Value Engineering Annual Report FY 2014/2015



Table of Contents

Executive Summary 1
Program Organization
Value Engineering (VE) Overview
Cost Savings Initiative (CSI) Overview
FY 2014/2015 VE Performance Measures
Adopted Recommendations7
Adoption Rates
Percent Project Saved 10
Percent Program Saved11
Return on Investment
Work Plan Completion
Pending Recommendations
FY 2014/2015 CSI Performance Measures15
CSI Summary 16
CSI Approved Savings 17
CSI Percent Project Saved 18
CSI Percent Program Saved 19
Appendix: Process Control Systems 53

Executive Summary

Value Engineering During Project Development

The districts conducted 31 studies or 141% of the original number of studies scheduled for fiscal year 20014/2015. The original work plan had 22 studies scheduled for the year and the target was to complete 75% or 17 of the planned studies. Due to the dynamics of the department's work program, 4 of the 22 scheduled studies (18%) were either dropped from the work plan altogether or rescheduled for the 2015/2016 fiscal year, while 13 of the conducted studies were added to the original work plan.

During this same period, the districts acted on 262 recommendations, approving 132 for a 50% adoption rate. One Hundred ten of the approved recommendations resulted in \$334.0 million in project cost avoidance/savings. The remaining 22 approved recommendations were value added recommendations that increased project performance, while adding \$120.2 million to the project cost. Therefore, the total value of the approved recommendations, including the value added recommendations, produced **\$213.8 million in project cost avoidance/savings**.

The approved recommendations resulted in a 8.14% project saved, 14.04% program saved and a Return on Investment (ROI) of \$139 to \$1. The percent project saved is calculated by dividing the value of all approved recommendations by the total costs of the projects studied, while the percent program saved is calculated by dividing the value of all approved recommendations by the average project cost of three fiscal year lettings. The ROI is calculated by dividing the value of all approved recommendations by the cost of administering the program.

There were 75 pending recommendations totaling \$263.6 million in potential cost avoidance/ savings at the end of the 2014/2015 fiscal year. Thirty-eight of the 75 recommendations have been pending for more than 12 months, which is 51% of the total number of pending recommendations. Since the VE Study is a 'snapshot' of the project at some point in time of project development and projects are continuously moving forward in development, this is a concern. The longer recommendations are unresolved and in a pending status the less likely that they will be adopted because the development of the project has advanced.

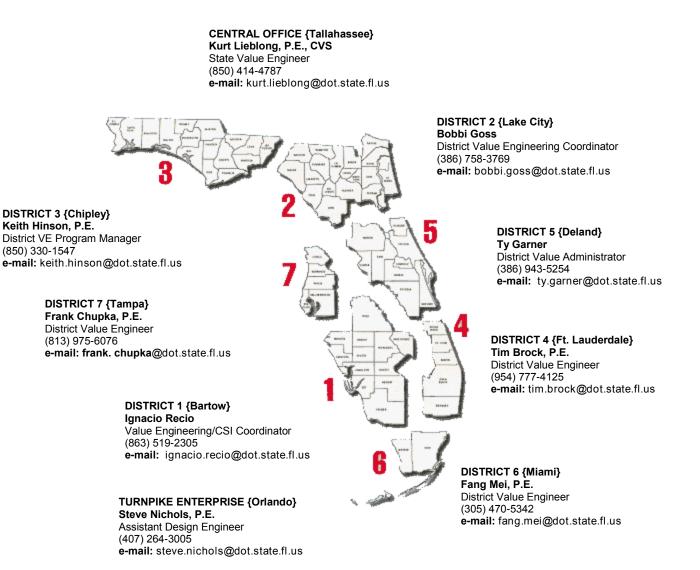
Cost Savings Initiatives During Construction

Forty-five Cost Savings Initiative (CSI)'s) Proposals were submitted during fiscal year 2014/2015. During this same period, the districts acted on 57 proposals totaling more than \$8.76 million and approving 46 of the proposals. The implemented savings from the 46 approved CSI's was \$8.19 million. The approved CSI proposals resulted in a 0.36% project saved and a 0.34% program saved. There are currently 13 pending CSI's totaling \$3.31 million in potential project savings.

Program Organization

Mission: Administer the Florida Department of Transportation Value Engineering and Cost Savings Initiative Programs, satisfying the needs of the stakeholders.

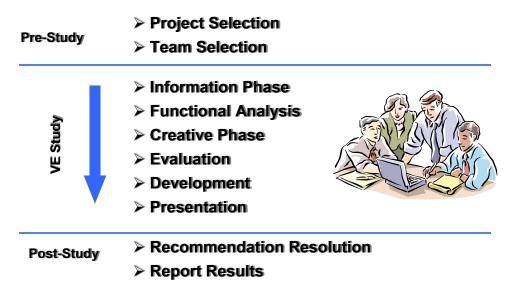
Vision: Value Engineering . . . providing an effective support function which maximizes project and process value for the transportation systems in the State of



Value Engineering Overview

What is Value Engineering

Value Engineering (VE) is the formal application of a proven and effective tool used to improve the value of a project, product or service. VE strives to optimize the use of allocated funds without reducing the quality or performance. A multi-disciplined team is assembled and the six phases of the VE Job Plan (Information, Functional Analysis, Creative, Evaluation, Development and Presentation) are used to guide the team through the process.



VE Job Plan

The administration of the VE Program can be broken down into the following key processes.

Pre-Study	Study	Post Study
Project Selection	Conduct VE Study	Recommendation Resolution
Team Selection		Report Results

Value Engineering Overview

Performance Measures

The VE Program and the Cost Savings Initiative (CSI) Program are managed through the use of the Process Control Systems found in Appendix B. Each process has a set of Quality and In-Process measures that are used to evaluate the performance of the program. The Quality Measures for the overall VE program are defined below.

VE Pro	ogram
Quality Measure	Calculation
Q1: Approved Cost Avoidance Recommendations	Sum of all approved cost avoidance/ savings recommendations
Q2: Approved Value Added Recommendations	Sum of all approved value added recommendations
Q3: Adoption Rate	# of Approved Recommendations # of Proposed Recommendations
Q4: Percent Project Saved	Value of Approved Recommendations Total Project Costs
Q5: Percent Program Saved	Value of Approved Recommendations 3 Year Monthly Average Lettings
Q6: Return on Investment (only reported annually)	Value of Approved Recommendations Total cost of VE Program

Cost Savings Initiative Overview

What is Cost Savings Initiative

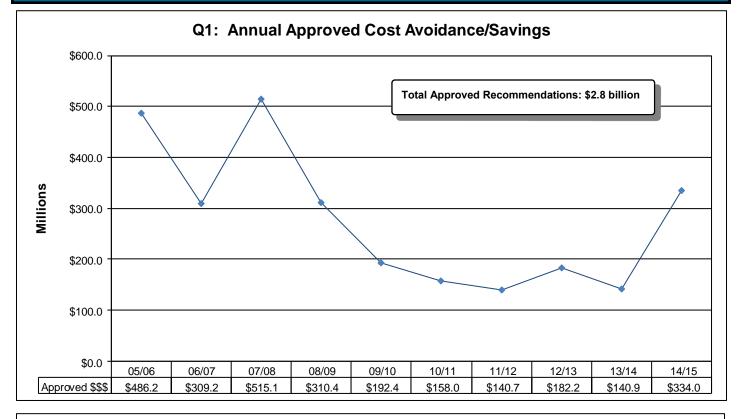
The Cost Savings Initiative Program offers an opportunity for the contractor to propose cost savings ideas prior to work beginning and as work progresses on a project. Contractors can demonstrate their innovation and ingenuity by proposing ideas that contribute to the cost effectiveness of the project. The contractors are then rewarded for this ingenuity and innovation by sharing in any project savings generated from an approved Cost Savings Initiative (CSI) proposal.

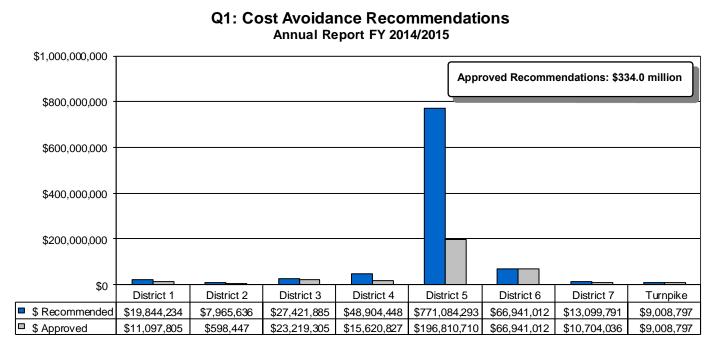
Performance Measures

CSI	Program
Q1: Number of CSI's	Sum of all CSI's
Q2: Approved Cost Savings	Sum of all approved CSI savings
Q3: Percent Project Saved	<u>Value of Approved Proposals</u> Total Project Costs
Q4: Percent Program Saved	Value of Approved Recommendations 3 Year Monthly Average Lettings

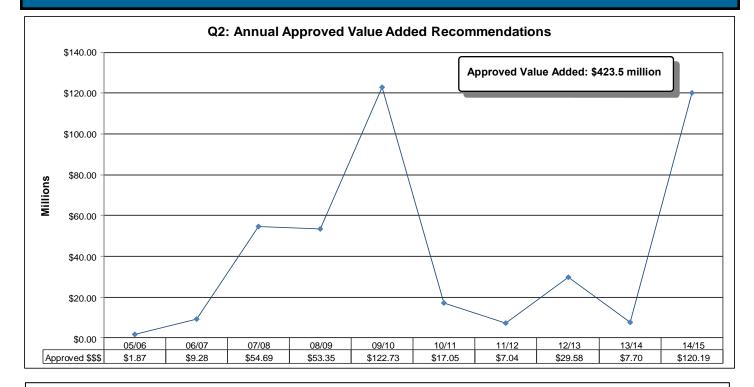
Fiscal Year 2014/2015 Value Engineering Performance Measures

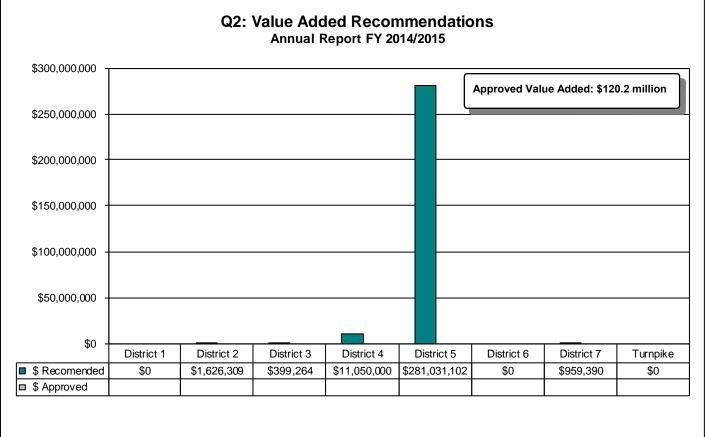
Adopted Recommendations



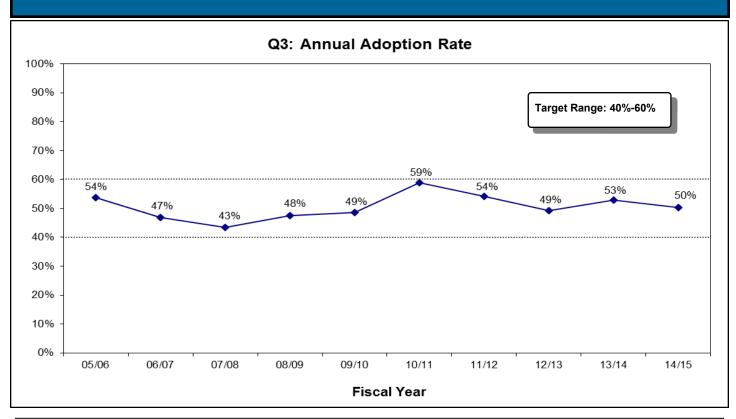


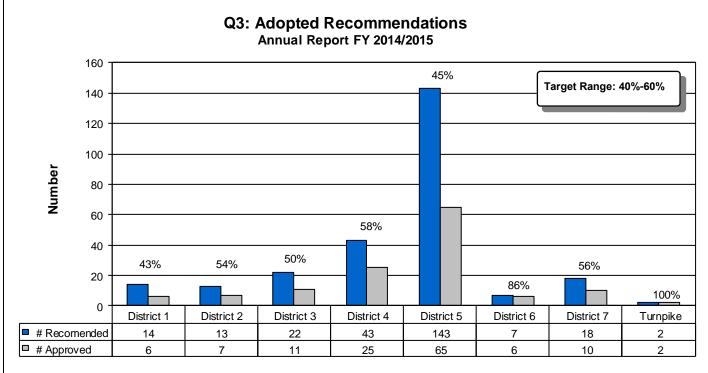
Adopted Recommendations





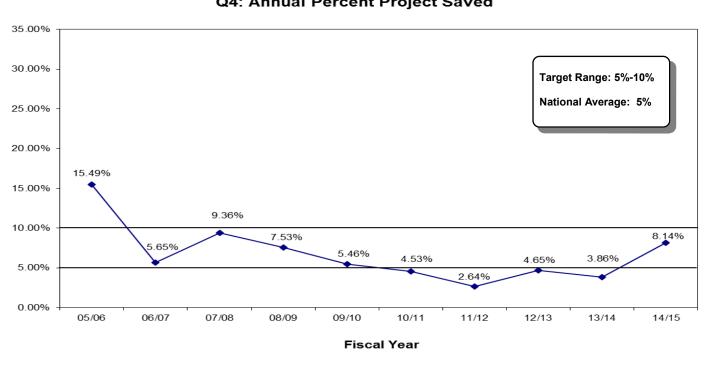
Adoption Rates



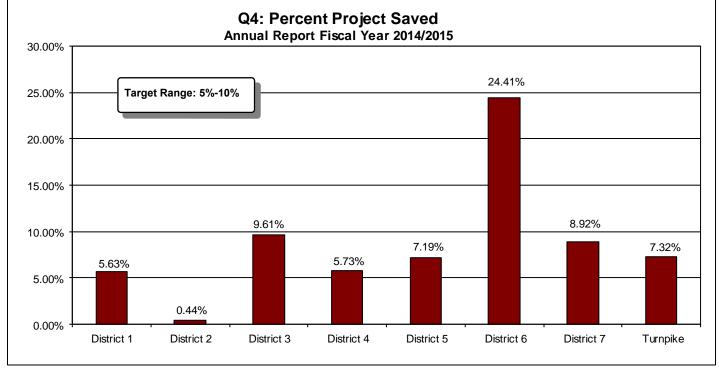


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Percent Project Saved

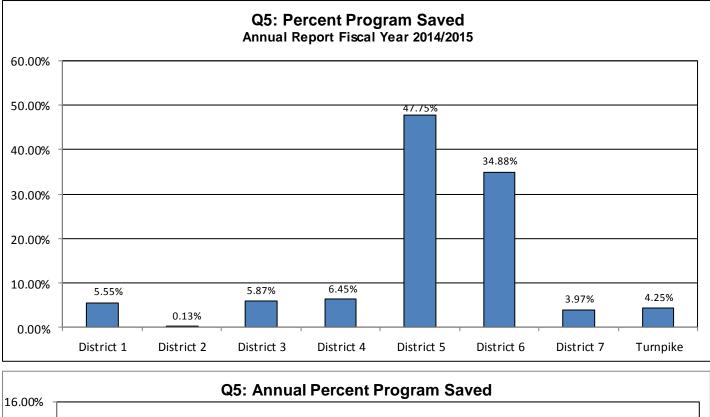


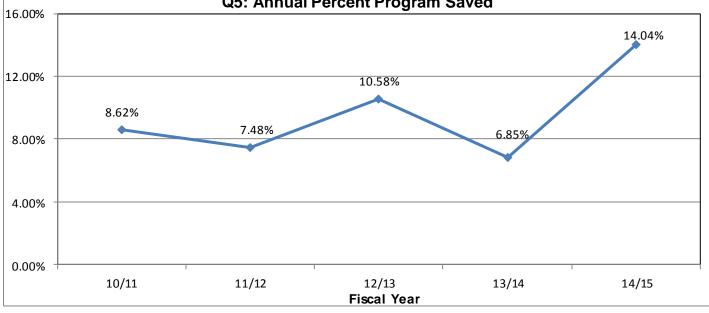
Q4: Annual Percent Project Saved



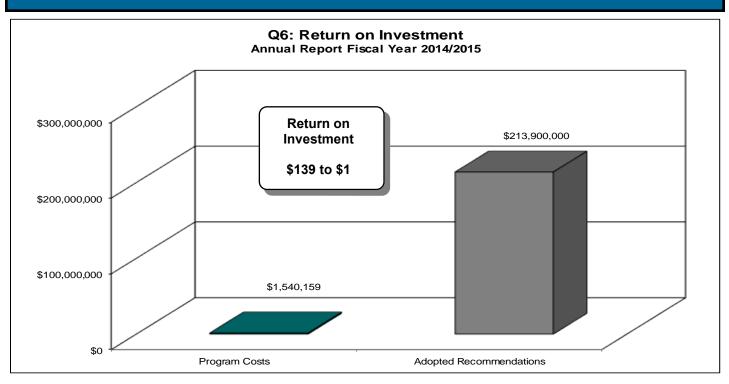
Percent Program Saved

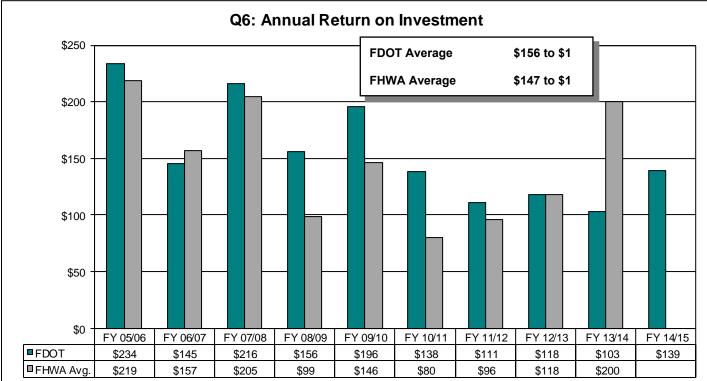
The Percent Program Saved is a new measure. The intent is to compare the cost avoidance/ savings to the overall work program. The measure is calculated by dividing the three year average monthly lettings into the overall cost avoidance/savings.





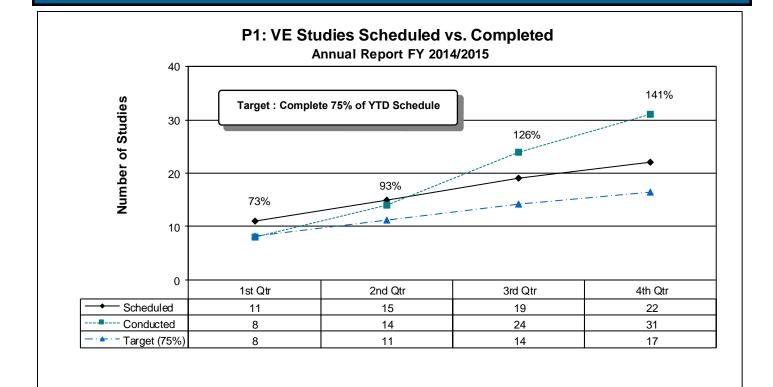
Return on Investment



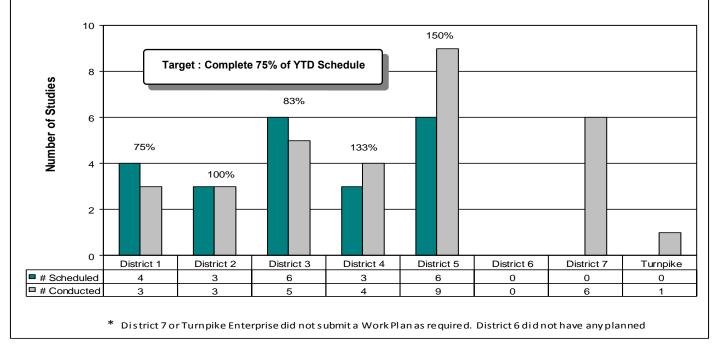


* FHWA data for fiscal year 2014/2015 was not available at time of publication.

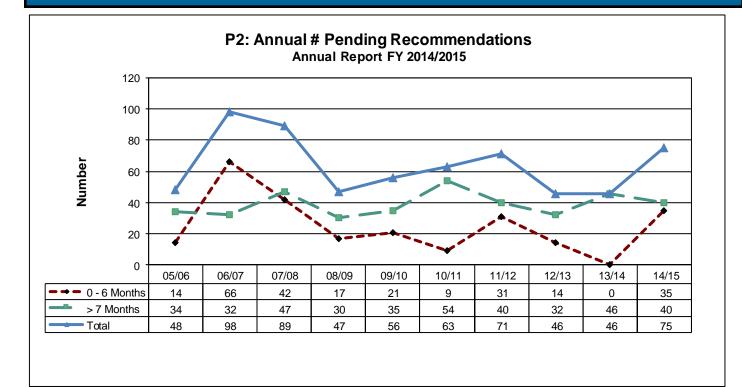
Work Plan Completion

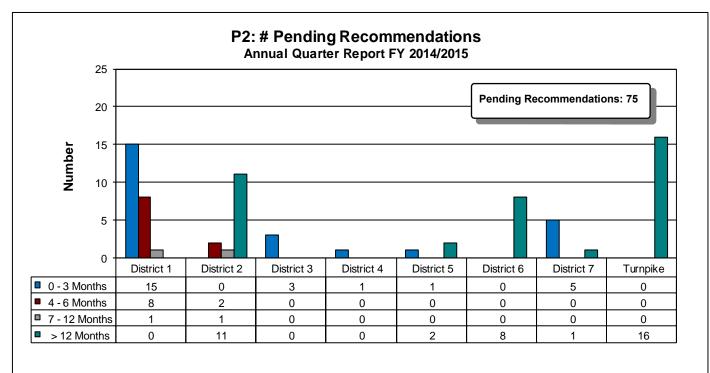


P1: VE Studies Scheduled vs Completed Annual Report FY 2014/2015



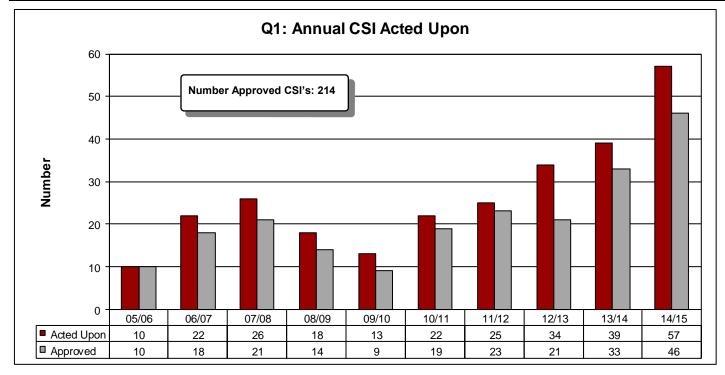
Pending Recommendations

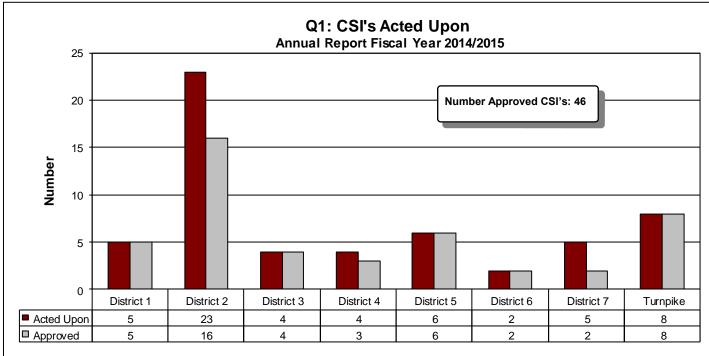




Fiscal Year 2014/2015 Cost Savings Initiative Performance Measures

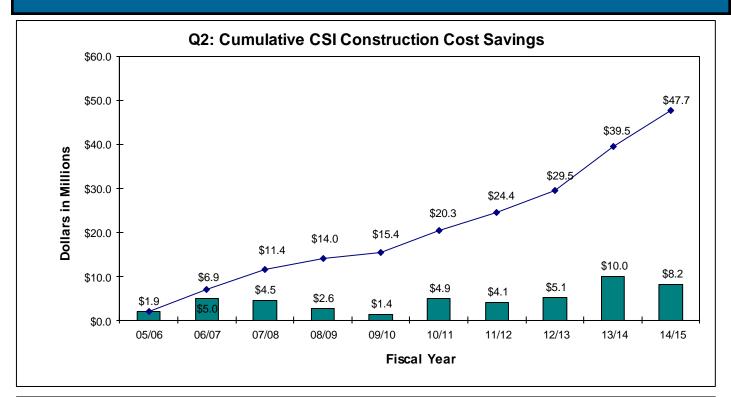
CSI Summary

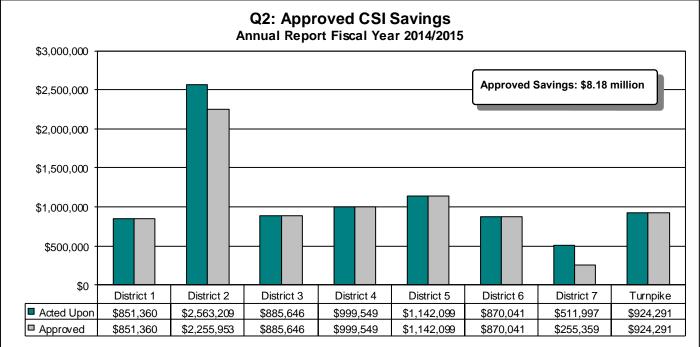




* Prior to fiscal year 2010/2011, Cost savings Initiatives (CSI) were formerly referred to as Value Engineering Change Proposals (VECP's).

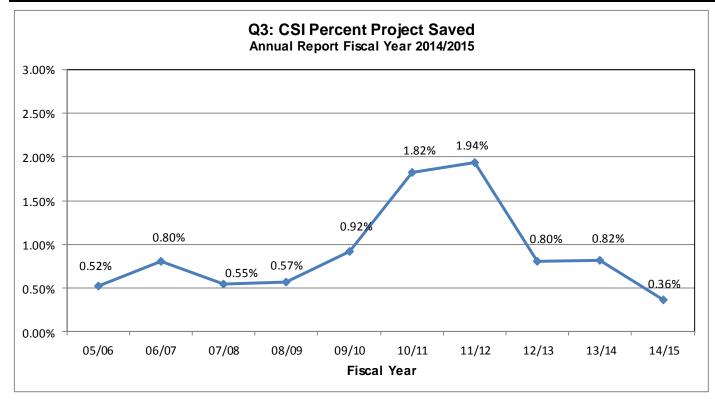
CSI Approved Savings

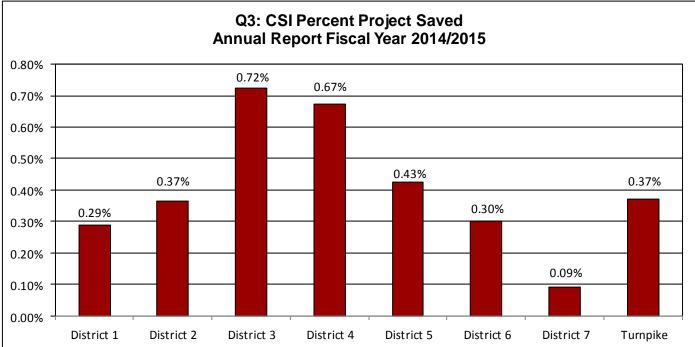




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CSI Percent Project Saved

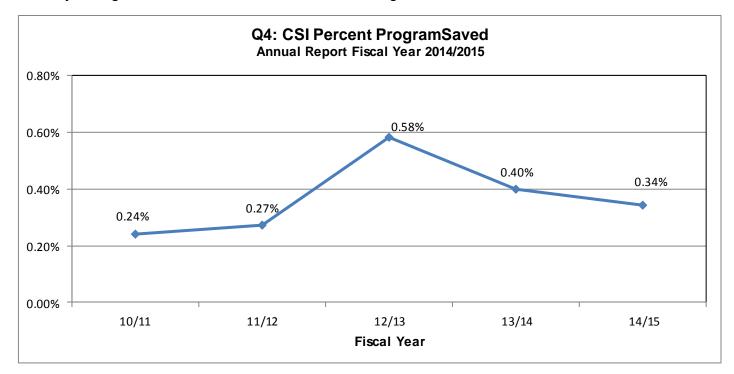


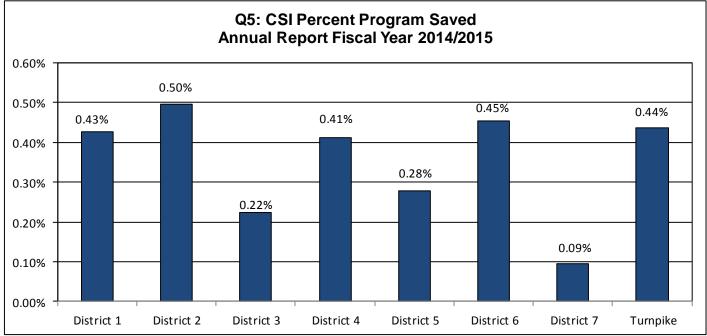


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CSI Percent Program Saved

The Percent Program Saved is a new measure. The intent is to compare the cost avoidance/ savings to the overall work program. The measure is calculated by dividing the three year average monthly lettings into the overall cost avoidance/savings.





Appendix Process Control Systems

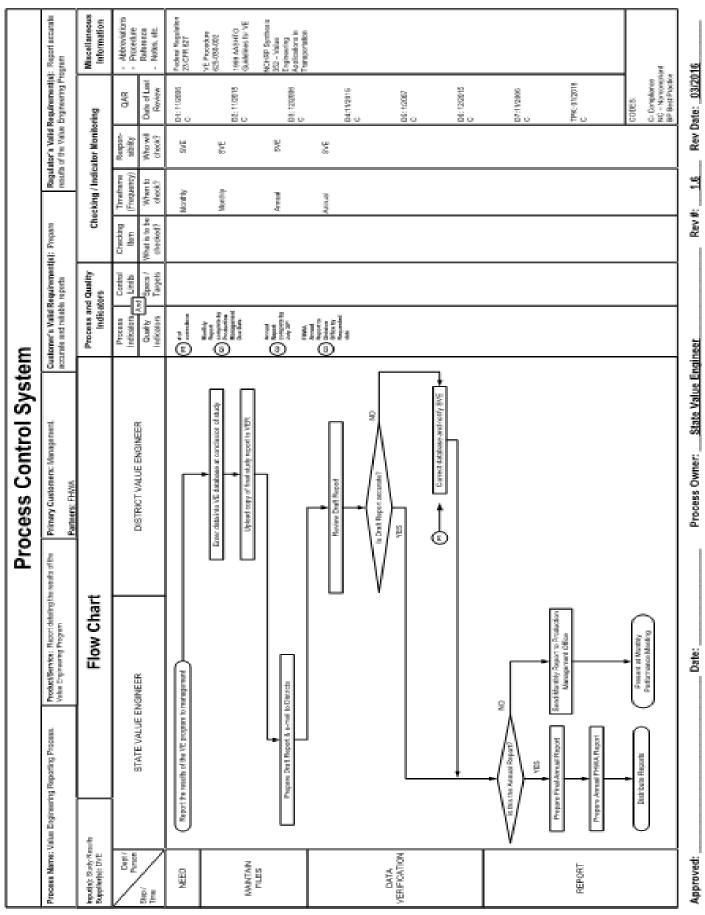
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