoid forfeiture of such funds.
<b>Explanatory Data</b>	Amount of redistributed federal funds requested during the Federal fiscal year and amount received, if any.

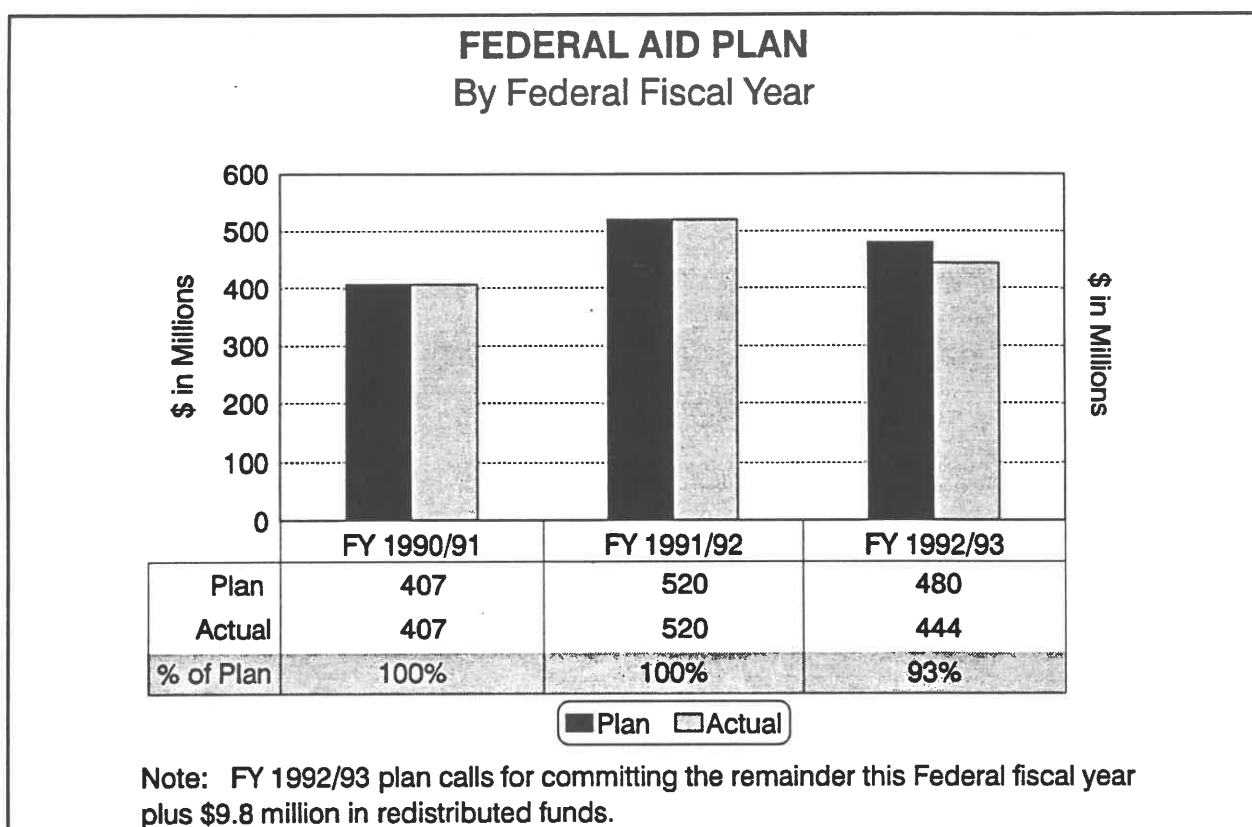


**Synopsis:** At the end of the 3rd Quarter of the federal fiscal year (6/30/93), the Department had committed 93% (\$444.3 M. of a total of \$480.1 M.) of federal funds subject to forfeiture at federal fiscal year end if not committed. \$35.8 M. or 7% remains to be committed during the 4th Quarter ending 9/30/93.

The Department plans to commit the remaining balance by federal fiscal year end. Also, the Department requested an additional \$64.9 M. in federal funds and received \$9.8 M. of the total requested.

**Comparison with FY 1991/92:**

- For Federal FY 1993, the amount of federal aid subject to forfeiture was 8% less than in the previous year.
- The Department had committed 17% more of its plan by end of 3rd Federal fiscal year Quarter in FY 1992/93 than it had at the same point in FY 1991/92.



**Narrative:** The Department is one of few state agencies that produces a tangible product -- a transportation system composed of roads, bridges, and other ancillary facilities.

## *Management of Administrative Costs*

The Florida taxpayer, who funds construction and maintenance of the state transportation system, has a legitimate expectation that the Department will strive to maximize tax dollars put into actual transportation product by containing administrative overhead and product support costs to the extent possible.

It must be recognized, however, that the Department, as a public agency, is directed by the Legislature to perform many services and activities not required of private sector firms performing similar functions. Thus, a direct comparison of Department overhead costs with those of the private sector is not recommended.

<b>Primary Measure</b>	<b>Administrative Costs as a Percent of Total Program. Dollar Amount of Administrative Costs vs. Dollar Amount of Total Program.</b>
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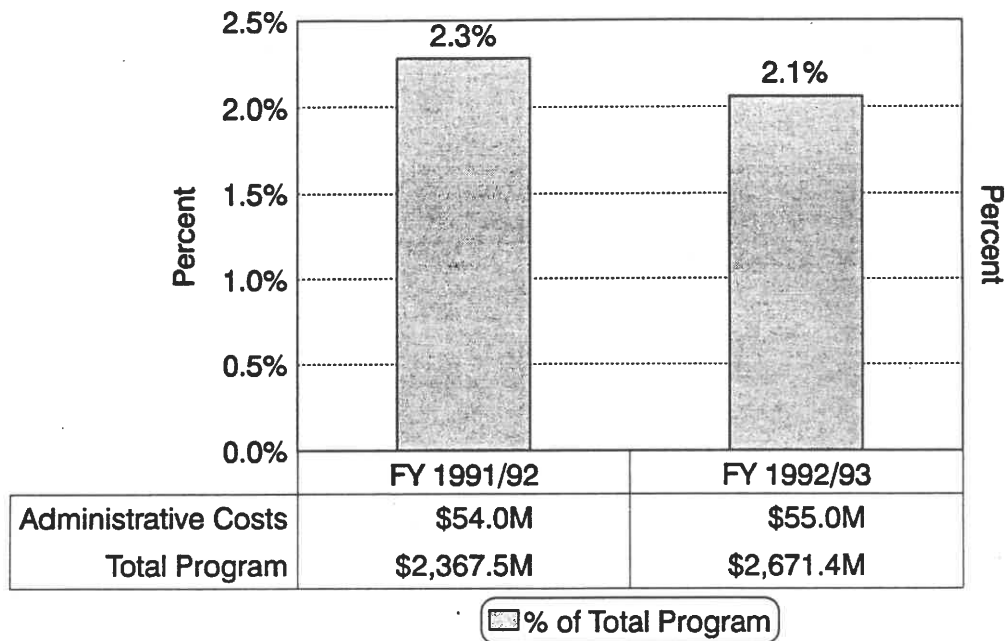
This measure tracks administrative costs as a percent of the total program (product, product support, operations, maintenance, and administration) and by actual dollar amounts. The measure allows evaluators to assess the reasonableness of administrative costs over time, and where increases occur, to review the administrative budget in greater detail. Since the administrative cost percentage will automatically increase or decrease when total program size is reduced or increased, respectively, absolute dollar amounts must also be reviewed.

**Synopsis:** *Total Administrative costs were 2.1% of the Total Program for FY 1992/93, or \$55 M. of a total program of almost \$2.7 B.*

**Comparison with FY 1991/92:**

- *Although administrative costs as a percentage of total program decreased in FY 1992/93 from FY 1991/92, based on actual dollar amounts of administrative costs, there was a 1.9% increase in administrative costs in FY 1992/93 compared to FY 1991/92.*

# **ADMINISTRATIVE COSTS** **% of Total Program By Fiscal Year**



**Narrative:** The Department is the only state agency that operates on a "cash flow" basis; that is, the Department is not required to have funds "on hand" to cover all existing contractual obligations and it may let contracts against revenue it expects to

receive in the future. The advantage to the taxpayer of the cash flow method is that transportation tax collections are returned to the taxpayer in the form of transportation facilities much sooner than would be the case under the more traditional "encumbrance" financing method.

## *Cash Management*

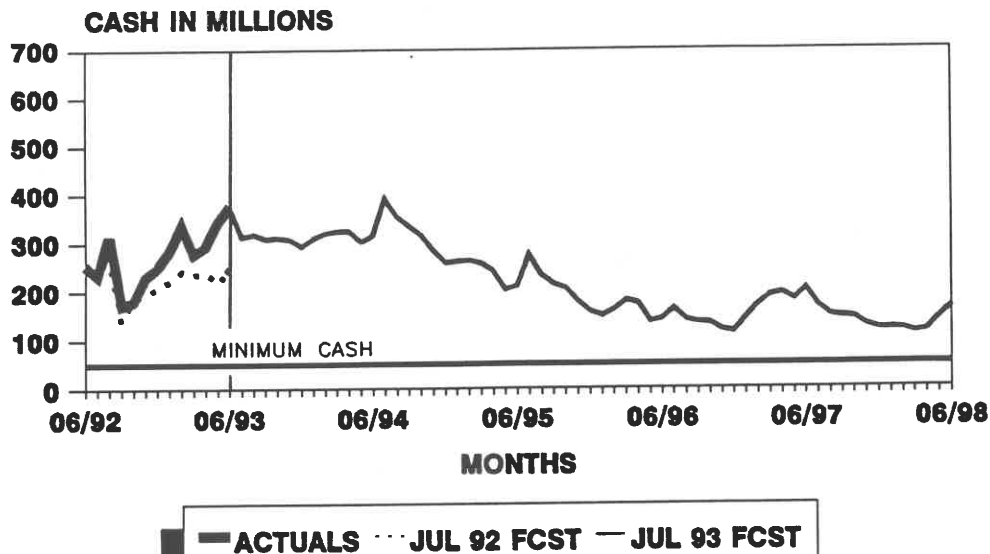
State law requires that the Department maintain a minimum cash balance in the State Transportation Trust Fund of 5% of outstanding obligations or \$50 million, whichever is less. Because the Department must maintain a lawful cash balance, and must pay its bills promptly, it must carefully forecast future incoming revenues and future expenditures and frequently revise forecasts based on new information. For instance, when economic factors negatively impact gas tax revenues, the Department must adjust its cash forecast to reflect less incoming revenue, which may, in turn, necessitate deferral of projects in the work program. Periodic fine tuning of forecasts of revenues and expenditures is essential to sound financial management.

### **Primary Measure**

#### **Original 36-month Forecast of Revenues and Expenditures Reconciled to Actual Revenues and Expenditures.**

This measure assesses the accuracy of Department forecasts and provides the evaluator with the variables that reconcile the original forecast with actual revenues and expenditures.

## STTF CASH FORECAST FISCAL YEARS 1992/93 - 1997/98



**SOURCE: OOC**

### VARIANCE ANALYSIS AS OF 6/30/93

Changes in the Cash Balance	FY 93 Ending Cash Balance
<b>JULY 1992 CASH FORECAST</b>	<b>249.6</b>
• Advanced Construction Conversion reduction	(9.6)
• Miscellaneous Receipts Forecast Update	(18.4)
• Revenue Estimating Conference receipts over projected receipts	<u>40.3</u>
SUBTOTAL	12.3
Estimated unreimbursed costs for Hurricane Andrew:	(8.7)
Impact of cash flow changes:	
• Right of Way	(7.4)
• Consultants	18.4
• Construction	67.1
• Public Transportation	32.8
• Other	(6.0)
Impact of the Tentative Work Program	<u>17.8</u>
SUBTOTAL	114.0
<b>FY 92/93 ACTUAL ENDING CASH BALANCE</b>	<b>375.9</b>

**Narrative:** Like most state agencies, the Department purchases goods and services from the private sector. Because the Department contracts for design and construction of transportation facilities, it has a large dollar volume of payments to consultants and contractors, with "progress payments" often spanning a 2 or 3 year period on construction contracts.

### ***Prompt Payment to Contractors & Vendors***

It is important that the Department act as a good "customer:" one who pays its financial obligations in a timely manner and in accordance with state law, which requires that invoices be forwarded to the State Comptroller within 20 days after receipt of the invoice by the Department or approval of goods or services, whichever is later.

*Secondary Measure      Number and Dollar Volume of Invoices Processed in  
Compliance with 20-day Rule*

*This measure assesses how efficiently the Department processes invoices in compliance with the statutory 20-day time period.*

**Synopsis:** *The Department achieved 90% compliance, having processed 164,533 of 183,785 invoices in compliance with the 20-day rule. From the standpoint of dollar volume, the Department achieved 92% compliance, having processed \$1.51 B. of a total of \$1.64 B. invoices in compliance with the 20-day rule.*

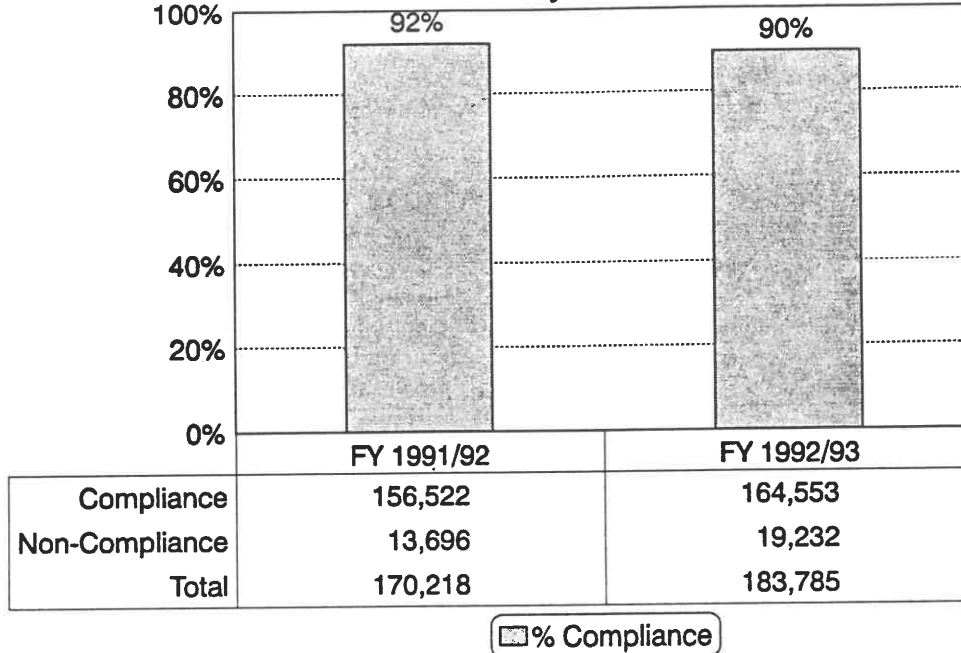
**Comparison with FY 1991/92:**

*The compliance rate for FY 1992/93 was 2% lower than in FY 1991/92 for both number of invoices and dollar volume.\**

\* Note: Compliance percentages were adversely affected during FY 1992/93 by diversion of manpower to process emergency invoices due to Hurricane Andrew.

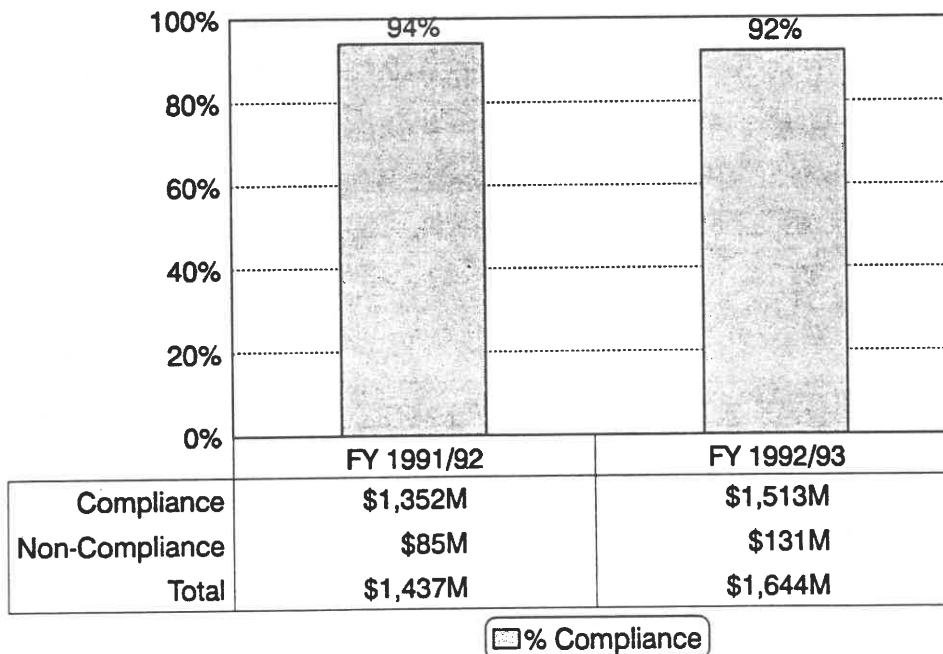
## INVOICES PROCESSED IN COMPLIANCE WITH 20-DAY RULE

Number of Invoices By Fiscal Year



## INVOICES PROCESSED IN COMPLIANCE WITH 20-DAY RULE

\$ Amount of Invoices By Fiscal Year



**Narrative:** The Department was authorized by the 1990 Legislature to issue bonds to finance a \$500 million advanced right-of-way acquisition program and a \$1.1 billion program to expand the Turnpike System statewide by constructing new toll facilities meeting economic feasibility criteria.

## *Management of Bond Programs*

Since bond financing involves payment of interest to bondholders on bond proceeds received by the Department, it is important that interest be minimized, to the extent possible, through timing of the sale and maintenance of a high bond rating. Although Department bond sales are processed by the Division of Bond Finance in the Department of Management Services, accurate financial data relating to bond funded projects and management of bond funded programs are responsibilities of the Department and are factors that influence future bond ratings.

**Secondary Measure** *Bond Proceeds Commitment Plan vs. Actual Commitment of Proceeds, for each Bond Series Issued during the Year and for all Outstanding Bond Series that have not been Totally Committed.*

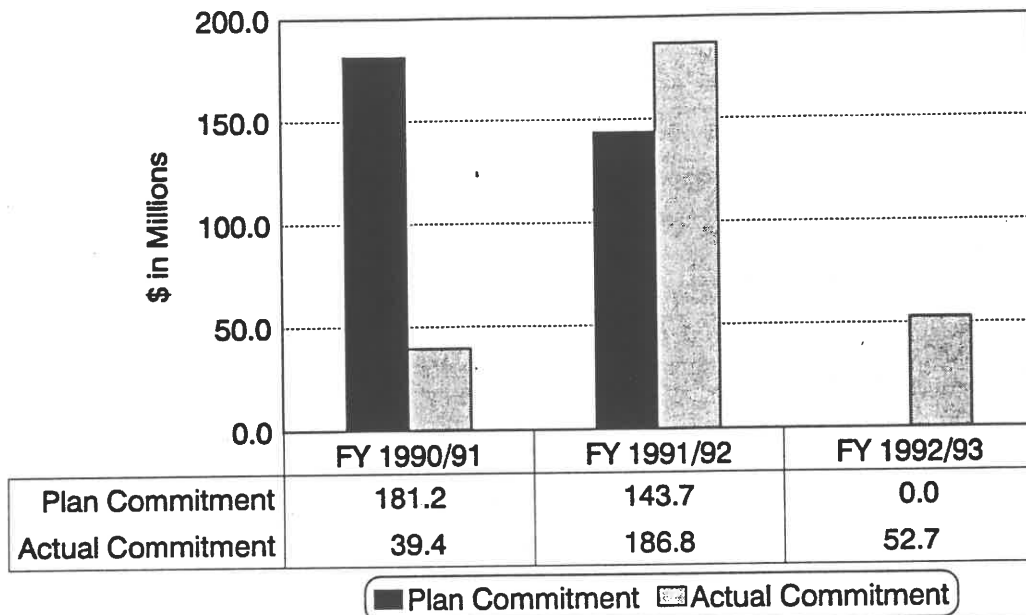
Since bond proceeds are essentially a loan on which interest is being paid, it is important that the proceeds are committed to projects on schedule and do not remain idle. This measure monitors the Department's performance in committing bond proceeds on schedule.

**Explanatory Data** For each series issued during the fiscal year, provide bond rating and interest rate.



### TURNPIKE BOND FUNDS - P91A

#### Bond Commitment By Fiscal Year



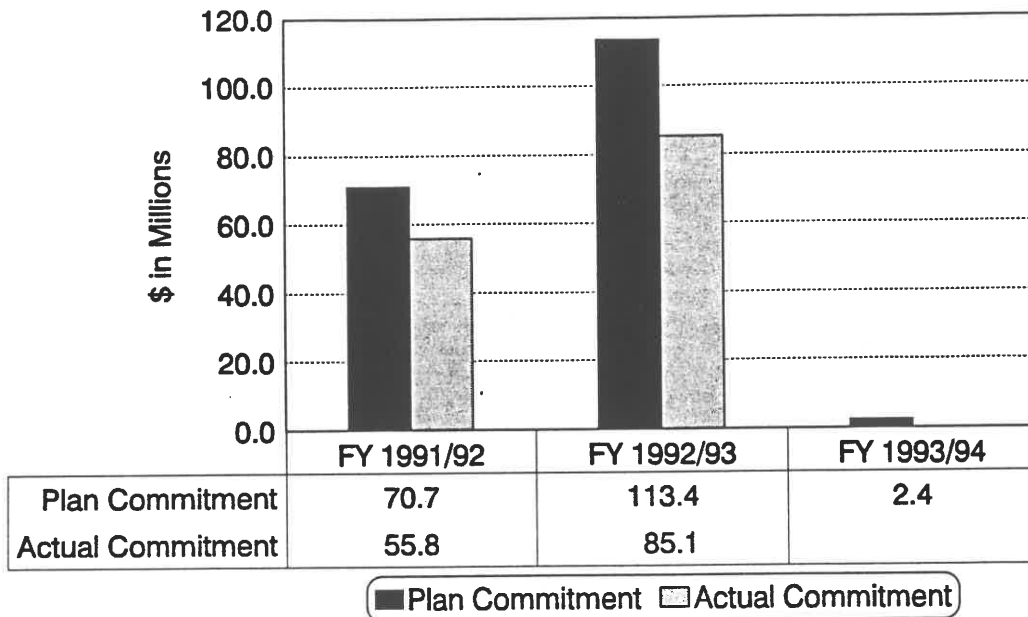
### TURNPIKE BOND FUNDS - P91A

Date Issued	January 1991
Interest Rate	7.2 %
Use of Proceeds	Seminole Expressway - Right of Way and Construction Veterans Expressway (Hillsborough Co.) - Right of Way
Total Commitment Plan	\$324.9 M.
Actual Commitments	\$278.9 M.
Commitment Balance	\$46.0 M.

Of the total, \$34.0 M. is for right of way. All parcel titles have been acquired; this is to pay final judgments.  
The remaining \$12.0 M. Contingency Fund is for potential construction cost overruns.

### TURNPIKE BOND FUNDS - P92A

#### Bond Commitment By Fiscal Year



### TURNPIKE BOND FUNDS - P92A

Date Issued	June 1992	
Interest Rate	6.34 %	
Use of Proceeds	Veterans Expressway (Hillsborough Co.) - Construction	
Total Commitment Plan	\$186.5 M.	
Actual Commitments	\$140.9 M.	All construction contracts for Veterans Expressway have been let.
Commitment Balance	\$45.6 M.	After reserving contingencies amounts for potential cost overruns, savings resulting from low bids are planned for use on the Southern Connector Extension project.

**Narrative:** The collection of tolls on 58 of Florida's toll facilities is the responsibility of the Department. By far, the largest and highest revenue-producing toll facility is the Florida Turnpike, which is managed by the Department.

### *Management of Toll Facility Operational Costs*

Toll revenues are used to pay debt service on bonds issued for construction of a facility and facility maintenance or, if 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 interest that the maximum amount of tolls collected be used to pay off the debt or be used for other transportation improvements, toll collection costs should be contained and carefully managed.

#### *Secondary Measure      Operational Costs per Toll Transaction*

This measure provides the evaluator with the "cost per transaction" by dividing total operational costs (for toll collectors, supervisors, management) by the number of toll transactions. The cost per transaction can then be monitored over time and will provide the basis for measuring improved efficiency.

#### *Secondary Measure      Percentage of Toll Revenues Used to Collect Toll*

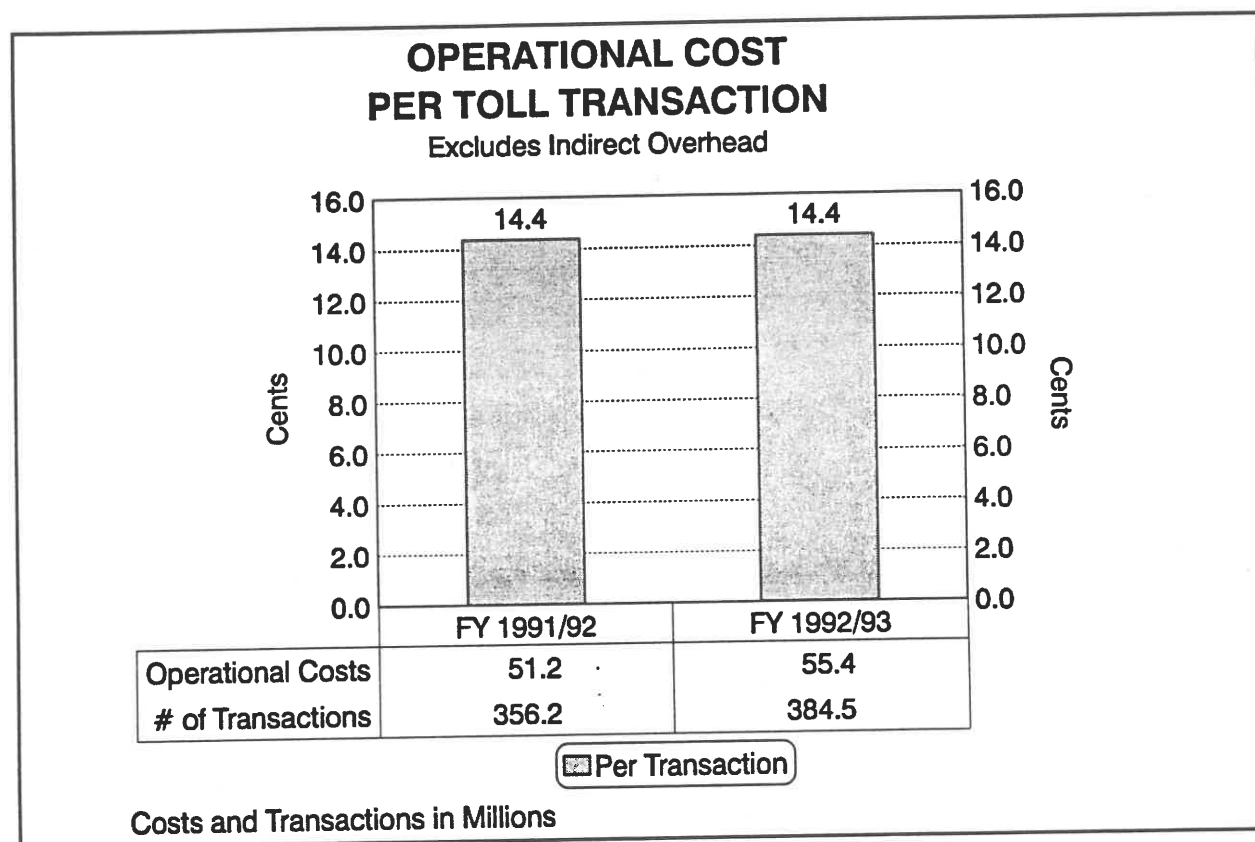
This measure arrives at the percentage of toll revenues used to collect tolls by dividing total operational costs by total toll revenue collected. Although the percentage will automatically decrease when a toll increase occurs, such adjustments will be noted. This measure will serve as the basis for containment of operational costs.

**Synopsis:** For FY 1992/93, the Department's cost to operate toll facilities was 14.4 cents per toll transaction.

Of total toll revenue, 20.1% was used to defray direct operational costs of collecting tolls. Including indirect operational costs, 28.9% of total toll revenue was used to defray operational costs of collecting tolls.

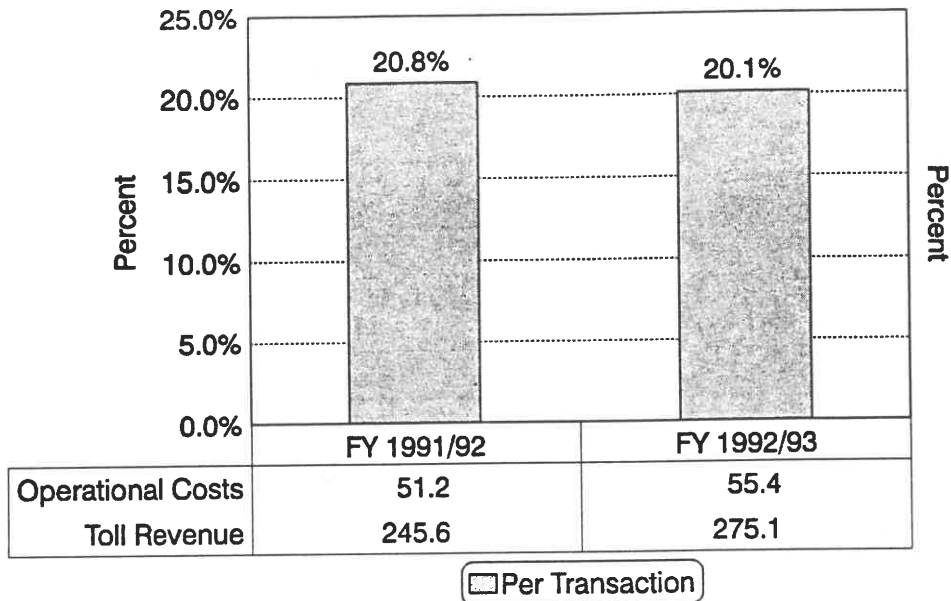
**Comparison with FY 1991/92:**

- The cost to operate toll facilities was the same (14.4 cents) per toll transaction in FY 1992/93 as in FY 1991/92.
- Excluding indirect operational costs, the percentage of toll revenues used to collect tolls was 0.7% lower in FY 1992/93 than in FY 1991/92.
- Including indirect operational costs, the percentage of toll revenues used to collect tolls was 0.2% lower in FY 1992/93 than in FY 1991/92.



### % TOLL REVENUES USED TO COLLECT TOLL

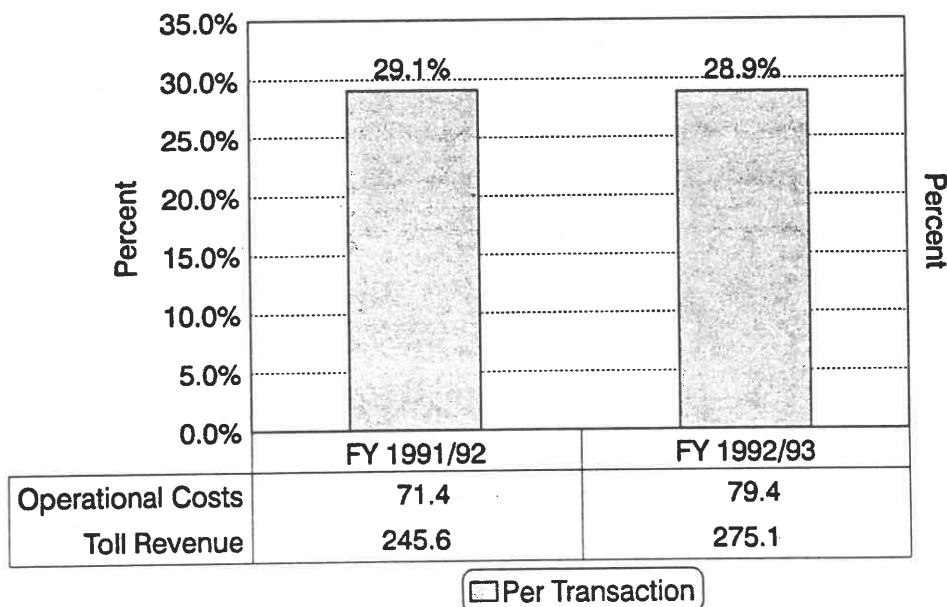
Excludes Indirect Overhead



Costs and Revenue in Millions

### % TOLL REVENUES USED TO COLLECT TOLL

Includes Indirect Overhead



Costs and Revenue in Millions

**Narrative:** The term "Information Technology" encompasses all computer systems supporting Department operations. The more than 60 systems range from those that directly support production activities to those that provide data used in administrative functions and management decision making.

## *Information Technology*

Effective application of information technology contributes to improved productivity and quality in most, if not all, Department operations, and therefore should not be measured in isolation. Further, although appropriate use of computer technology does result in increased efficiency and improved quality of end products, it does not lend itself to quantitative measurement. Its positive impacts are, however, measured as part of major operations addressed elsewhere in this report.

Indicator
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Progress toward implementation of the Business Information Systems Plan (BISP), including CADD and office automation.
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In 1990, the Department adopted a Business Information Systems Plan (BISP), a long-range plan for use of information technology. Implementation of BISP will continue over several years, with plan updates occurring annually. Individual projects in Department operational areas (e.g., Financial Management) are developed using a structured methodology, Information Engineering, to achieve the most desirable degree of integration between resulting information systems (i.e., systems that "talk to each other"), as well as meeting identified business needs.

BISP implementation began during FY 1991/92 with Financial Management, the Department area identified as highest priority. During FY 1992/93, completion and initial delivery of the Accounts Receivable Invoicing (ARI) system occurred. Originally scheduled for completion in October, 1992, the ARI system was actually delivered in June, 1993. The ARI system combines eight previous systems, some of which were not computerized. Prior to ARI system implementation, research by different offices was required to answer the question, "How much is owed to the Department?" Currently in progress are the Work Program, Federal Aid and Project Cost systems, three systems of critical importance to the Department.

Projects have also begun in the Production Management area in Construction Contracts, Non-Construction Contracts, and Right-of-Way.

In January, 1992, the Department's Chief Internal Auditor began a proactive audit of BISP (a proactive audit is one in which audit staff become involved in a program during its development), in order to identify any problems or concerns needing management attention. In June, 1993, the Chief Internal Auditor identified concerns relating to schedules for BISP implementation, pointing out that original schedules were overly optimistic and that the Department currently has no criteria in place to ensure that revised BISP deadlines are realistic. The BISP team has committed resources to developing accurate schedules and will continue to fine tune the process. Also in June, 1993, Internal Audit suggested the need for continued attention to clearly defining roles and responsibilities of the various organizational units involved in BISP projects. The BISP team agreed that additional refinement is needed in this area.

In addition to improved information systems, BISP addresses other areas -- two of those, office automation and communications, received substantial effort during FY 1992/93. An office automation review was conducted in all districts, with recommendations for improvement in the use of information technology. A plan for equipment replacement was developed, with replacement beginning in 1994. Use of electronic mail was expanded, with over 5,000 employees now able to send and receive mail electronically and use the electronic calendar on a statewide basis. Several Department employees participated in a telecommuting pilot project, allowing them to work from their homes. Response from telecommuters has been positive, and the Department's final report on the project is due later this year. On the communications side, the Department is now connected to a nationwide communications network allowing the Department to send and receive information electronically from all other transportation agencies and the Federal Highway Administration.

Computer Aided Drafting and Design (CADD) is an engineering application of computer technology that is recognized as an essential tool throughout the engineering community. The demonstrated benefits of CADD are increased productivity and enhanced quality of construction plans. The Department was considered an early leader in the use of CADD among departments of transportation nationally and continues to pursue improved application of CADD. The technology continues to drive the automation process in every facet of engineering work -- the power, memory, storage devices and the vendors' continual improvement of engineering software has made the "desk top" work station environment a reality.

FY 1991/92 was the first year of a two-year effort to replace obsolete mid-1980's CADD equipment with standard desk-top work stations which allow greater flexibility and availability to designers. During FY 1992/93, this effort was essentially completed, with 95% replacement accomplished -- the last of the old mini-computer systems will be phased out by December, 1993. The basic CADD environment enabling district design personnel to produce construction plans is now in place.

A nationally recognized advancement in automation of surveying and design functions developed by the Department is the Electronic Field Book (EFB) computer system. The EFB system allows collection of field survey data more quickly and accurately and allows direct electronic access to survey data by CADD systems used in the design process. During FY 1991/92, implementation of EFB systems was completed in two districts and was initiated in the remaining districts. During FY 1992/93, these systems were essentially implemented statewide.

Technology used in the preconstruction area continues to change. Examples of new engineering/CADD technology being used or investigated include: Global Positioning System (GPS) for surveying; scanning and presentation graphics to develop renderings of projects for use in public hearings; digital photogrammetric systems for capture of topographic and digital terrain data; and automated storage systems (optical media based) for retention and agency-wide availability of project plan images, computer-based design files and other project-related data.



**Narrative:** The extent to which the Department actively recruits qualified employees, provides training opportunities for employees, and minimizes turnover, positively impacts productivity and work quality in all operational areas. While it is important to monitor and report Department efforts to recruit, train and retain employees, the benefits in increased productivity and improved performance are difficult to quantify.

### *Personnel-Related Practices*

Indicator	Percent of work time per employee spent on training.
Indicator	Average longevity of service of Department professional employees.
Indicator	Number of quality improvement team suggestions implemented, Amount of money saved or revenue increased due to implementation of quality improvement team suggestions.
Indicator	Existence of active recruitment programs.

Department recruitment efforts are geared toward attracting civil engineering students and graduates. The Department's primary source of entry level engineers is the Professional Engineer Training Program -- a popular, 4-year training program that provides graduate civil engineers with broad, practical experience in transportation engineering, and guides them toward Professional Engineer registration. During FY 1992/93, eighteen (18) engineering graduates finished the program and all 18 were hired (from 1989 to 1993, 83 trainees graduated and 82 of those were hired).

The Student Cooperative Education Program, which was re-authorized during FY 1991/92, provides opportunities for college students (primarily engineering majors) to gain work experience compatible with their course work and career goals, while the Department benefits from attracting and retaining skilled, trained individuals in critical areas. During FY 1992/93, twenty-six (26) students participated in the program, 81% of which were females or minorities.

In response to alarming attrition rates in state transportation agencies and declining enrollment in the civil engineering curriculum, the TRAC (Transportation and

Civil Engineers Career Centers) Pilot Program was created at the national level to increase awareness and interest in civil engineering and transportation careers among pre-college and college students. A TRAC Career Center has been established at the University of Florida in Gainesville. Through 2-person outreach teams, the program will implement an aggressive public information campaign from elementary school level through college in a effort to attract more students to the curriculum and new graduates to the transportation profession. At present, two Department employees have received training to participate in an outreach team and implementation is scheduled to begin in Fall, 1993.

The benefits of successful recruitment programs are dependent on the Department's ability to retain professional employees. At the end of FY 1992/93, the average continuous service of the Department's 4,102 professional employees was 12.14 years (compared to 12.19 years in FY 1991/92).. The Department has intensified recruitment efforts by compiling recruitment source lists at the local, regional and national levels, and is working to place advertisements through various computer networks. These networks will enable the Department to reach larger audiences of professional, technical and managerial candidates and provide a profile which focuses on the Department as a key employer in the transportation industry.

Needs-based training for all employees is essential to enhanced productivity, improved work quality and retention. For FY 1992/93, 1.16% of work time per employee was spent on training (compared to 1.20% in FY 1991/92). In addition to planned training classes, the Department is piloting a new Individualized Training Plan, which will allow classes to be targeted to employees requesting training and should enhance the planning, scheduling and delivery of needs-based training.

During FY 1992/93, the Department introduced a job skills training program called ADVANCE. This program teaches reading, writing, and mathematic skills to employees and is tailored to their specific job duties. The program was initiated in District 4 and has been implemented in three districts, focusing primarily on maintenance and construction employees -- a total of 366 employees participated in ADVANCE during FY 1992/93. Program participants, supervisors and managers give the courses excellent ratings and report improvements in productivity, quality and attendance. The Department received a Davis Productivity Award for development and implementation of ADVANCE. The Department of Education has adopted ADVANCE as the standard for work place jobs skills training in state government.

The "Quality Improvement" or QI program is viewed as a positive employee practice that directly involves teams of employees in problem solving tasks of their own selection. This structured approach to solving work-related problems was pioneered in state government by the Department and continues to result in implementation by management of many QI team recommendations. During FY 1992/93, a total of 35 QI team suggestions were implemented by various units in the Department, slightly less than one-half the number reported as implemented during FY 1991/92.

***PRESERVATION OF  
CURRENT STATE SYSTEM***

Billions of taxpayer dollars have been invested over many years in constructing Florida's roads, bridges and other transportation facilities. Our transportation "infrastructure," as it is frequently called, is an asset which serves nearly every Floridian on any

given day. Failure to adequately maintain our transportation assets would not only allow deterioration of a costly investment, but also would adversely impact the State's economy, jeopardize the safety of the traveling public, and accelerate deterioration of motor vehicles, to name just a few. With limited revenues, it is not possible to maintain every road and bridge in perfect condition, or replace immediately every facility that becomes obsolete. However, the public has a right to expect structural deficiencies to be corrected before safety is threatened and before damage is allowed to become so severe as to necessitate major reconstruction.

### *Preservation of Current State System*

**Narrative:** There are approximately 10,000 bridges in Florida and about 5,600 of these are the responsibility of the Department. All bridges in the State are inspected by the Department for structural deficiencies at least once every two years (bridges with certain

identified deficiencies are inspected more frequently). Over time, some bridges also become "functionally obsolete," meaning they fail to meet current design standards for items such as under-bridge clearance, roadway width, or guardrails. The Department's Bridge Repair and Replacement Backlog monitors the need for repair, rehabilitation and replacement of deficient bridges, with priority scheduling given to work on structurally deficient bridges.

## ***Bridge Repair & Replacement***

Florida law requires the Department to "meet the annual needs for ... repair and replacement of bridges on the system." The Department objective set by the Legislature in 1990 is used to measure the backlog of deficient bridges.

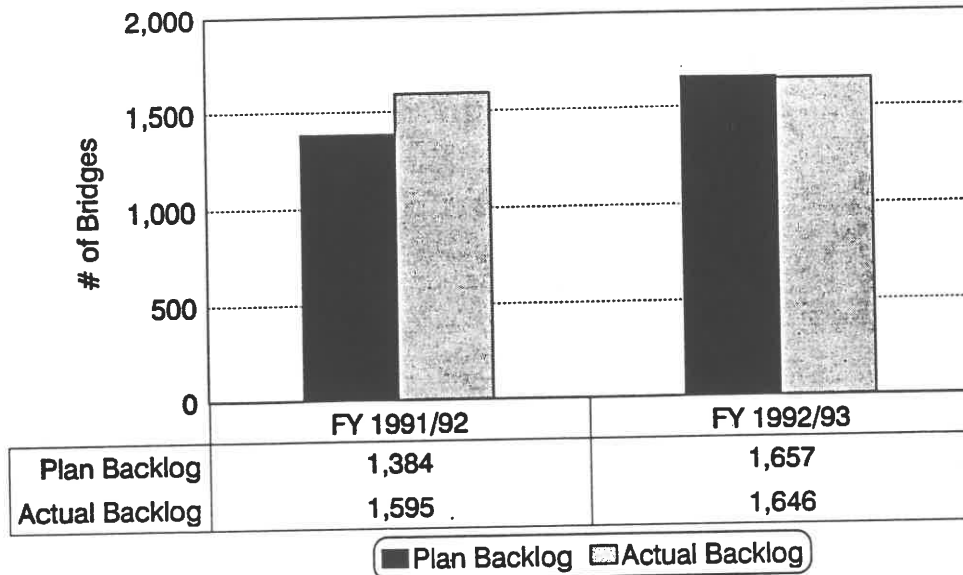
<b>Primary Measure</b>	<b>Reduce the Backlog of Bridges on the State Highway System Requiring Repair to the 1983 Level (1,145 bridges) by the End of FY 1999-2000.</b>
<b>Primary Measure</b>	<b>Reduce the Backlog of Bridges on the State Highway System Requiring Replacement to the 1983 Level (278 bridges) by the End of FY 1999/2000. Replace 7 Major Bridges over a 10-year Period from 1984-1993</b>

### ***Synopsis:***

**Bridge Repair** - *For FY 1992/93, the actual year-end backlog of bridges needing repair was 0.6% lower than anticipated, indicating that the department made satisfactory progress toward attaining the objective by FY 1999/2000.*

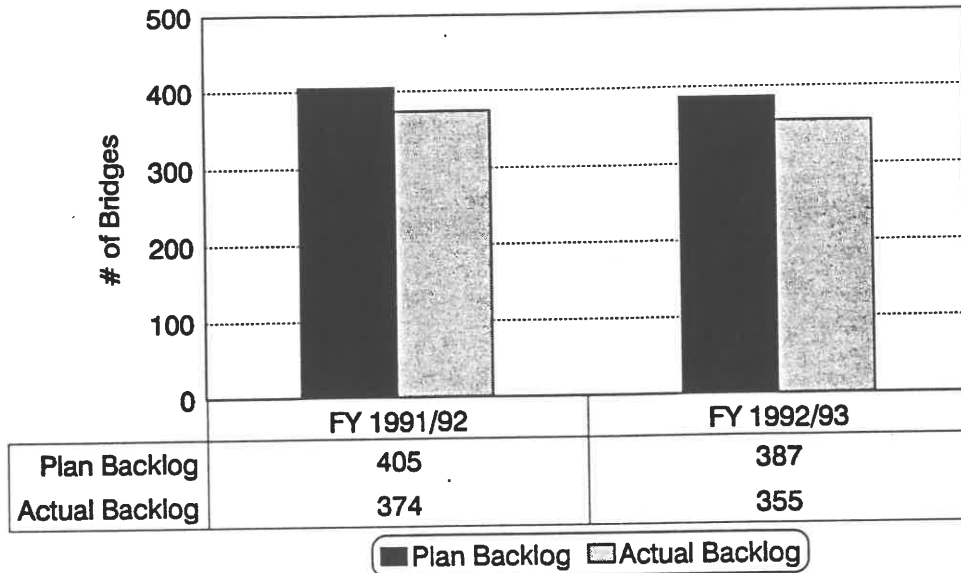
**Bridge Replacement** - *For FY 1992/93, the actual year-end backlog of bridges needing replacement was 8% lower than anticipated, indicating that the department made good progress toward attaining the objective by FY 1999/2000.*

## BRIDGE REPAIR By Fiscal Year



Objective: reduce bridges requiring repair to the 1983 level (1,145) by the end of 1999/2000.

## BRIDGE REPLACEMENT By Fiscal Year



Objective: reduce bridges requiring replacement to the 1983 level (278) by the end of 1999/2000.

### Seven (7) Major Bridge Replacement

Of the seven (7) major bridge replacements, a total of 6 are either under construction or complete (Green, Eau Gallie, Apalachicola River, Choctawhatchee Bay, Acosta and Edison). The remaining replacement bridge (Boynton Beach) has been delayed due to litigation, but is scheduled for replacement in FY 1996/97.



**Narrative:** 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") and weather conditions to which a road pavement is subjected.

## *Resurfacing*

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. The Department measures the condition of road pavements on an annual basis and road segments that do not measure up to predefined pavement condition standards are considered deficient and become part of the pavement deficiency backlog. Priority scheduling is accorded to roads with the most severe deficiencies.

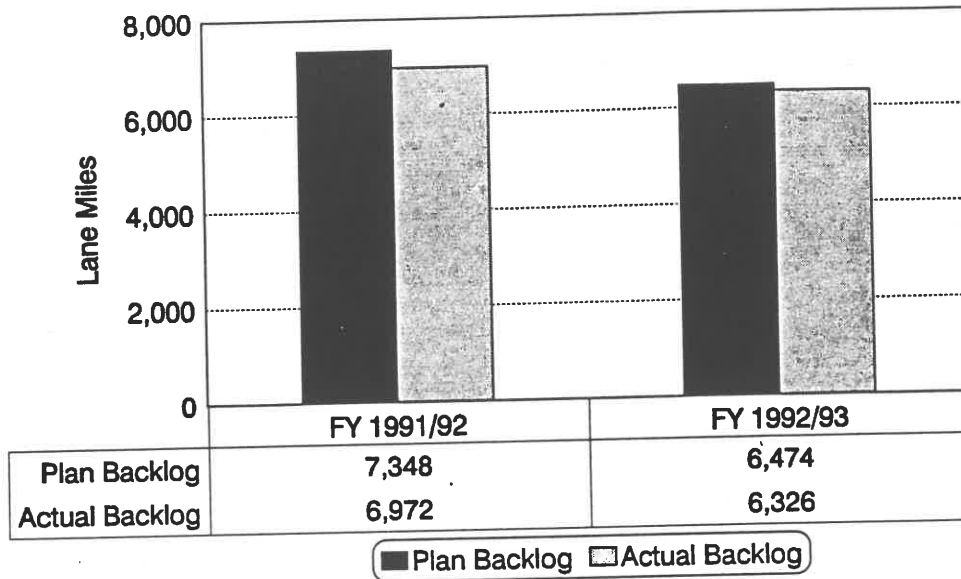
Florida law requires the Department to "meet the annual needs for resurfacing of the state highway system...." The Department objective set by the Legislature in 1990 is used to measure the backlog of structurally deficient roads.

<b>Primary Measure</b>	<b>Reduce the Backlog of Structurally Deficient State Highways to the 1983 Level (5,020 lane miles) by the End of FY 1996/97.</b>
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**Synopsis:**

*For FY 1992/93, the actual year-end backlog of roads needing resurfacing was 2.3% lower than anticipated, indicating satisfactory progress toward attaining the objective by FY 1996/1997.*

## RESURFACING By Fiscal Year



Objective: reduce backlog of structurally deficient state highways to 1983 level (5,020) by end of 1996/97.

**Narrative:** Routine maintenance encompasses highway repairs (repairing potholes, patching, etc.), roadside upkeep (mowing, litter removal), drainage management, and traffic services (road signs, re-striping). Adequate, uniform road

maintenance on a statewide basis is essential from structural and safety standpoints and is important for aesthetic and environmental reasons.

### *Routine Maintenance*

Florida law requires the Department to provide routine and uniform maintenance of the state highway system. The measure below is the Department's current operating policy implementing the statutory provision.

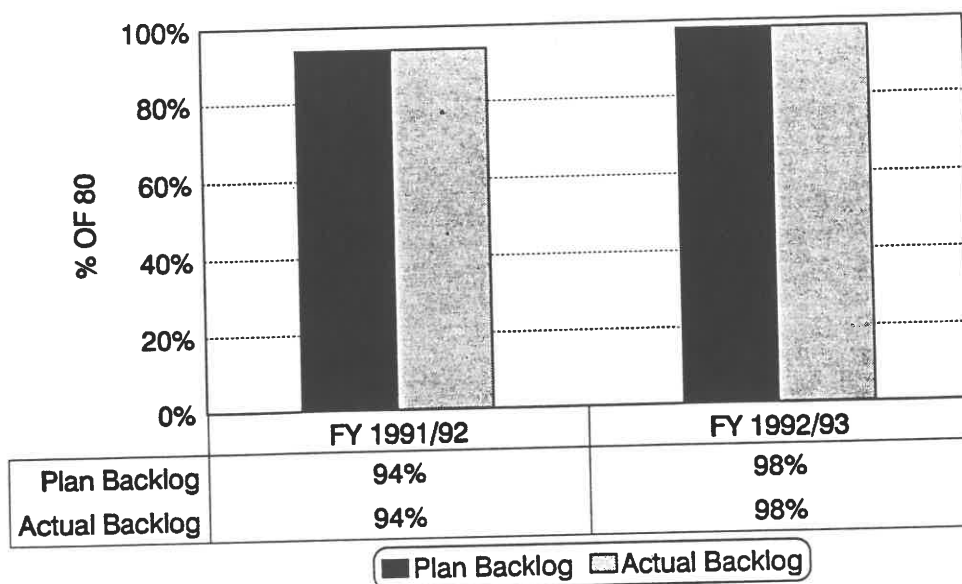
<b>Primary Measure</b>	<b>Achieve a Maintenance Rating of 80 on the State Highway System in FY 1994/95.</b>
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**Note:** The "maintenance rating" goal of 80 referred to is based on the Department's evaluation of its performance using the Maintenance Rating Program. This system grades five (5) maintenance elements and arrives at a composite state score based on a scale of 1 to 10.

**Synopsis:**

*For FY 1992/93, the Department achieved 98% of the objective of a system-wide maintenance rating of 80 by FY 1994/95.*

## ROUTINE MAINTENANCE By Fiscal Year



Objective: achieve a Maintenance Rating of 80 on the State Highway System in 1994/95.

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***SAFETY***  
***PROGRAMS***

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**Narrative:** Although the Department's role in safety of the traveling public is limited to those programs which it administers or funds, its safety activities are comprehensive and far reaching: certain programs are applicable to any public road in the

## *Safety Programs*

state, and its Highway Safety Program provides funding for state and local government safety programs in the areas of engineering, law enforcement, public information and education, and emergency medical services.

The transportation system component over which the Department exercises most control is the State Highway System, in that the Department is responsible for designing, constructing and maintaining the 12,000 miles of state roads (an additional 96,000 miles of road are the responsibility of cities and counties).

Florida's 1991 fatal crash rate for all roads (state, county and city) was 2.0 fatal crashes per 100 million vehicle miles traveled, a significant reduction from 2.4 in 1990. By comparison, the 1991 fatal crash rate for State roads only was 1.95 fatal crashes per 100 million vehicle miles (this rate was lower than any of the five previous years). The official national crash rate for 1991 was 1.7 fatal crashes per 100 million vehicle miles. For 1991, data indicates that road conditions (e.g., soft shoulders, ruts, standing water) were a contributing cause in only 3.4% of crashes involving injuries or fatalities, as compared to 3.7% in 1990.

The Department's ability to impact the number of traffic-related injuries and fatalities is limited by contributing factors over which it has no control, e.g., driver skills or impairment, presence and use of safety equipment, vehicle condition, and weather conditions.

*Secondary Measure    Annual, Comprehensive Review by the Commission of the Department's Safety Activities and Programs, Including But Not Limited To: Determinations of the Extent to Which the Department is (1) Meeting or Exceeding Current Design Standards for Safety, (2) Committing its Safety Program Funds, and (3) Pursuing Needed Safety Initiatives and Innovations.*

Indicator	Florida's fatal crash rate per 100 million vehicle miles traveled (and fatal crash rate per 100 million VMT for State Highway System only) vs. National Average Rate.
Indicator	Percent of crashes on State Highway System involving injuries or fatalities where road conditions were a contributing cause, compared to previous year percentage.

The Department's design criteria emphasize safety as an integral part of all project designs. The District Safety Engineer is a member of the team that reviews project plans. His role is to review crash data for the roadway section to be improved and to identify particular problems indicated by the data. In this way, many existing hazardous situations are resolved. Department safety emphasis on the State system is important and well placed since it carries nearly 70% of the traffic statewide.

Both when designing new transportation facilities and rehabilitating existing facilities, the Department adheres to national safety design criteria, and in most instances Department criteria for the State system exceed national standards. Variances from these criteria are granted only for existing conditions on rehabilitation projects after review of the district variance request by the State Roadway Design Engineer. As part of the review, crash data are examined to determine if the existing condition has created a high crash risk.

During FY 1992/93, of 475 projects let to construction, a total of 62 variances were approved (of 6,175 potential variances based on 13 safety design elements for each project), for a compliance rate of 99%. Of the 62 variances granted, over 50% related to road lane width, horizontal alignment (sharpness of curve), super elevation (bank of road), and horizontal clearance (road edge to nearest obstruction).

The Department also administers a Highway Safety Construction Program comprised of projects that enhance safety of high hazard/high crash road locations (e.g., installation of rumble strips, adding paved shoulder) and eliminate roadside obstacles. The chart following this narrative shows planned and actual commitment of program funds for FY 1992/93.

The Department is responsible for the Traffic Safety Program, pursuant to which federal grants are awarded primarily to local governments for safety programs in the areas of engineering, law enforcement, public information and education, and emergency medical services. During FY 1992/93, ninety-five (95) grants totaling about \$6.4 million were awarded for a variety of traffic safety purposes such as speed enforcement training, alcohol countermeasures, emergency medical services, pedestrian safety, motorcycle safety, and promotion and enforcement of safety belt use. As part of this program in FY 1992/93, the Department initiated a 3-year public information program on safety, including public service announcements, billboards and other information.

The Rail-Highway Grade Crossing Improvement Program targets the most hazardous crossings for installation of railroad traffic control devices, such as flashing lights and gates, or even grade separation structures for extremely hazardous crossings that have frequent train arrivals and high volume of vehicular traffic. During FY 1992/93, this program was funded with about \$5 million in combined federal-aid and state matching funds. A total of 52 crossing improvements were completed during the year and 41 new project agreements with railroad companies were executed, of 48 programmed for execution.

The Corridor Safety Improvement Program was initiated in 1991 to provide a community-based, comprehensive approach to reducing crashes, fatalities and injuries in high risk corridors. These projects combine engineering, enforcement, education and emergency services in a coordinated effort. Corridor safety projects are presently underway in Polk, Hillsborough and Highlands Counties, and are planned in Duval and Broward Counties. Florida is considered a leader in implementing safety programs that integrate the "4 E's" of safety, evidenced by frequent requests for information and presentations at national conferences, by other states, and federal agencies.

Because of Florida's standing as the leading state for combined pedestrian and bicyclist fatalities, the Department initiated safety awareness programs in both areas. Specific programs were developed and targeted to reduce trauma to school-age children and older adults. These programs are comprehensive, addressing planning, engineering, education and law enforcement.

Bicycle programs provide traffic education training for grades K-5. Helmet campaigns have proven effective in tested regions. Campaigns are underway to reduce the number of bicyclists not using lights at night. Laws are under review to strengthen pedestrian law enforcement practices; especially reducing alcohol



related injury (40% of fatal pedestrian crashes involve highly intoxicated pedestrians). Florida is the first state to have full time staff and trainers to teach basic skills to school crossing guards.

The Department has now trained over 3,000 planners and engineers on how to design safe places to walk and to cross roadways. Recent changes in design policies have greatly improved the percentage of both state and local roads that include pedestrian and bicycle friendly designs.

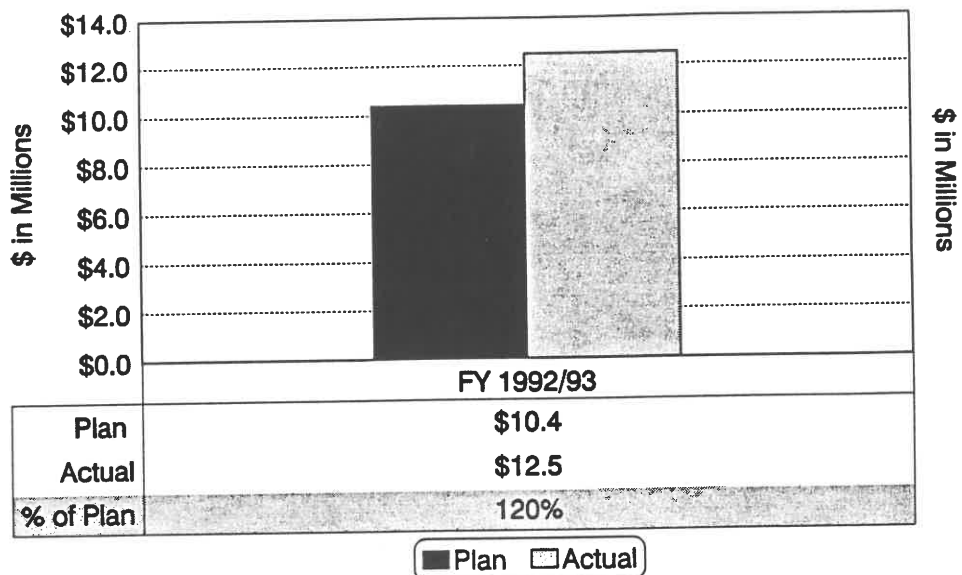
In recognition of the number of elder drivers in Florida and their special needs, the Department has initiated the Elder Driver Program. This high priority program enhances state road safety by establishing design standards specifically tailored to the elder road user, such as advanced signing and larger signs, and road stripes of 6 inch width instead of 4 inch width. Improvements to highway lighting are encouraged to address potential night vision problems.

The Department will host a Florida Symposium on Highway Safety in September, 1993. The purpose is to bring together safety professionals from all fields of highway safety, including engineering, enforcement, education and emergency medical services at the state, local and private levels, to establish working relationships and dialogue. The theme of the Symposium is "Working Together for a Safer Florida." It is hoped that this will become a biannual event.

Through the aforementioned activities involving all levels of government and the private sector and incorporating education, engineering and enforcement strategies, the Department pursues goals of reducing the frequency of crashes and the severity of injuries sustained in those crashes that do occur.

## HIGHWAY SAFETY CONSTRUCTION FUNDS

\$ Amount



Note: Dollar amounts are for 22 safety construction projects let during FY 1992/93.  
 \$4.76 M. in unprogrammed funds rolled forward to FY 1993/94.

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***CAPACITY IMPROVEMENTS***  
***HIGHWAYS & ALL PUBLIC***  
***TRANSPORTATION MODES***

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**Narrative:** Highest funding priority is accorded to preservation of existing highways, bridges, and other transportation facilities. First call on transportation revenues is to maintain our transportation assets to standards established and funded by the

Legislature. With an existing backlog of preservation needs, highway capacity improvement needs -- including new road construction, adding lanes to existing roads, and traffic operations improvements (intersection improvements, signal timing, etc.) -- have necessarily been accorded secondary priority. Thus, although Florida law mandates that the Department "reduce congestion on the state transportation system" through new construction, expansion of existing facilities and traffic operations improvements, these capacity improvement programs have not been comprehensively addressed due to competing preservation priorities for limited funding.

## ***Capacity Improvements Highways***

Further, the degree to which capacity improvements yield the desired result of increased mobility (i.e., movement of people and goods in greater volume or reduced trip time) is affected by many factors over which the Department has little or no control. These factors include extent and location of growth, local government zoning and land development decisions, and changing travel patterns.

The measure below acknowledges funding limitations and appropriately focuses on activities under the Department's control rather than attempting to measure the desired result (reduced congestion/increased mobility) which is subject to factors beyond the Department's control.

<b>Primary Measure</b>	<b>Capacity Improvement Projects Let vs. Capacity Improvement Projects Planned</b>
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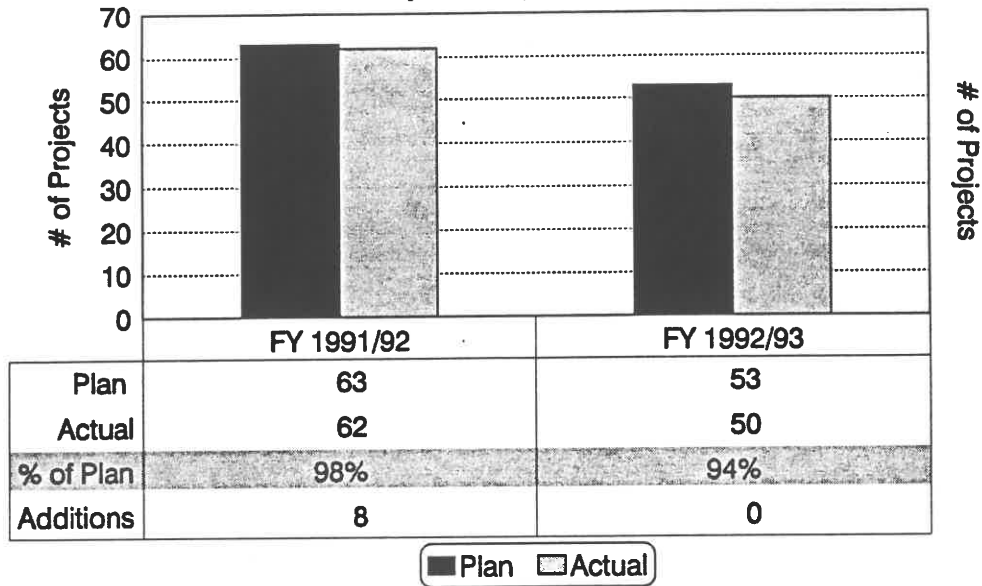
**Synopsis:** *The Department achieved 94% of plan, having let 50 of 53 highway capacity improvement projects planned for the year.*

**Comparison with FY 1991/92:**

- *The plan for FY 1992/93 was 16% smaller than that in FY 1991/92. Achievement of plan was 4% lower in FY 1992/93 than in FY 1991/92.*

## CAPACITY IMPROVEMENT PROJECTS HIGHWAY

# of Projects By Fiscal Year



New corridor construction and major reconstruction projects adding lanes.

**Narrative:** Public Transportation capacity improvements include airports, seaports, rail, bus transit, intermodal development (projects enhancing connectivity of various transportation modes) and commuter assistance (carpooling, vanpooling, park & ride, etc.).

The Department's role is generally limited to providing funding and technical support. Public transportation facilities and, therefore, projects to improve facility capacity are, with few exceptions, owned and operated by local government or private-sector entities, with state assistance limited to grants, other funding assistance and technical support.

### *Capacity Improvements Public Transportation Modes*

Since the Department exercises little control over the timing and production readiness of public transportation capacity improvement projects, the following secondary measure is used.

<i>Secondary Measure</i>	<i>Dollar Amount Committed to Public Transportation Capacity Improvement Projects vs. Dollar Amount Planned</i>
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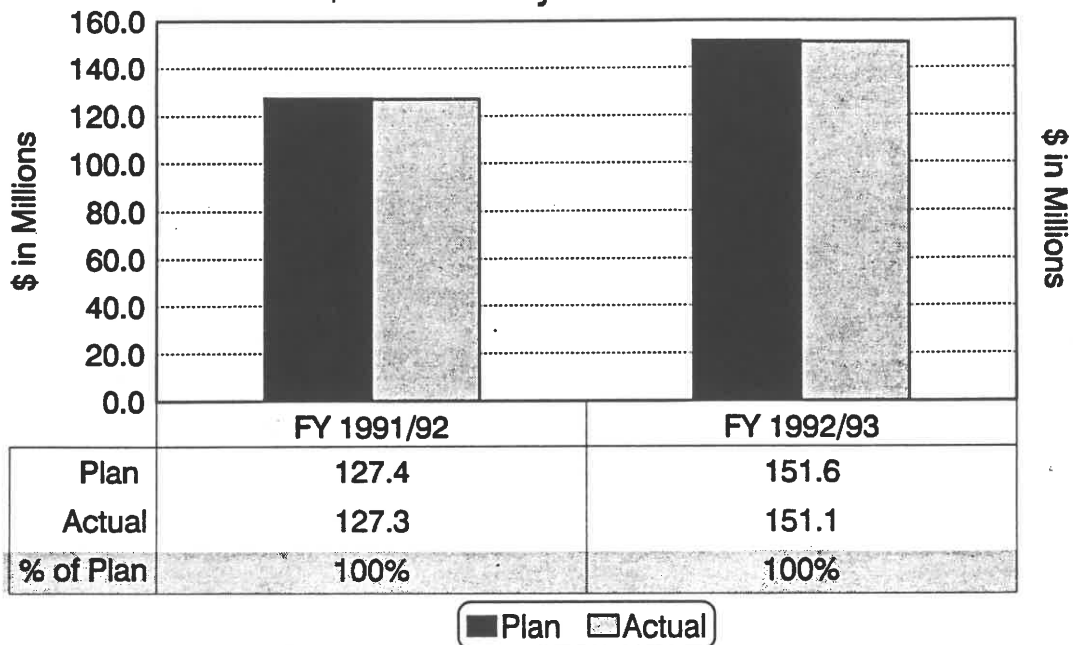
**Synopsis:** For FY 1992/93, the Department achieved 100% of plan, committing \$151.1 M. of a plan of \$151.6 M. in public transportation capacity improvement projects.

**Comparison with FY 1991/92:**

- The Department achieved 100% of plan in both years. The plan for FY 1992/93 was 19% bigger than the FY 1991/92 plan.

# **CAPACITY IMPROVEMENT PROJECTS PUBLIC TRANSPORTATION**

**\$ Amount By Fiscal Year**



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***DISADVANTAGED &  
MINORITY BUSINESS  
PROGRAMS***

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**Narrative:** Both Federal and State law address utilization of socially and economically disadvantaged business enterprises (DBE's) in Department contracts for construction of transportation facilities. Specifically, for all consultant and construction contracts which are in part funded with

federal aid, at least 10% of the total contract amount must be spent on small businesses owned and controlled by socially and economically disadvantaged individuals, as defined by law. Failure to attain this goal results in withholding of federal funds.

### ***Disadvantaged/ Minority Business Programs***

State law also provides maximum opportunity for increased participation by minority business enterprises (MBE's) in State purchases of commodities and contractual services. All agencies, including the Department, are subject to varying percentage goals geared to specific minority groups.

The Department, like all state agencies, is subject to state policy to provide the assurance of equal employment opportunity (EEO) through programs that will allow full utilization of women and minorities. The Department's 5-year Affirmative Action (AA) Plan outlines Department affirmative action goals and ensures that all employees are fully aware of their responsibilities in implementing the goals.

The Department has attained "employment parity" meaning simply that the percentage of female and minority employees mirrors the total percentage of females and minorities in the available labor market. Current goals of the Department are to achieve "economic parity," that is, to employ females and minorities in job classes where they previously have been under-represented.

<b>Primary Measure</b>	<b>Dollar Volume of Disadvantaged Business Enterprise Utilization as a Percentage of Total Federal Funded Contracts (10% Statutory Goal).</b>
<b>Indicator</b>	Progress Toward Economic Parity for Minorities and Females in the Eight Equal Employment Opportunity Categories; Reported as Goal vs. Actual.
<b>Indicator</b>	Progress Toward Attaining Statutory Goals for Individual Minority Business Categories in Four Work Type Areas; Reported as Goal vs. Actual.

*Synopsis: For all construction and consultant contracts financed in part by federal funds, DBE participation was 13.4%, exceeding the 10% goal.*

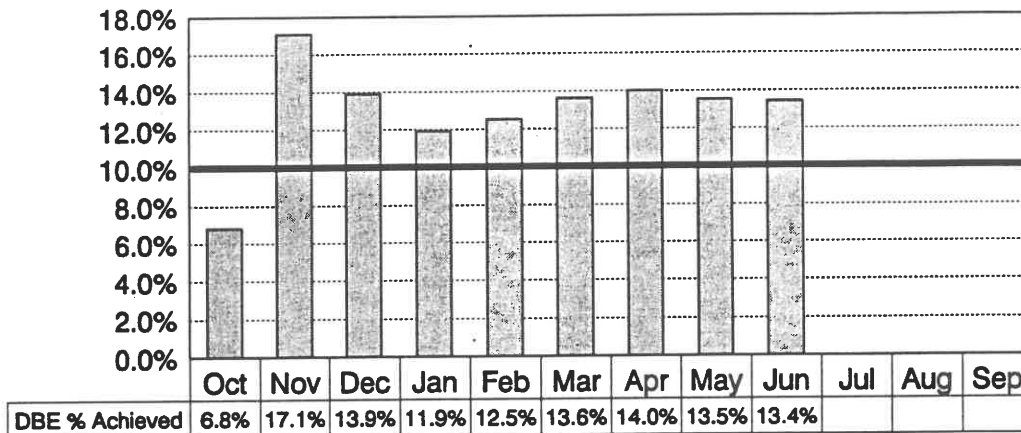
*For all consultant contracts (including 100% state funded), DBE participation was 13.1%.*

***Comparison with FY 1991/92:***

- *DBE participation rate for FY 1992/93 was 1.2% lower than in FY 1991/92 for all construction and consultant contracts financed in part by federal funds.*
- *DBE participation rate for FY 1992/93 was 3.4% higher than in FY 1991/92 for all consultant contracts.*

## DBE ACHIEVEMENT ON EXECUTED FEDERAL FUNDED CONTRACTS

*FY 1992/93*



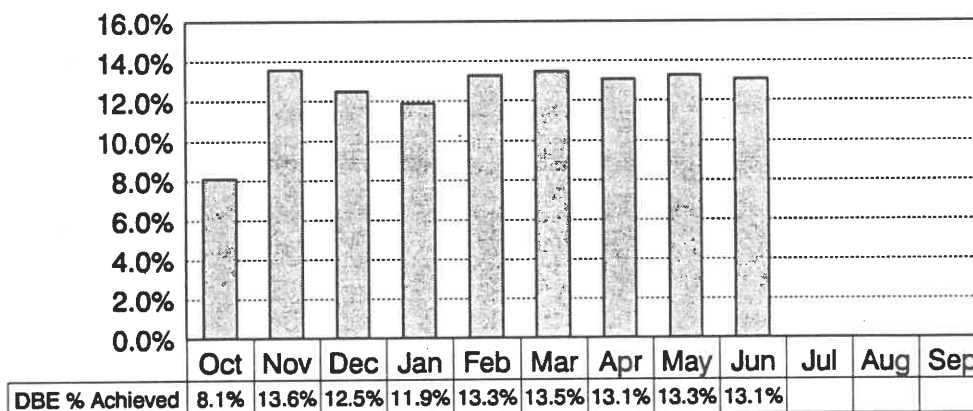
■ DBE % Achieved

Cumulative Plot

Total Executed \$530.0 million  
Total DBE \$71.0 million

## DBE ACHIEVEMENT ON ALL EXECUTED CONSULTANT CONTRACTS

*FY 1992/93*



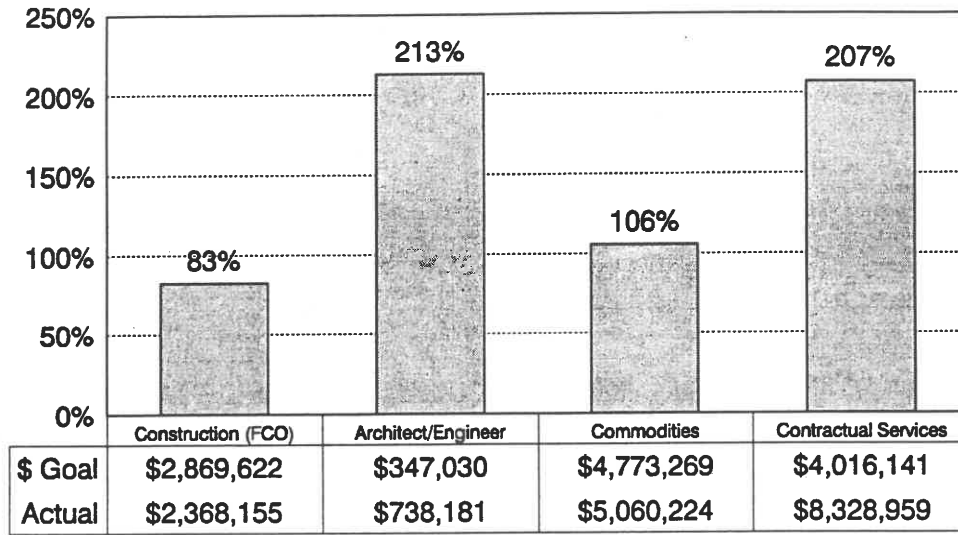
■ DBE % Achieved

Cumulative Plot

Total Executed \$298.3 million  
Total DBE \$39.2 million

## MINORITY BUSINESS ENTERPRISE EXPENDITURES - FY 1992/93

*By Category*



Total Goal            \$12,006,062  
 Total Actual        \$16,495,519  
 Total % of Goal     137%

% of Goal

### Female Economic Parity

Categories	Goal	Current # of Employees	Over/(Under) Goal
Officials/Administrators	52	19	(33)
Professionals	771	996	225
Technical Services	394	432	38
Protective Services	19	18	(1)
Para-Professionals	104	117	13
Office/Clerical	1,562	1,583	21
Skilled Craft	27	32	5
Service/Maintenance	230	225	(5)

### Minority Economic Parity

Categories	Goal	Current # of Employees	Over/(Under) Goal
Officials/Administrators	17	21	4
Professionals	406	703	297
Technical Services	178	396	218
Protective Services	27	51	24
Para-Professionals	61	48	(13)
Office/Clerical	401	748	347
Skilled Craft	120	191	71
Service/Maintenance	563	707	144

*QUALITY INITIATIVES*  
&  
*COST-SAVING PROGRAMS*

Not only is it important that the Department perform the road and bridge projects it has committed to in the work program and move them through design, right-of-way acquisition and construction according to schedule, it is equally important that

the resulting product be a quality one, using the best engineering knowledge and materials available. It is essential that the Department have in place, provide strong management support to, and give continuing priority to, programs whose purpose is improvement of transportation products and the standards, procedures, and decision-making processes that support production activities.

### *Quality Initiatives & Cost-Saving Programs*

Although the programs that follow are considered essential to quality performance and continual improvement, the success of these programs collectively is not amenable to pure quantitative measurement.

Value Engineering (VE) uses multi-disciplinary teams (design engineer, construction engineer, maintenance engineer, right-of-way agent, etc.) to evaluate significant projects and determine if, strictly from an engineering standpoint, the same

## *Value Engineering*

quality product can be achieved at less cost. If potential cost savings are identified, recommendations are made to the District Secretary. The District Secretary sometimes elects not to implement a VE recommendation due to non-engineering factors (e.g., a cost-saving design change might be rejected due to an adverse impact on the community).

Where possible, improvements made as a result of VE reviews are incorporated as standard business practice and may involve permanent revisions to the Department's standard specifications and design standards.

During FY 1992/93, a total of 85 projects were reviewed by VE teams, a 25% increase over FY 1991/92. Of the total recommendations generated by the reviews, 39% were implemented, for a total cost savings of \$111.6 Million. By contrast with the savings, the cost of administering the VE Program is \$0.9 Million annually. Fiscal year 1992/93 savings are the most ever achieved in any one year and are a 90% increase over FY 1991/92 savings.

Indicator	Savings attributable to VE reviews vs. cost of administering VE program.
Indicator	Number of projects reviewed by VE vs. planned for review.
Indicator	Percent of VE recommendations implemented,
Indicator	Number of implemented VE recommendations that result in permanent revisions to Department standards and specifications.



The Department of Transportation is a decentralized agency in which the central office establishes policies, standards and procedures, and seven district offices are responsible for implementation. Florida law requires the central office to monitor

## *Quality Assurance*

implementation of policies and procedures in order to ensure uniform compliance and quality performance by the districts. To fulfill these needs, the Department initiated the Quality Assurance (QA) Program in FY 1990/91. The QA program's purposes are twofold: to assure a level of uniformity in procedures among the seven Department district offices and Turnpike Office; and to provide a framework within which procedures are improved and streamlined.

The QA program is essential to achieving and maintaining the necessary degree of uniformity in a decentralized agency such as the Department. The public, transportation industry, local governments, etc., have a legitimate expectation that, for example, the Miami District Office and the Lake City District Office will respond similarly when articulating and implementing Department policy on a given matter.

Development of indicators for the QA program were deferred pending further Department experience with the QA process. During FY 1993/94, indicators will be developed and recommended to the Commission. However, since initial implementation of the QA program, the Department has monitored the percentage of non-compliance per QA review conducted. Based on a total of 597 reviews conducted, data indicates that non-compliance per review has steadily declined each year, with the result that consistency of products and services delivered to the customer has improved.

The benefits of relevant, quality research include economic savings from improved materials and engineering technology, but also go beyond immediate, practical results by providing policy options and alternatives that assist in successfully

## *Research*

addressing the complex transportation issues of the future. The Department's Research Program is managed in the Central Office and for FY 1992/93, had a budget of about \$7.7 million (about 0.2% of the total Department budget for the year). This is slightly over twice the research budget for FY 1991/92.

During FY 1992/92, 23 new research projects were funded and started, from a total of 36 funding requests. A total of 16 final reports were accepted by project managers during the year, with 6 of those, or 37% having been implemented during the period. Documented benefits included time savings, dollar savings, cost avoidance, quality improvement and validation of assumptions.

Indicator	Percent of final reports accepted by project managers.
Indicator	Percent of accepted recommendations implemented and benefits received.
Indicator	Studies planned vs. actual (starts, finished).
Indicator	Research opportunities acted on.
Indicator	Percent of budget spent on research.

In 1991, the Department initiated Pre-Construction Partnering, a structured method of bringing key project managers together to set complementary, shared goals for the project. Partnering fosters a climate in which project-related issues are

### *Pre-Construction Partnering*

discussed and resolved at the lowest practical level of responsibility. A typical partnering group includes Department employees, federal highway employees, contractors, sub-contractors, local government representatives and utility companies. Key goals of Partnering are creation of a cooperative team spirit, trust among members of the "construction team," and a step-by-step problem identification and resolution process -- all aimed at reducing the number and complexity of disputes during the project. Indeed, the Department reports that the number of claims filed by contractors has decreased substantially; however, data is insufficient to warrant conclusions.

In addition to direct benefits such as timely decision-making and improved accountability and delegation of authority for decisions, Partnering has been credited with a "spin off" cost-saving result: a substantial increase during FY 1992/93 in savings from Value Engineering Change Proposals (VECPs). These are cost-saving proposals submitted by contractors which, if approved by the Department for implementation on the project, result in savings to the Department and the contractor, who receives one-half of the savings. During FY 1992/93, total savings from VECPs were almost \$2.9 million, almost four times the previous 4-year average of \$724,000.

In FY 1990/91, the Department instituted a critical quality control and quality improvement initiative: Post-Construction Review of Transportation Facilities. Following project completion, a multi-disciplinary department team evaluates the project,

## *Post-Construction Reviews*

identifies opportunities for improvement and develops methods to incorporate improvements in future projects. These reviews ensure continual improvement of transportation products and the processes by which they are planned, designed and constructed.

During FY 1992/93, a total of 40 post-construction reviews were conducted, resulting in 104 improvements that have been replicated in future projects. Moreover, eleven (11) improvements were identified as being of statewide significance and have resulted in permanent revisions to standards or operational processes.

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***EXTERNAL  
RELATIONS***

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**Narrative:** Florida's citizenry and, to a lesser extent, her visitors, underwrite the cost of construction and preservation of the State Transportation System primarily through payment of gas taxes and motor vehicle registration fees, the two largest revenue sources dedicated to transportation purposes.

## *External Relations*

Members of the public, by virtue of their status as transportation taxpayers, are the Department's customers. They pay for, and in turn, expect to receive quality products and services from the Department. Their perceptions, views and direct experiences with Department products and employees are important features of the comprehensive performance assessment process.

A survey instrument is the most appropriate means for evaluating customer satisfaction with the Department. Such a survey should have three components, each geared to a different degree of customer interaction with the Department.

The first component would focus on public perception of the transportation system generally, including condition and adequacy of the system, transportation problem identification and prioritization, perceptions regarding traffic congestion and use of public transportation.

The second component would assess the working relationships of the transportation community with the Department. The focus would be on how well the Department carries out its various statutory obligations and partnership strategies promoting coordination of transportation planning and project activities with local governments, metropolitan planning organizations, community transportation groups, regional planning councils, etc.

The third survey component would target specific Department programs or activities that involve direct contact with members of the public and would assess how well the Department provided the service or administered the regulatory activity. Included in this category would be toll collection, access (driveway) permits, outdoor advertising permits/logo program, adopt-a-highway program, highway beautification, wildflower program, and oversize/overweight vehicle permits, etc.

Survey results would be used by the Department to improve working relationships and provision of services where indicated.

Indicator	Three-pronged customer survey performed and reported as part of the Year-End Performance and Productivity Report.
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