
**Value Engineering
Annual Report
FY 2011/2012**



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Executive Summary

Value Engineering During Project Development

The districts completed 21 studies or 56% of the original number of studies scheduled for fiscal year 20011/2012. The original work plan had 39 studies scheduled for the year and the target was to complete 75% or 29 of the planned studies. Due to the dynamics of the department's work program, 21 of the 39 scheduled studies (54%) were either dropped from the work plan altogether or rescheduled for the 2012/2013 fiscal year, while five of the completed studies were added to the original work plan.

During this same period, the districts acted on 144 recommendations, approving 78 for a 54% adoption rate. Sixty-six of the approved recommendations resulted in \$140.7 million in project cost avoidance/savings. The remaining 12 approved recommendations were value added recommendations that increased project performance, while adding \$7 million to the project cost. Therefore, the total value of the approved recommendations, including the value added recommendations, produced **\$133.7 million in project cost avoidance/savings**.

The approved recommendations resulted in a 2.64% project saved, 7.48% program saved and a Return on Investment (ROI) of \$111 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 71 pending recommendations totaling \$312.2 million in potential cost avoidance/savings at the end of the 2011/2012 fiscal year. This is a 12.7% increase in the total number of pending recommendations from the end of the 2010/2011 fiscal year. Twenty-two of the 71 recommendations have been pending for more than 12 months, which is more than 30% 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

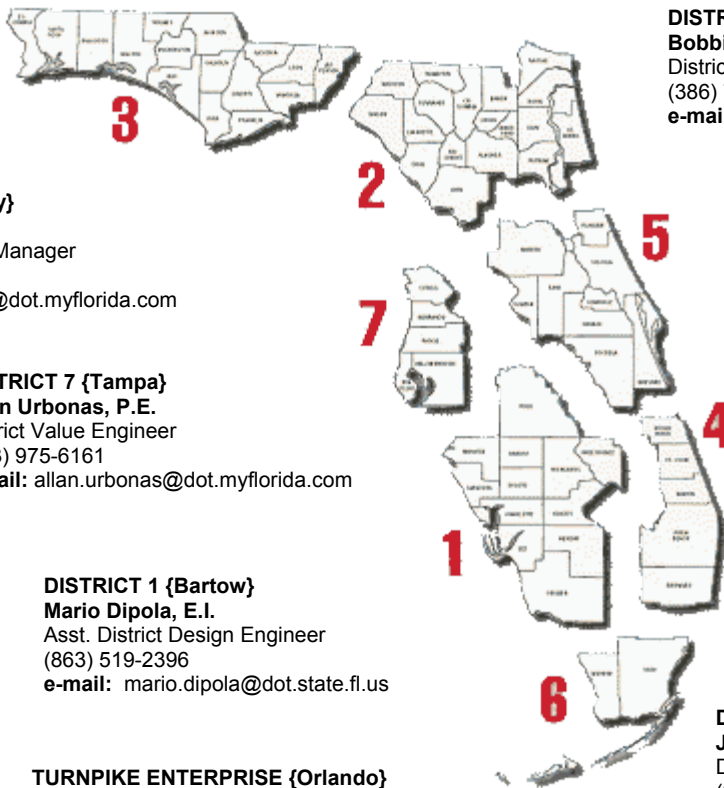
Twenty-seven Cost Savings Initiative (CSI's) Proposals were submitted during fiscal year 20011/20012. During this same period, the districts acted on 24 proposals totaling more than \$4.2 million and approving 22 of the proposals. The implemented savings from the 22 approved CSI's was \$4.12 million. The approved CSI proposals resulted in a 1.85% project saved and a 0.21% program saved. There are currently seven pending CSI's totaling \$2.26 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 Florida.

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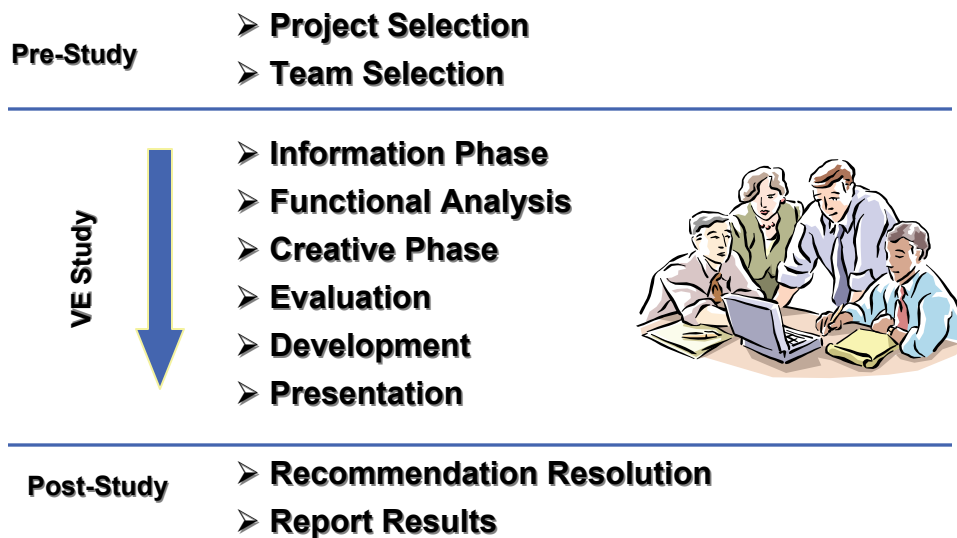
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Value Engineering Overview

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 Program	
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	$\frac{\# \text{ of Approved Recommendations}}{\# \text{ of Proposed Recommendations}}$
Q4: Percent Project Saved	$\frac{\text{Value of Approved Recommendations}}{\text{Total Project Costs}}$
Q5: Percent Program Saved	$\frac{\text{Value of Approved Recommendations}}{\text{3 Year Monthly Average Lettings}}$
Q6: Return on Investment (only reported annually)	$\frac{\text{Value of Approved Recommendations}}{\text{Total cost of VE Program}}$

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.

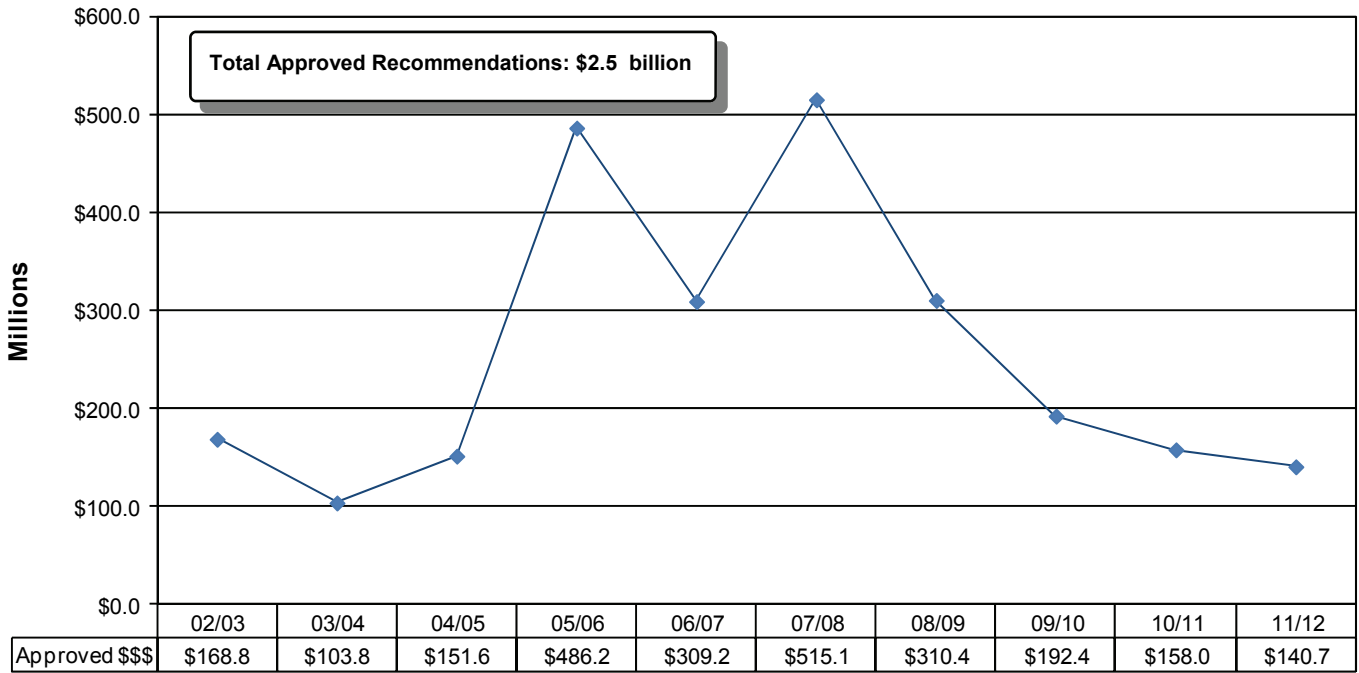
Performance Measures

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	$\frac{\text{Value of Approved Proposals}}{\text{Total Project Costs}}$
Q4: Percent Program Saved	$\frac{\text{Value of Approved Recommendations}}{\text{3 Year Monthly Average Lettings}}$

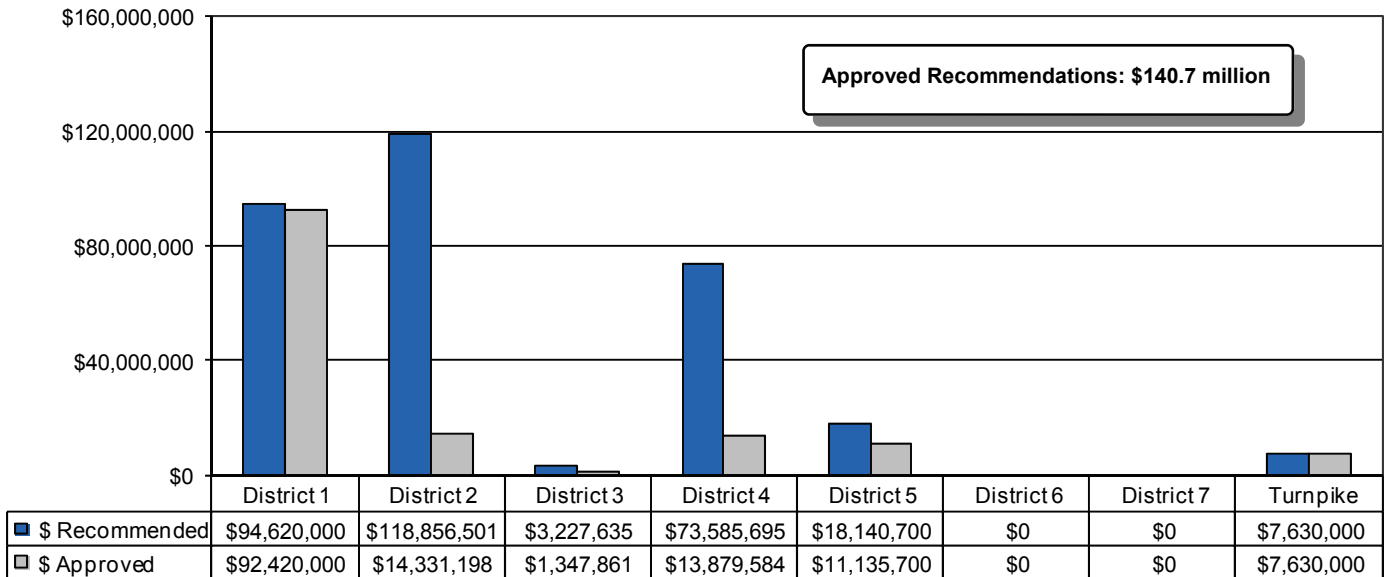
**Fiscal Year 2011/2012
Value Engineering
Performance Measures**

Adopted Recommendations

Q1: Annual Approved Cost Avoidance/Savings

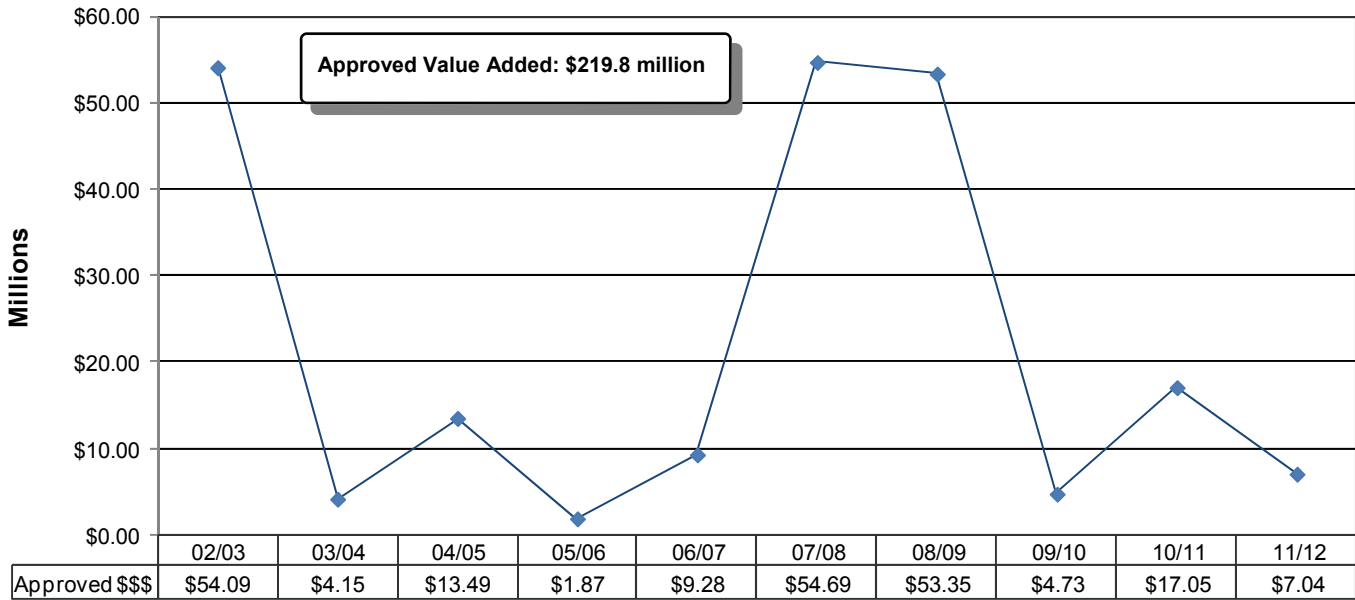


Q1: Cost Avoidance Recommendations Annual Report FY 2011/2012

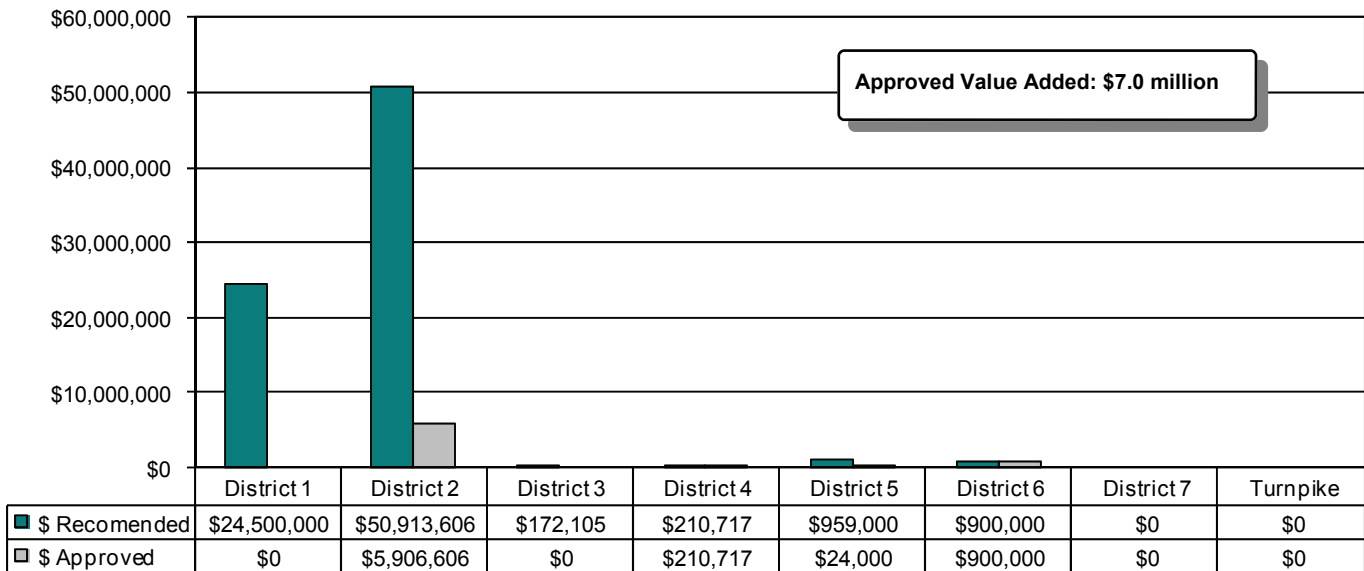


Adopted Recommendations

Q2: Annual Approved Value Added Recommendations



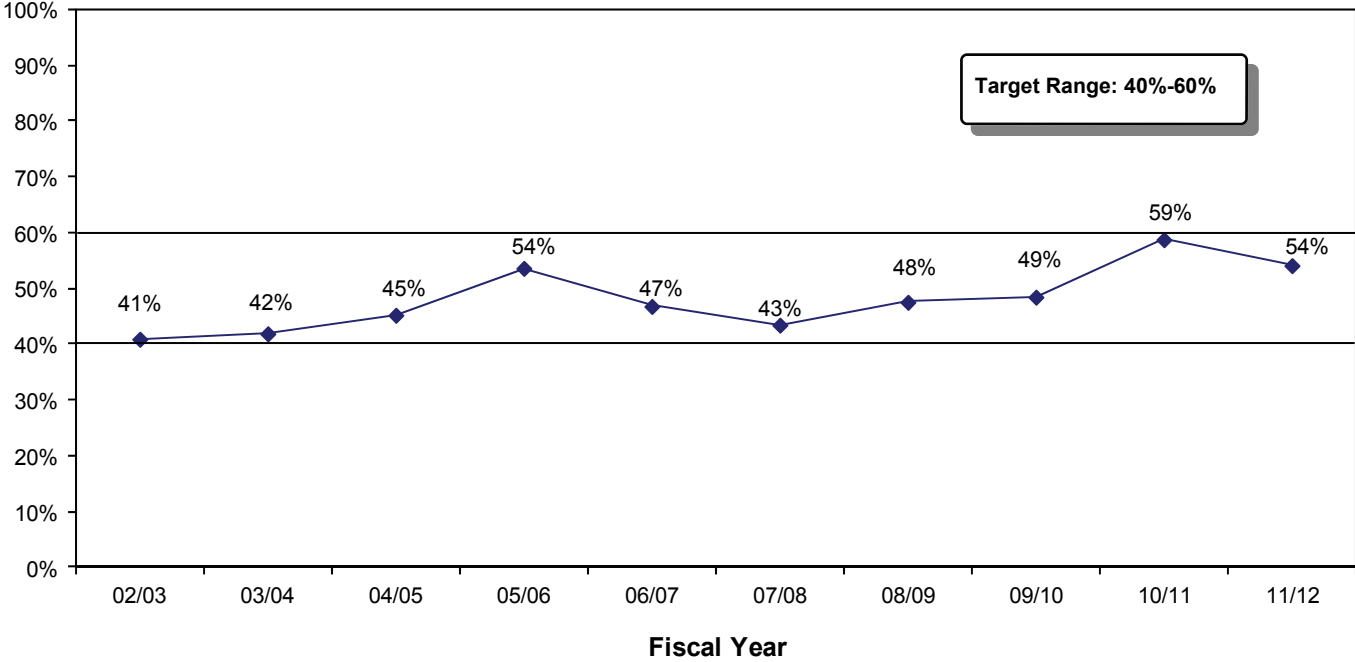
Q2: Value Added Recommendations Annual Report FY 2011/2012



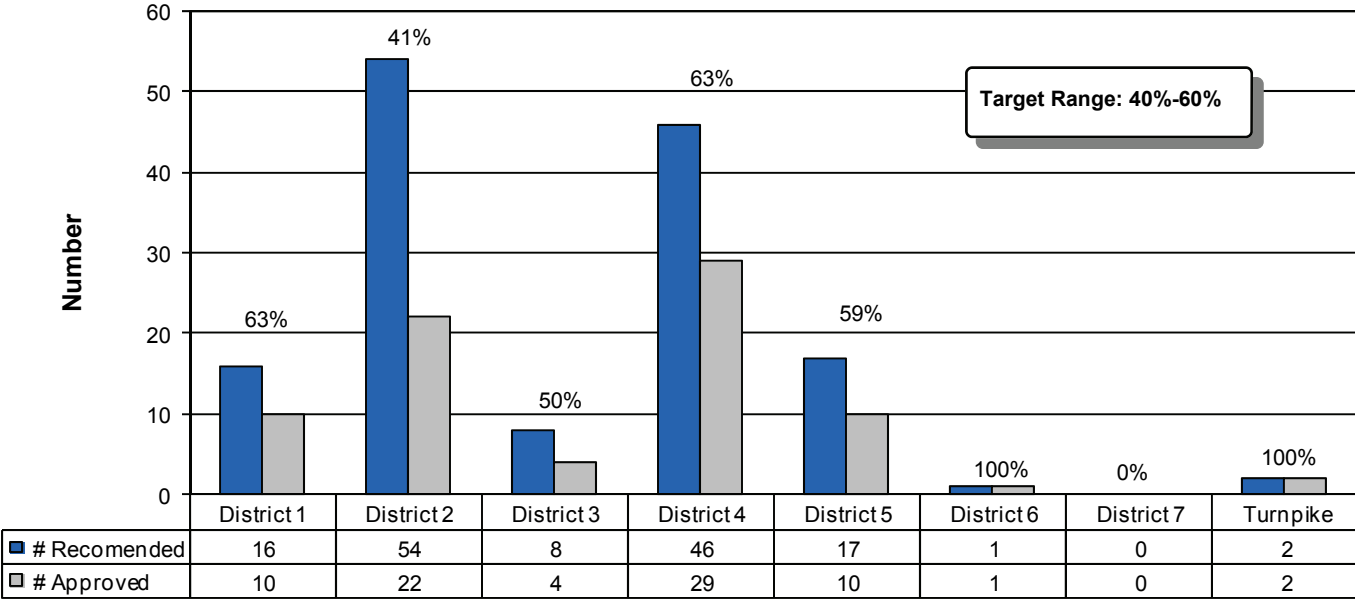
* A Value Added Recommendation significantly increases the performance of a function while also increasing the cost.

Adoption Rates

Q3: Annual Adoption Rate

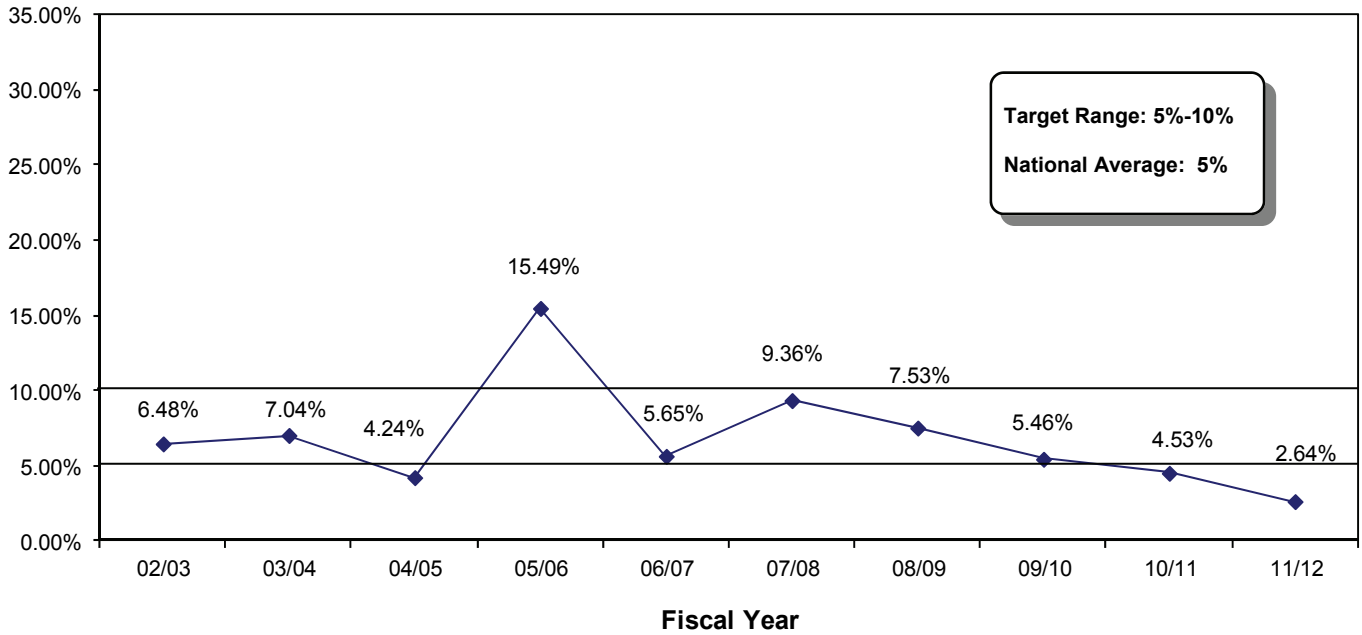


**Q3: Adopted Recommendations
Annual Report FY 2011/2012**

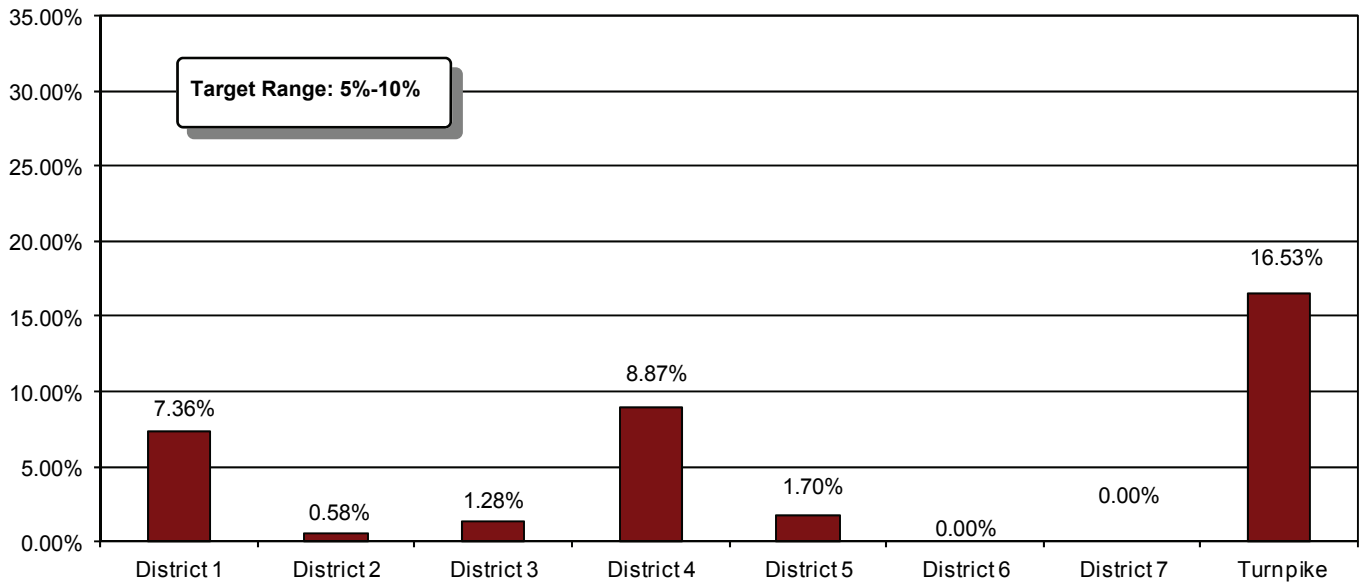


Percent Project Saved

Q4: Annual Percent Project Saved

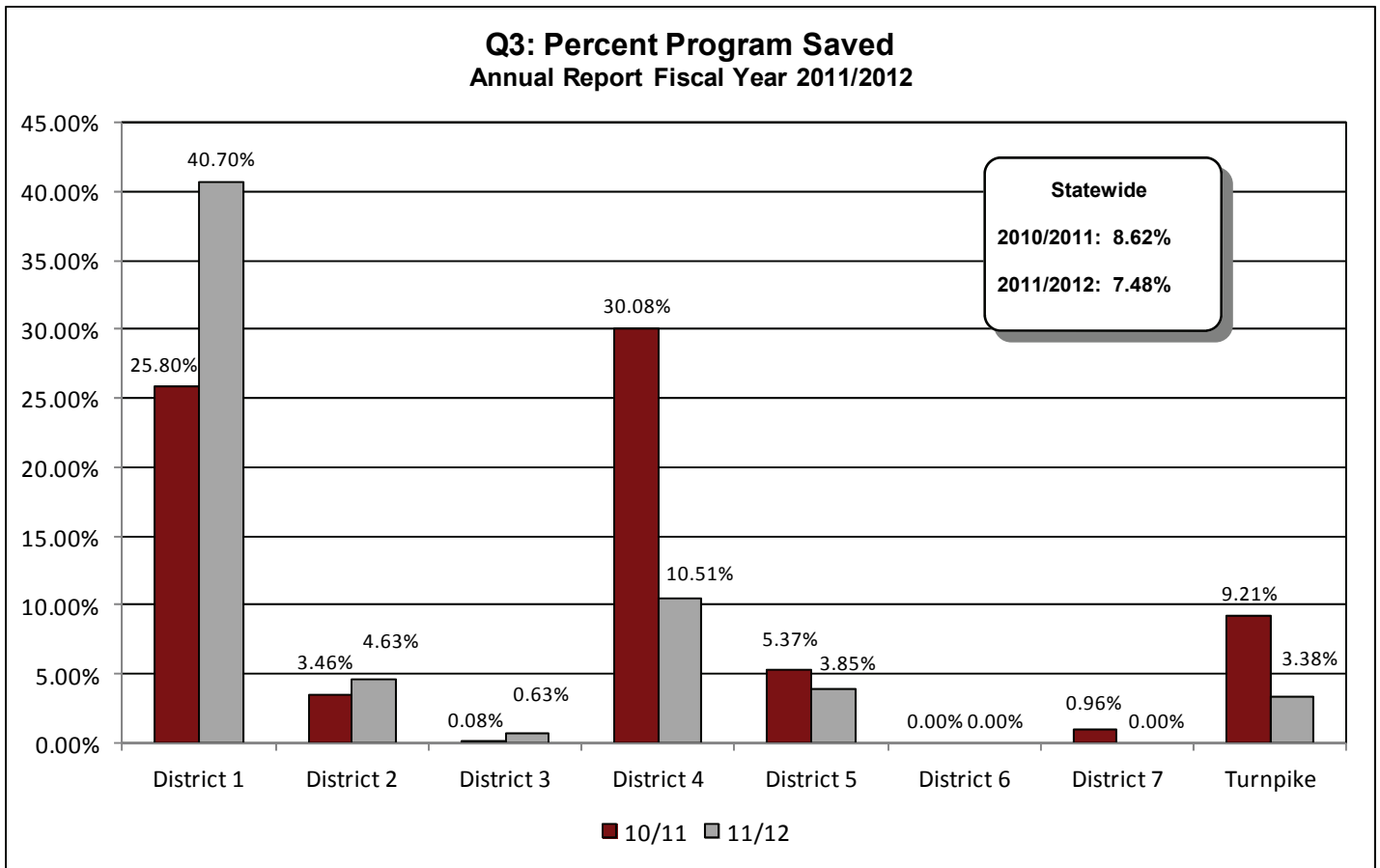


Q4: Percent Project Saved Annual Report Fiscal Year 2011/2012



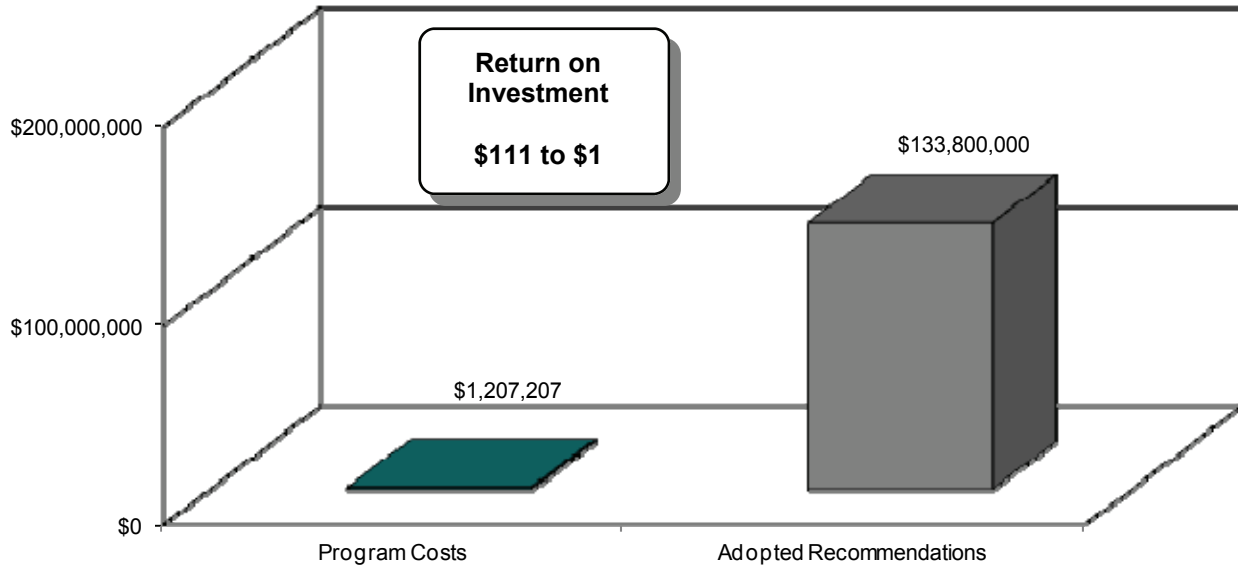
Percent Program Saved

The Percent Program Saved is a new measure introduced last year. 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. Line charts showing trends will be developed in future years as data becomes available.

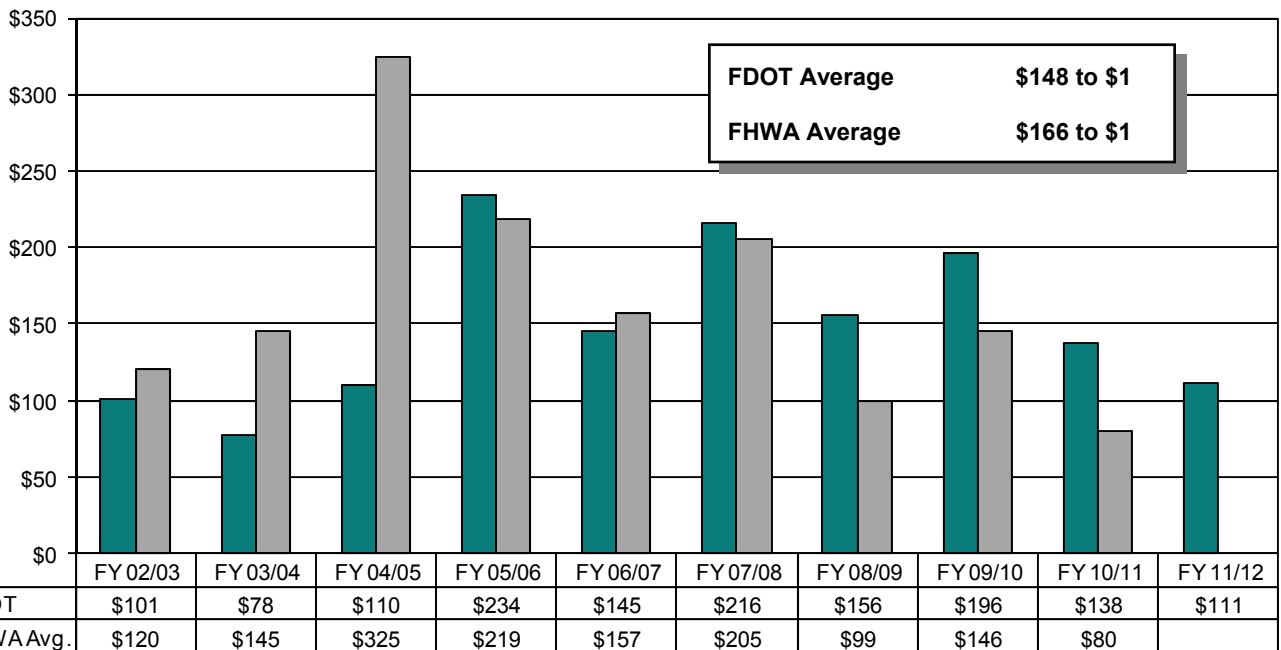


Return on Investment

Q5: Return on Investment
Annual Report Fiscal Year 2011/2012



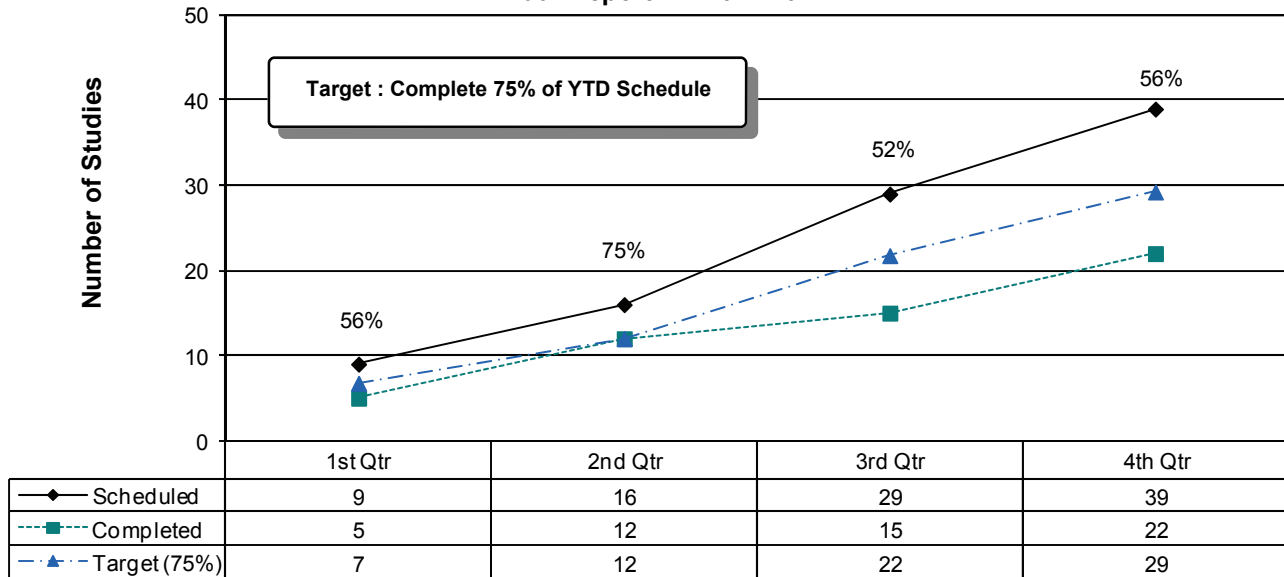
Q5: Annual Return on Investment



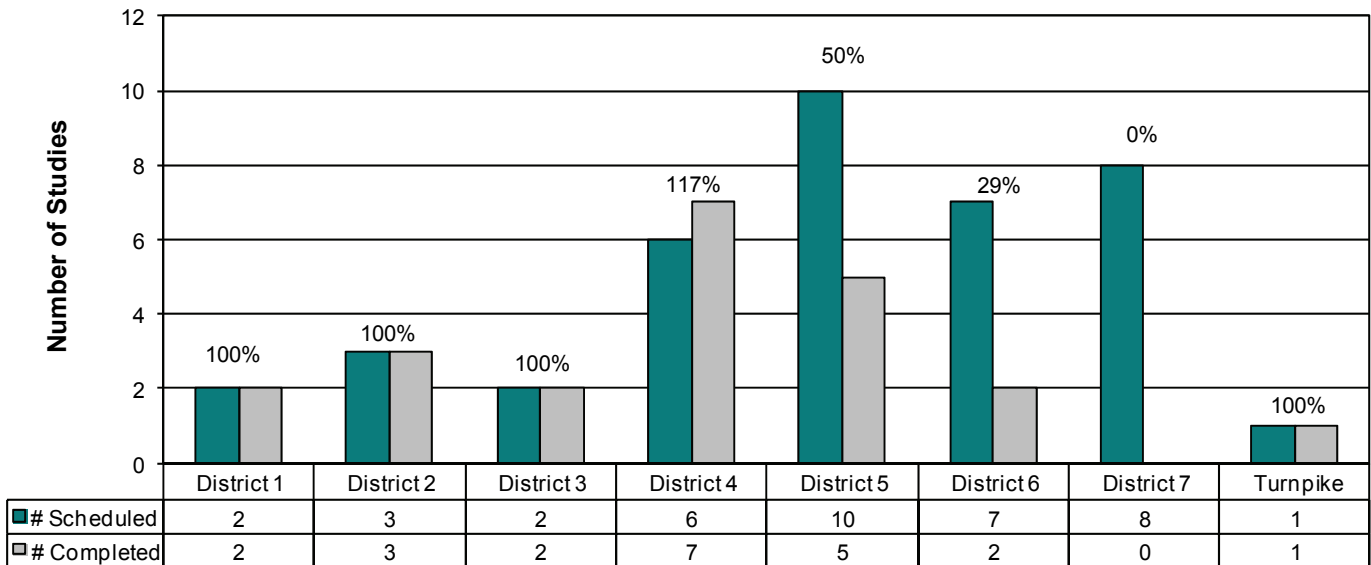
* FHWA data for fiscal year 2011/2012 was not available at time of publication.

Work Plan Completion

P1: VE Studies Scheduled vs. Completed
Annual Report FY 2011/2012

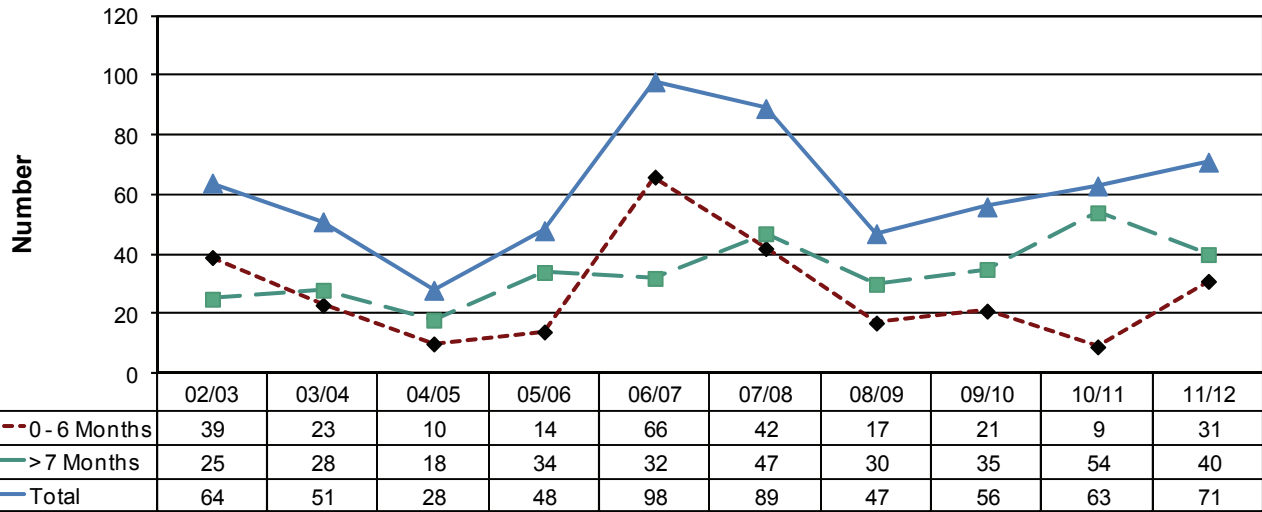


P1: VE Studies Scheduled vs Completed
Annual Report FY 2011/2012

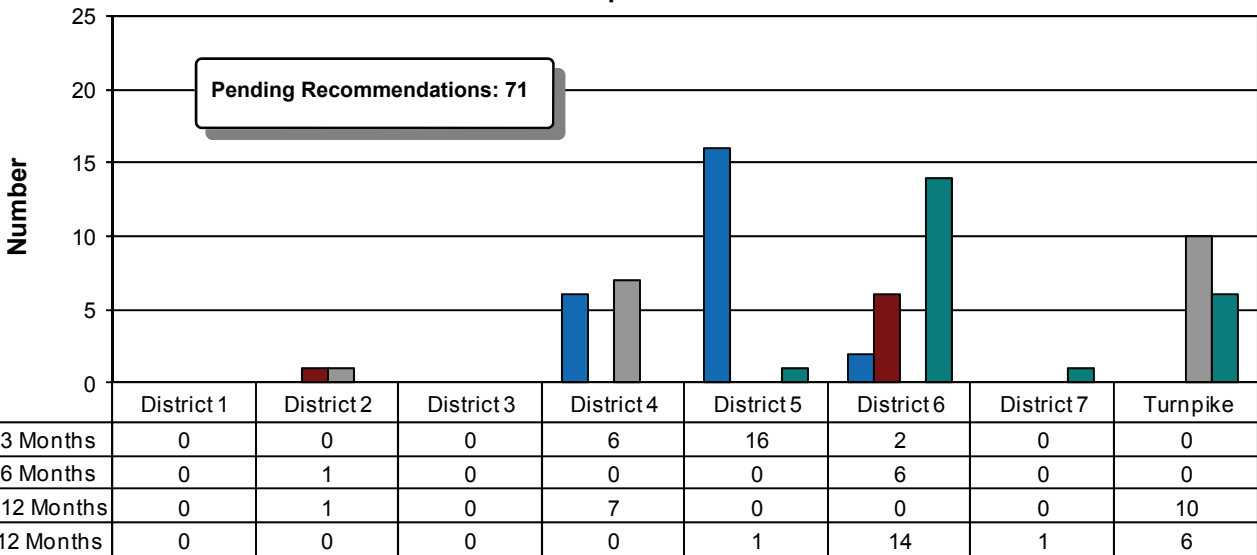


Pending Recommendations

P4: Annual # Pending Recommendations
Annual Report FY 2011/2012



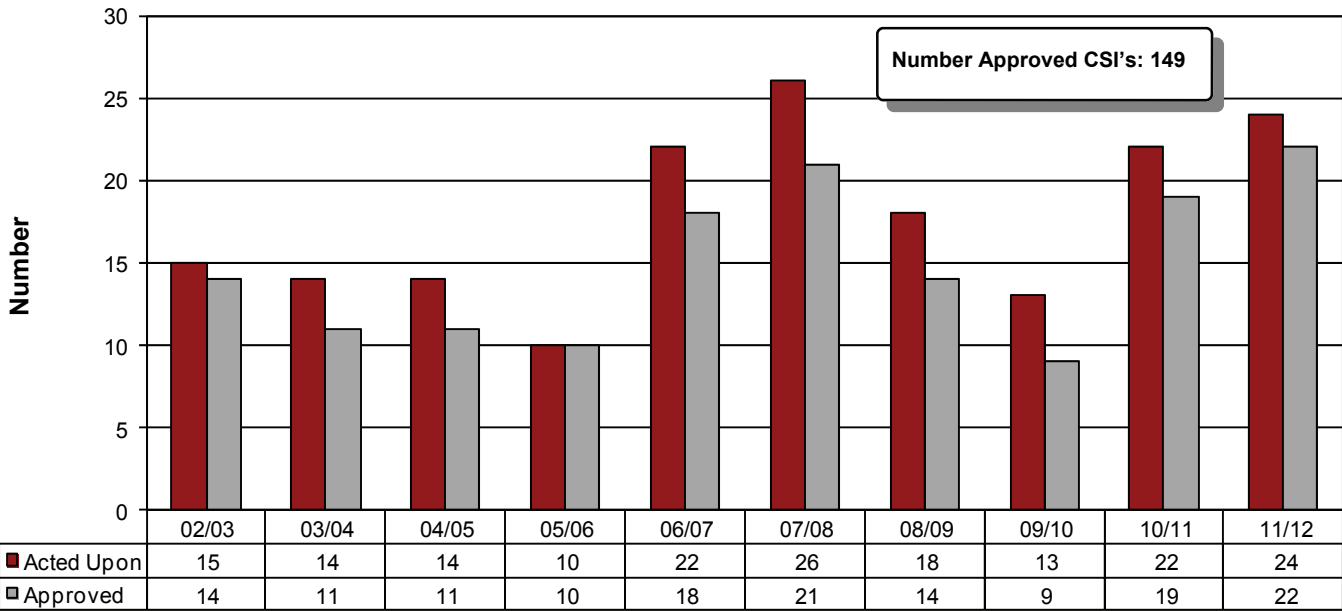
P4: # Pending Recommendations
Annual Quarter Report FY 2011/2012



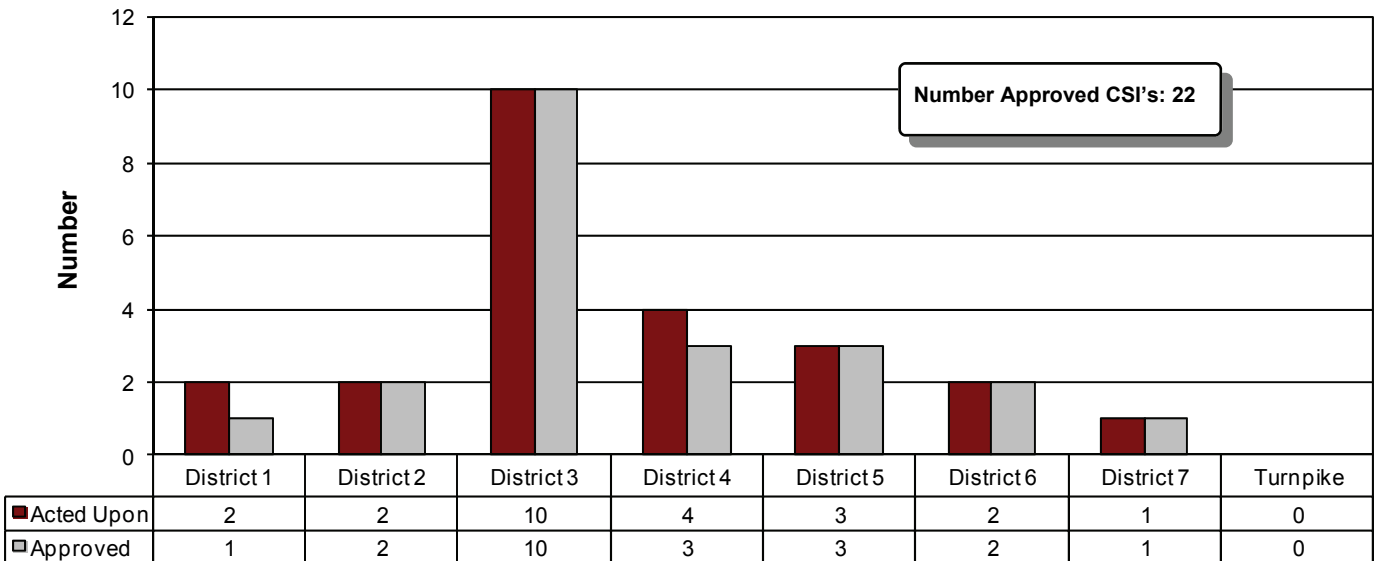
**Fiscal Year 2011/2012
Cost Savings Initiative
Performance Measures**

CSI Summary

Q1: Annual CSI (VECP's) Acted Upon



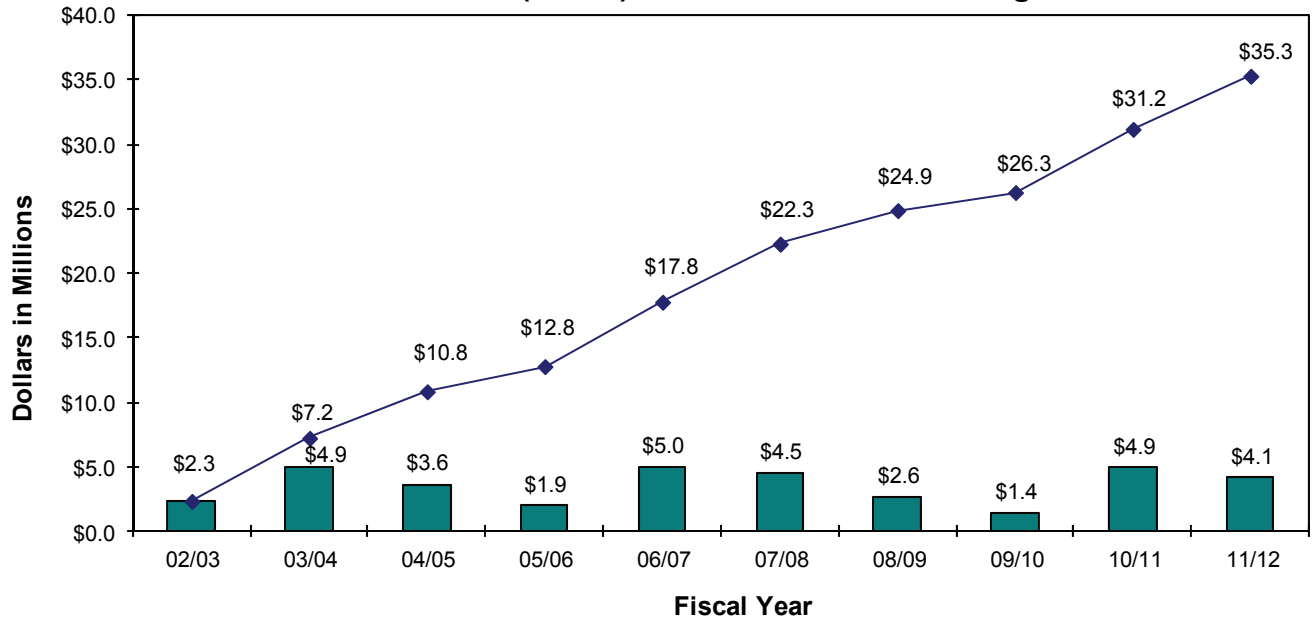
**Q1: CSI's Acted Upon
Annual Report Fiscal Year 2011/2012**



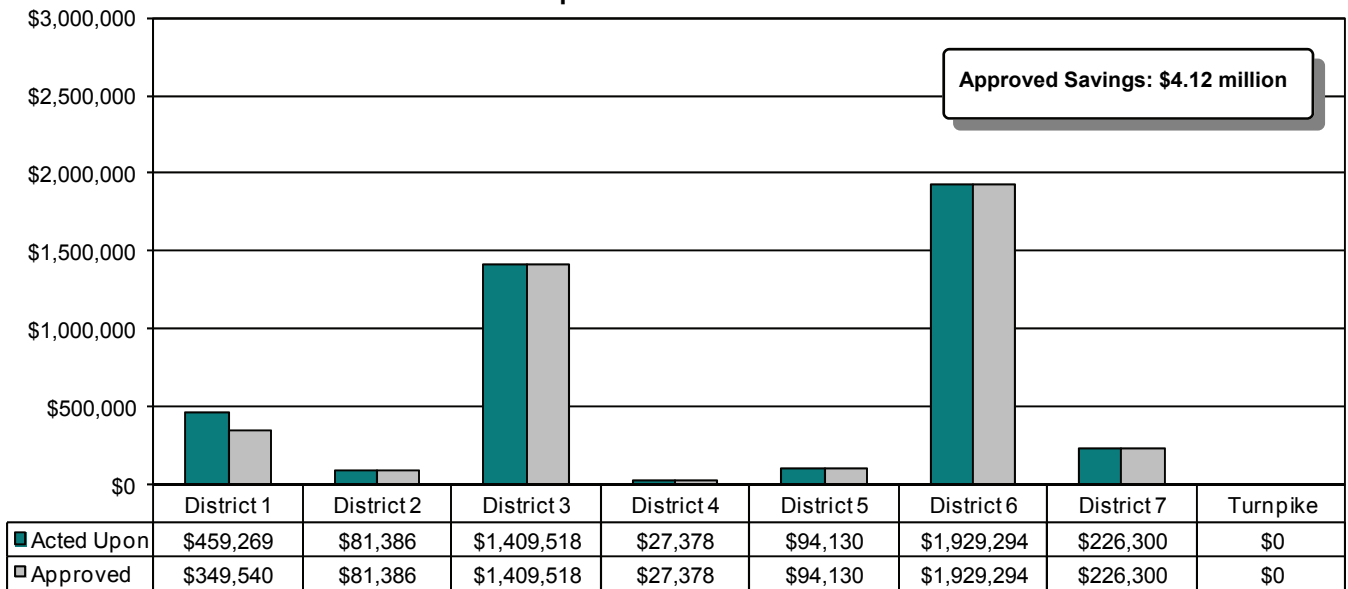
* Prior to fiscal year 2010/2011, Cost savings Initiatives (CSI) were formerly referred to as Value Engineering Change Proposals (VECP's).

CSI Approved Savings

Q2: Cumulative CSI (VECP) Construction Cost Savings



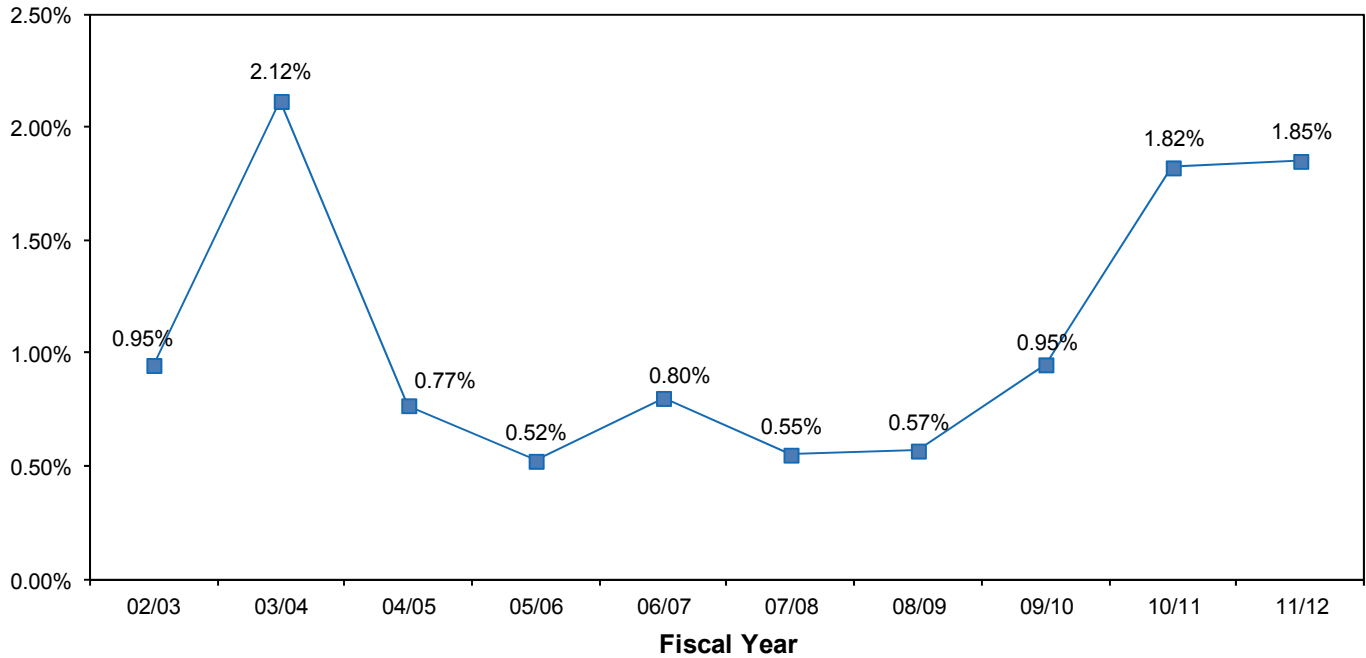
**Q2: Approved CSI Savings
Annual Report Fiscal Year 2011/2012**



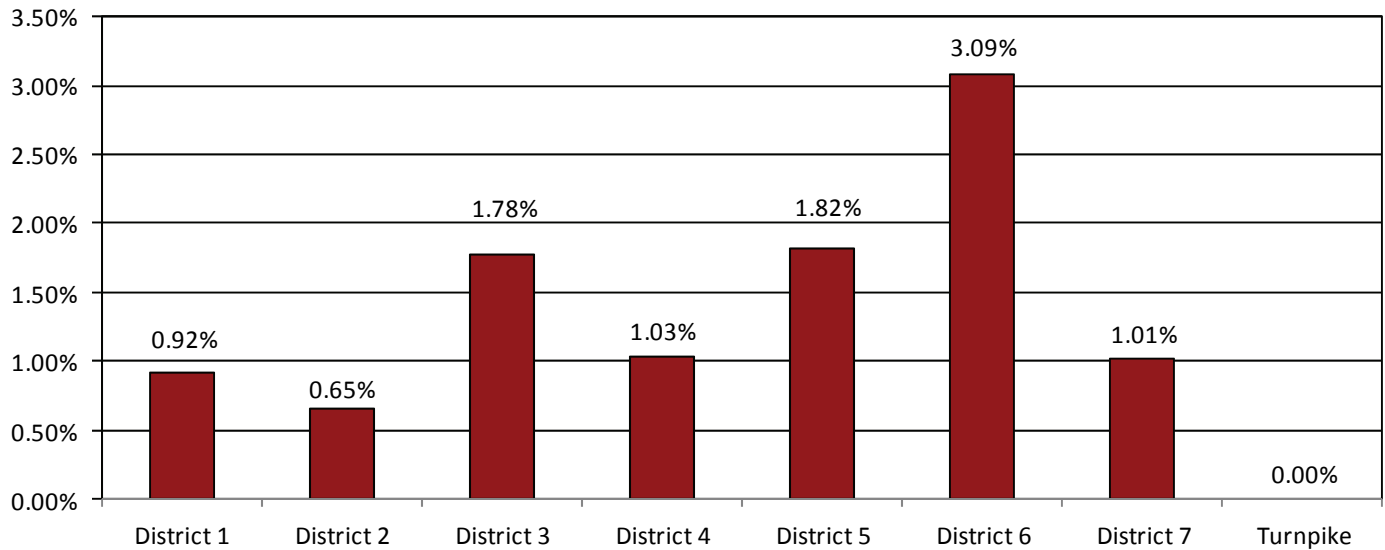
* Prior to fiscal year 2010/2011, Cost savings Initiatives (CSI) were formerly referred to as Value Engineering Change Proposals (VECP's).

CSI Percent Project Saved

Q3: CSI (VECP) Annual Percent Project Saved



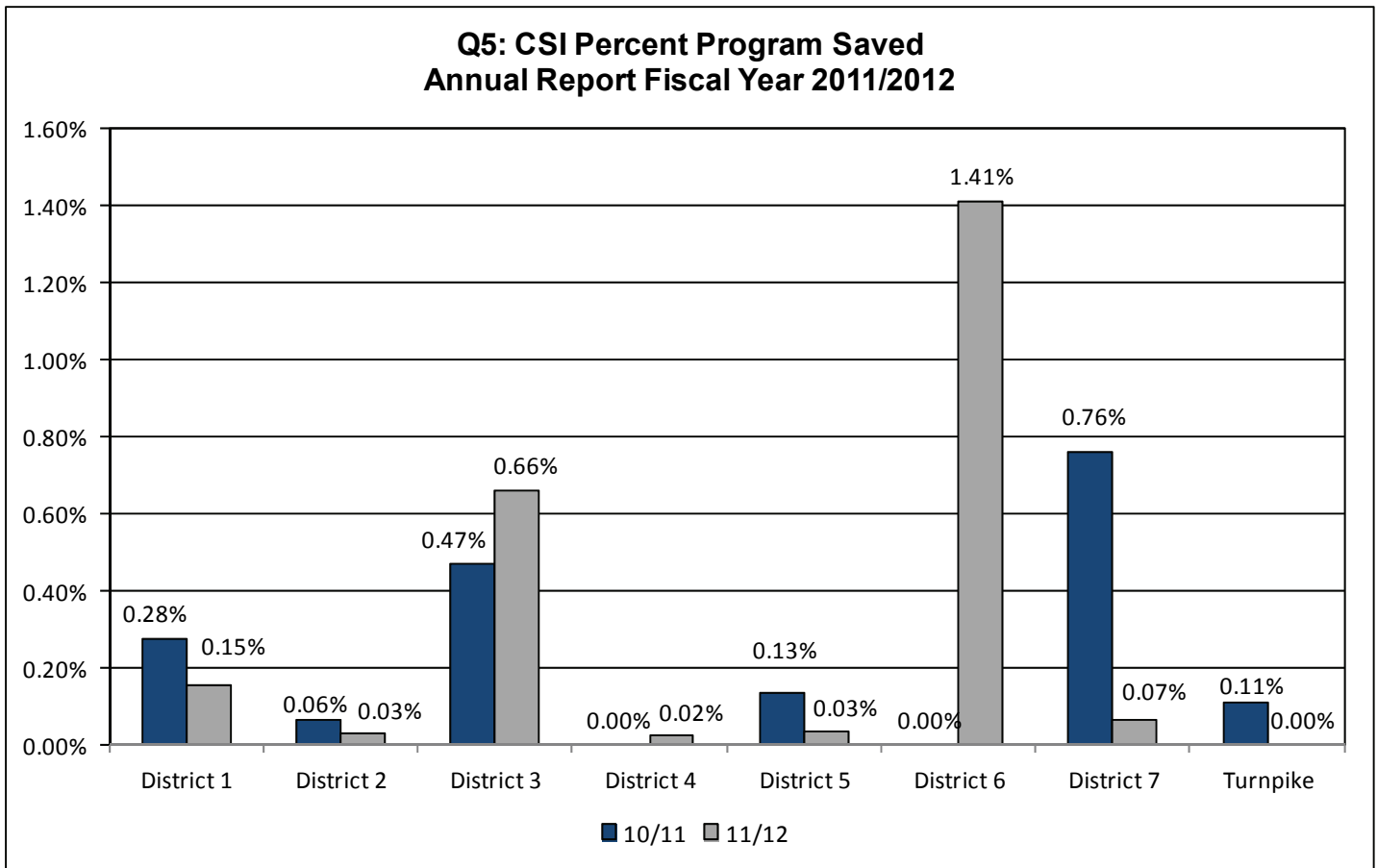
**Q4: CSI Percent Project Saved
Annual Report Fiscal Year 2011/2012**



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

CSI Percent Program Saved

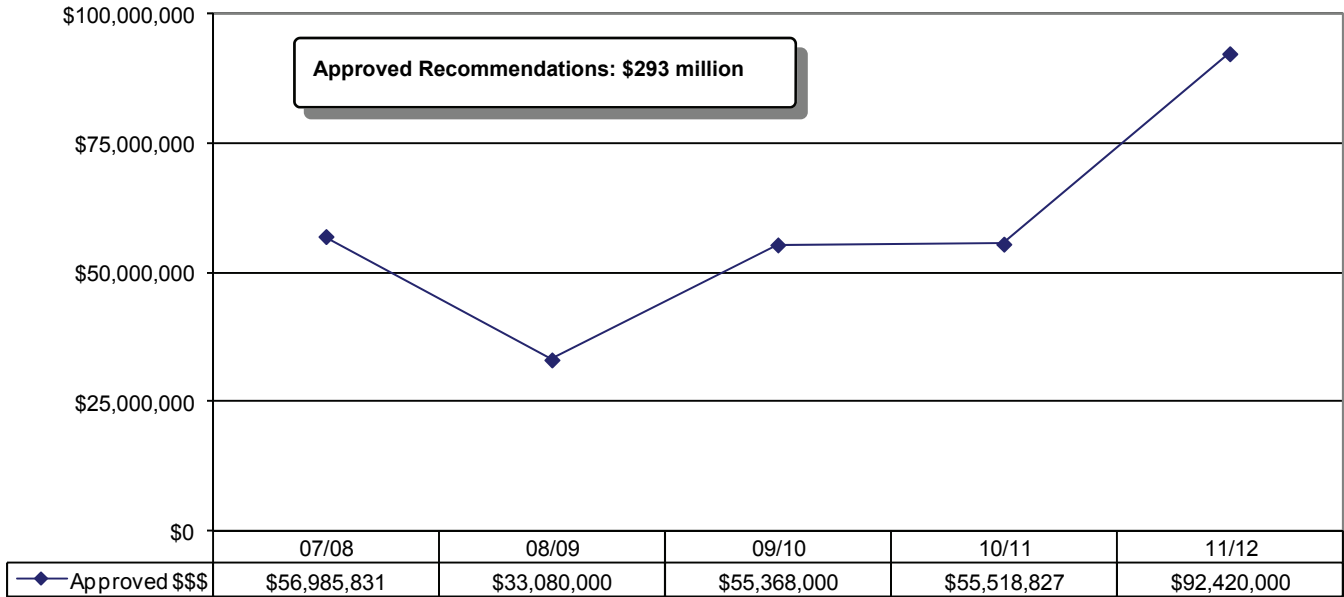
The Percent Program Saved is a new measure introduced last year. The intent is to compare the cost avoidance/savings to the overall work program. The measure is calculated by dividing the three year average monthly lettings into the overall cost avoidance/savings. Line charts showing trends will be developed in future years as data becomes available.



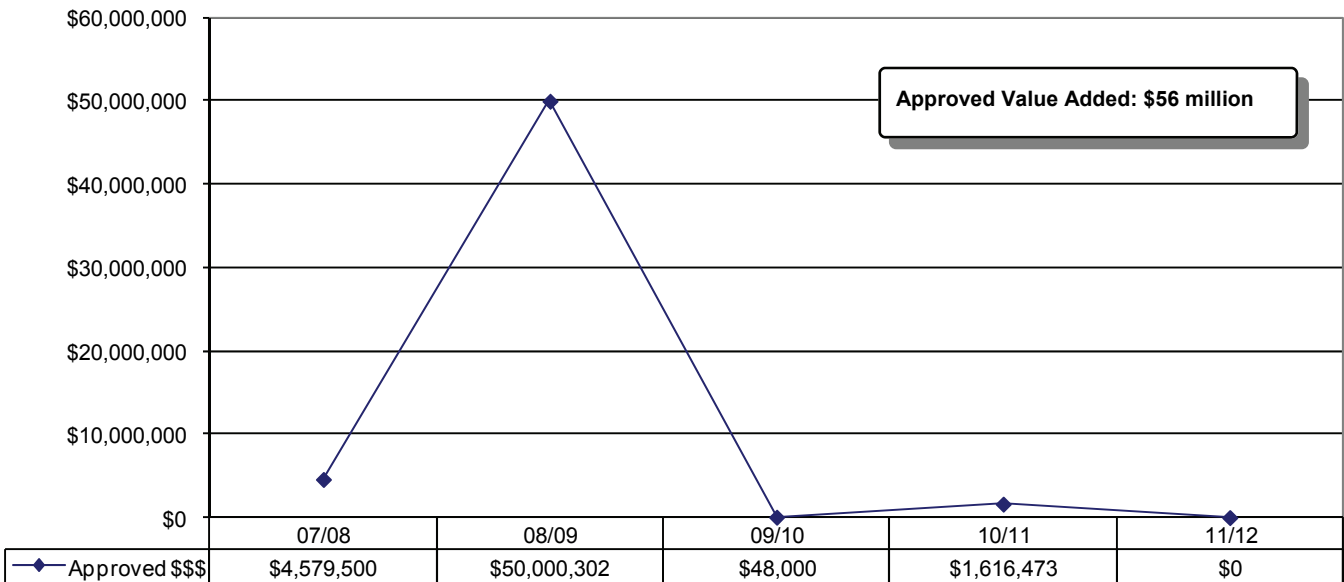
Appendix A
5 year History
Annual Performance Measures
by District

District 1

**Q1: Annual Approved Cost Avoidance/Savings
District 1**

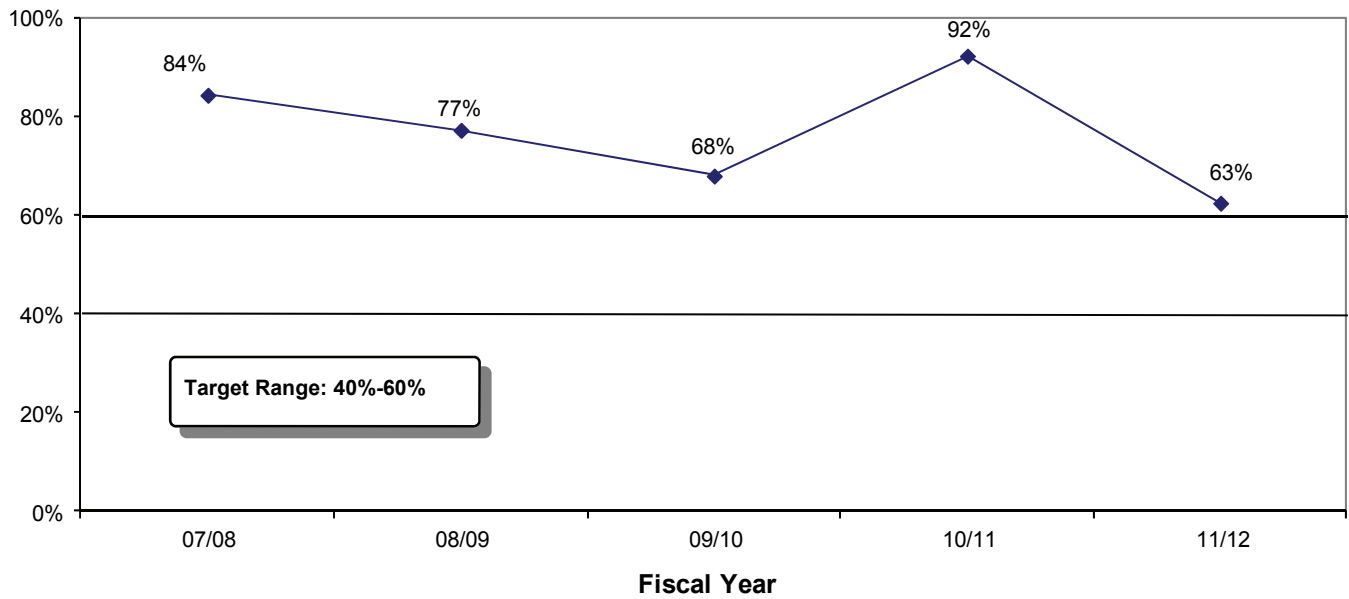


**Q2: Annual Approved Value Added Recommendations
District 1**

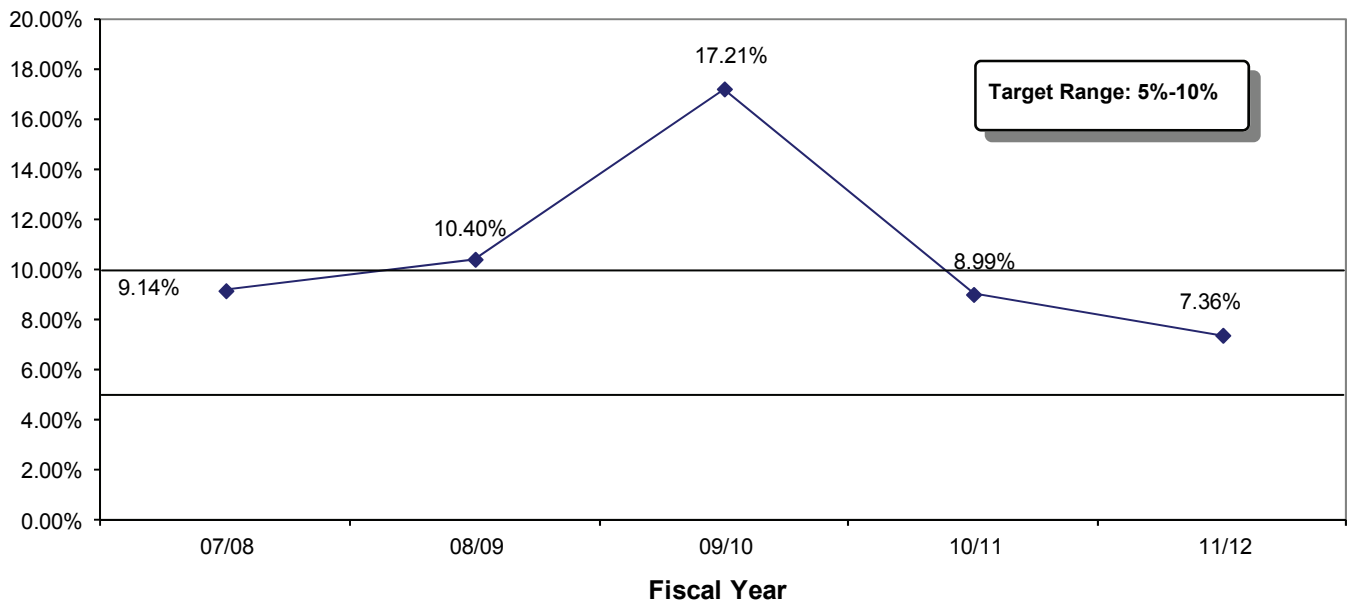


District 1

Q3: Annual Adoption Rate District 1

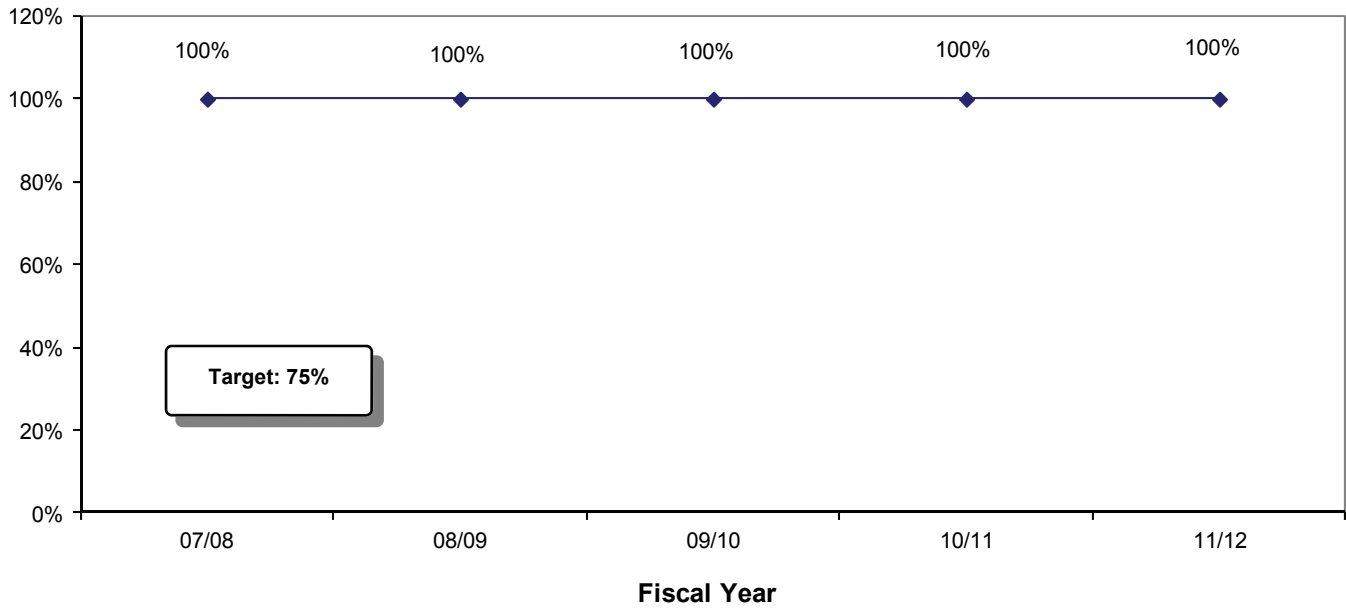


Q4: Annual Percent Project Saved District 1

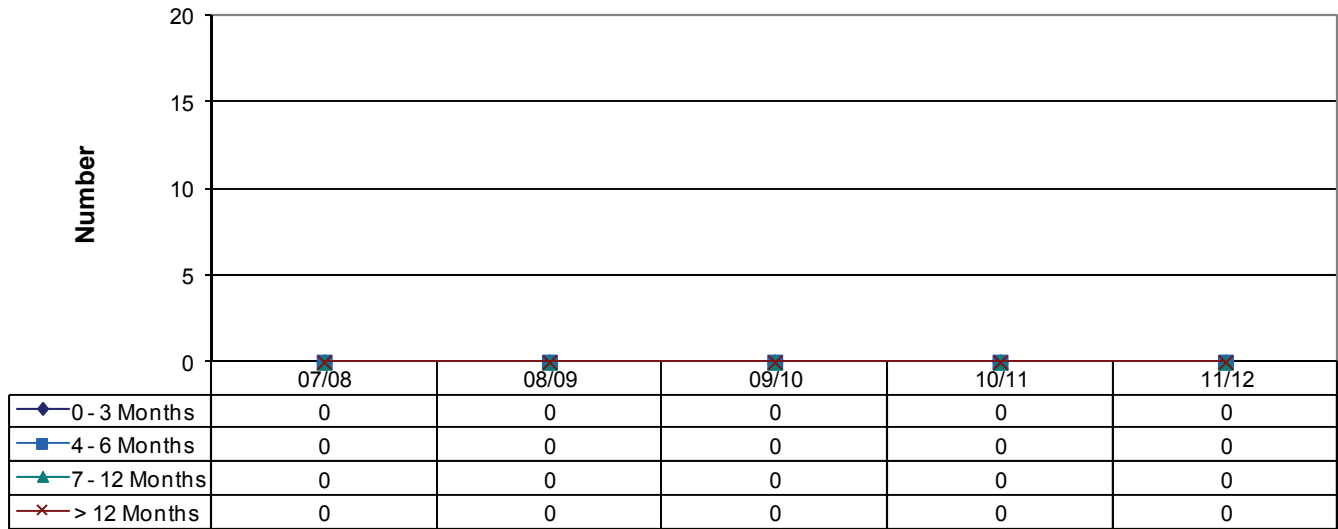


District 1

P1: % Scheduled VE Studies Completed
District 1

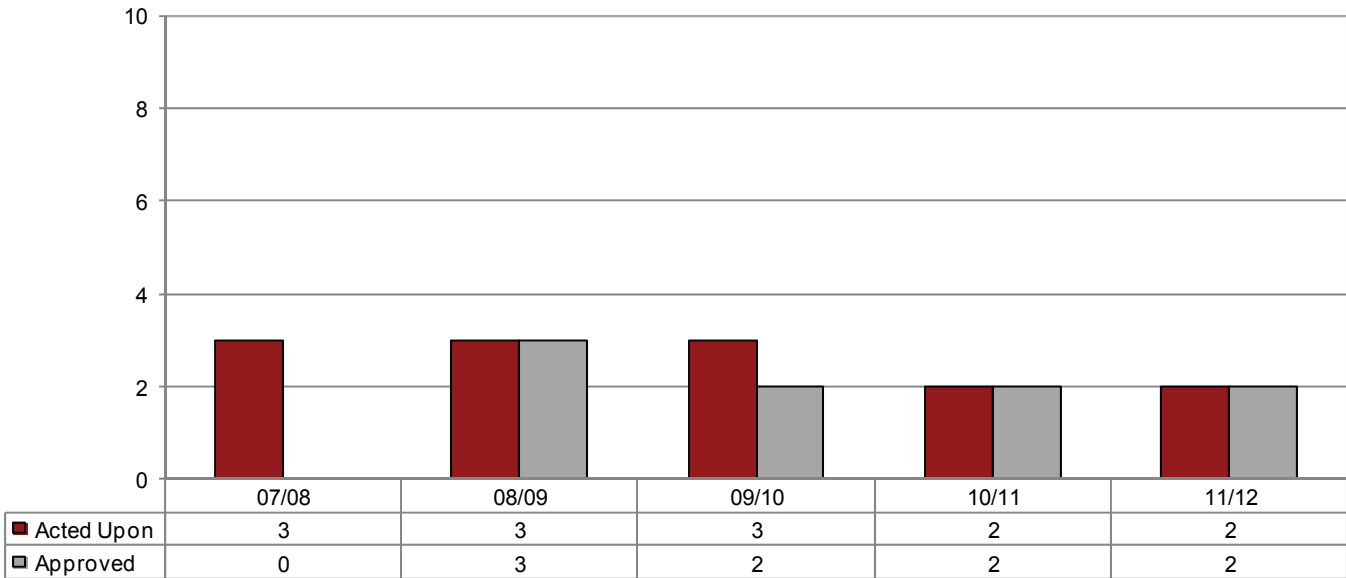


P4: Annual # Pending Recommendations
District 1

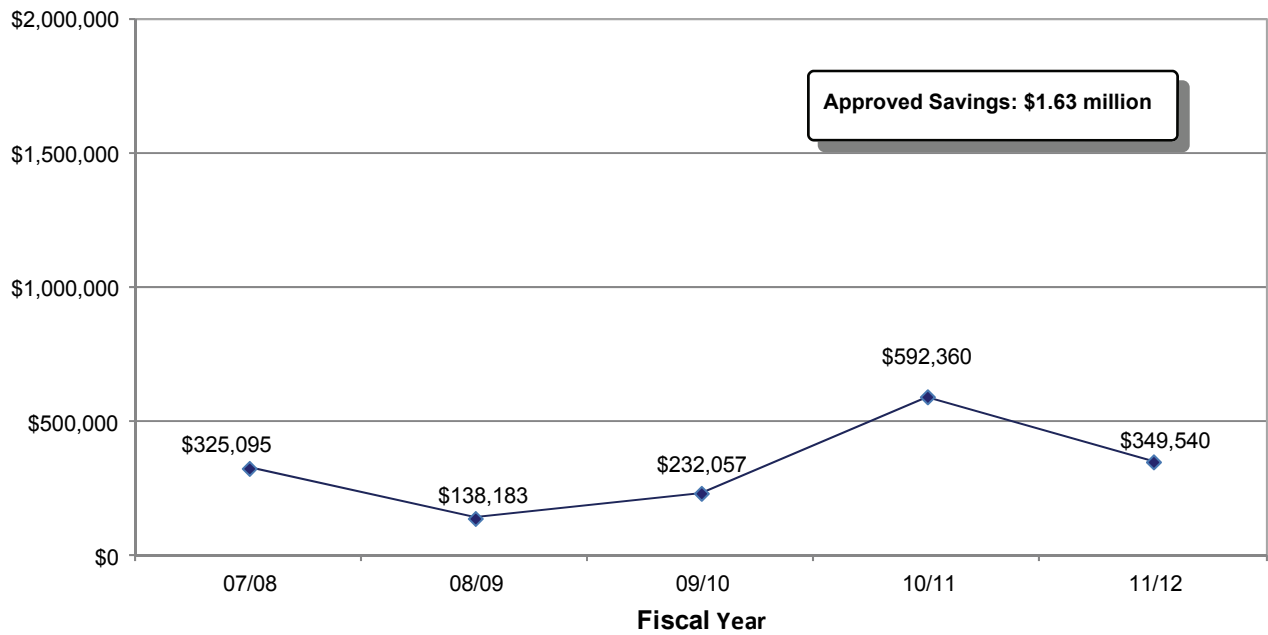


District 1

Q1: Annual VECP's Acted Upon

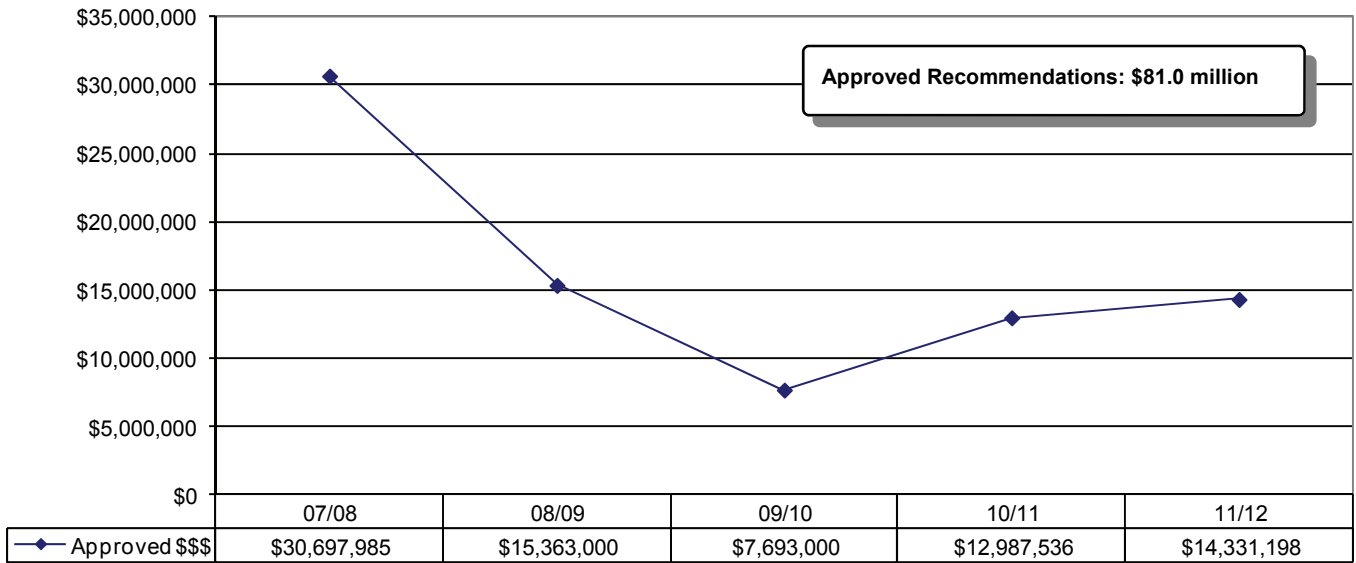


Q2: Annual Approved VECP Savings

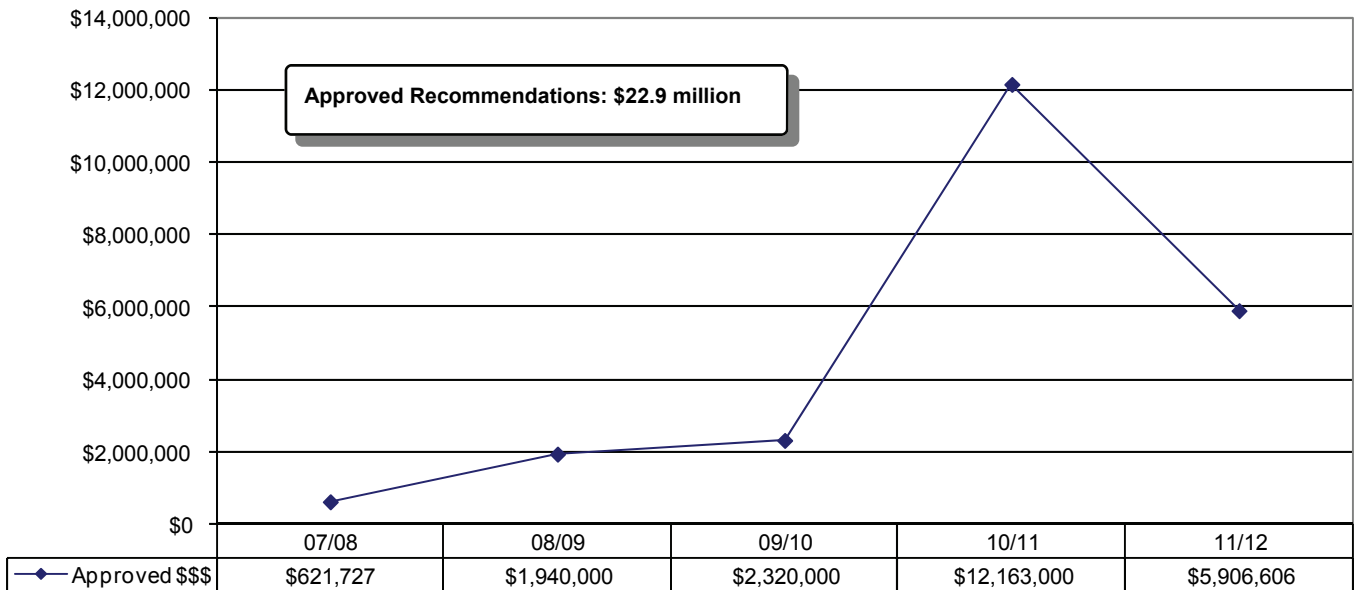


District 2

**Q1: Annual Approved Cost Avoidance/Savings
District 2**

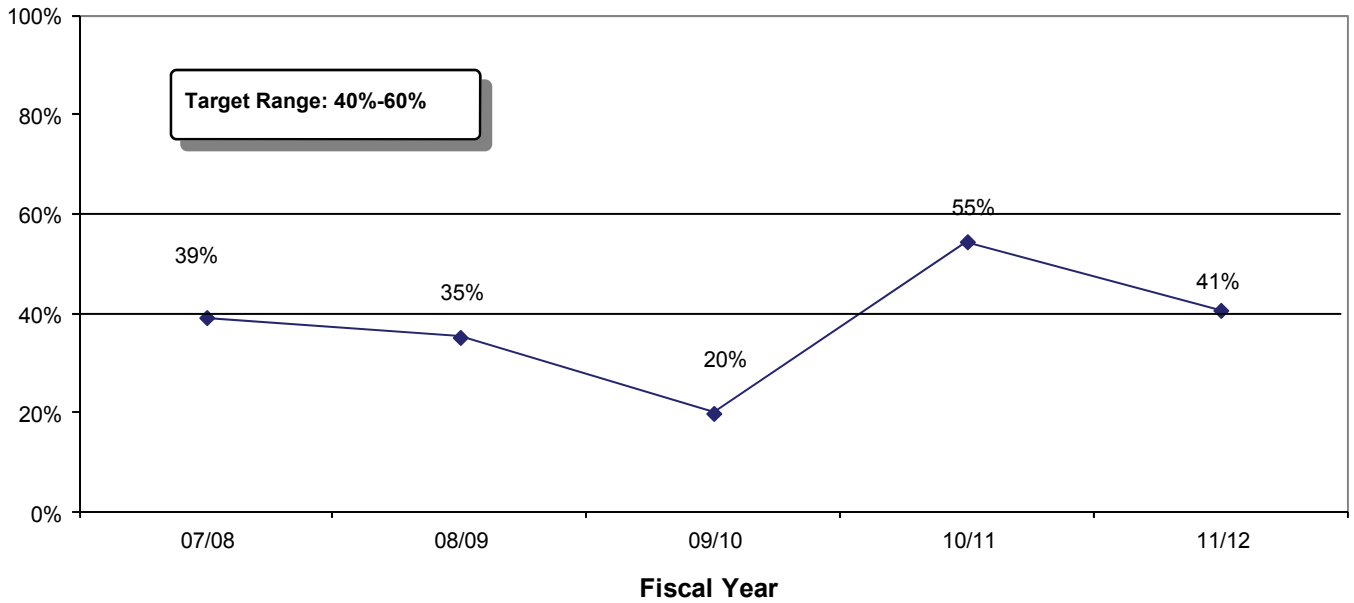


**Q2: Annual Approved Value Added Recommendations
District 2**

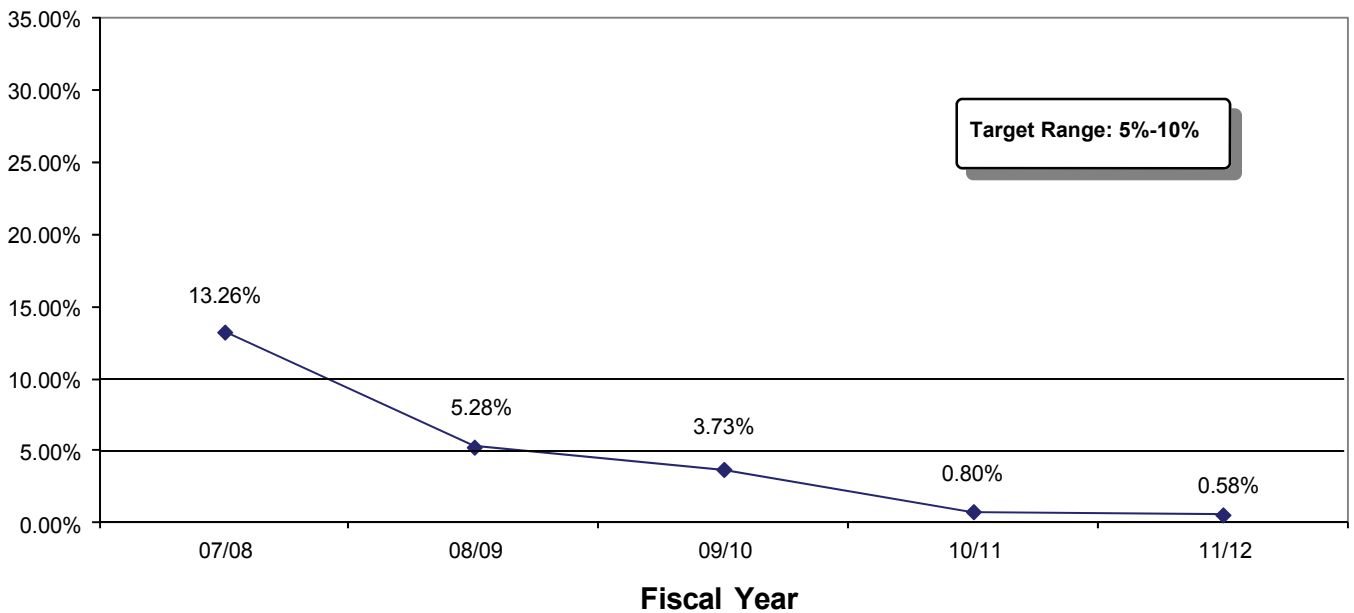


District 2

Q3: Annual Adoption Rate District 2

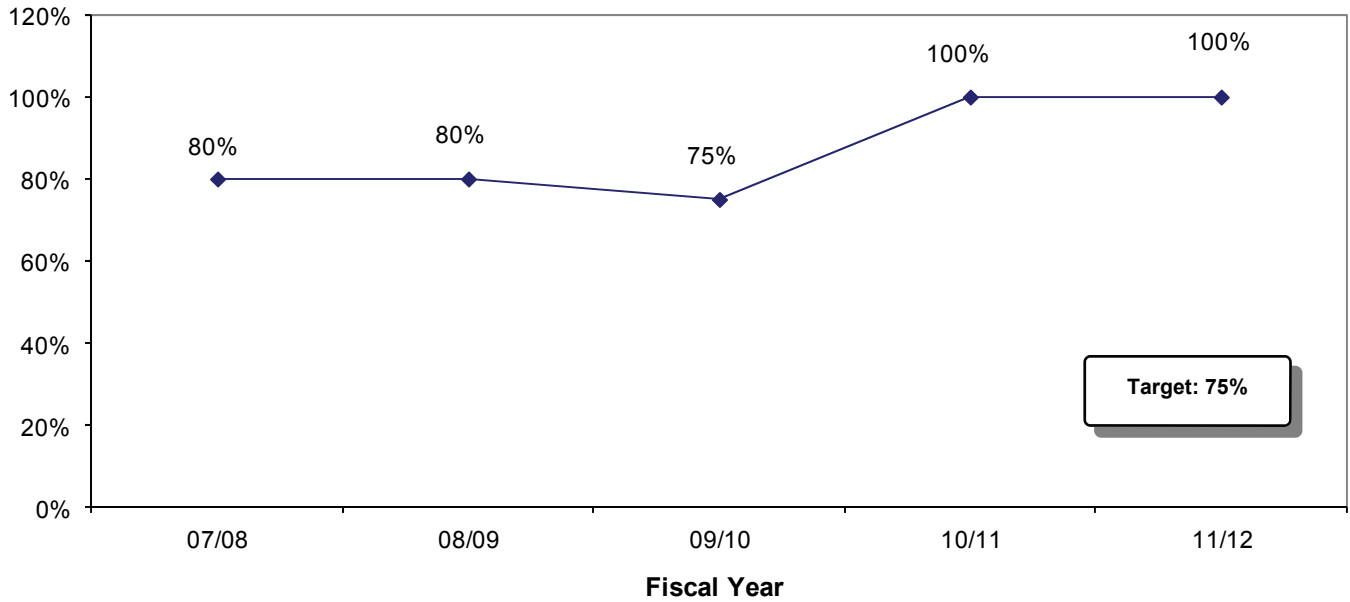


Q4: Annual Percent Project Saved District 2

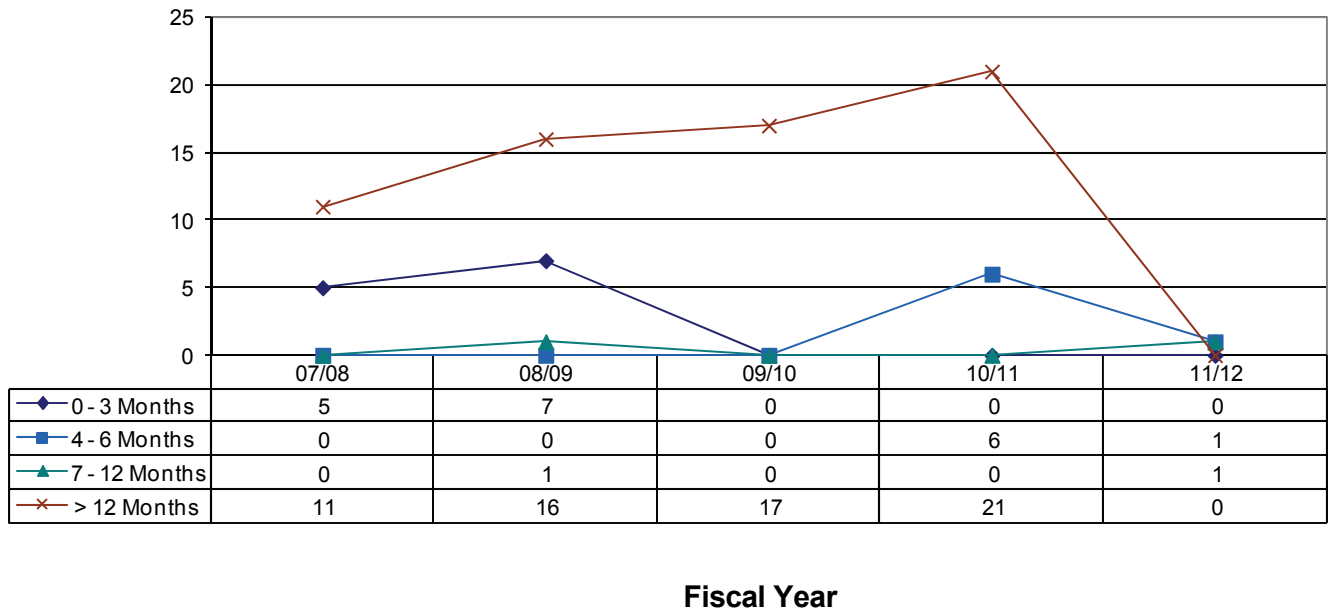


District 2

**P1: % Scheduled VE Studies Completed
District 2**

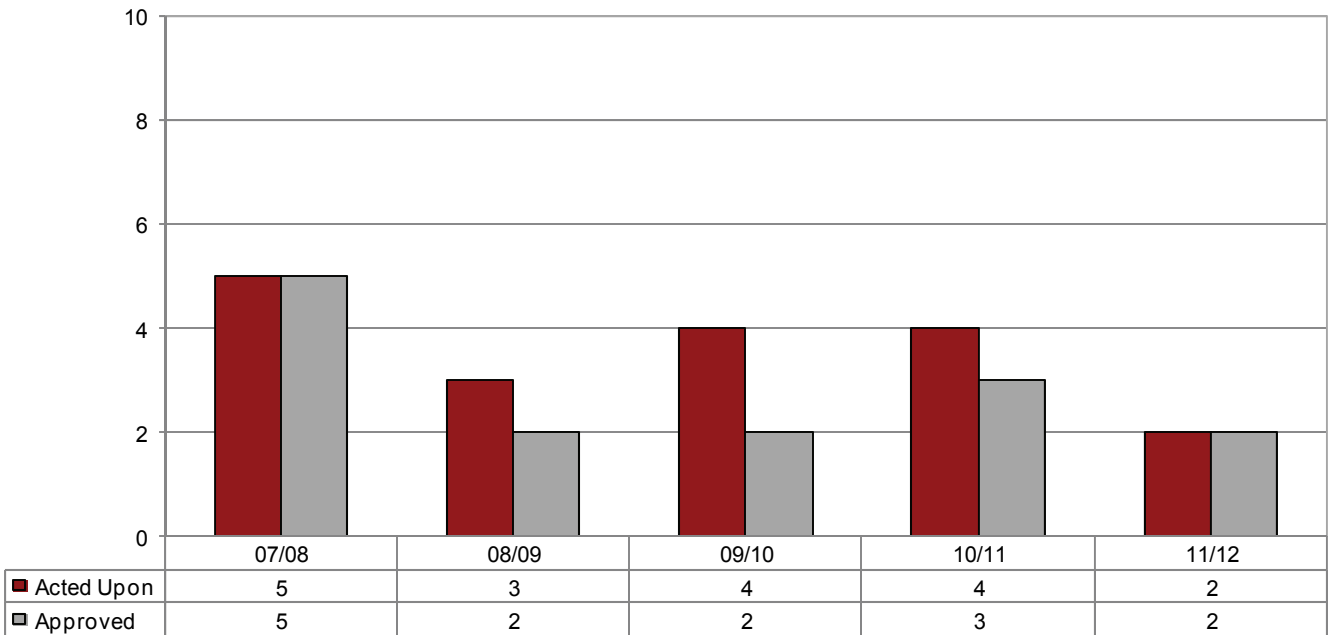


**P4: Annual # Pending Recommendations
District 2**

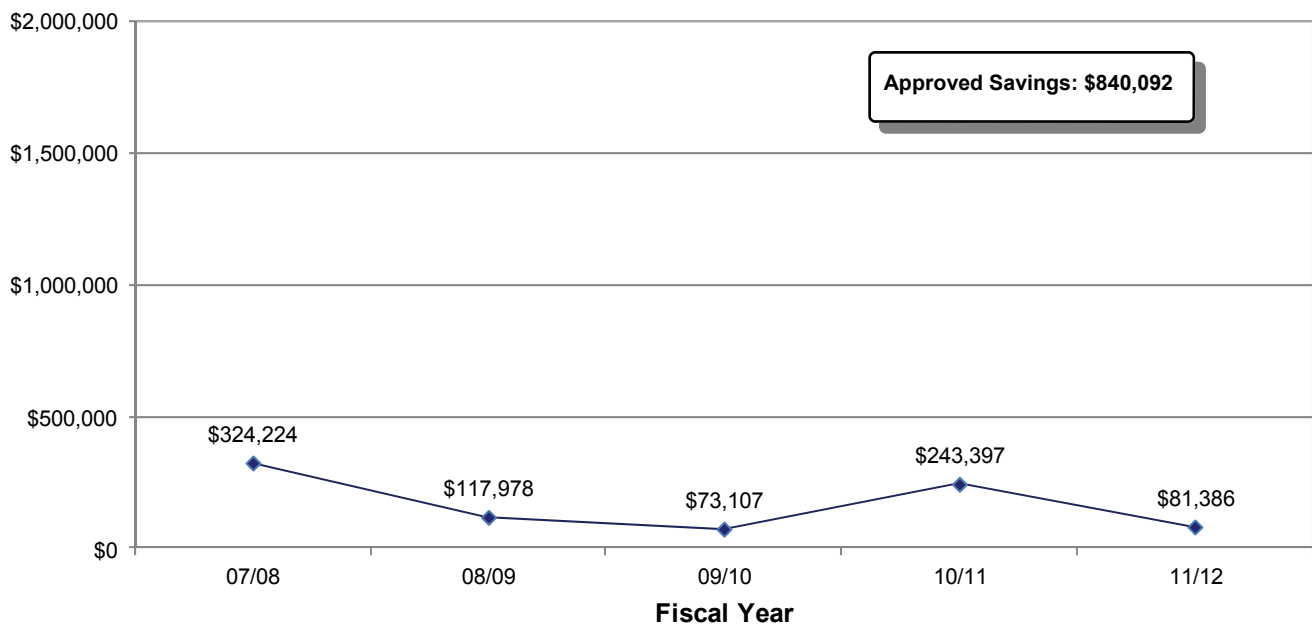


District 2

Q1: Annual VECP's Acted Upon

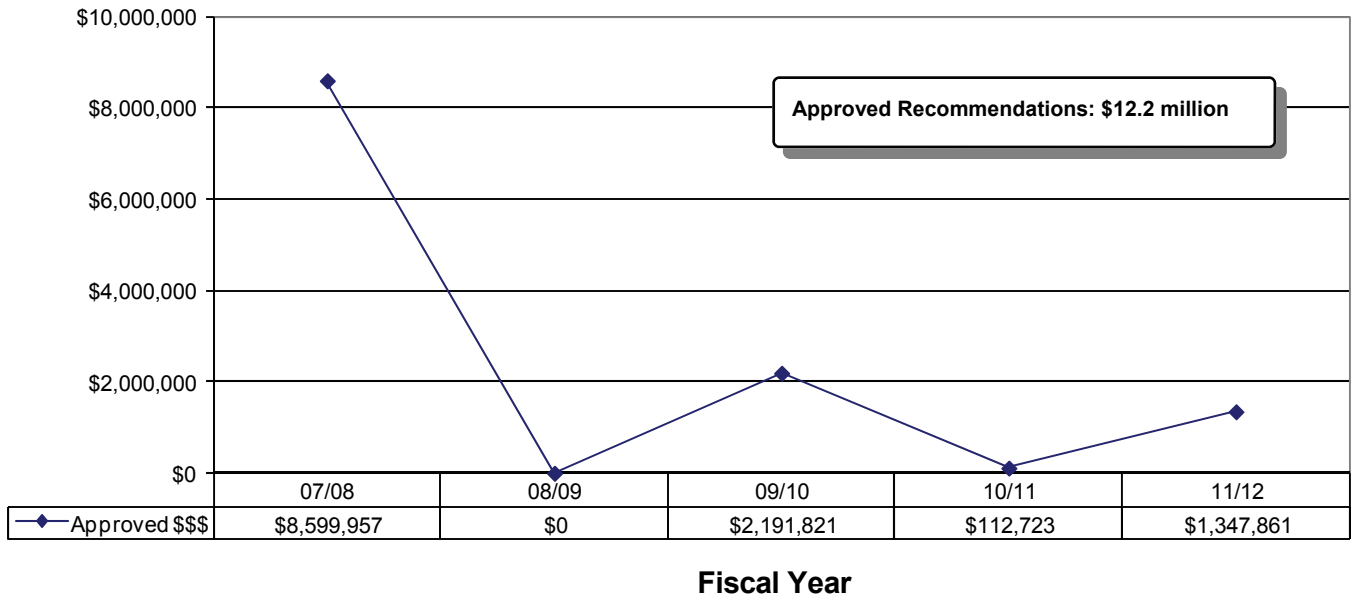


Q2: Annual Approved VECP Savings

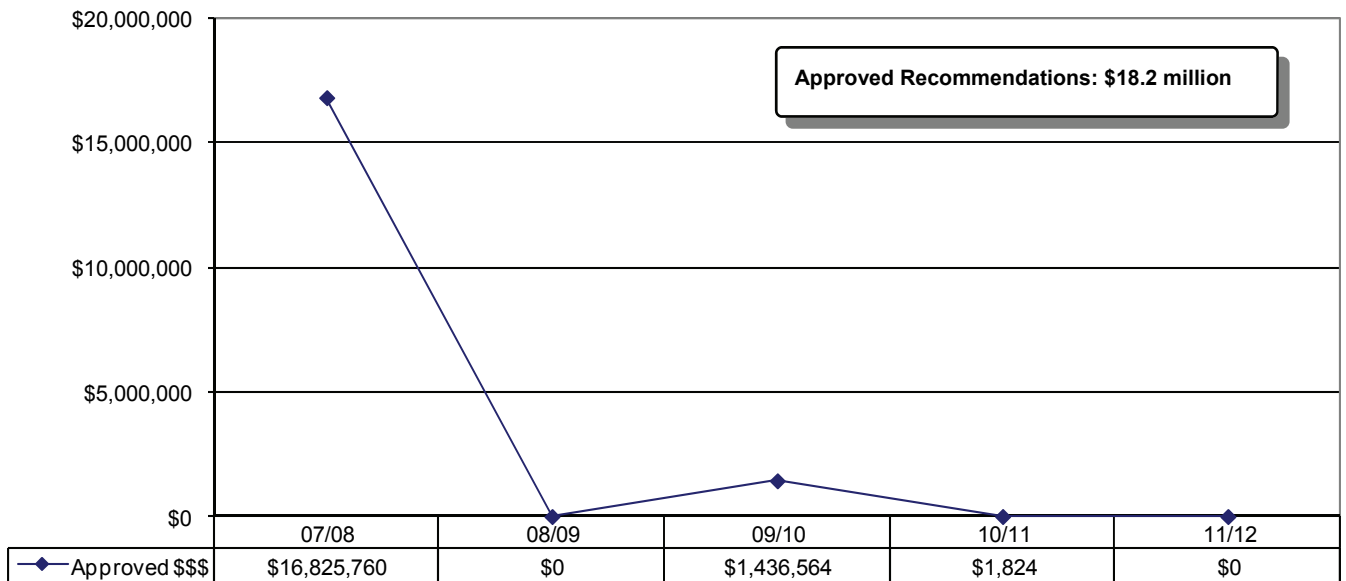


District 3

Q1: Annual Approved Cost Avoidance/Savings
District 3

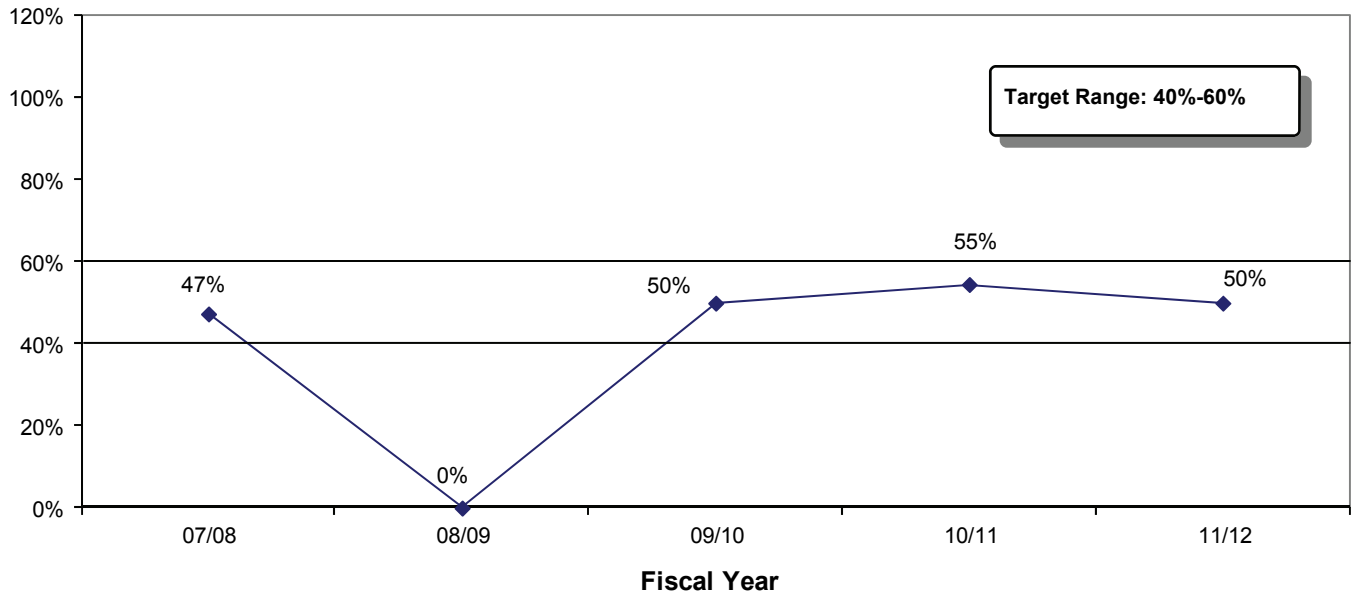


Q2: Annual Approved Value Added Recommendations
District 3

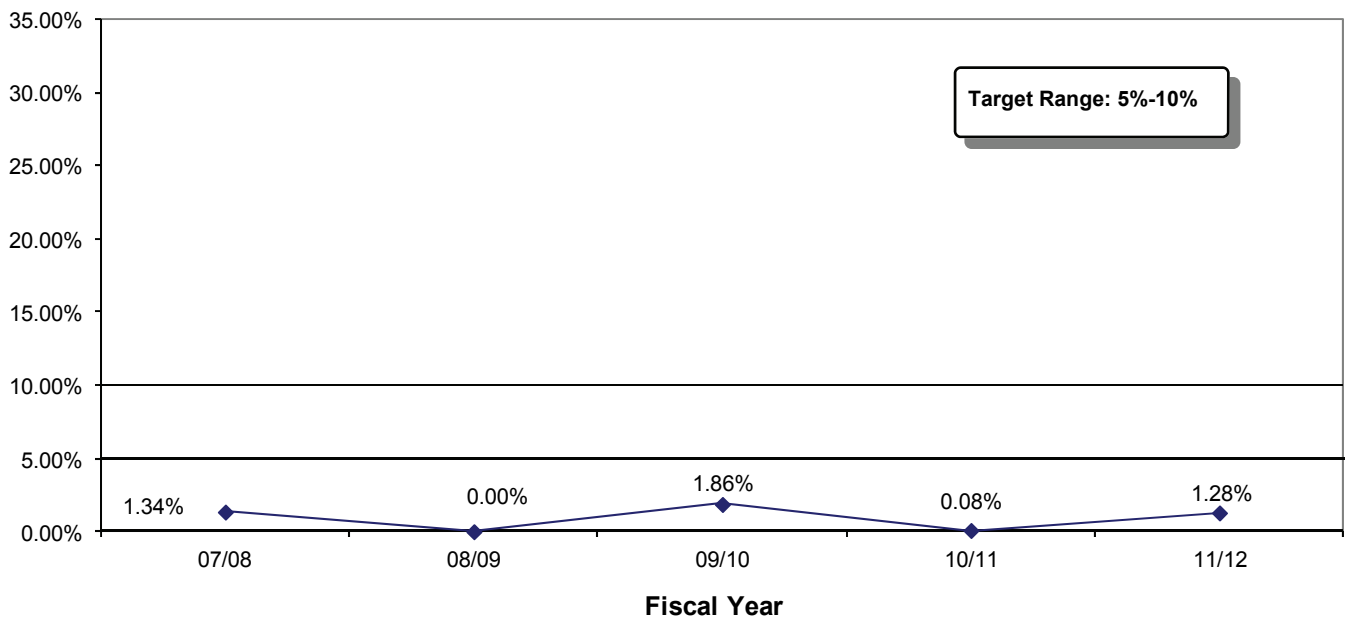


District 3

Q3: Annual Adoption Rate District 3

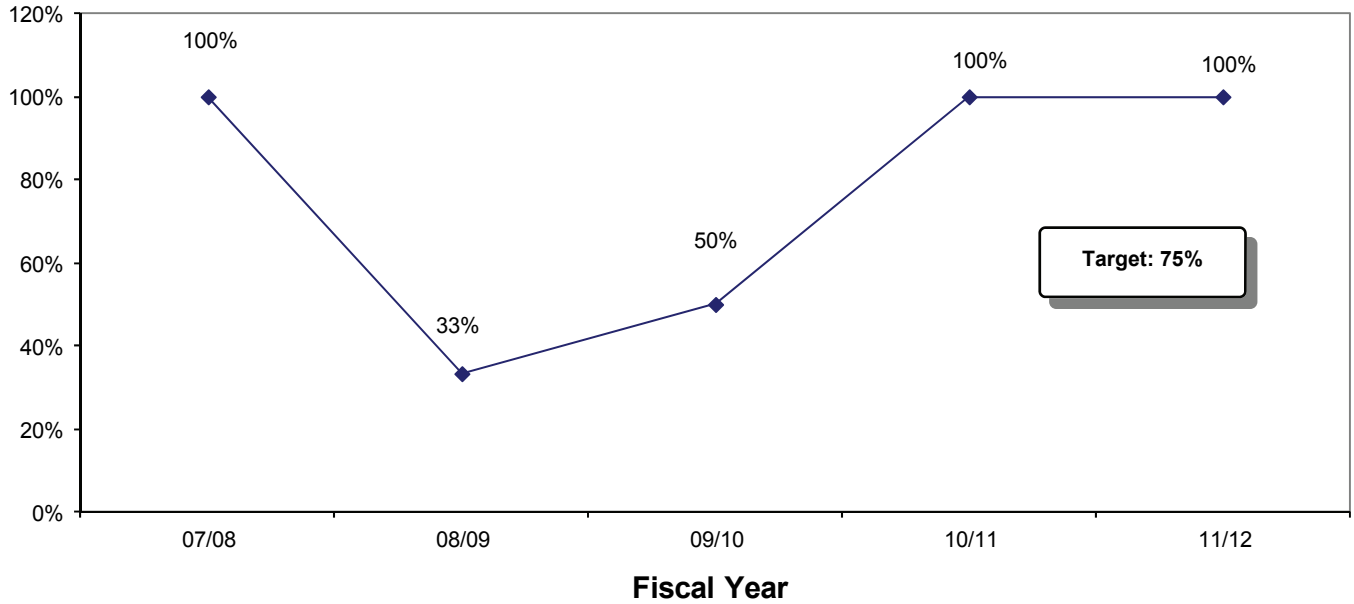


Q4: Annual Percent Project Saved District 3

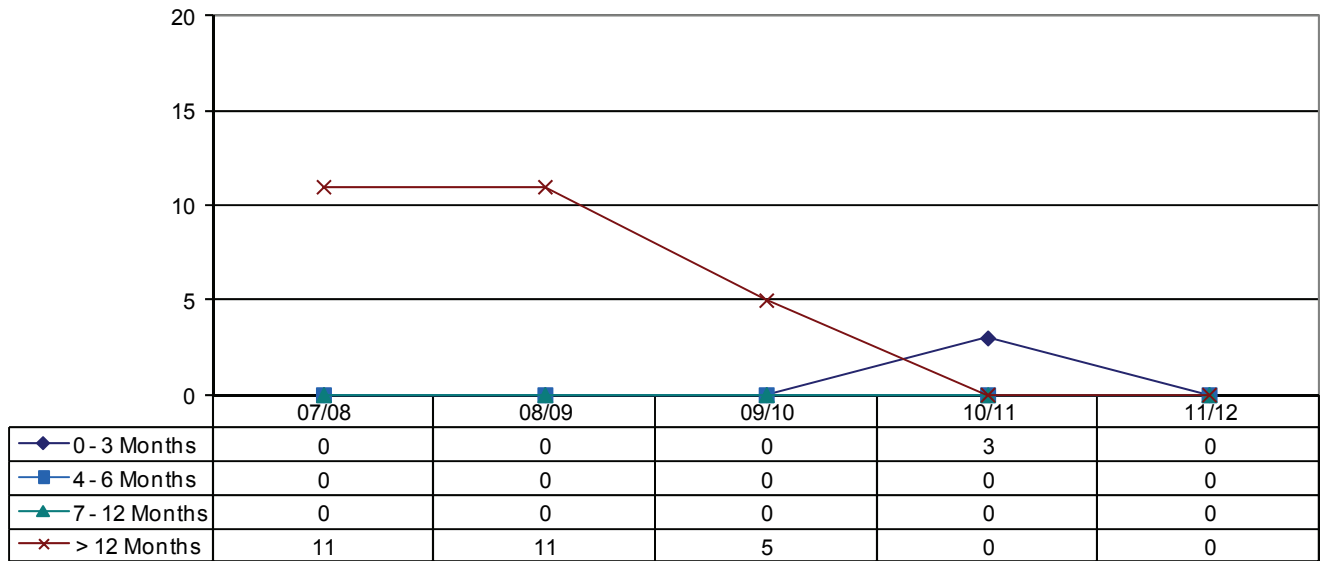


District 3

P1: % Scheduled VE Studies Completed
District 3

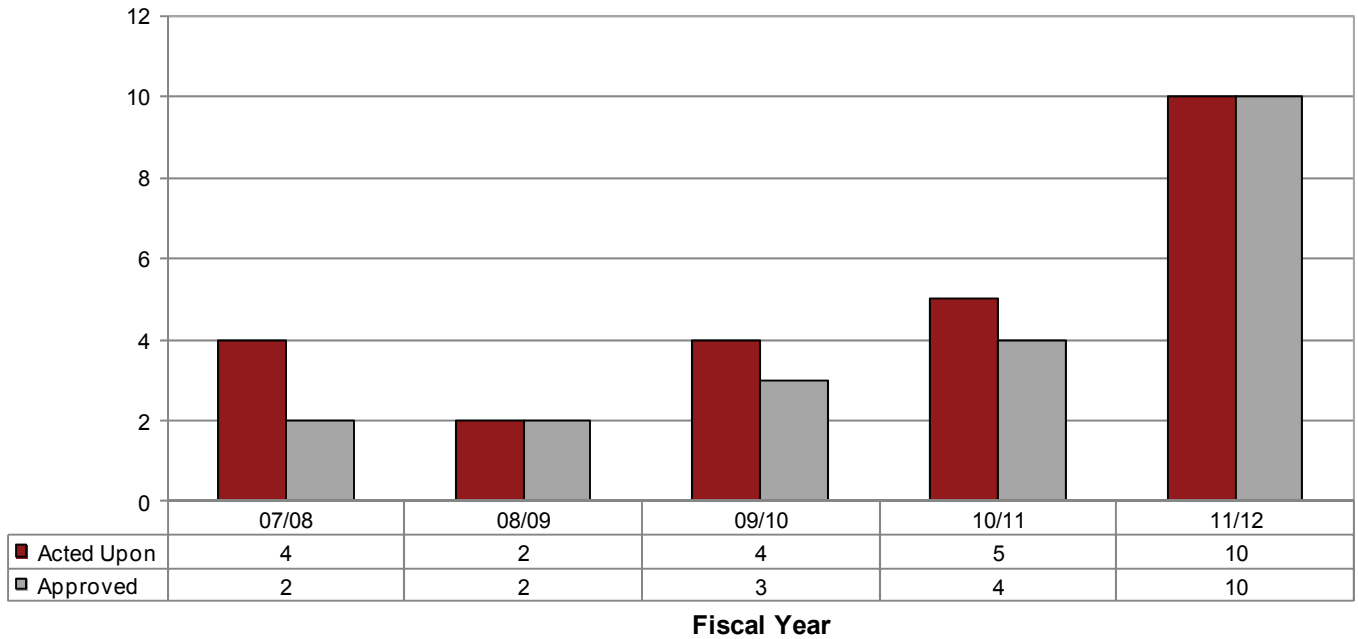


P4: Annual # Pending Recommendations
District 3

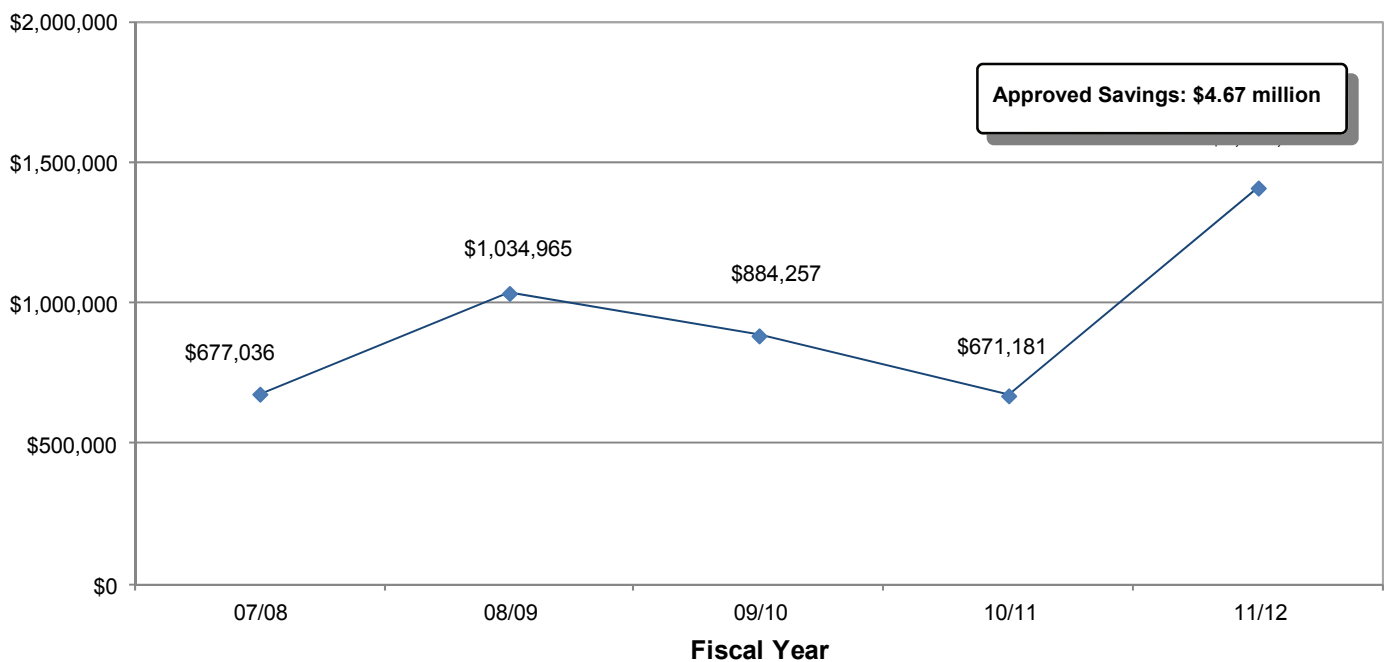


District 3

Q1: Annual VECP's Acted Upon

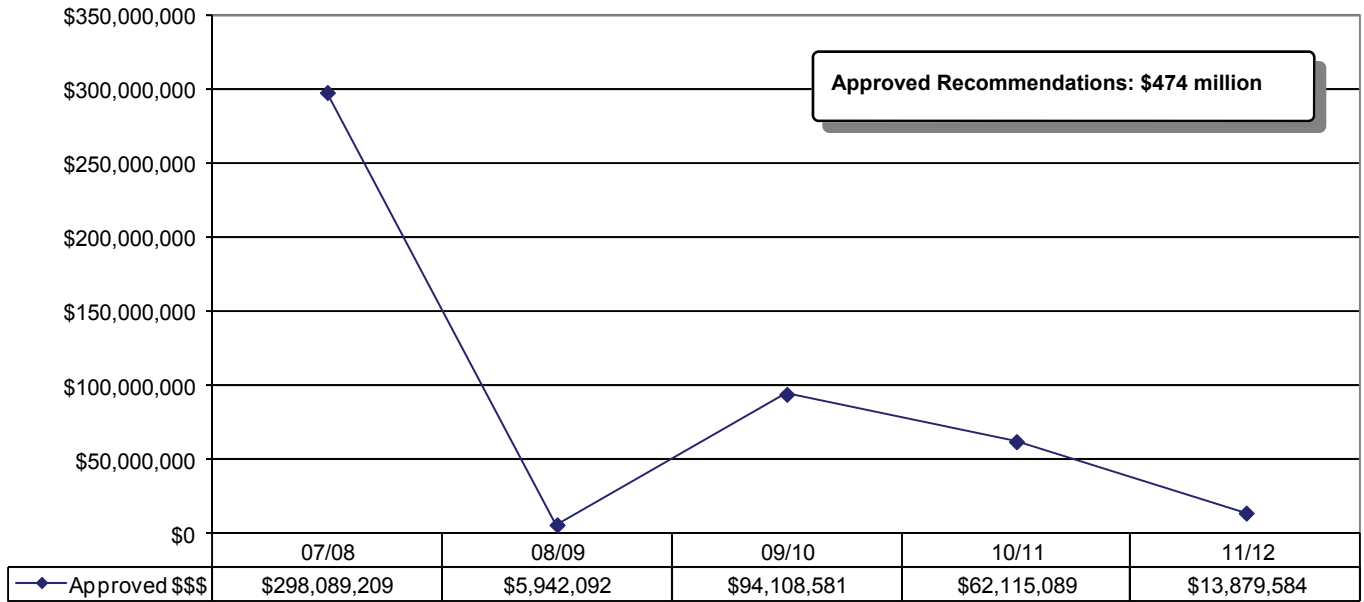


Q2: Annual Approved VECP Savings

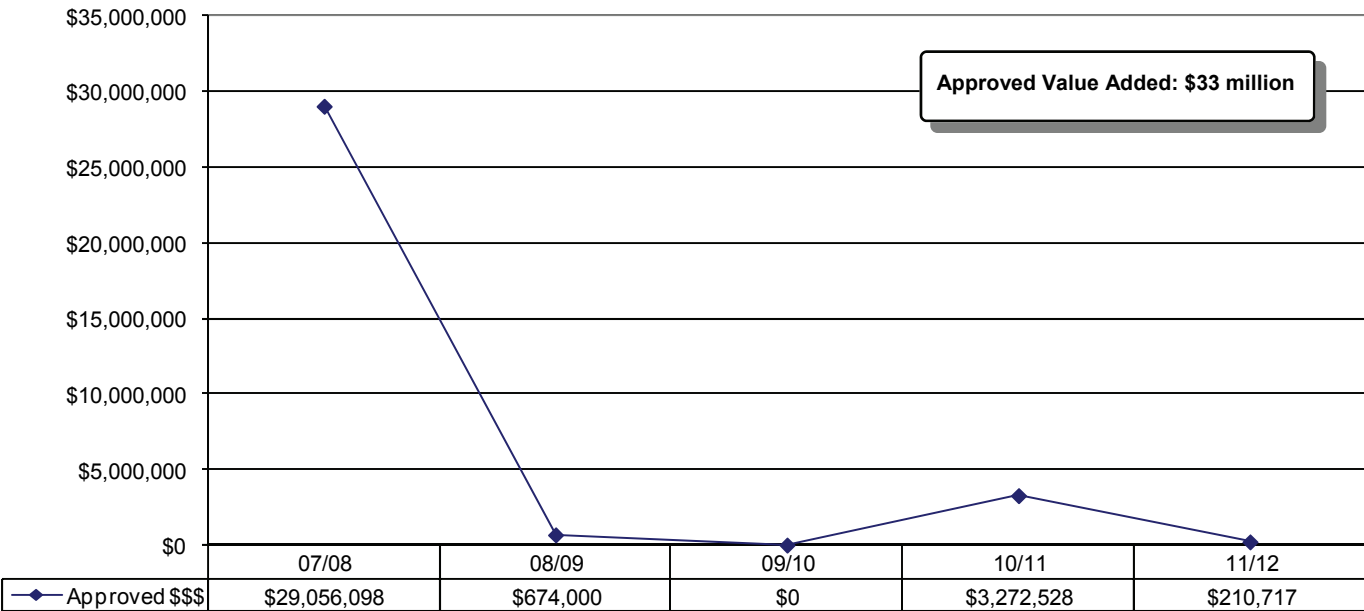


District 4

P1: Annual Approved Cost Avoidance/Savings
District 4

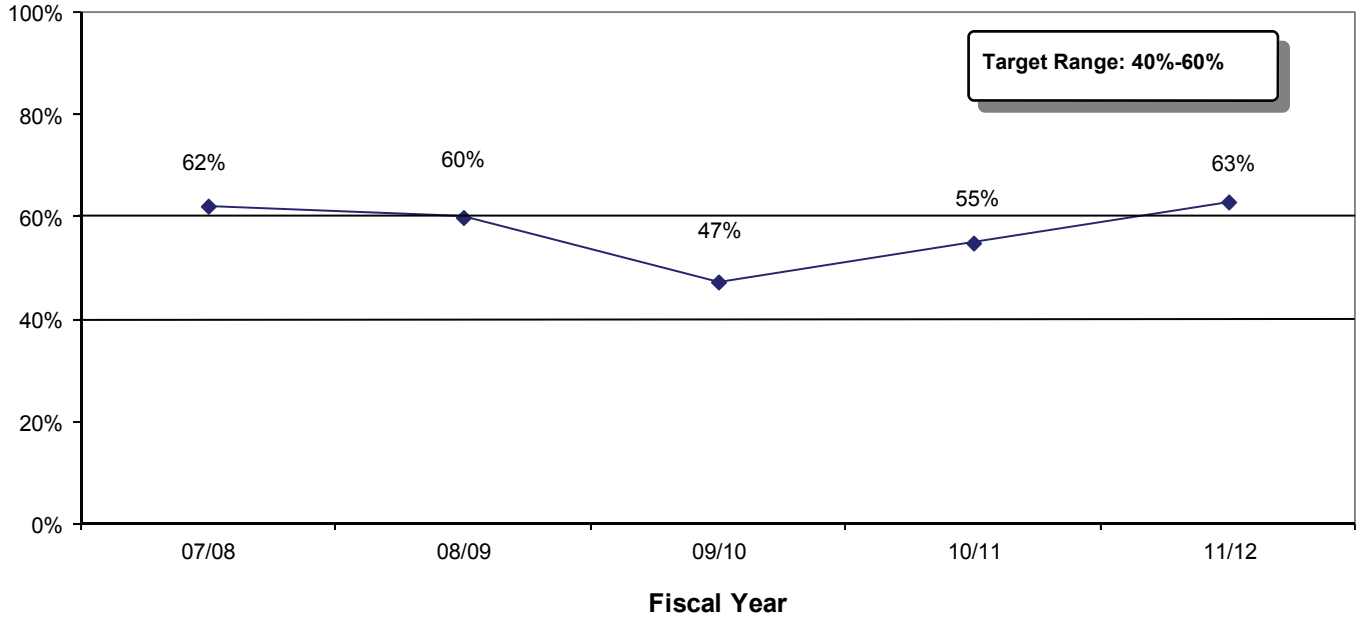


Q2: Annual Approved Value Added Recommendations
District 4

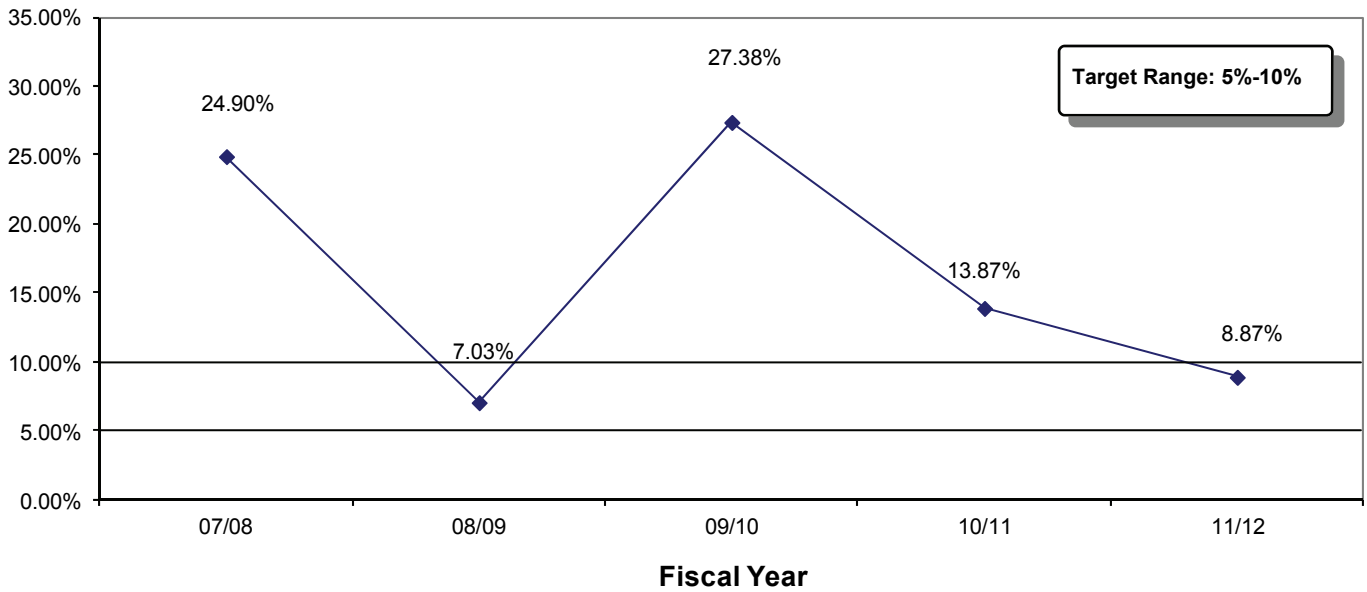


District 4

Q3: Annual Adoption Rate District 4

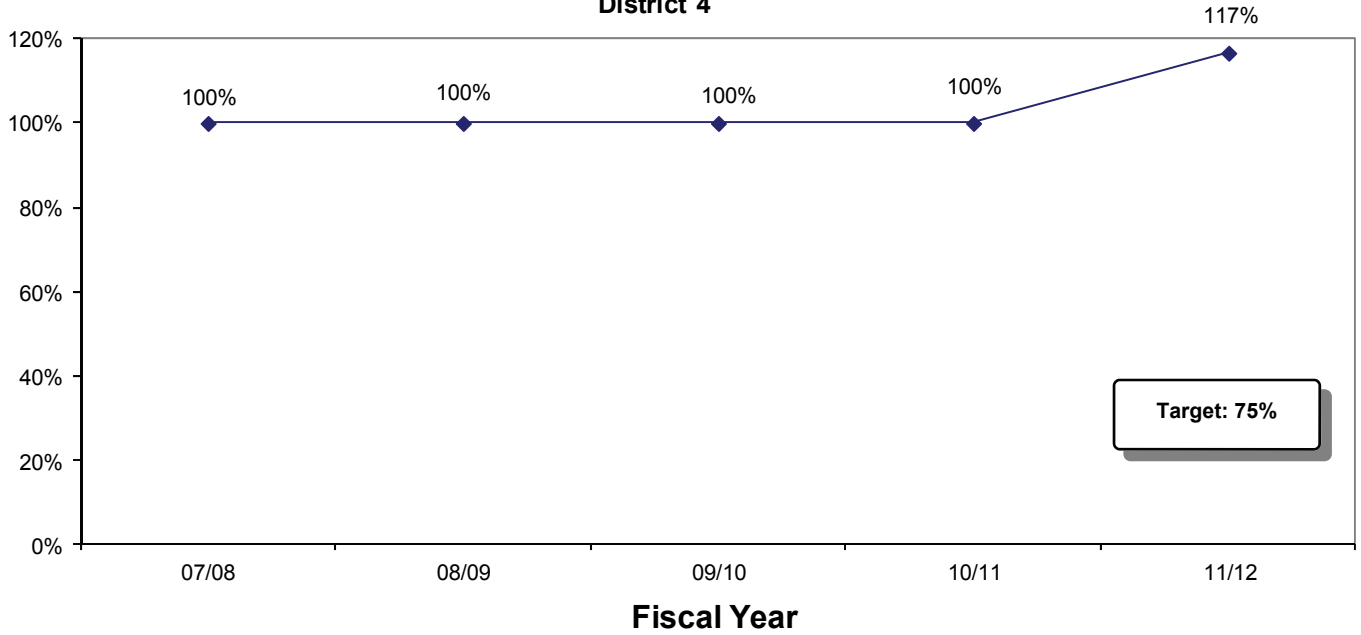


Q4: Annual Percent Project Saved District 4

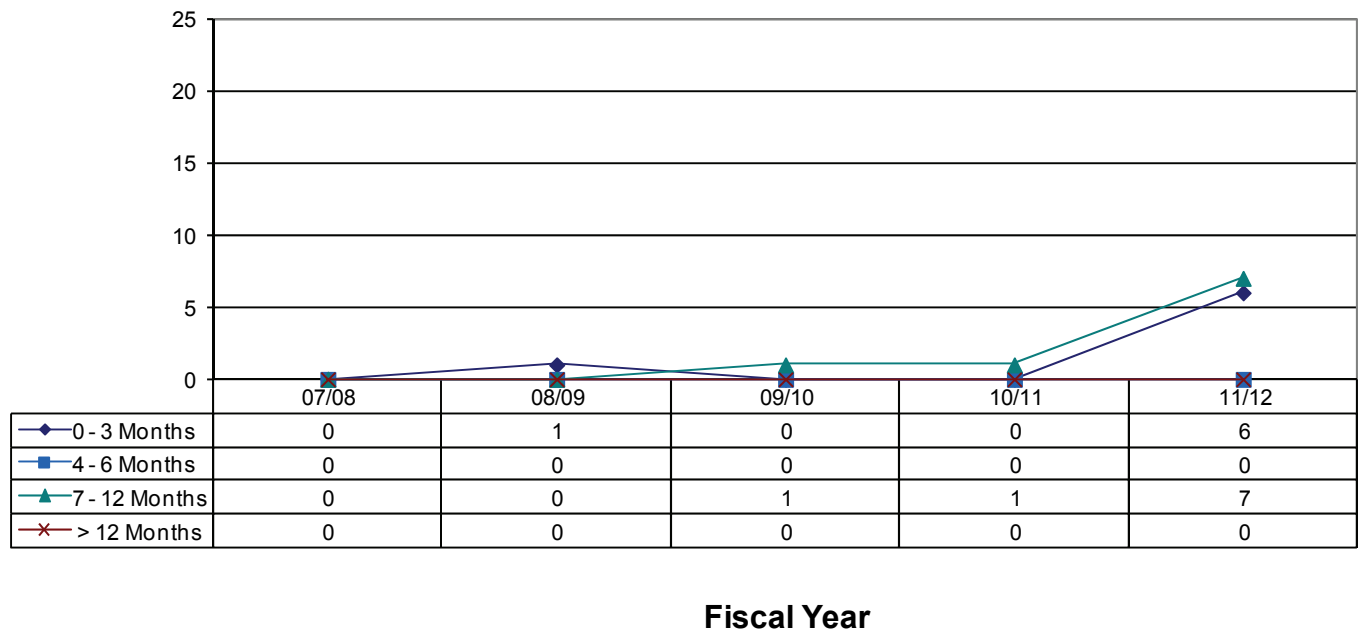


District 4

P1: % Scheduled VE Studies Completed
District 4

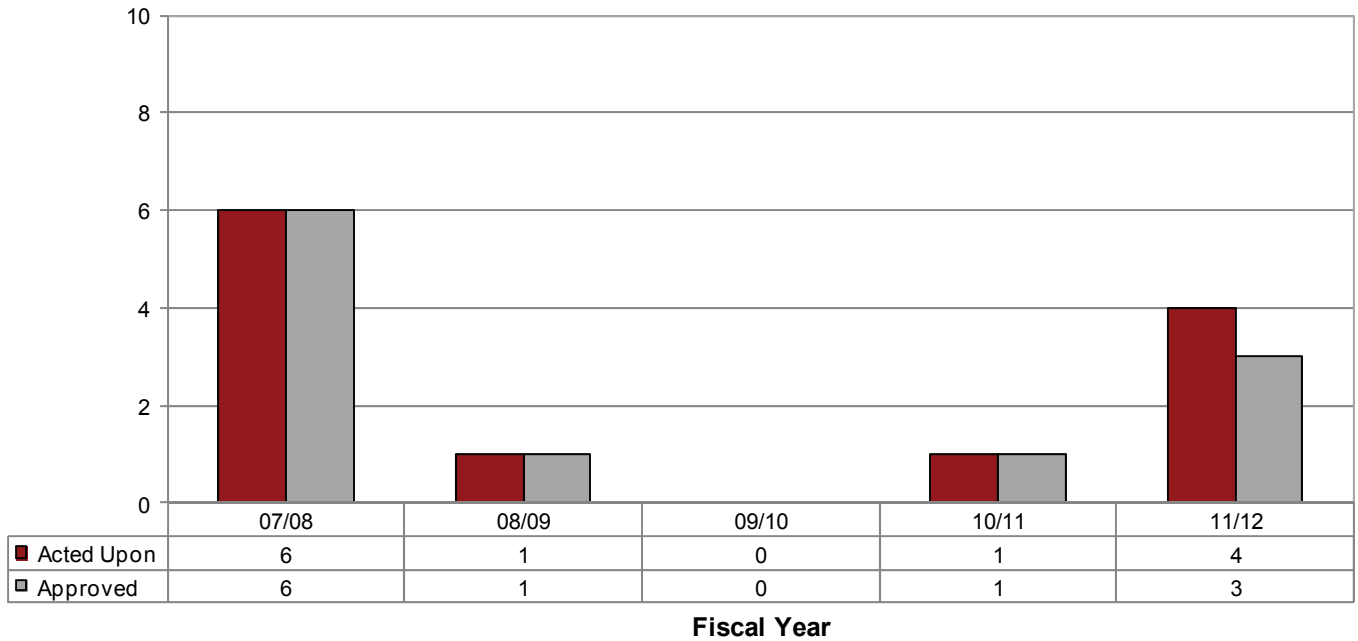


P4: Annual # Pending Recommendations
District 4

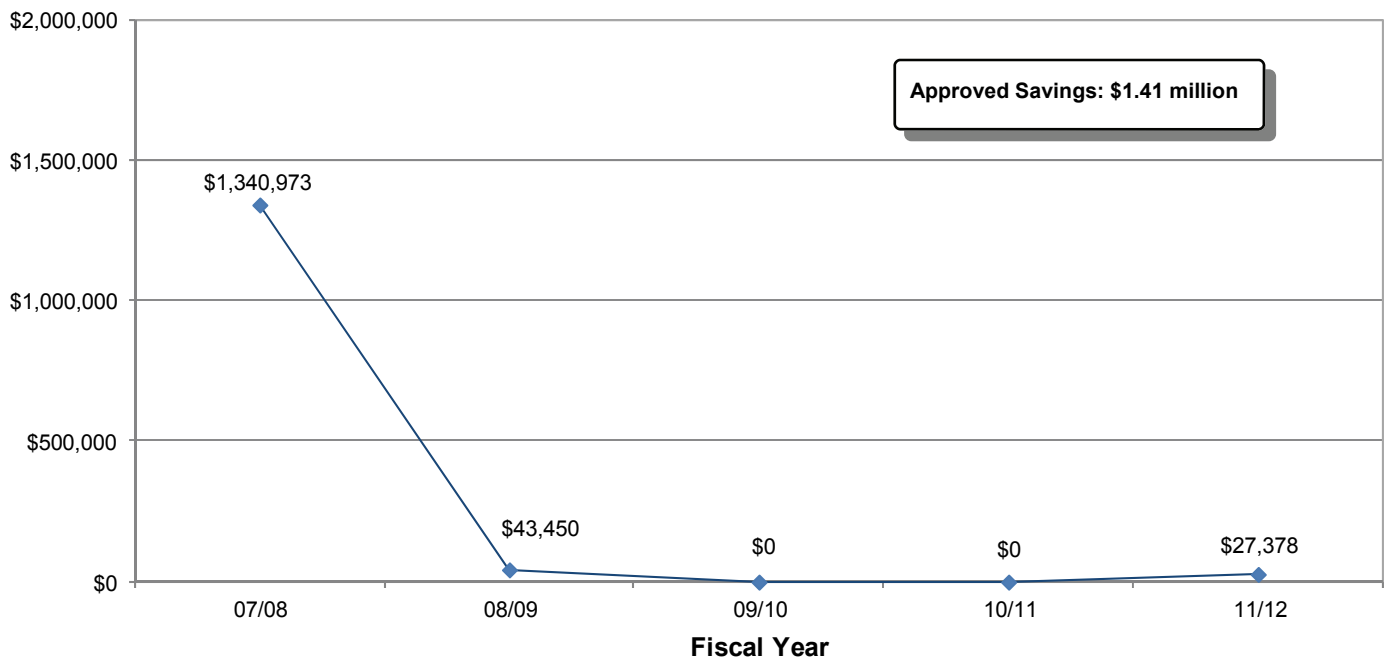


District 4

Q1: Annual VECP's Acted Upon

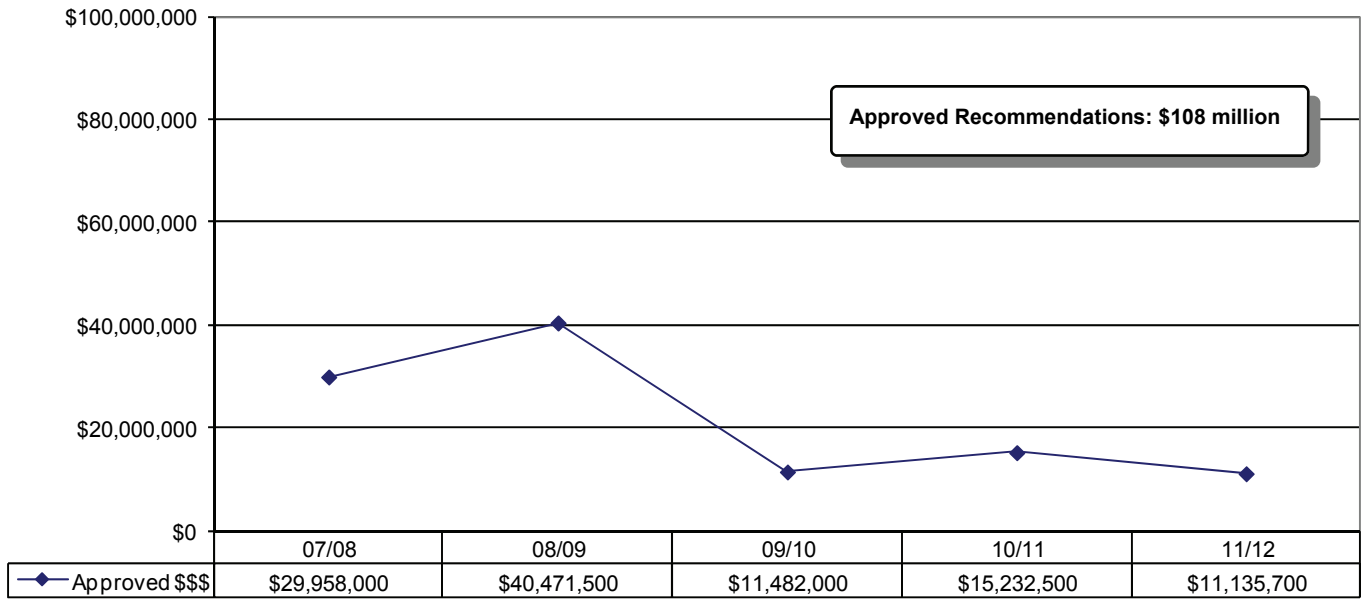


Q2: Annual Approved VECP Savings

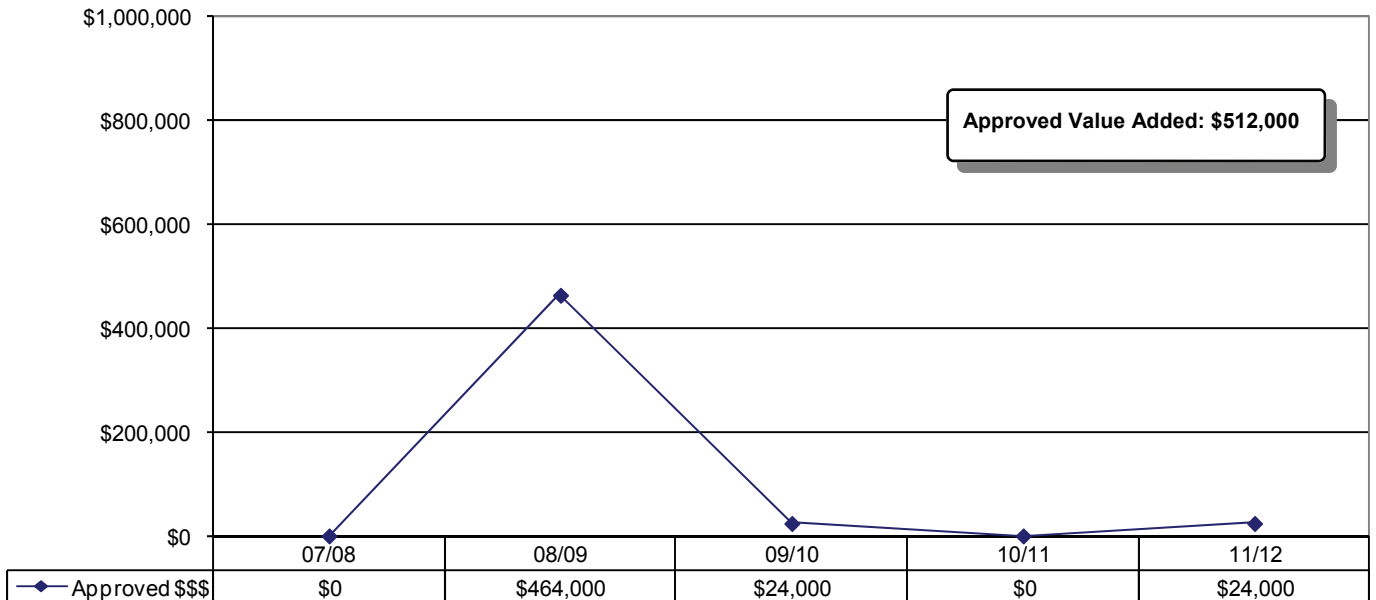


District 5

**Q1: Annual Approved Cost Avoidance/Savings
District 5**

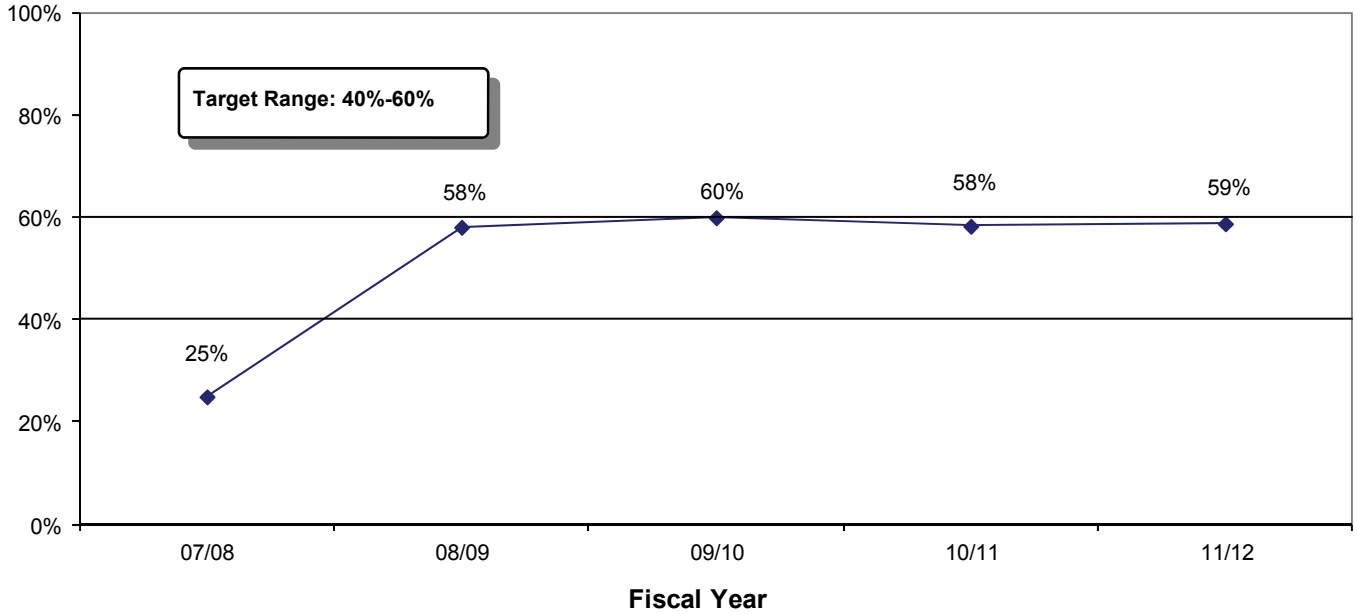


**Q2: Annual Approved Value Added Recommendations
District 5**

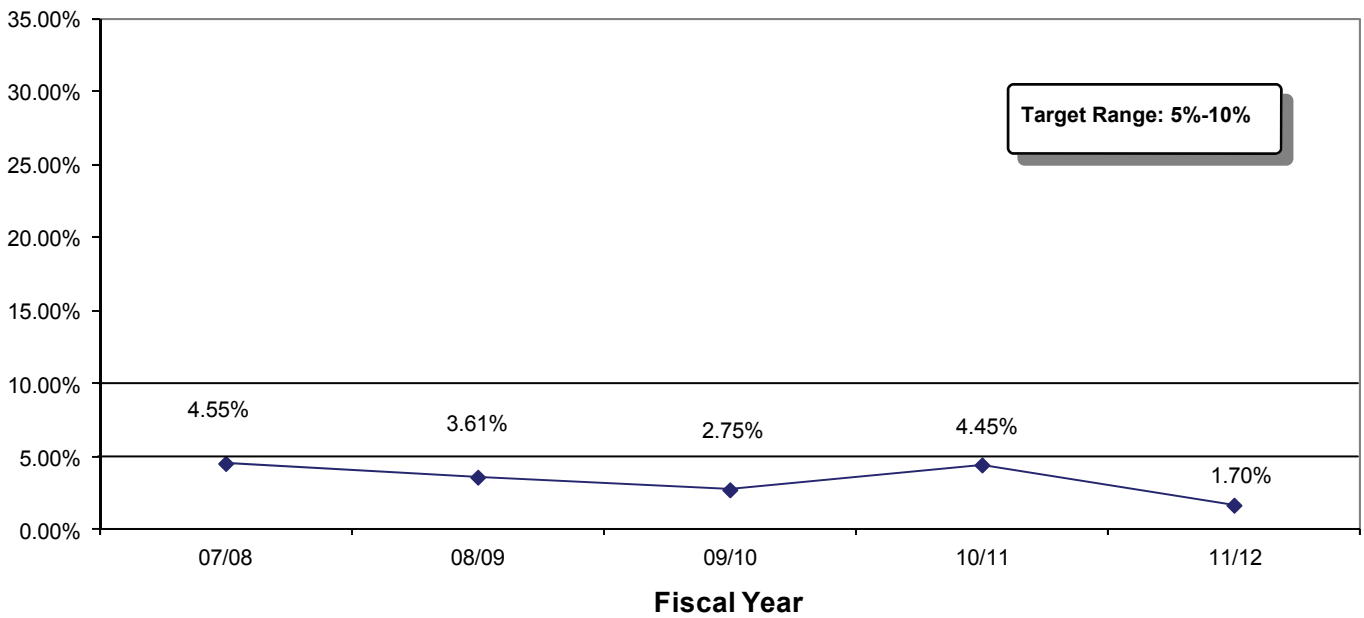


District 5

Q3: Annual Adoption Rate District 5

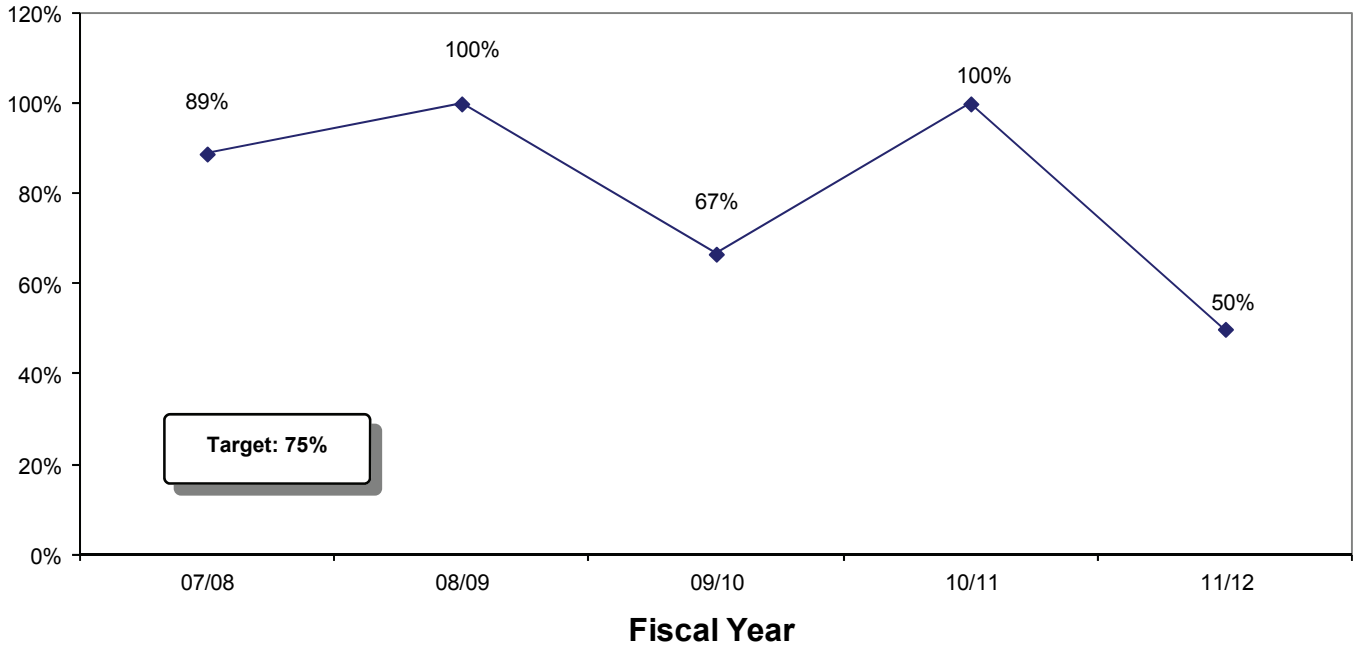


Q4: Annual Percent Project Saved District 5

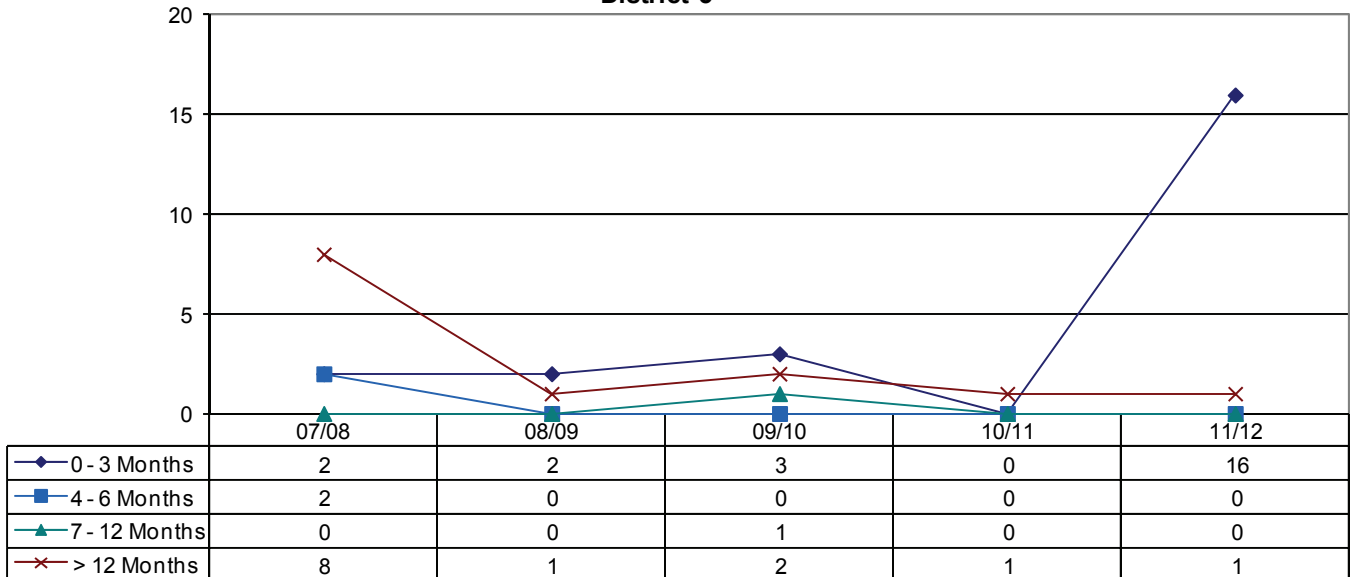


District 5

P1: % Scheduled VE Studies Completed
District 5

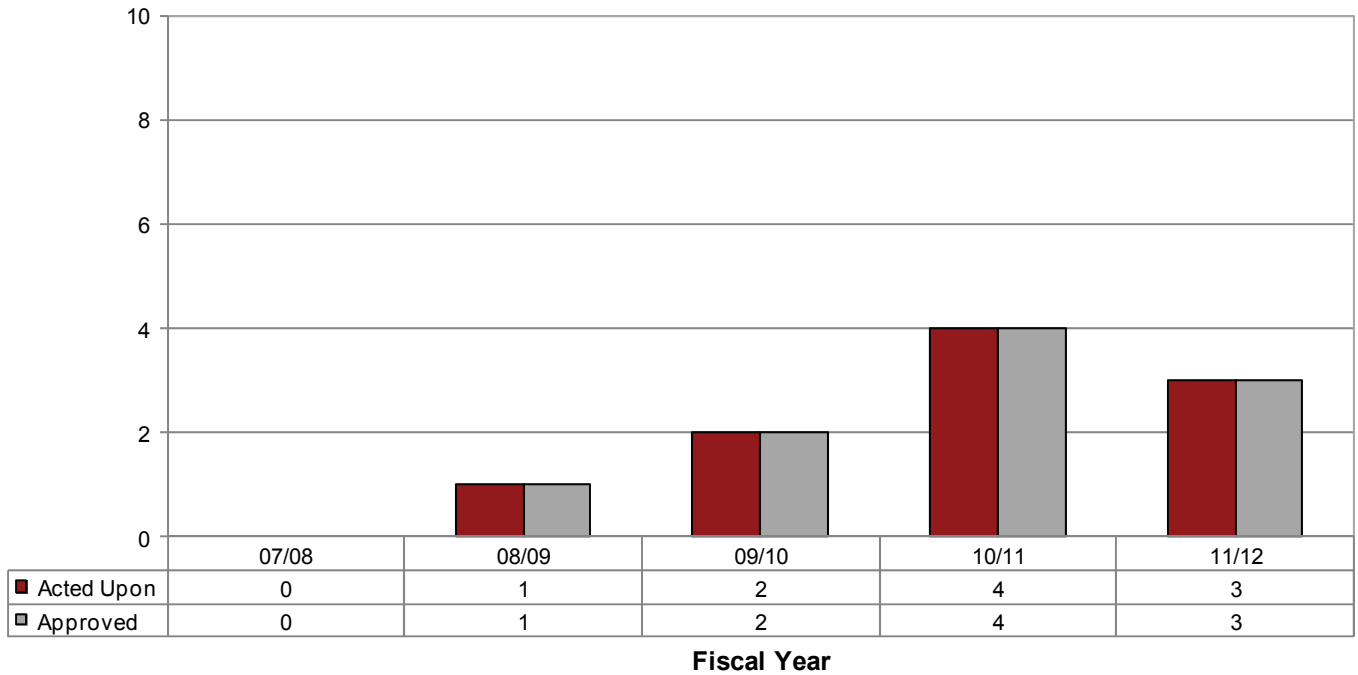


P4: Annual # Pending Recommendations
District 5

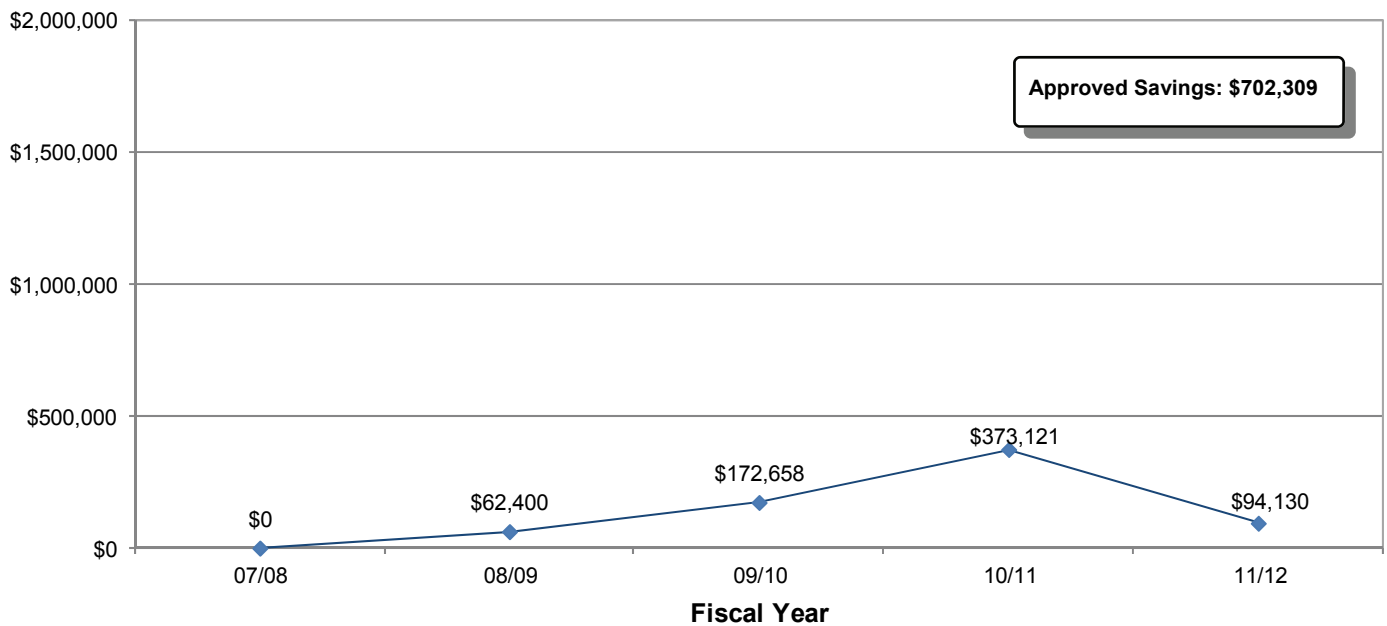


District 5

Q1: Annual VECP's Acted Upon

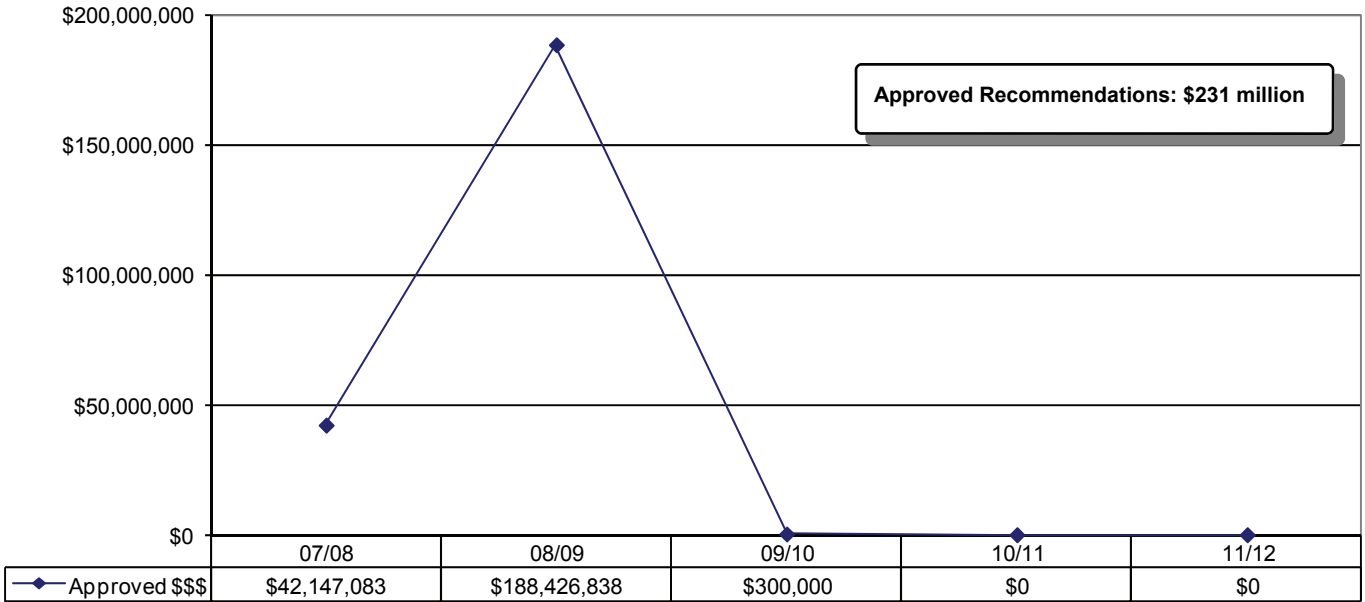


Q1: Annual VECP's Acted Upon

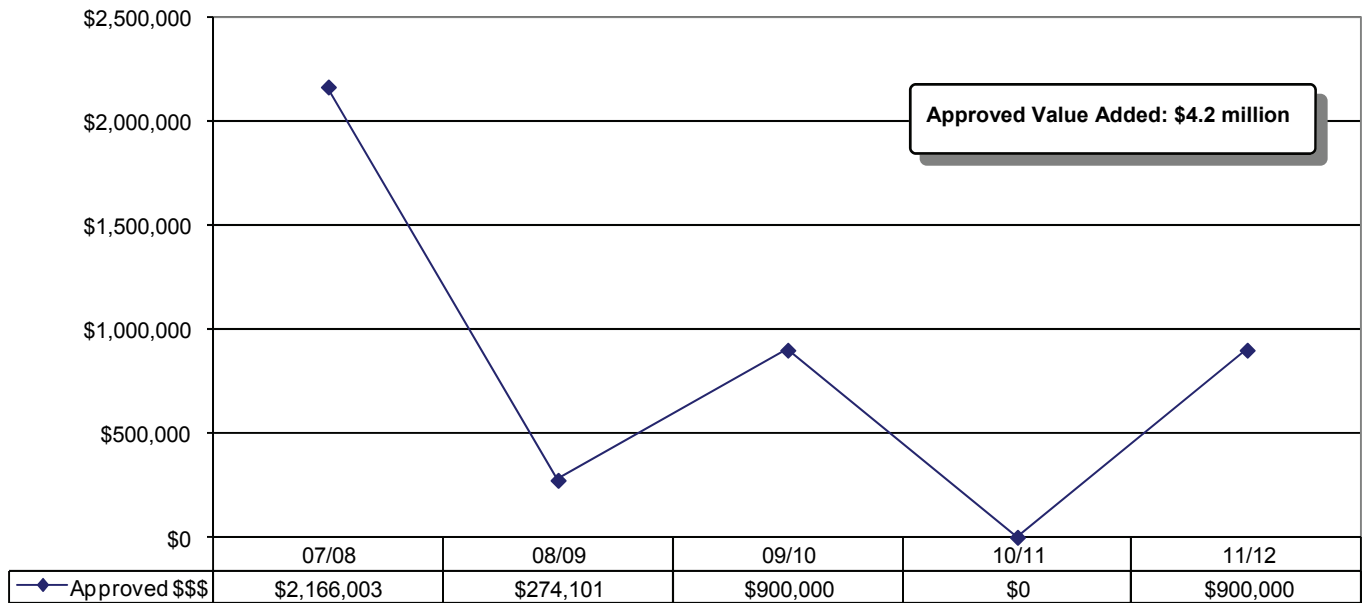


District 6

Q1: Annual Approved Cost Avoidance/Savings
District 6

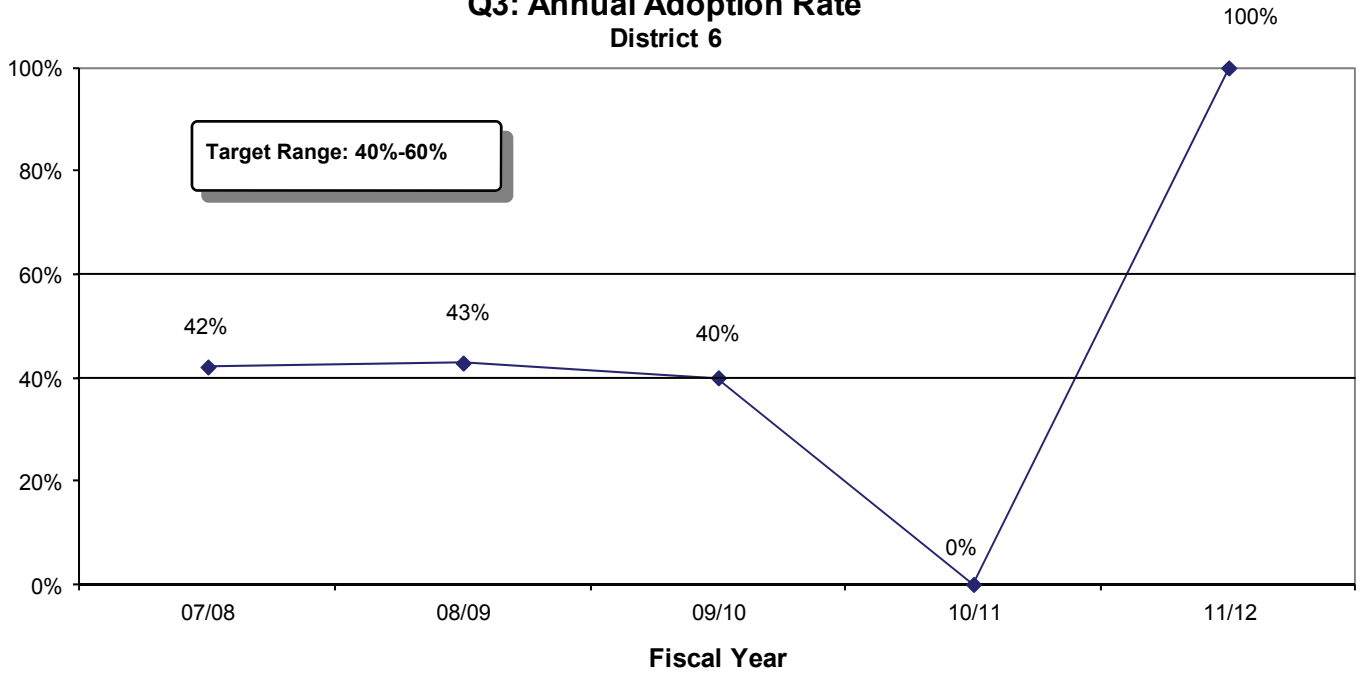


Q2: Annual Approved Value Added Recommendations
District 6

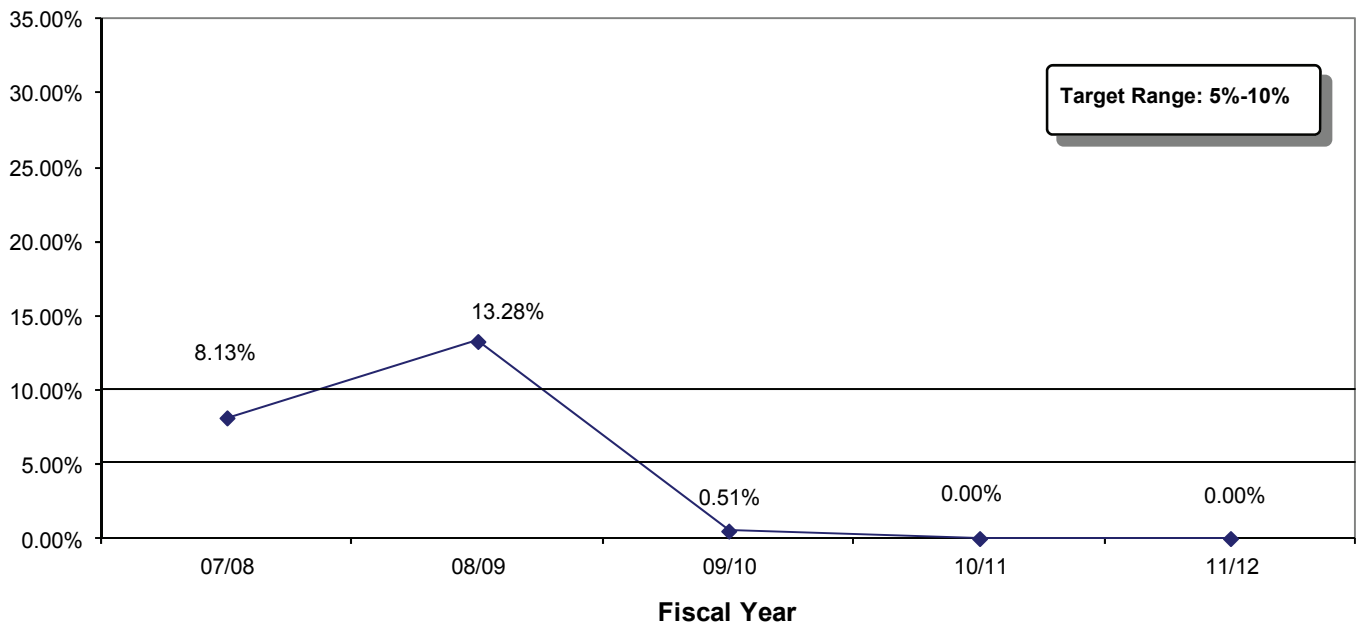


District 6

Q3: Annual Adoption Rate District 6

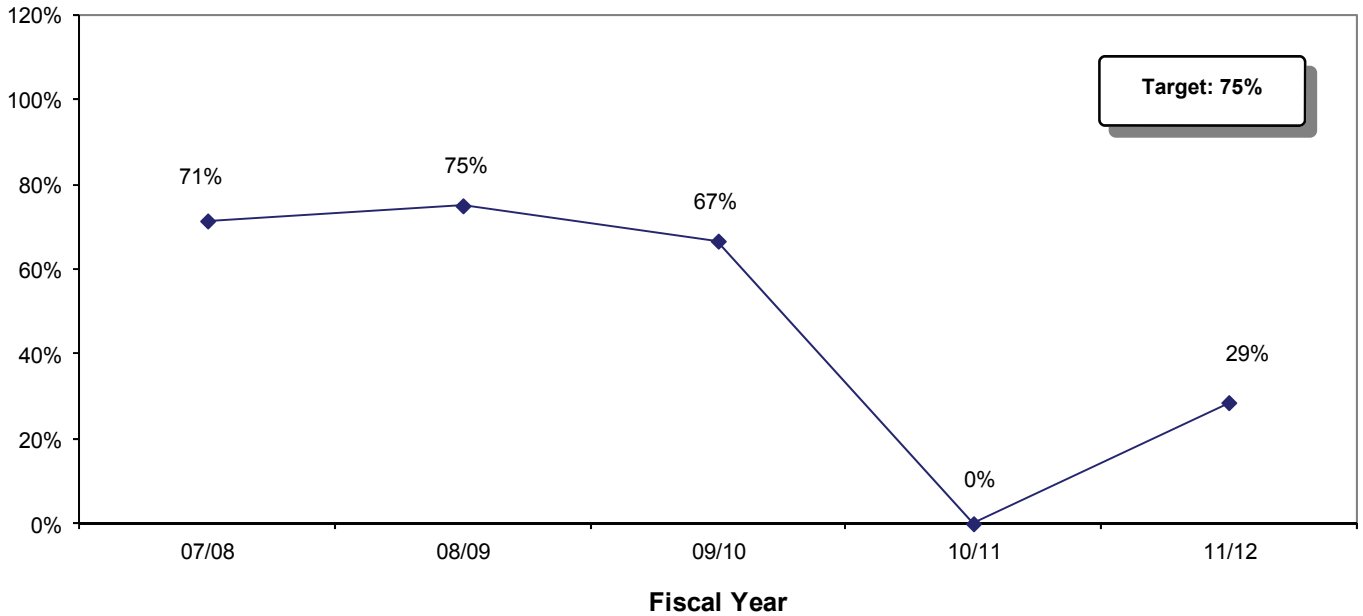


Q4: Annual Percent Project Saved District 6

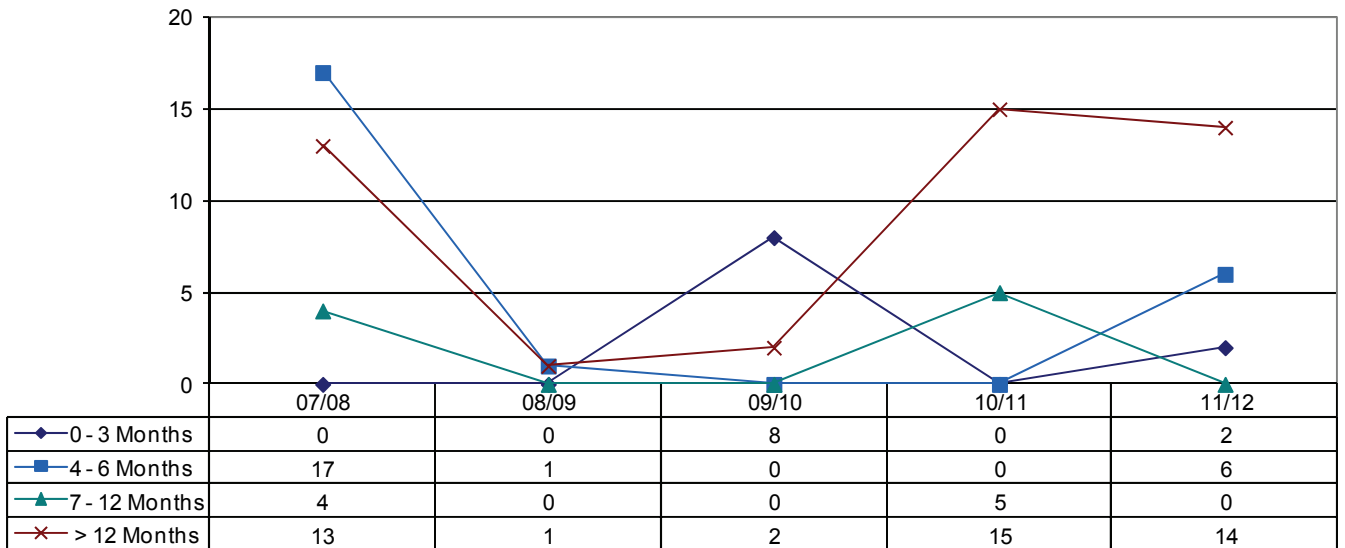


District 6

P1: % Scheduled VE Studies Completed
District 6

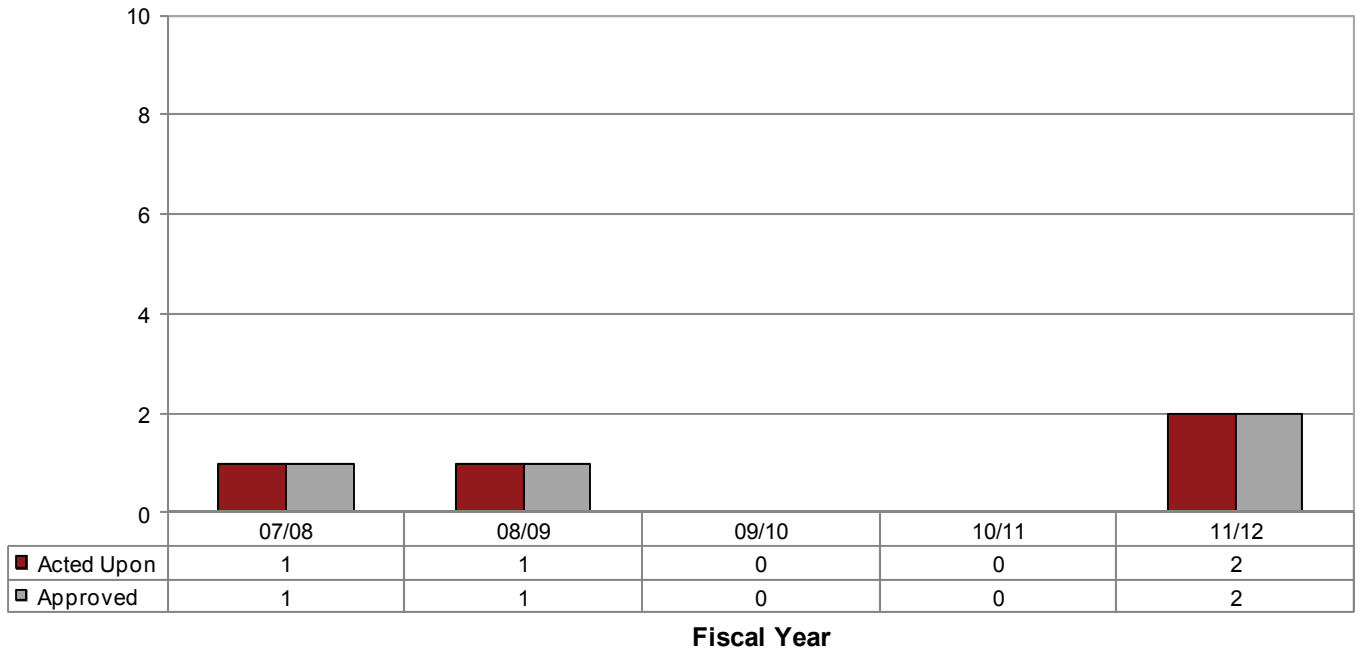


P4: Annual # Pending Recommendations
District 6

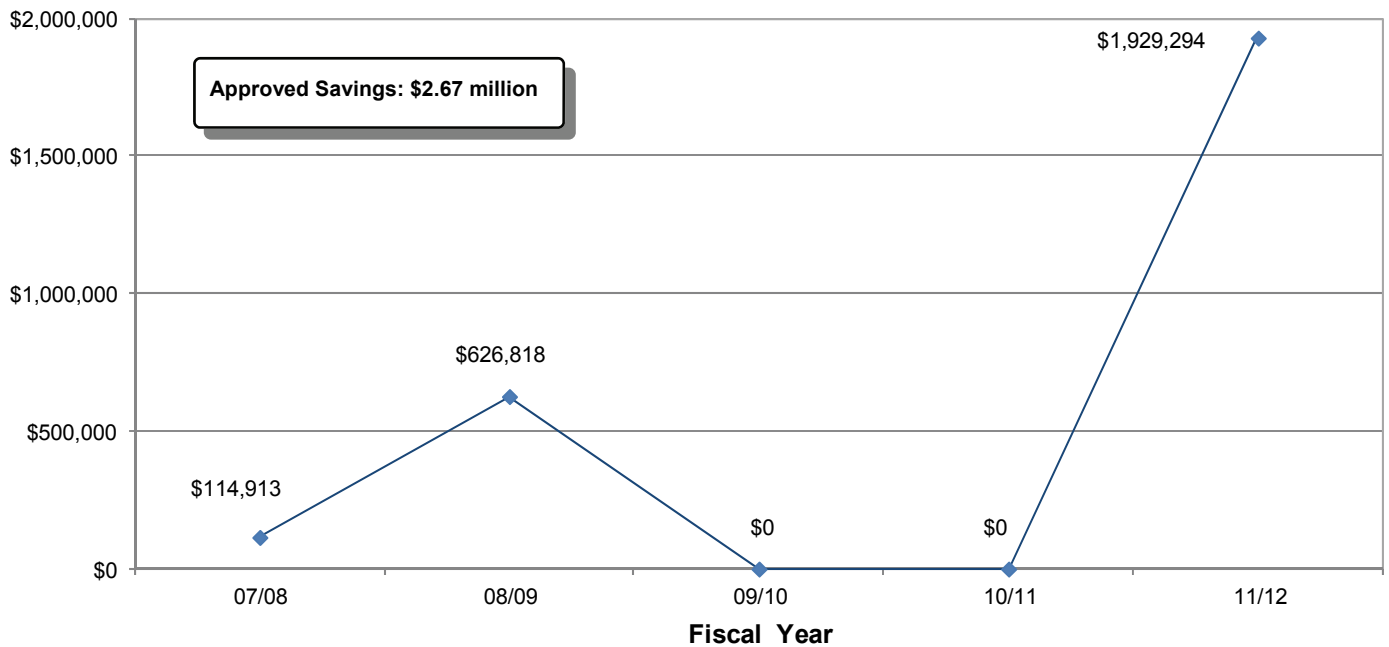


District 6

Q1: Annual VECP's Acted Upon

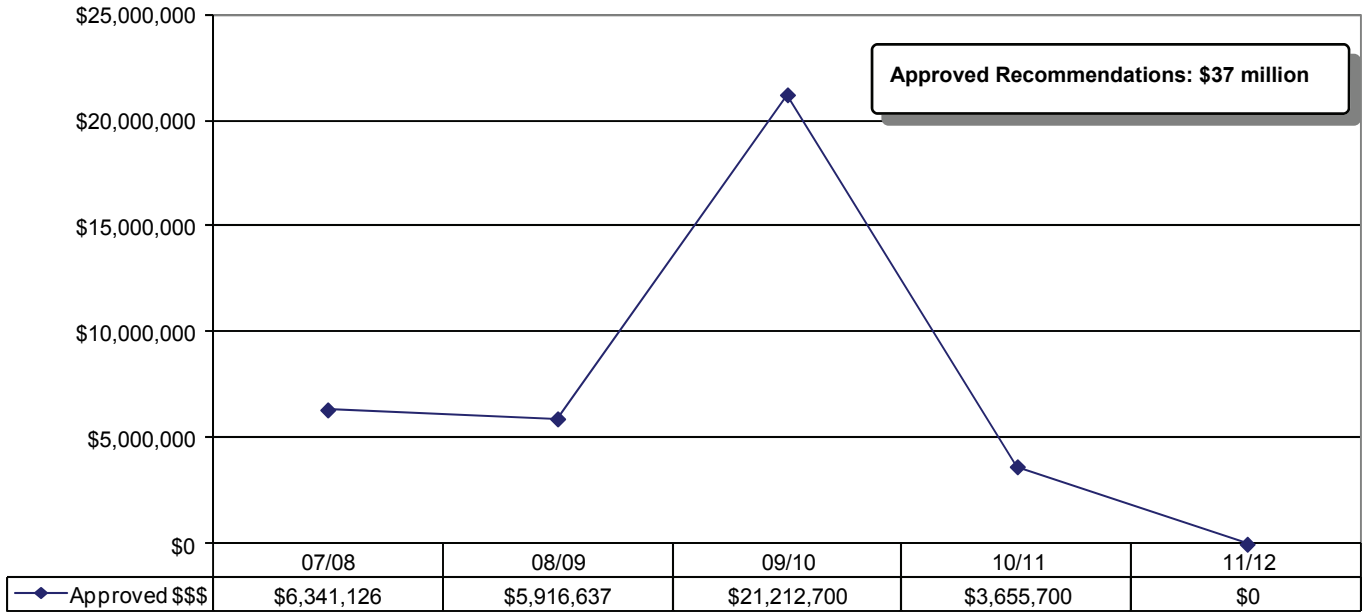


Q2: Annual Approved VECP Savings

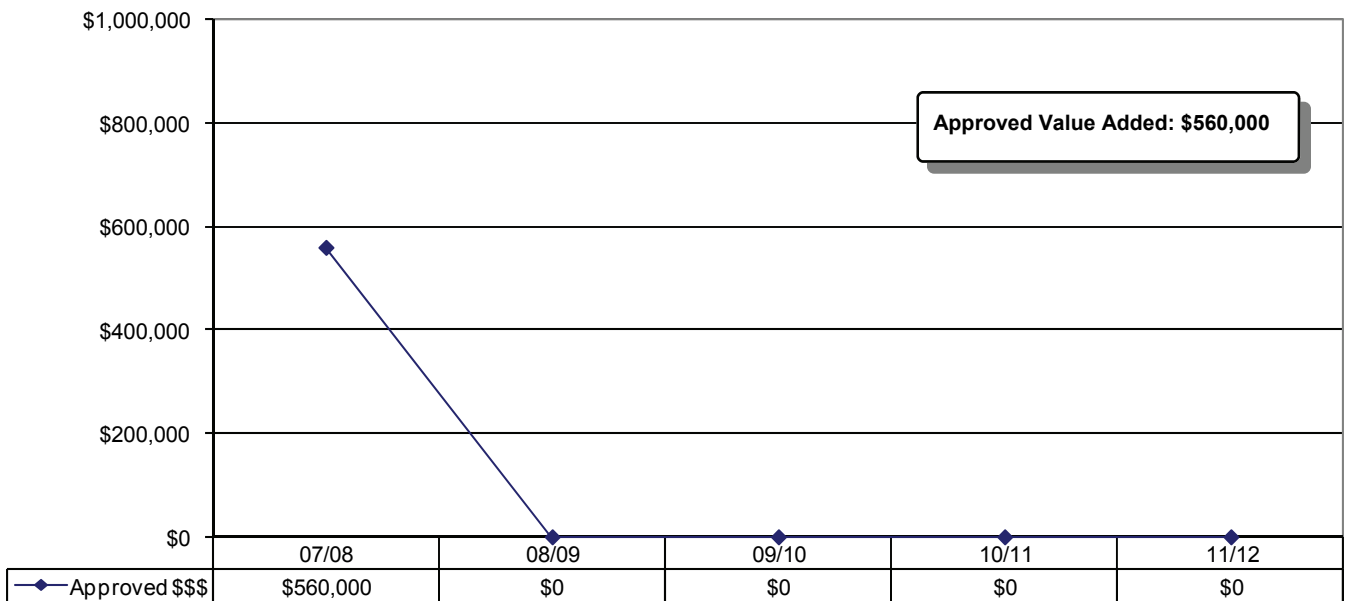


District 7

Q1: Annual Approved Cost Avoidance/Savings
District 7

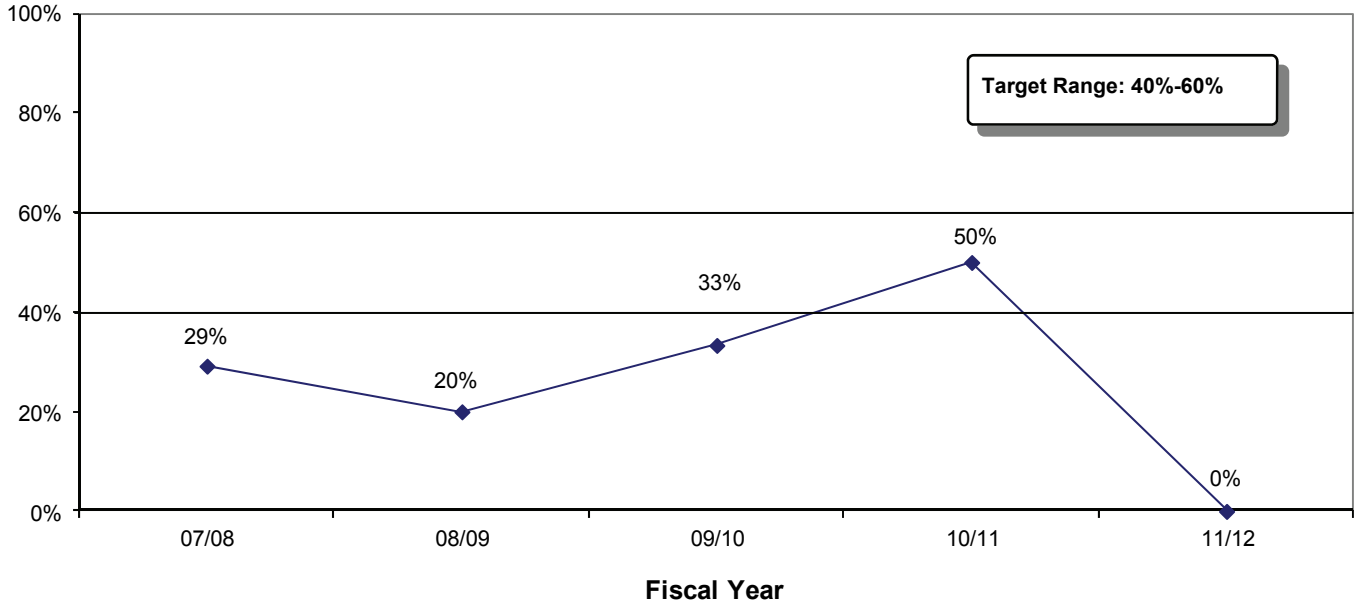


Q2: Annual Approved Value Added Recommendations
District 7

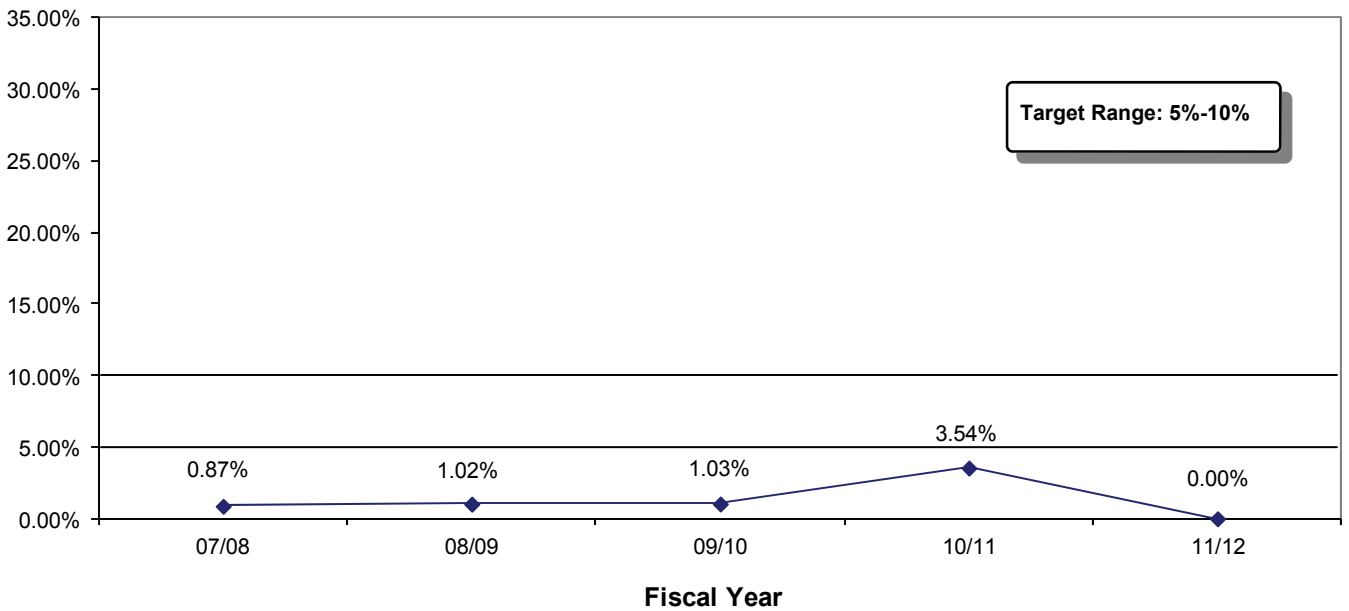


District 7

Q3: Annual Adoption Rate District 7

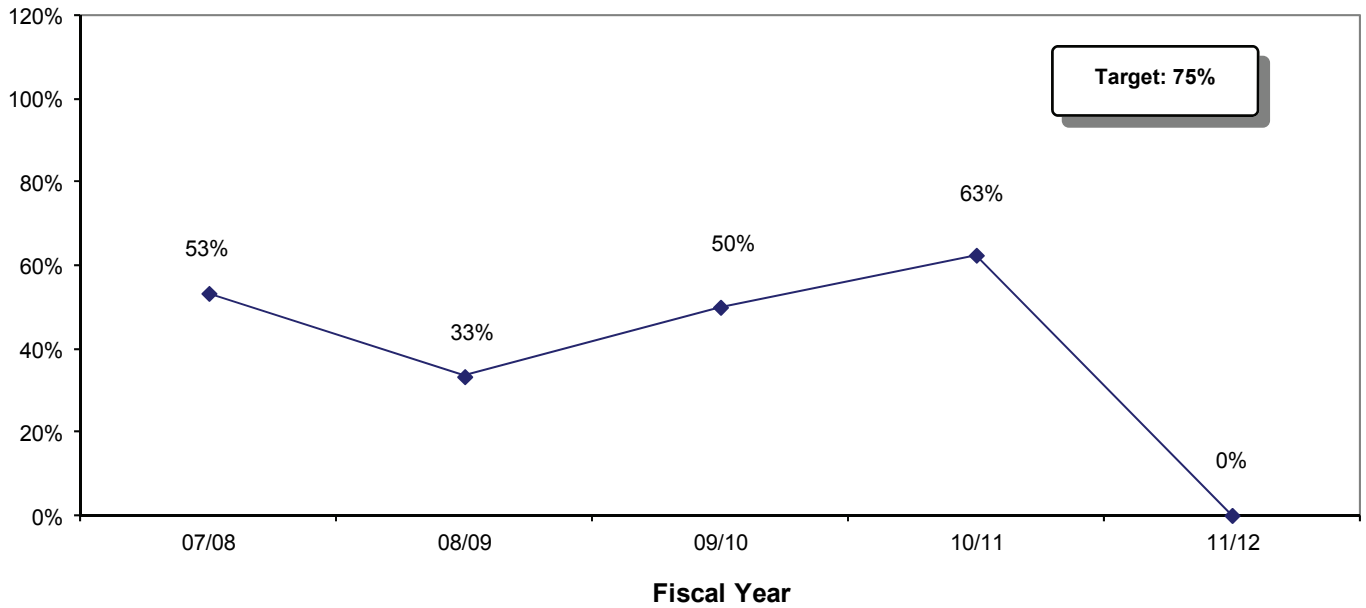


Q4: Annual Percent Project Saved District 7

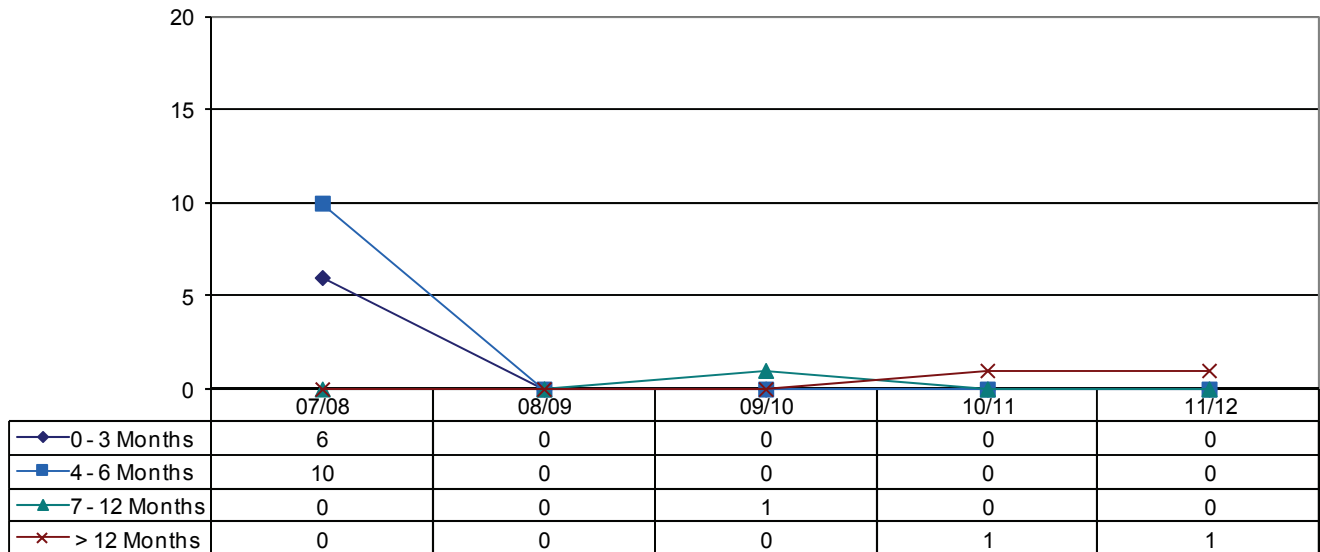


District 7

P1: %Scheduled VE Studies Completed
District 7

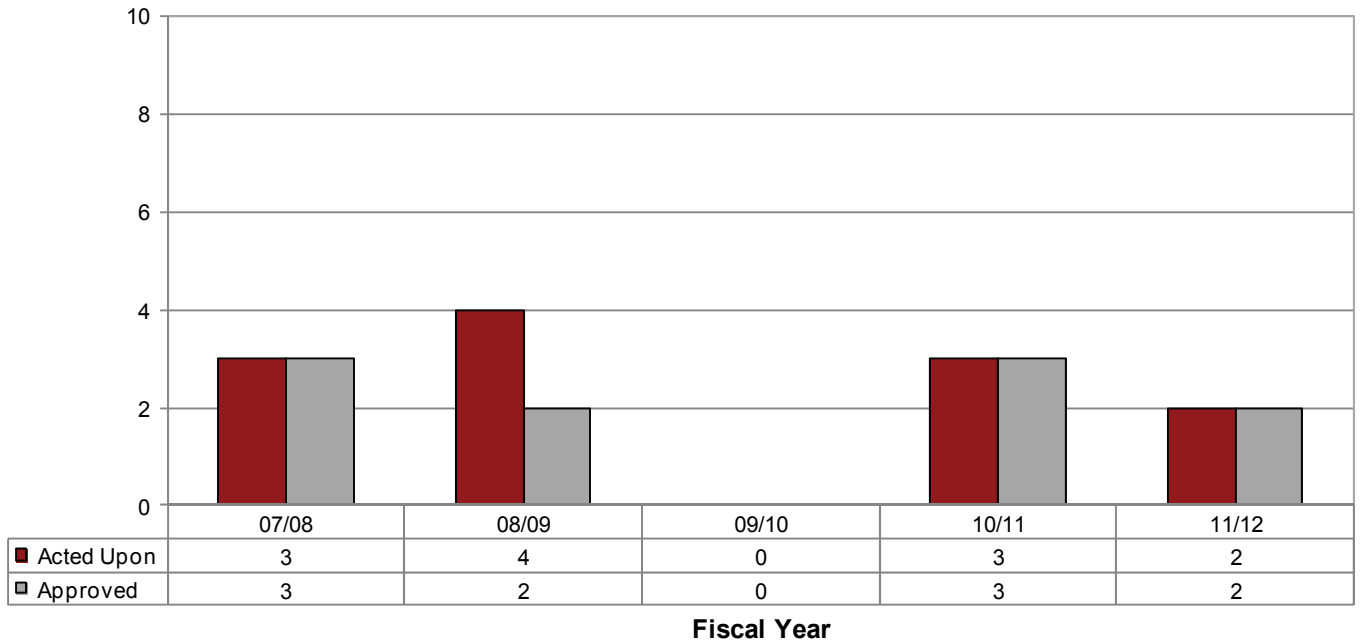


P4: Annual # Pending Recommendations
District 7

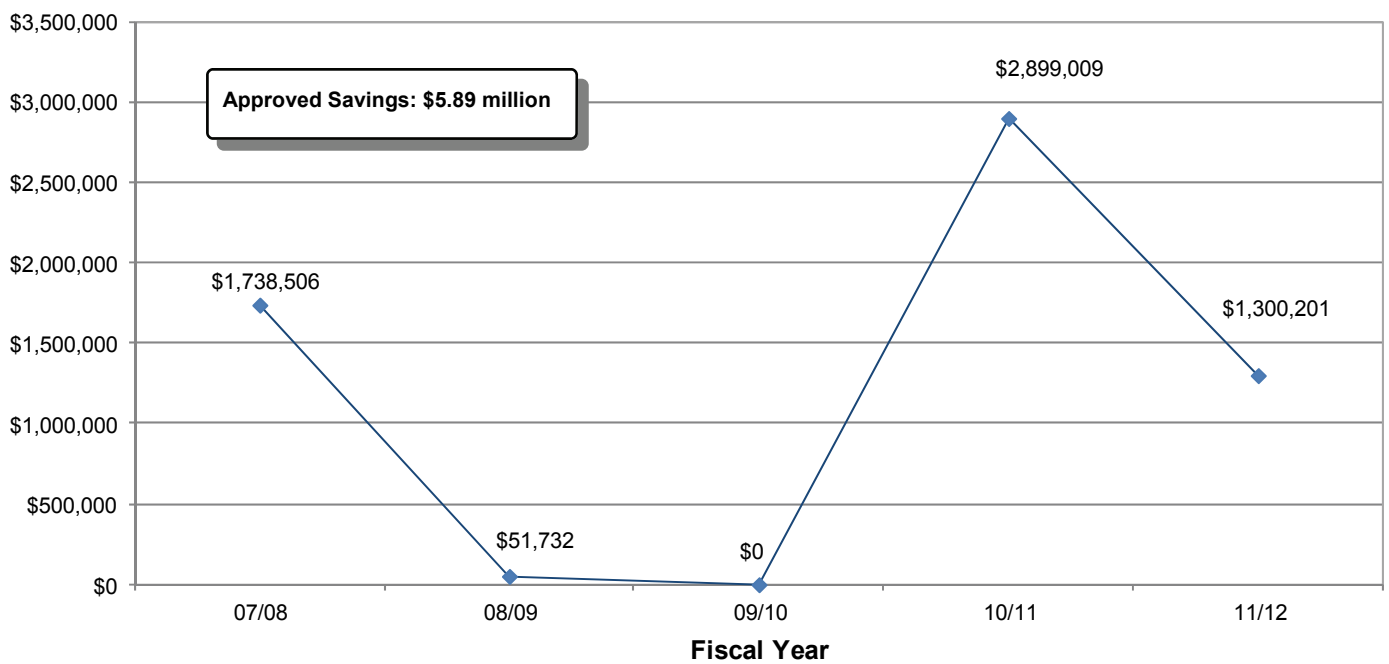


District 7

Q1: Annual VECP's Acted Upon

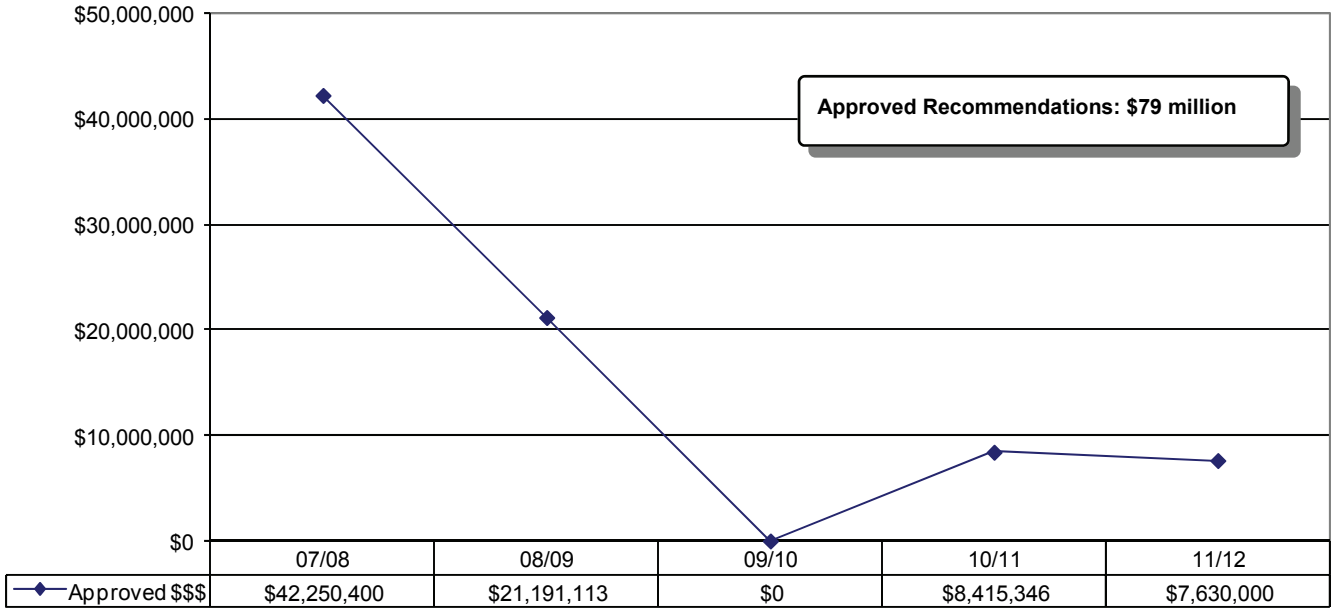


Q1: Annual VECP's Acted Upon

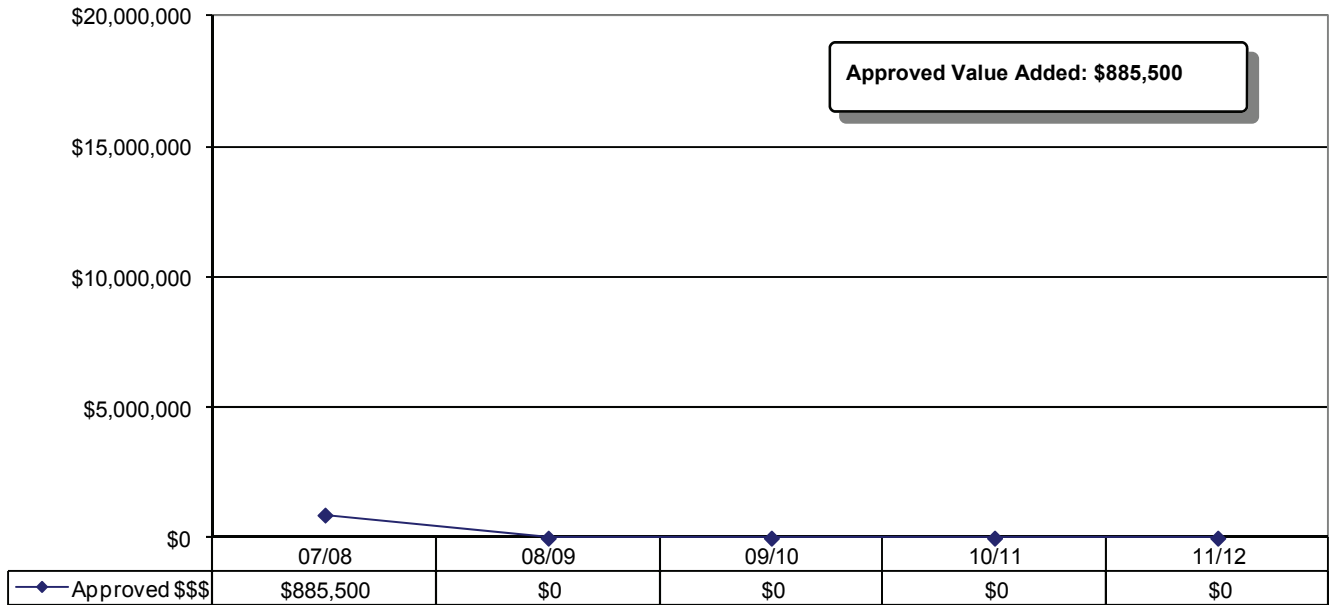


Turnpike Enterprise

Q1: Annual Approved Cost Avoidance/Savings
Turnpike Enterprise

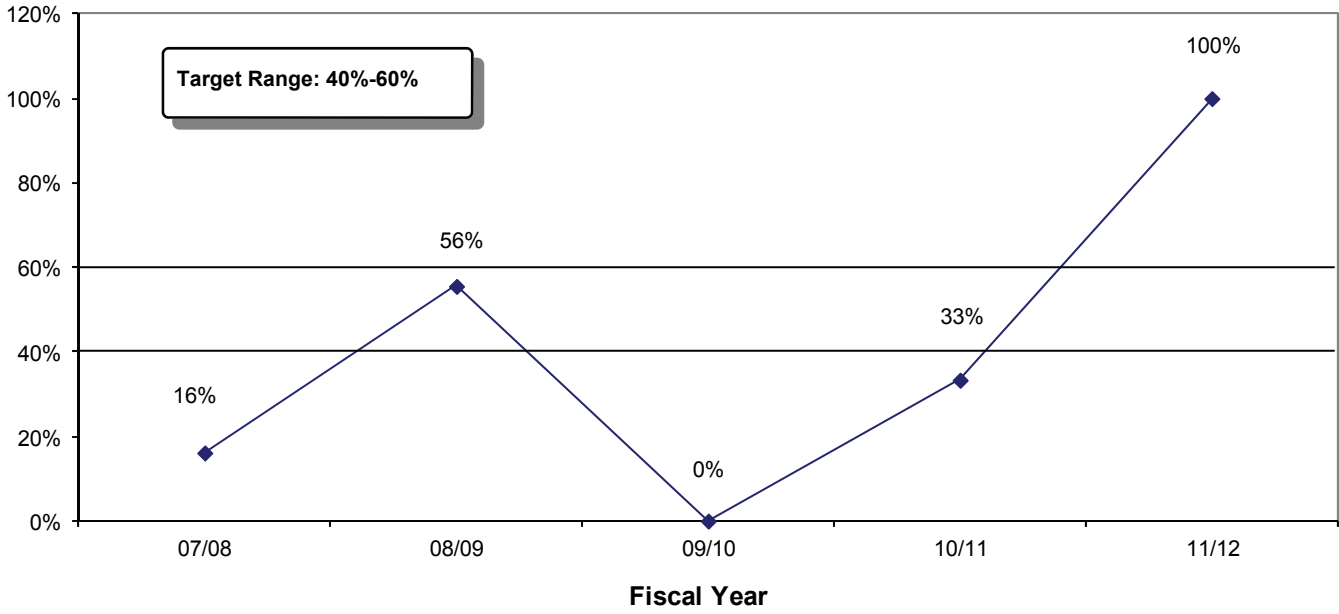


Q2: Annual Approved Value Added Recommendations
Turnpike Enterprise

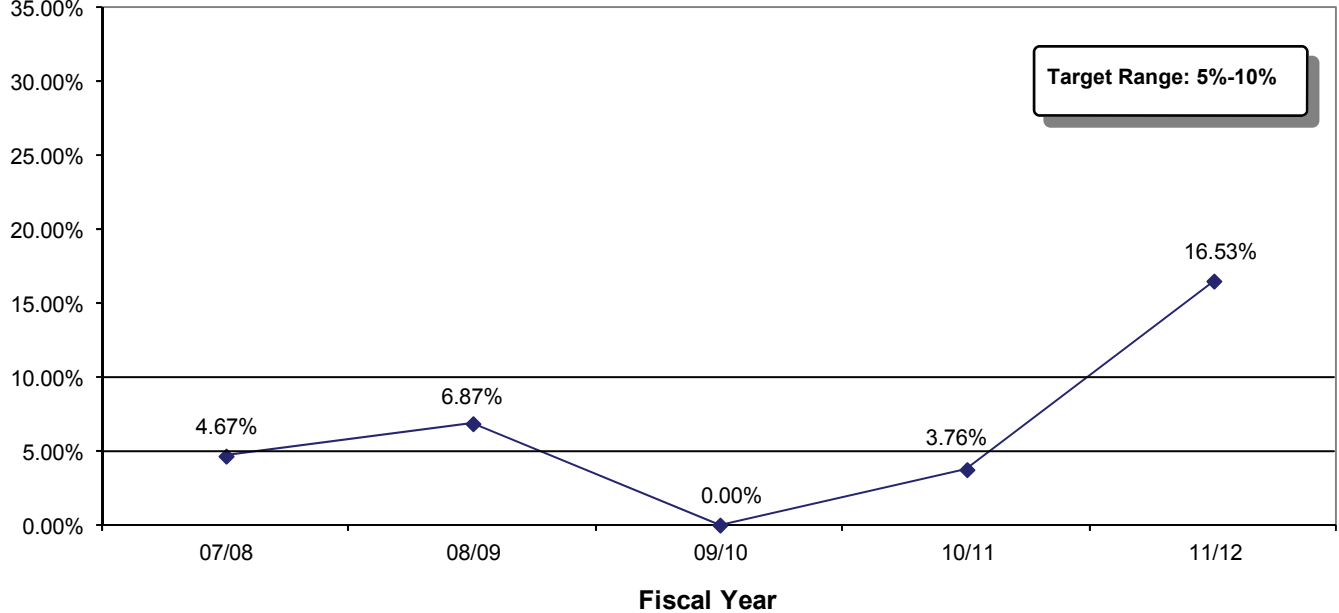


Turnpike

Q3: Annual Adoption Rate Turnpike Enterprise

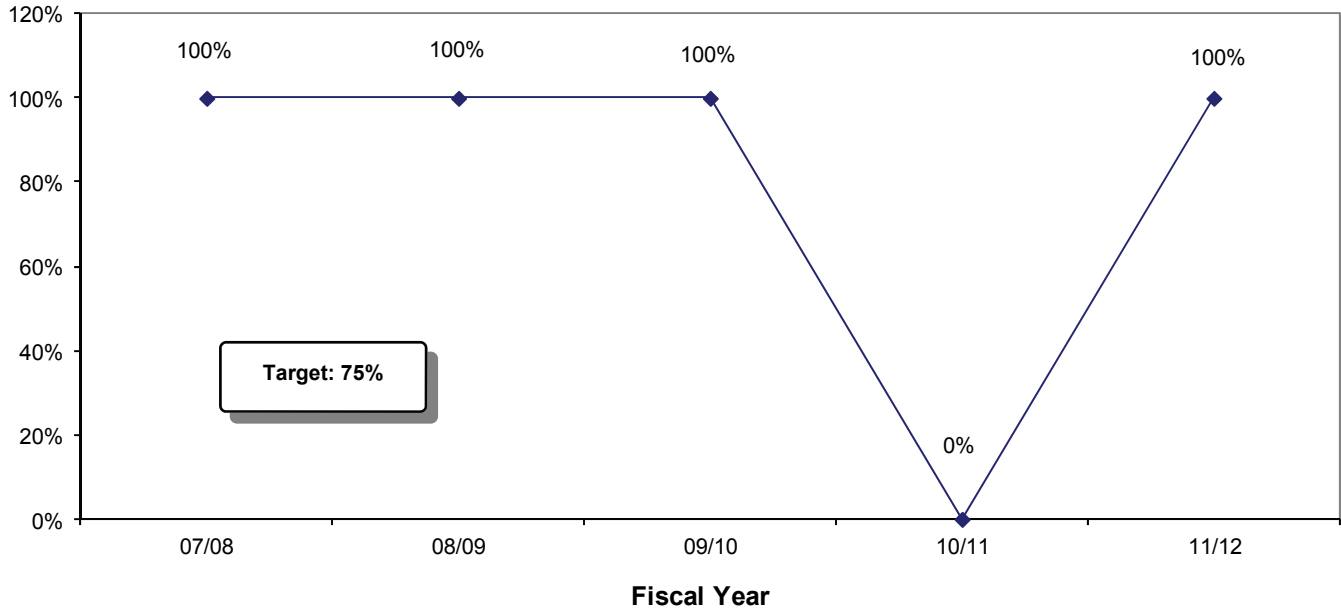


Q4: Annual Percent Project Saved Turnpike Enterprise

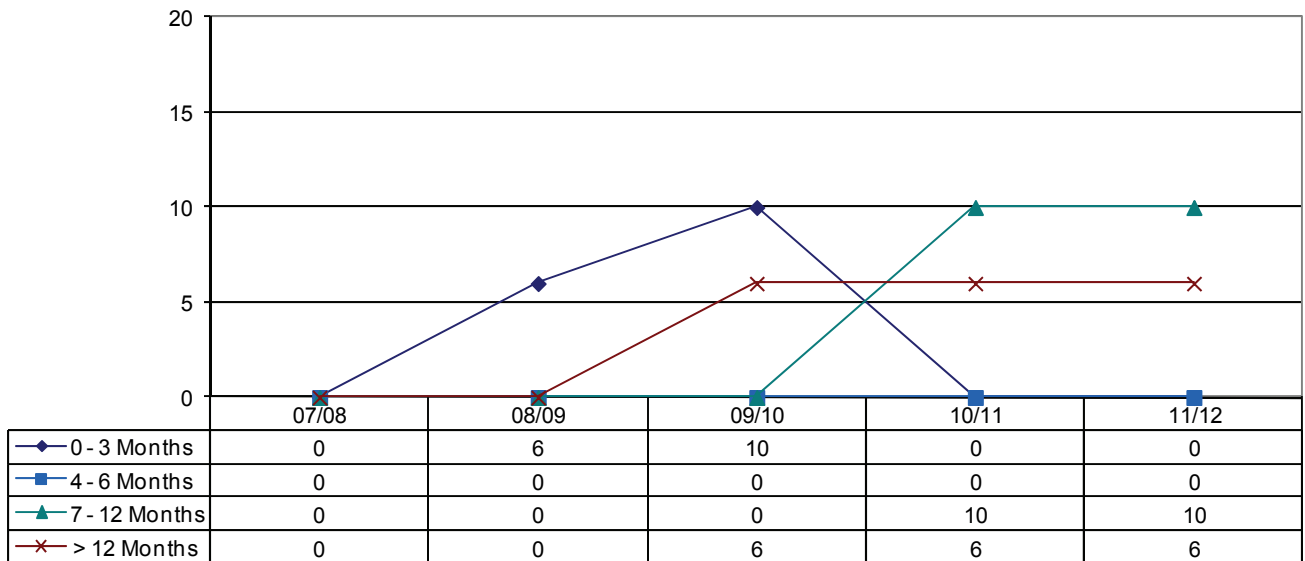


Turnpike

P1: % Scheduled VE Studies Completed
Turnpike Enterprise

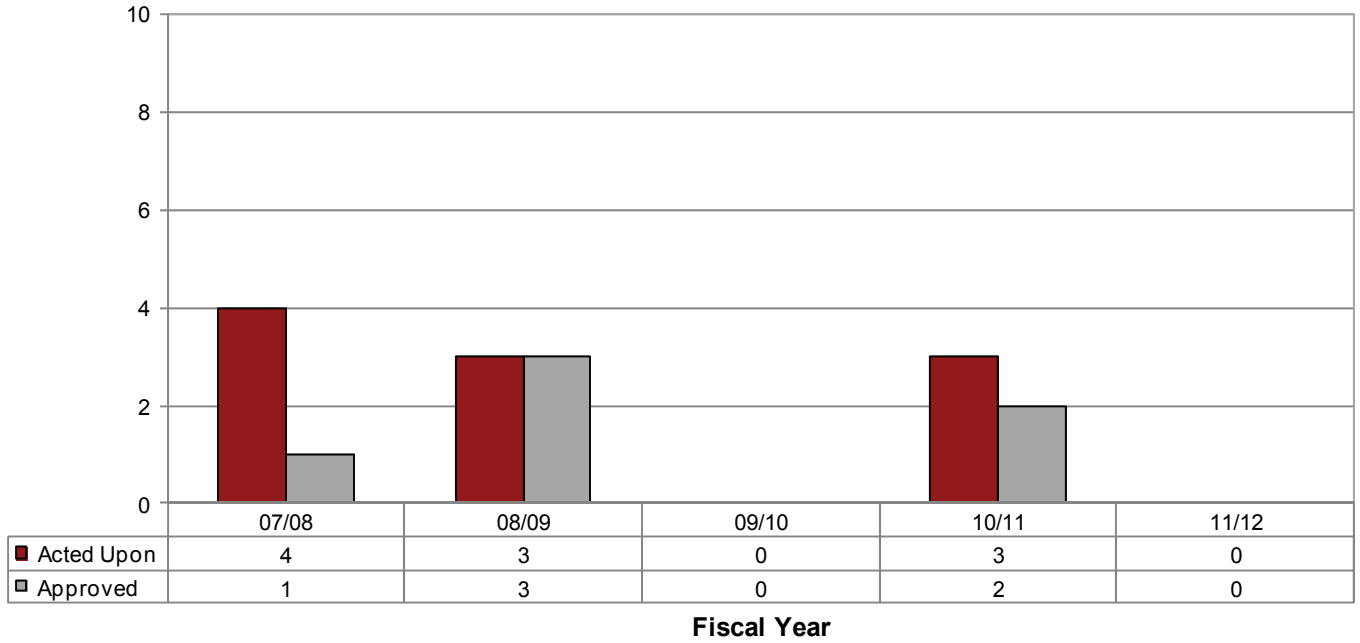


P4: Annual # Pending Recommendations
Turnpike Enterprise

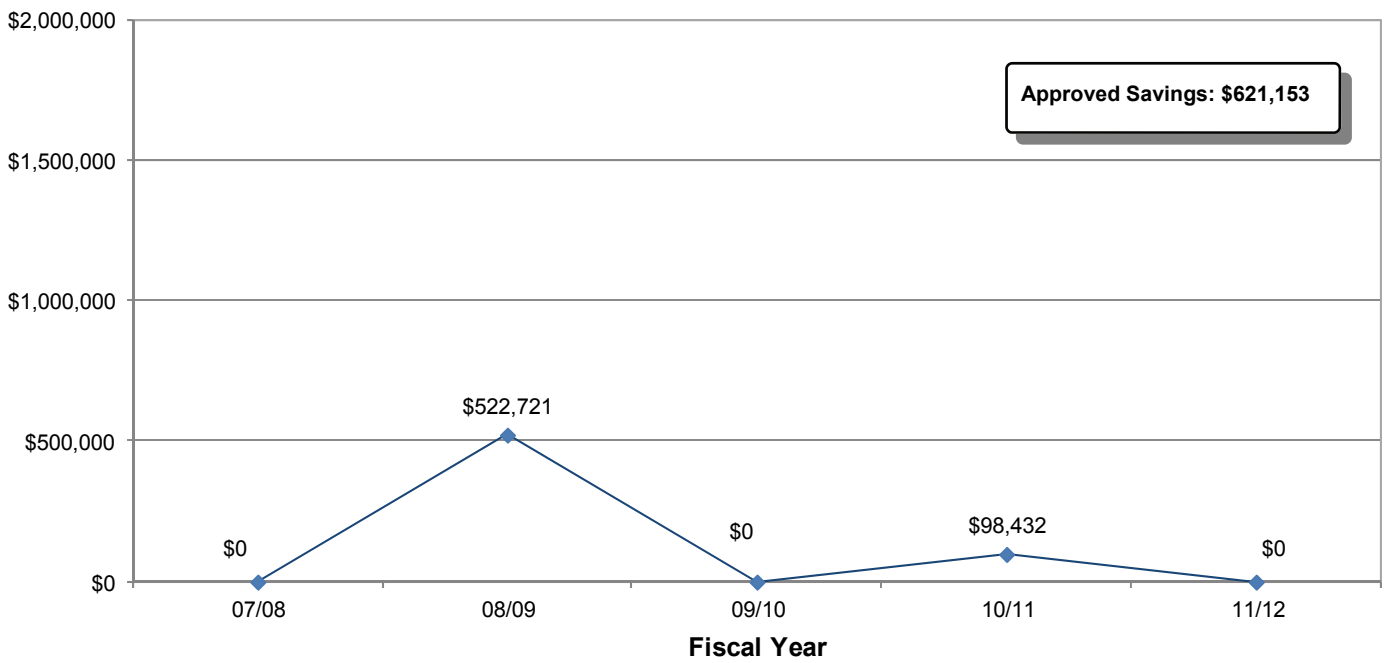


Turnpike

Q1: Annual VECP's Acted Upon



Q2: Annual Approved VECP Savings



Appendix B

Process Control Systems

Process Control System

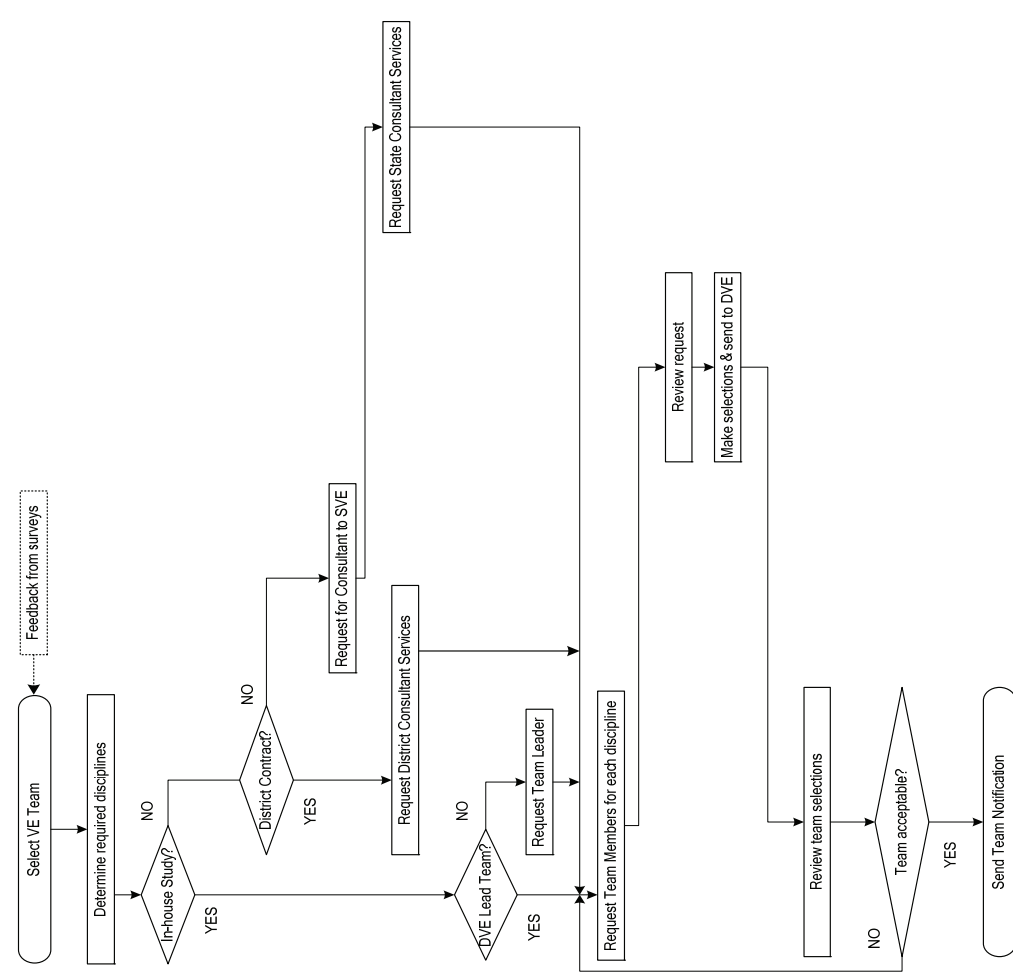
Process Name: Value Engineering Program		Product/Service: Perform Value Engineering analysis on selected projects and document findings	Primary Customers: Management Regulators: FHWA	Customers Valid Requirements(s): Effective use of resources to produce a quality transportation system.	Regulator's Valid Requirement(s): Projects with total costs of \$25 million or more have a VE study performed during the design process.								
Inputs: Projects Supplier(s): Work Program		Flow Chart			Miscellaneous Information								
Step / Time	Dept / Person	DISTRICT VALUE ENGINEER	VALUE ENGINEERING TEAM	STATE VALUE ENGINEER	Checking / Measurement Monitoring								
		Process and Quality Measures (QAOQ)			Checking Item	Timeframe (Frequency)	Responsibility						
		Process Measures	Control Limits	Specs / Targets	What is to be checked?	When to check?	Who will check?						
		Quality Measures			Date of Last Review								
PROJECT SELECTION					VER & Work Plan	Quarterly	SVE	D1: 11/2006 C	Federal Regulation 23 CFR 627				
TEAM SELECTION					Work Program	Annual	SVE	D2: 12/2006 C	VE Procedure 625-030-002				
STUDY					VER	Quarterly	SVE	D3: 12/2006 C	1999 AASHTO Guidelines for VE				
RESOLUTION					VER	Quarterly	SVE	D4: 5/2007 C	NCHRP Synthesis 352 - Value Engineering Applications in Transportation				
REPORTING					Surveys	Annual	DVE	D5: 1/2007 C					
		P1	P2	P3	P4								
		C1	C2	C3	C4	C5	C6						
		% scheduled studies completed	# projects > \$25 million never studied	% projects studied in PUBE	# of pending rec. per time perio	\$\$\$ Saved per time period	Value Added \$\$\$ per time period	Adoption Rate	Percent Saved	Return on Investment	% Customer Satisfaction		
		75%	0	75%	40%-60%	5% - 10%	\$130 to \$1						

Approved: _____ Date: _____ Process Owner: State Value Engineer Rev#: 1.5 Rev Date: 10/2007

Process Control System

Process Name: Value Engineering Project Selection	Product/Service: Develop a Value Engineering Work Plan by July 1 of each fiscal year.	Primary Customers: District Management, State Value Engineer. Partners: FHWA	Regulator's Valid Requirement(s): All projects with the NHS system with estimated total costs > \$25 million have a VE analysis	Miscellaneous Information
Inputs: Projects Supplier(s): Work Program	Flow Chart			Checking / Indicator Monitoring
Dept/ Person Step/ Time	DISTRICT VALUE ENGINEER	DISTRICT MANAGEMENT	STATE VALUE ENGINEER	
NEED				
REVIEW				
DEVELOP				
APPROVAL				
DISTRIBUTE				
EXECUTE				
Process and Quality Indicators				
Process Indicators Process Quality Indicators Control Limits and Specs/Targets				
P1: % work plans approved by July 1 C1: % scheduled studies completed C2: # projects > \$25 million never studied C3: % projects studied in Pre-Design phase				
Checking Item What is to be checked?				
Work Plan Received VER & Work Plan Work Program VER				
Timeframe (Frequency) When to check?				
Annual Quarterly Annual Quarterly				
Responsibility Who will check?				
SVE SVE SVE SVE				
QAR Date of Last Review				
D1: 11/2006 D2: 12/2006 D3: 12/2006 D4: 5/2007 D5: 1/2007 D6: 5/2007 D7: 1/2006 TPK: 1/2007				
CODES: C- Compliance NC- Noncompliant BP Best Practice				

Process Control System

Process Name: Value Engineering Team Selection Product/Service: Team with the necessary skills and experience to conduct a value engineering analysis	Primary Customers: Team Leaders & Team Members Partner: FHWA & Project Manager	Regulator's Valid Requirement(s): Multi-disciplined team of individuals not personally involved in the design of the project																																																							
Flow Chart		Checking / Indicator Monitoring	Miscellaneous Information																																																						
Input(s): Project disciplines Supplier(s): Department Heads, Consultants	DISTRICT VALUE ENGINEER DEPARTMENT HEAD STATE VALUE ENGINEER	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Process Indicators and Quality Indicators</th> <th style="width: 15%;">Control Limits and Specs/Targets</th> <th style="width: 15%;">Checking Item</th> <th style="width: 15%;">Timeframe (Frequency)</th> <th style="width: 15%;">Responsibility</th> <th style="width: 15%;">QAR</th> </tr> </thead> <tbody> <tr> <td>Q1: # of teams missing required disciplines</td> <td>0</td> <td>VER & VE Study Report</td> <td>Annual</td> <td>SVE</td> <td>D1: 11/2006 C</td> </tr> <tr> <td>Q2: # of teams with more than 2 untrained team members serving as primary team member</td> <td>0</td> <td>VER & VE Study Report</td> <td>Annual</td> <td>SVE</td> <td>D2: 12/2006 C</td> </tr> <tr> <td>Q3: # of team leaders not meeting qualifications</td> <td>0</td> <td>VER, VE study report, SAVE, FLPE, TRESS</td> <td>Annual</td> <td>SVE</td> <td>D3: 12/2006 C</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D4: 5/2007 C</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D5: 1/2007 C</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D6: 5/2007 C</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D7: 11/2006 C</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TPK: 12/2007 C</td> </tr> </tbody> </table>	Process Indicators and Quality Indicators	Control Limits and Specs/Targets	Checking Item	Timeframe (Frequency)	Responsibility	QAR	Q1: # of teams missing required disciplines	0	VER & VE Study Report	Annual	SVE	D1: 11/2006 C	Q2: # of teams with more than 2 untrained team members serving as primary team member	0	VER & VE Study Report	Annual	SVE	D2: 12/2006 C	Q3: # of team leaders not meeting qualifications	0	VER, VE study report, SAVE, FLPE, TRESS	Annual	SVE	D3: 12/2006 C						D4: 5/2007 C						D5: 1/2007 C						D6: 5/2007 C						D7: 11/2006 C						TPK: 12/2007 C	- Abbreviations - Procedure - Reference - Notes, etc. Federal Regulation 23 CFR 627 VE Procedure 625-030-002 AASHTO Guidelines for VE NCHRP Synthesis 352 - Value Engineering Applications in Transportation
Process Indicators and Quality Indicators	Control Limits and Specs/Targets	Checking Item	Timeframe (Frequency)	Responsibility	QAR																																																				
Q1: # of teams missing required disciplines	0	VER & VE Study Report	Annual	SVE	D1: 11/2006 C																																																				
Q2: # of teams with more than 2 untrained team members serving as primary team member	0	VER & VE Study Report	Annual	SVE	D2: 12/2006 C																																																				
Q3: # of team leaders not meeting qualifications	0	VER, VE study report, SAVE, FLPE, TRESS	Annual	SVE	D3: 12/2006 C																																																				
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					TPK: 12/2007 C																																																				
NEED																																																									
TEAM SELECTION																																																									
NOTIFICATION			CODES: C-Compliance NC- Noncompliant BP Best Practice																																																						

Process Control System

Process Name: Conduct Value Engineering Study	Product/Service: Completed VE Analysis with a report documenting the findings of the team.	Primary Customers: Management & D/VE Partners: FHWA, State Value Engineer	Customer's Valid Requirement(s): Follow the VE Job Plan to produce quality recommendations that can be implemented.	Regulator's Valid Requirement(s): Follow widely recognized systematic problem solving process that is used throughout private industry and government agencies.	Miscellaneous Information
Flow Chart					
DISTRICT VALUE ENGINEER	VALUE ENGINEERING TEAM				
Dept/ Person					
Step / Time					
NEED	Conduct VE Study				
INVESTIGATION	<div style="border: 1px solid black; padding: 5px;"> <p>Investigation Phase:</p> <ul style="list-style-type: none"> - Gather information about the present design from engineering reports, design plans, estimates, alternatives, right of way maps etc. - Gather information about project from Project Manager, Designer and anyone else familiar with the project. </div>				
ANALYSIS	<div style="border: 1px solid black; padding: 5px;"> <p>Analysis Phase:</p> <ul style="list-style-type: none"> - Team identifies the elements with the greatest potential for value improvement. </div>				
SPECULATION	<div style="border: 1px solid black; padding: 5px;"> <p>Speculation Phase:</p> <ul style="list-style-type: none"> - Team generates alternatives to the proposed design by using brainstorming techniques </div>				
EVALUATION	<div style="border: 1px solid black; padding: 5px;"> <p>Evaluation Phase:</p> <ul style="list-style-type: none"> - Team evaluates the alternatives and determines which offer the greatest potential for savings and approval. Advantages and disadvantages are considered at this point. </div>				
DEVELOPMENT	<div style="border: 1px solid black; padding: 5px;"> <p>Development Phase:</p> <ul style="list-style-type: none"> - Team develops the alternatives selected. Sketches, cost estimates, validation of data and other technical work are done at this point. </div>				
PRESENTATION	<div style="border: 1px solid black; padding: 5px;"> <p>Presentation Phase:</p> <ul style="list-style-type: none"> - Team presents its recommendations to management and appropriate staff with time allocated for question and answer. - VE Study report is developed during the study as a step-by-step record. </div>				
RESULTS	<div style="border: 1px solid black; padding: 5px;"> <p>Post Study Surveys of Team, Project Manager and Management. Feedback results to Project Selection and Team Selection Processes & Team Leader.</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px; text-align: center;"> Enter data into VE database </div>				
		Process and Quality Indicators	Checking / Indicator Monitoring		
		Process Indicators	Checking Item	Timeframe (Frequency)	Responsibility
		And	What is to be checked?	When to check?	Who will check?
		Quality Indicators	VER	Quarterly	SVE
		Adoption Rate			
		Control Limits And Specs/Targets			
		40%-60%			
					QAR
					Date of Last Review
					D1: 11/2006 C
					D2: 12/2006 C
					D3: 12/2006 C
					D4: 3/2007 C
					D5: 12/007 C
					D6: 5/2007 C
					D7: 1/2006 C
					TPK: 12/2007 C
					CODES:
					C- Compliance NC- Noncompliant BP Best Practice

Approved: _____ **Date:** _____ **Process Owner:** District Value Engineer **Rev #:** 1.5 **Rev Date:** 8/2007

Process Control System

Process Name: Value Engineering Recommendation Resolution Process.	Product/Service: Resolution of VE Team Recommendations	Primary Customers: Project Manager, SVE Partners: FHWA	Customer's Valid Requirement(s): Recommendations are acted upon in a timely manner, but that a recommendation is acted upon based on information and not time.	Regulator's Valid Requirement(s): Process to approve or reject recommendations to ensure the prompt review of VE recommendations	Miscellaneous Information - Abbreviations - Procedure Reference - Notes, etc. Federal Regulation 23 CFR 627 VE Procedure 625-030-002 1999 AASHTO Guidelines for VE NCHRP Synthesis 352 - Value Engineering Applications in Transportation
Input(s): Recommendations Supplier(s): VE Team	Flow Chart				
Dept / Person Step / Time	DISTRICT VALUE ENGINEER	STATE VALUE ENGINEER			
NEED	<pre> graph TD Start([Resolve Pending Recommendations]) --> Distribute[Distribute Study report to project team and Decision Makers] Distribute --> Resolved{Recommendations not resolved at presentation?} Resolved -- NO --> Resolved Resolved -- YES --> Schedule[Schedule Resolution Meeting] Schedule --> Available{Are Decision Makers Available} Available -- NO --> Resolved Available -- YES --> Meeting[Conduct meeting - Obtain Decisions (Adopt, Modify, Pending, Reject)] Meeting --> Made{Decisions Made?} Made -- YES --> Update[Update the database] Update --> Monitor([Monitor Pending Recommendations]) Made -- NO --> Escalate[Escalate Decision Process] Escalate --> Meeting </pre>				
RESOLUTION MEETING					
MONITOR					
Process and Quality Indicators		Checking / Indicator Monitoring			
Process Indicators Quality Indicators Control Limits Specs / Targets		Checking Item	Timeframe (Frequency)	Responsibility	QAR
Adoption Rate # of pending rec. per time period		What is to be checked?	When to check?	Who will check?	Date of Last Review
01		VER	Quarterly	SVE	D1: 11/2006 C
02		VER	Quarterly	SVE	D2: 12/2006 C
					D3: 12/2006 C
					D4: 5/2007 C
					D5: 1/2007 C
					D6: 5/2007 C
					D7: 11/2006 C
					TPK: 1/2007 C
					CODES: C- Compliance NC- Noncompliant BP Best Practice

Approved: _____ Date: _____ Process Owner: District Value Engineer Rev #: 1.5 Rev Date: 08/2007

Process Control System

Process Name: Value Engineering Reporting Process. Product/Service: Report detailing the results of the Value Engineering Program Primary Customers: Management. Partners: FHWA	Customer's Valid Requirement(s): Prepare accurate and reliable reports Regulator's Valid Requirement(s): Report accurate results of the Value Engineering Program												
Flow Chart <div style="display: flex; justify-content: space-around;"> <div style="width: 45%; text-align: center;"> <p>STATE VALUE ENGINEER</p> </div> <div style="width: 45%; text-align: center;"> <p>DISTRICT VALUE ENGINEER</p> </div> </div>	Process and Quality Indicators <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">Process Indicators</th> <th style="width: 15%;">Control Limits And Specs/Targets</th> <th style="width: 15%;">Checking Item</th> <th style="width: 15%;">Timeframe (Frequency)</th> <th style="width: 15%;">Responsibility</th> <th style="width: 15%;">QAR</th> </tr> <tr> <td> (P1) # of corrections (Q1) Quarterly Reports complete by 30th of month following end of quarter (Q2) FHWA Annual Report to Division Offices by Nov 1 </td> <td></td> <td>What is to be checked?</td> <td>Quarterly</td> <td>Who will check?</td> <td> D1: 11/2006 C D2: 12/2006 C D3: 12/2006 C D4: 5/2007 C D5: 1/2007 C D6: 5/2007 C D7: 11/2006 C TPK: 1/2007 C </td> </tr> </table>	Process Indicators	Control Limits And Specs/Targets	Checking Item	Timeframe (Frequency)	Responsibility	QAR	(P1) # of corrections (Q1) Quarterly Reports complete by 30 th of month following end of quarter (Q2) FHWA Annual Report to Division Offices by Nov 1		What is to be checked?	Quarterly	Who will check?	D1: 11/2006 C D2: 12/2006 C D3: 12/2006 C D4: 5/2007 C D5: 1/2007 C D6: 5/2007 C D7: 11/2006 C TPK: 1/2007 C
Process Indicators	Control Limits And Specs/Targets	Checking Item	Timeframe (Frequency)	Responsibility	QAR								
(P1) # of corrections (Q1) Quarterly Reports complete by 30 th of month following end of quarter (Q2) FHWA Annual Report to Division Offices by Nov 1		What is to be checked?	Quarterly	Who will check?	D1: 11/2006 C D2: 12/2006 C D3: 12/2006 C D4: 5/2007 C D5: 1/2007 C D6: 5/2007 C D7: 11/2006 C TPK: 1/2007 C								
NEED MAINTAIN FILES DATA VERIFICATION REPORT	Miscellaneous Information <ul style="list-style-type: none"> - Abbreviations - Procedure - Reference - Notes, etc. Federal Regulation 23 CFR 627 VE Procedure 625-030-002 1999 AASHTO Guidelines for VE NCHRP Synthesis 352 - Value Engineering Applications in Transportation	Checking / Indicator Monitoring CODES: C- Compliance NC- Noncompliant BP Best Practice											

Process Control System

Process Name: Cost Savings Initiative (CSI) Proposal		Product/Service: Resolution of CSI proposed by the Construction Contractor		Primary Customers: Construction Contractor Partners: FHWA		Customer's Valid Requirements(s): Review and either approve or reject the CSI proposal in a timely manner.		Regulator's Valid Requirements(s): Program that encourages the use of a cost reduction incentive clause.		Miscellaneous Information				
Step/ Time	Dept/ Person	Flow Chart						Checking / Indicator Monitoring						
		CONTRACTOR	RESIDENT ENGINEER	DISTRICT VALUE ENGINEER	REVIEWERS DESIGN CONST. OTHERS	DISTRICT CONSTRUCTION ENGINEER	DISTRICT DIRECTOR OF OPERATIONS	Process Measures (QA/QC)	Checking Item			Timeframe (Frequency)	Responsibility	QAR
PRIOR TO BEGINNING OF CONTRACT TIME												D1: 11/2006 C	DVE/SVE	Federal Regulation 23 CFR 627
AFTER CONTRACT TIME BEGINS												D2: 12/2006 C	DVE/SVE	Section 4 FDOT Specifications
SUBMITTAL												D3: 12/2006 C	SVE	Procedure Topic 625-50-005
REVIEW												D4: 5/2007 C	SVE	
NOTIFICATION												D5: 12/2007 C	SVE	
										D6: 5/2007 C	SVE			
										D7: 11/2006 C	SVE			
										TPK: 12/2007 C	SVE			
										CODES: C - Compliance NC - Noncompliant BP - Best Practices				

Approved: _____

Date: _____

Process Owner: _____

Rev.#: 1.6

Rev Date: 5/2011