
Value Engineering
Semi-Annual Report
FY 2007/2008



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Executive Summary

VE During Project Development

The Districts completed 15 studies or 52% of the original scheduled work plan during the first 2 quarters of the fiscal year. The original work plan had 29 studies scheduled for this time period and the target was to complete 75% of the planned studies or in this case 22 studies. Due to the dynamics of the Department's work program, 12 of the 29 scheduled studies (41%) were either rescheduled for later in the fiscal year, combined with other studies or dropped from the work plan altogether.

During this same period, the Districts acted on 139 recommendations, approving 53 for a 38% adoption rate which is below our target range of 40% to 60%. Forty-five of the approved recommendations resulted in \$81.6 million in project cost avoidance/savings. The remaining eight recommendations were value added recommendations that increased project performance, while adding nearly \$30 million to the project cost. Therefore, the total value of the approved recommendations, including the value added recommendations, produced **\$51.6 million in project cost avoidance/savings.**

A new performance measure that has recently been adopted by AASHTO and FHWA is the percent of project saved. This measure is calculated by dividing the value of all approved recommendations by the total cost of the projects studied. The national average for this measure is 5% and through the first 2 quarters of this fiscal year the Department saved 3.49% of the total cost of projects studied.

There are currently 86 pending recommendations totaling \$145.4 million in potential cost avoidance. This is a 12% decrease in the total number of pending recommendations and a 9% decrease in the amount of pending dollars from the 4th quarter of last year. While the number and amount of pending recommendations has decreased, the number that has been pending for more than 7 months has increased by 50% and 36% of the total recommendations have been pending for more than 12 months. 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.

VE During Construction

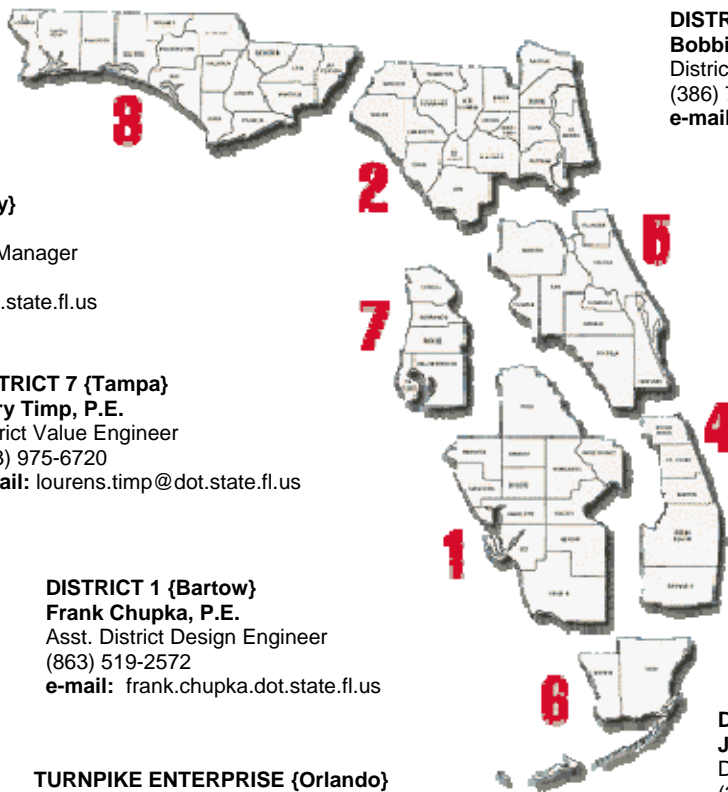
Sixteen Value Engineering Change Proposals (VECP's) were submitted during the first two quarters of the fiscal year, totaling more than \$2.4 million in potential project savings. During this same period, the districts acted on 12 proposals approving 8. The implemented savings from the 8 approved VECP's was more than \$1.3 million. There are currently four pending VECP's totaling \$332,200 in potential project savings.

Program Organization

Mission: Administer the Florida Department of Transportation Value Engineering Program, 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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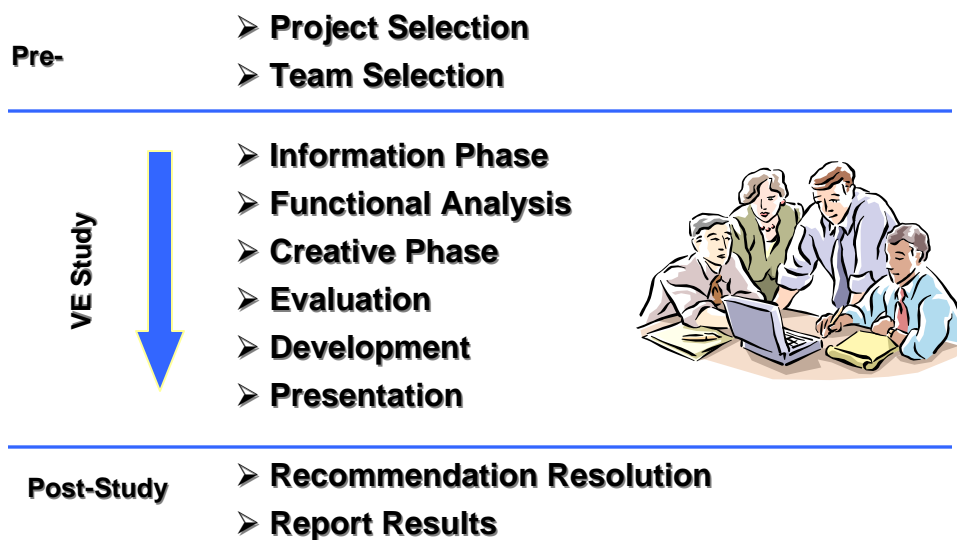
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Value Engineering Overview

What is Value Engineering

Value Engineering 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 Value Engineering 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

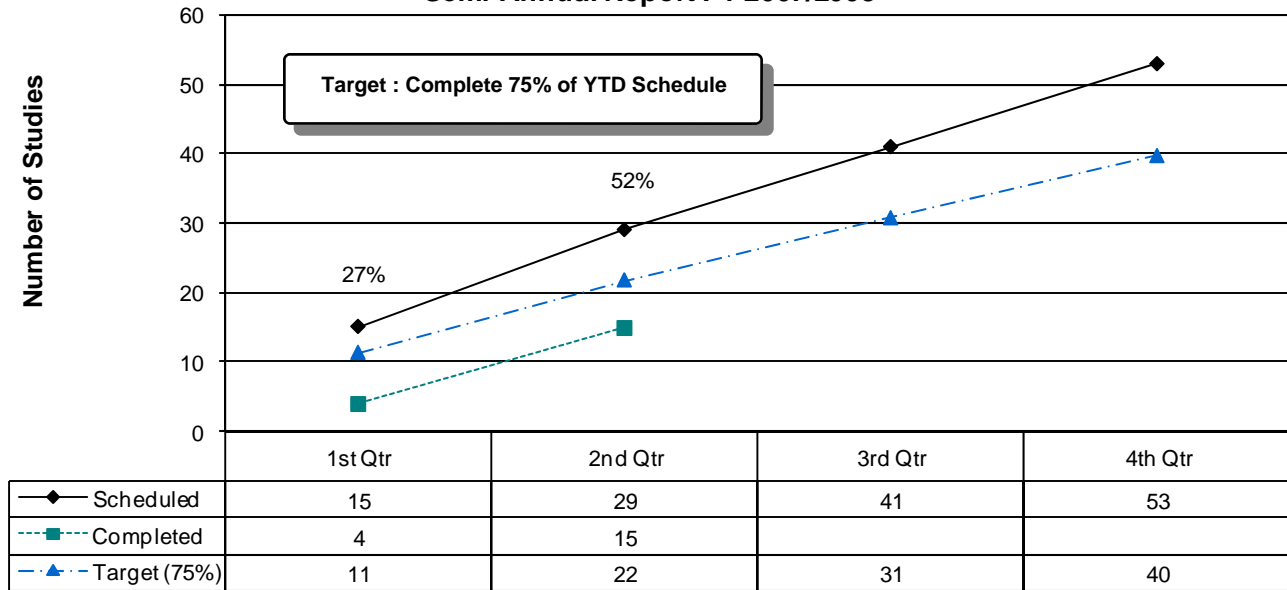
The Value Engineering Program is managed through the use of the Process Control Systems found in Appendix B. Each process has a set of Quality and In-Process measures that are used to evaluate the performance of the program. The Quality Measures for the overall Value Engineering program are defined below.

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: Return on Investment (only reported annually)	$\frac{\text{Value of Approved Recommendations}}{\text{Total cost of VE Program}}$
VECP Program	
Q1: Number of VECP's	Sum of all VECP's
Q2: Approved Cost Savings	Sum of all approved VECP savings

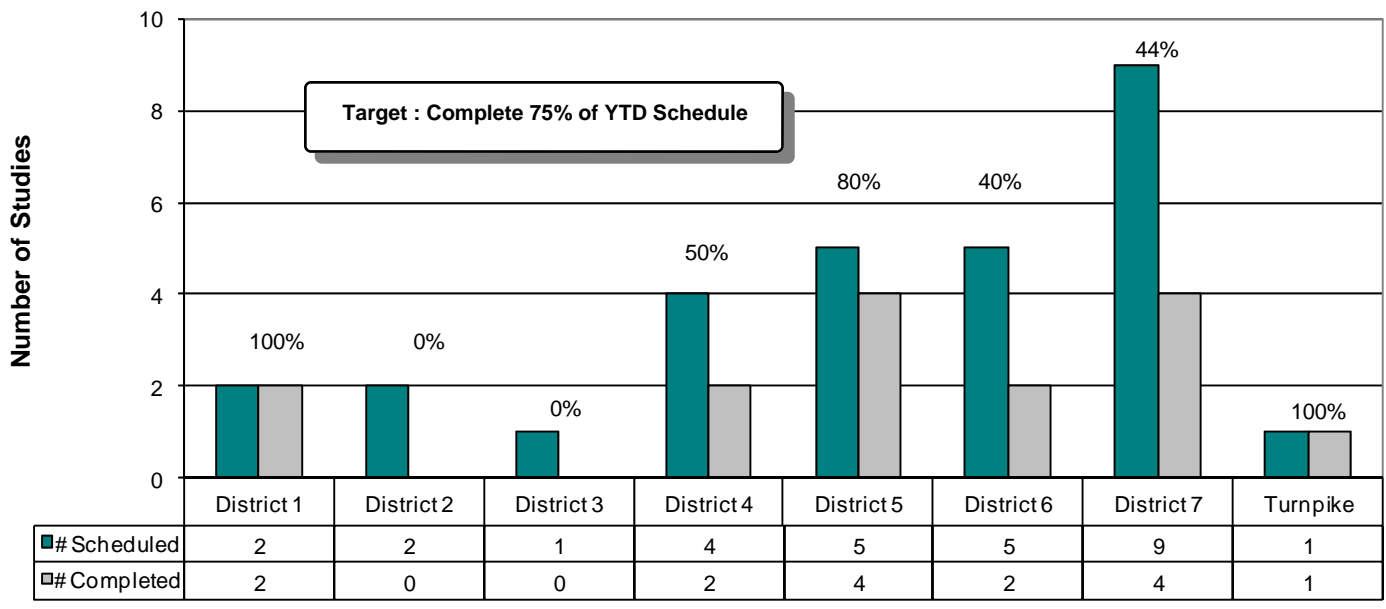
FY 2007/2008 Performance Measures

Work Plan Completion

P1: VE Studies Scheduled vs. Completed
Semi-Annual Report FY 2007/2008

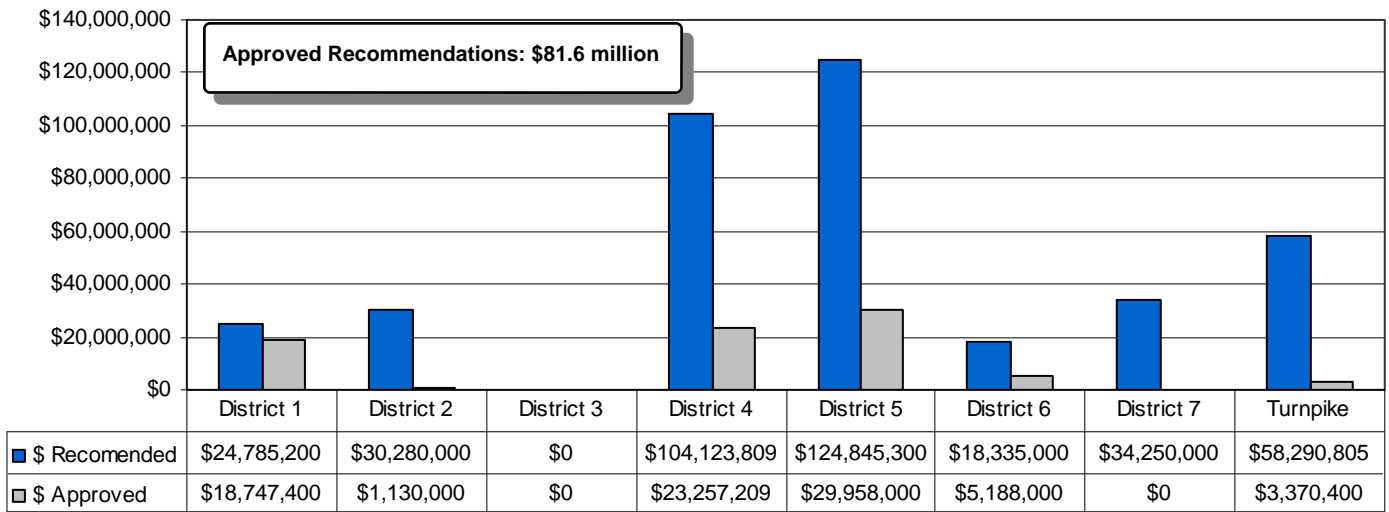


P1: VE Studies Scheduled vs Completed
Semi-Annual Report FY 2007/2008

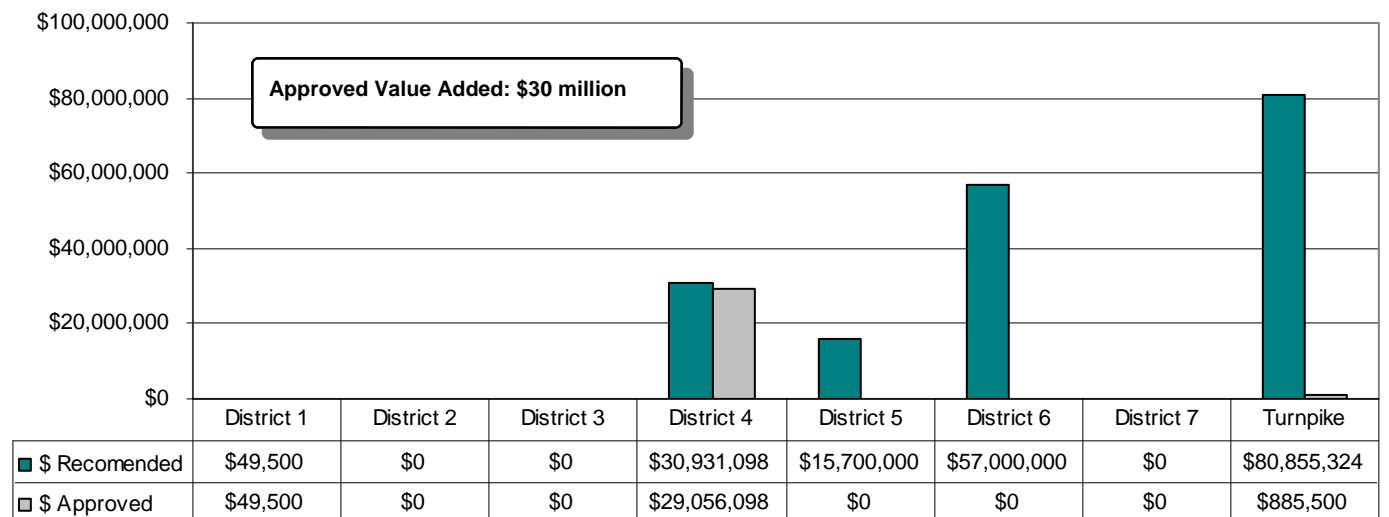


Adopted Recommendations

Q1: Cost Avoidance Recommendations Semi-Annual Report Fiscal Year 2007/2008



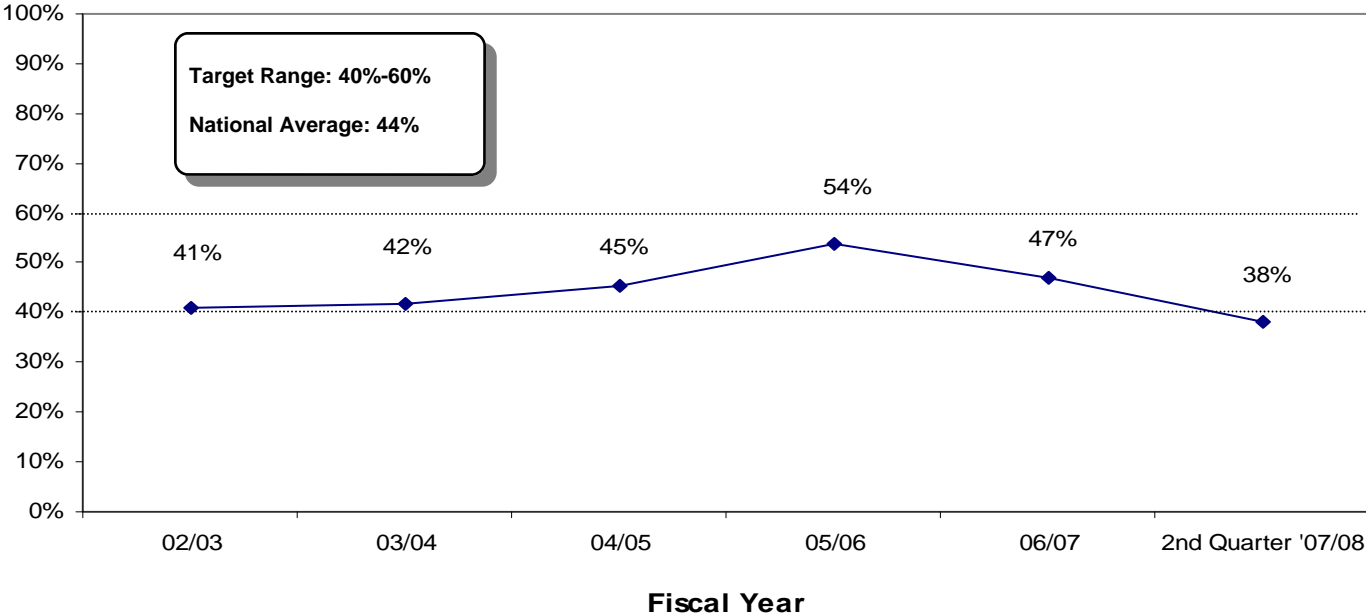
Q2: Value Added Recommendations Semi-Annual Report Fiscal Year 2007/2008



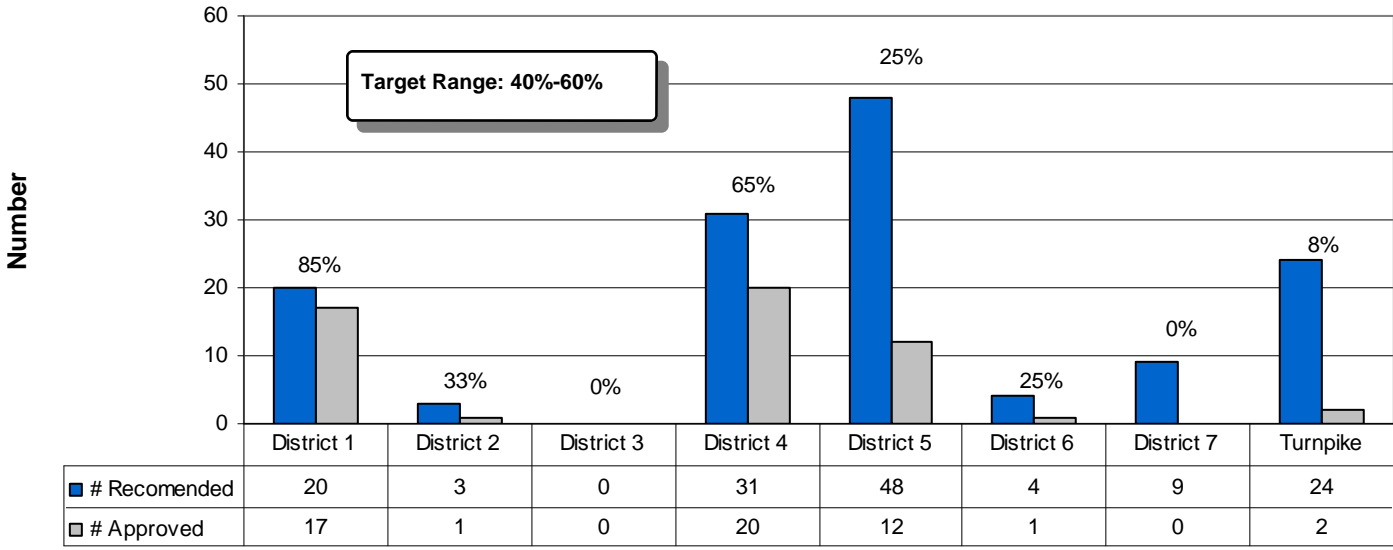
* A Value Added Recommendation significantly increases the performance of a function while also increasing the cost.

Adoption Rates

Q3: Annual Adoption Rate

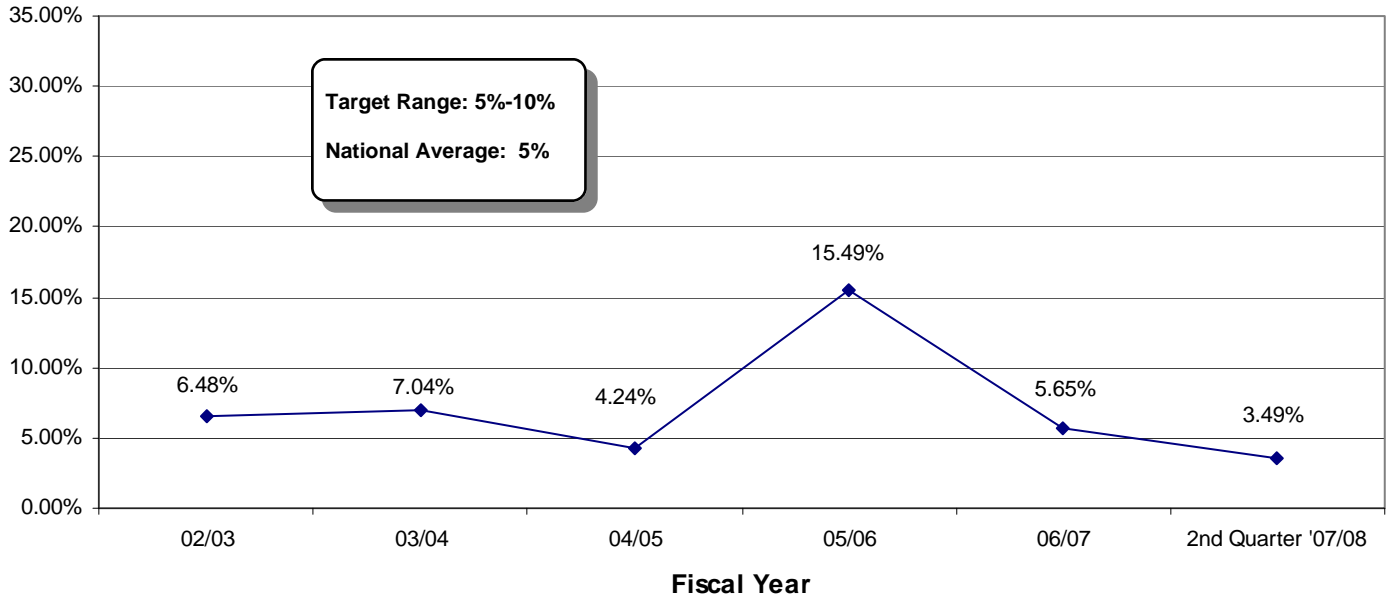


**Q3: Adopted Recommendations
Semi-Annual Report Fiscal Year 2007/2008**

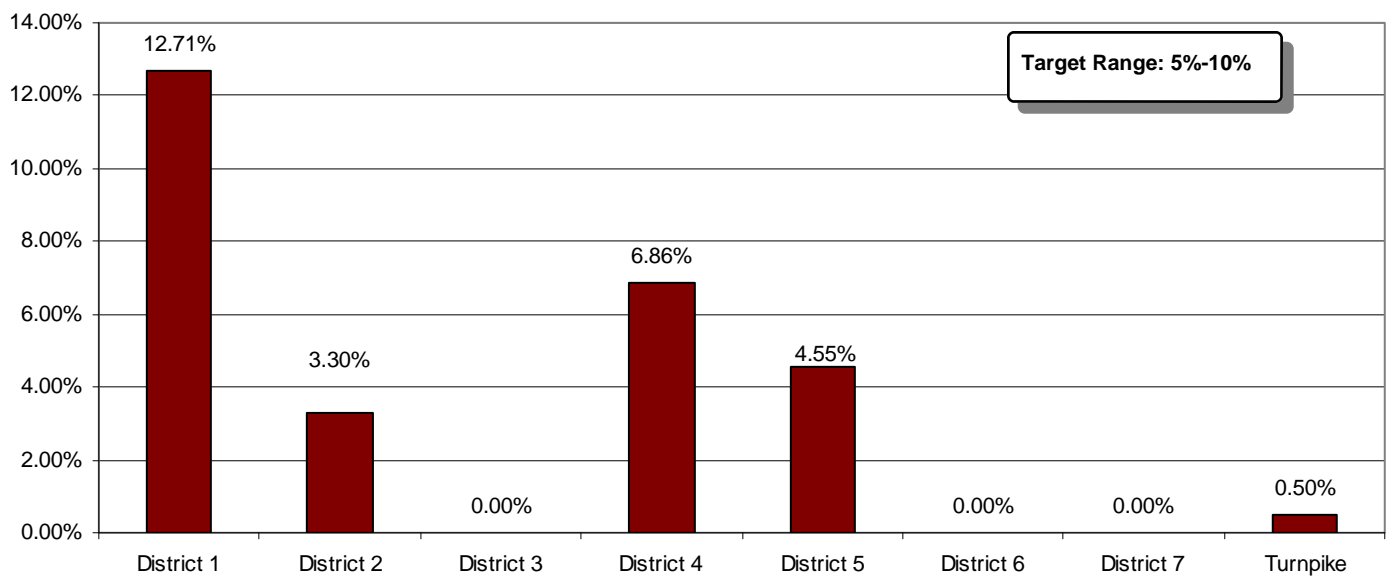


Percent Project Saved

Q4: Annual Percent Project Saved

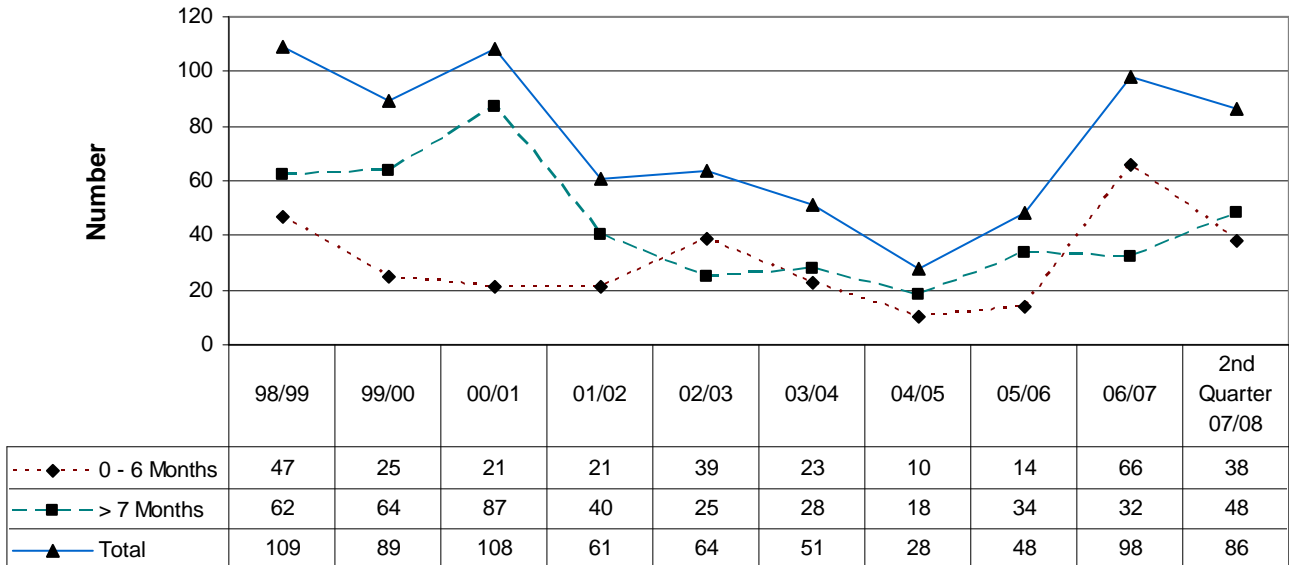


**Q4: Percent Project Saved
Semi-Annual Report Fiscal Year 2007/2008**

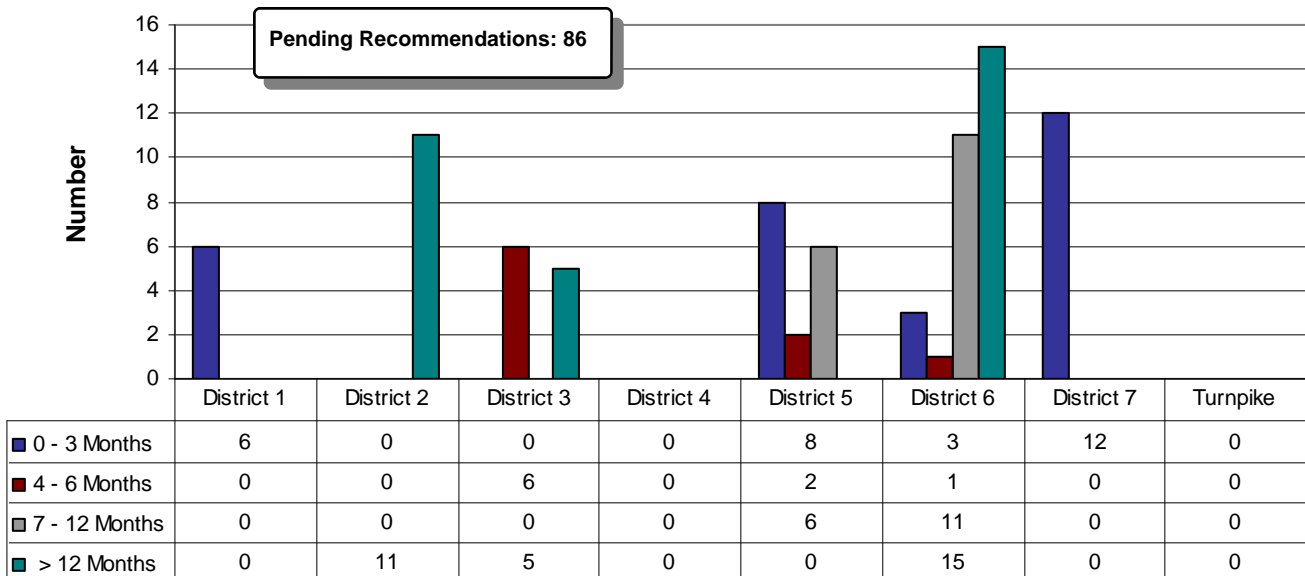


Pending Recommendations

P4: Annual # Pending Recommendations
Semi-Annual Report Fiscal Year 2007/2008

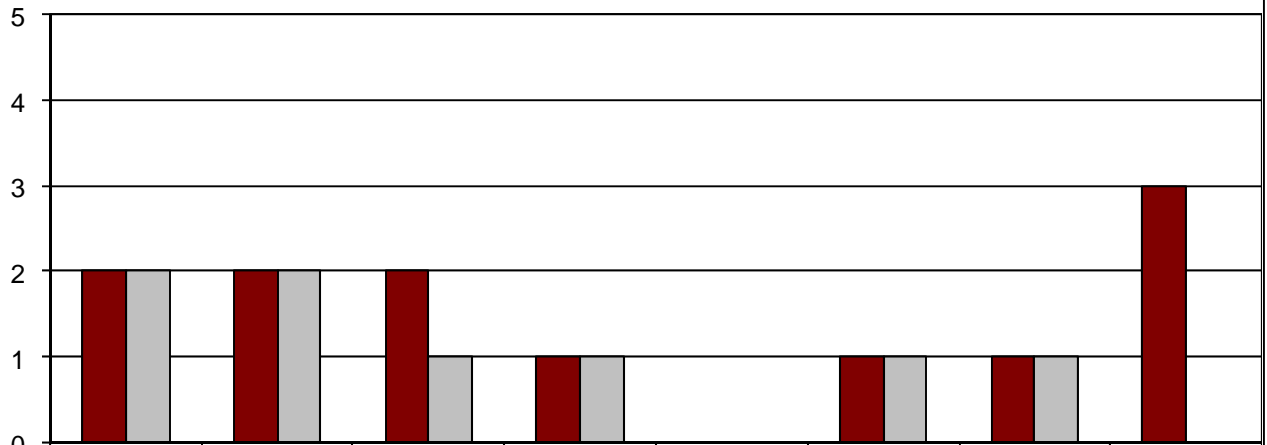


P4: # Pending Recommendations
Semi-Annual Report Fiscal Year 2006/2007



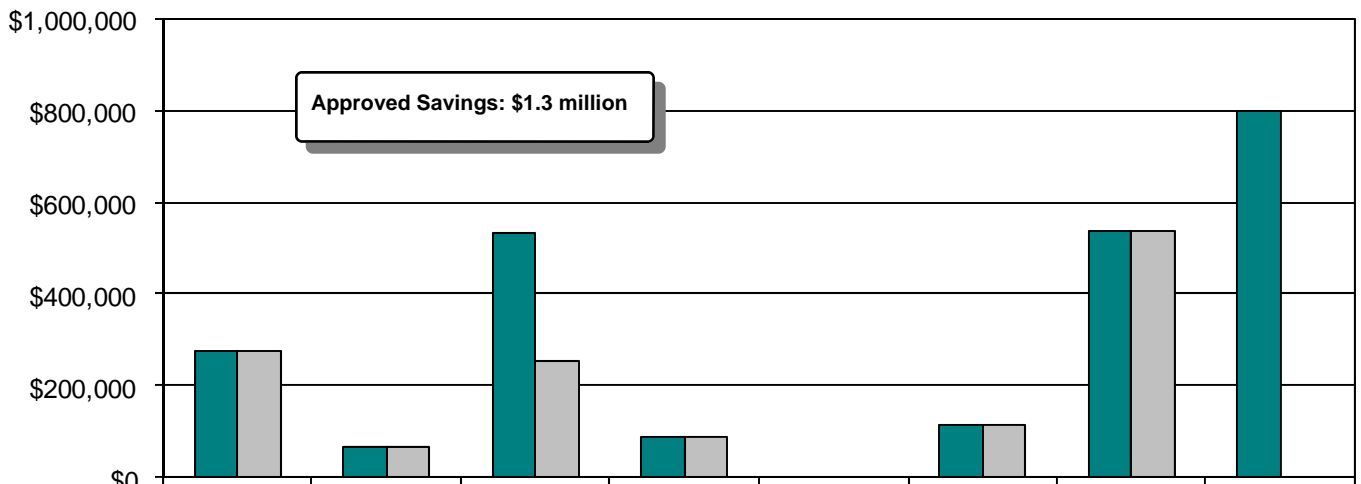
VECP Summary

VECP's Acted Upon
Semi-Annual Report Fiscal Year 2007/2008



	District 1	District 2	District 3	District 4	District 5	District 6	District 7	Turnpike
■ Acted Upon	2	2	2	1	0	1	1	3
□ Approved	2	2	1	1	0	1	1	0

Approved VECP Savings
Semi-Annual Report Fiscal Year 2007/2008

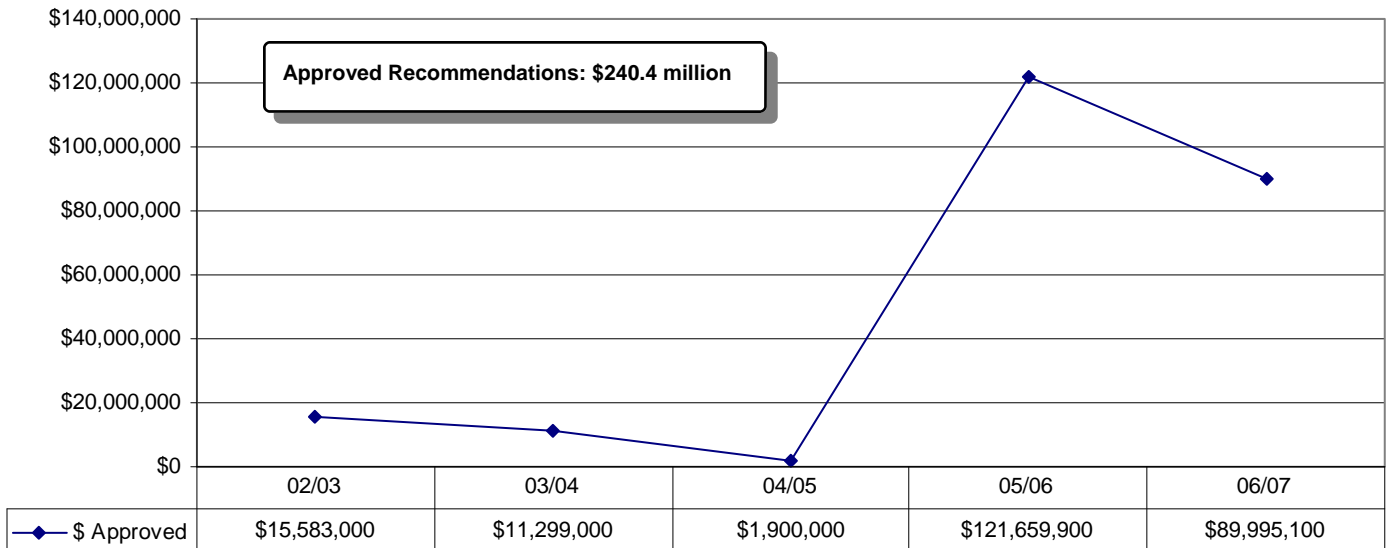


	District 1	District 2	District 3	District 4	District 5	District 6	District 7	Turnpike
■ Acted Upon	\$277,155	\$64,703	\$533,576	\$88,037	\$0	\$114,913	\$535,166	\$799,897
□ Approved	\$277,155	\$64,703	\$253,290	\$88,037	\$0	\$114,913	\$535,166	\$0

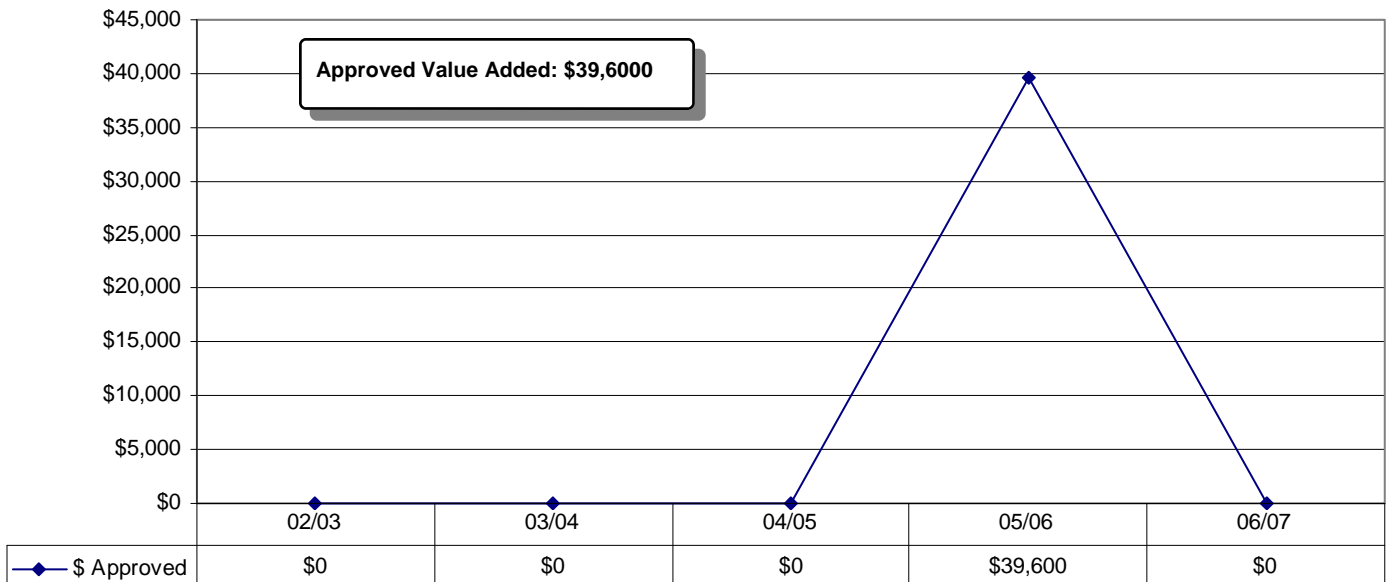
Appendix A
5 year History
Annual Performance Measures
by District

District 1

Q1: Annual Approved Cost Avoidance/Savings
District 1

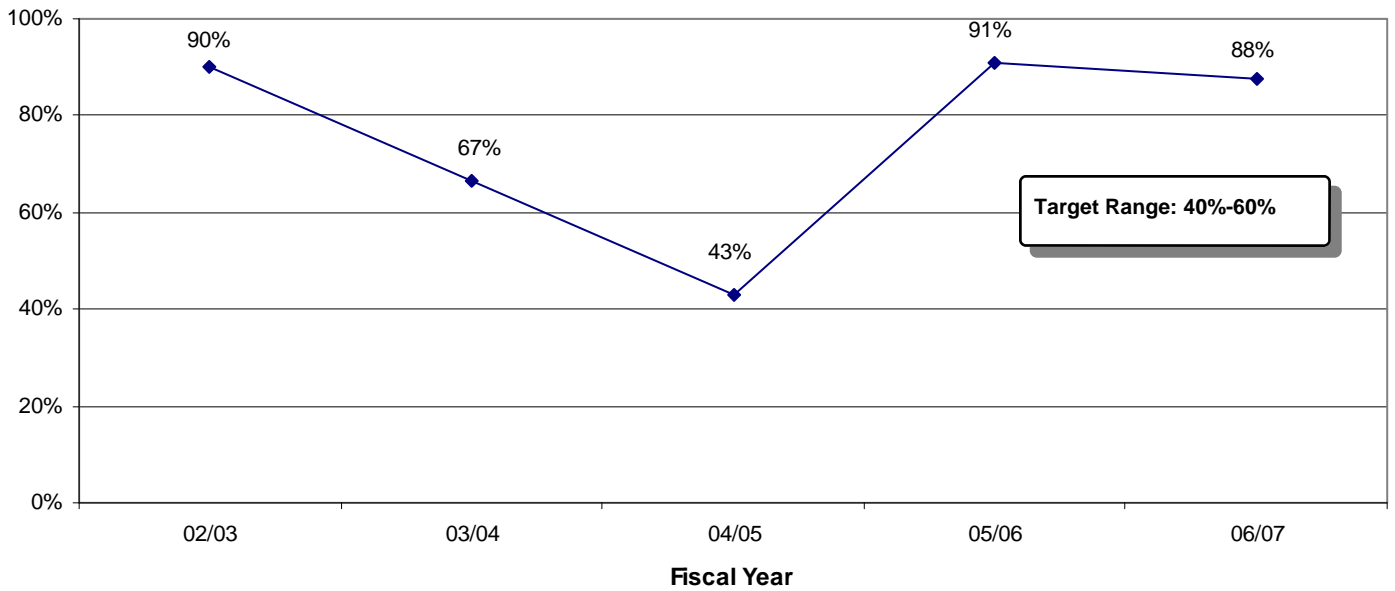


Q2: Annual Approved Value Added Recommendations
District 1

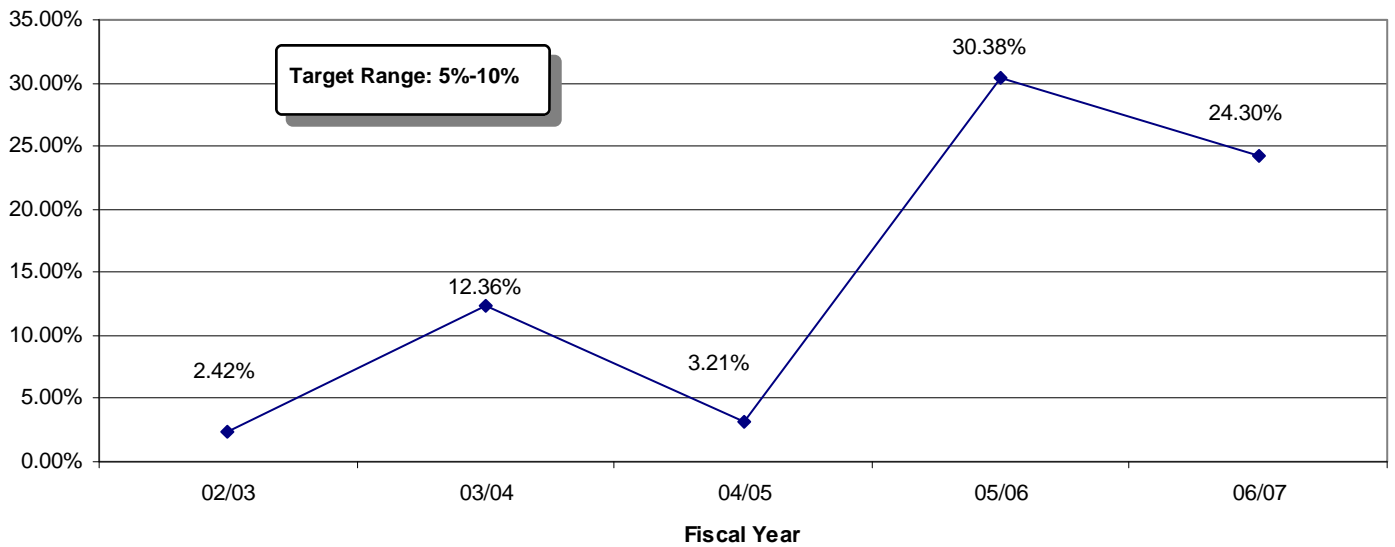


District 1

Q3: Annual Adoption Rate District 1

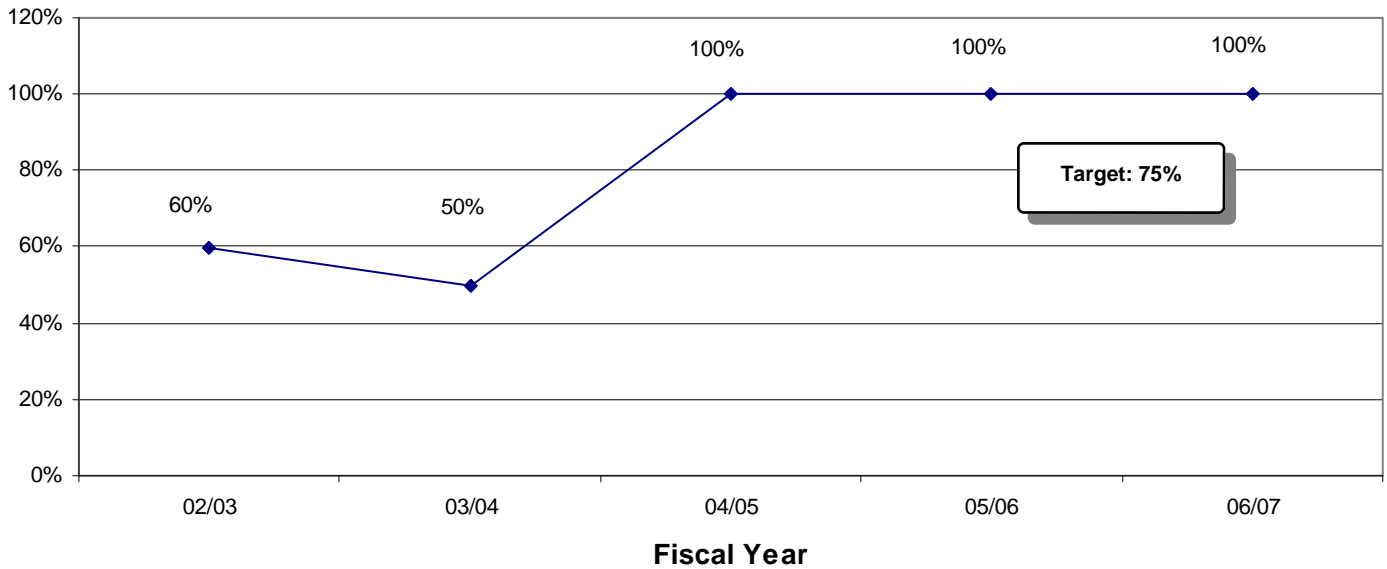


Q4: Annual Percent Project Saved District 1

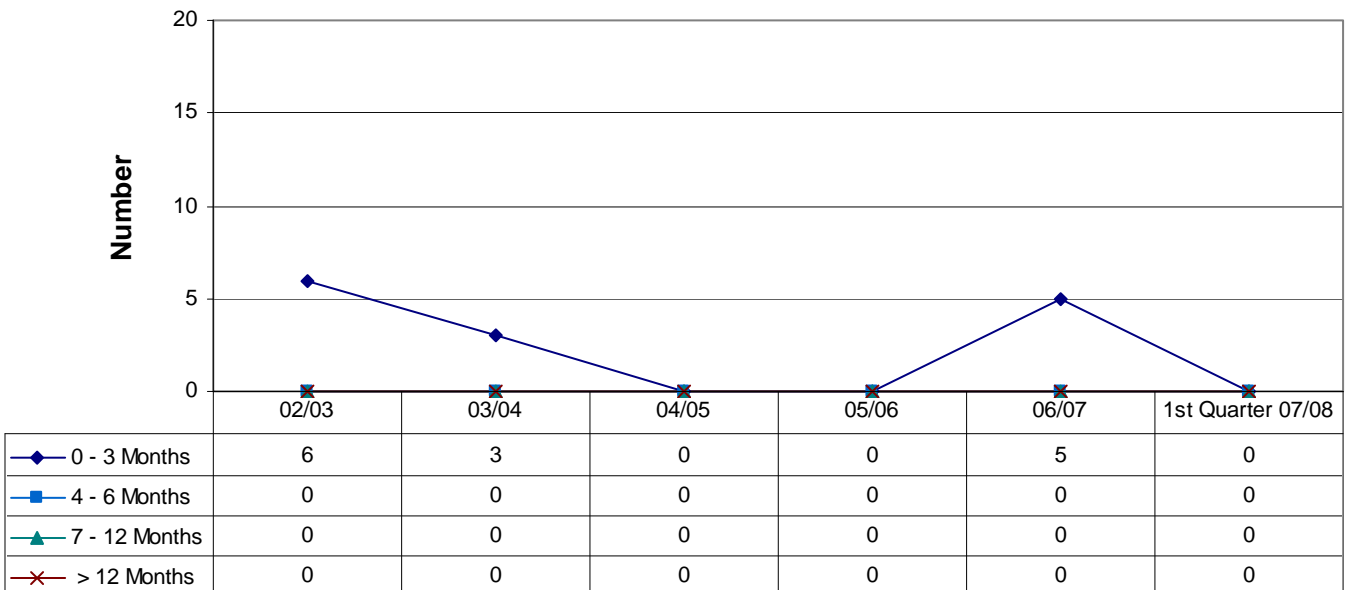


District 1

P1: % Scheduled VE Studies Completed
District 1

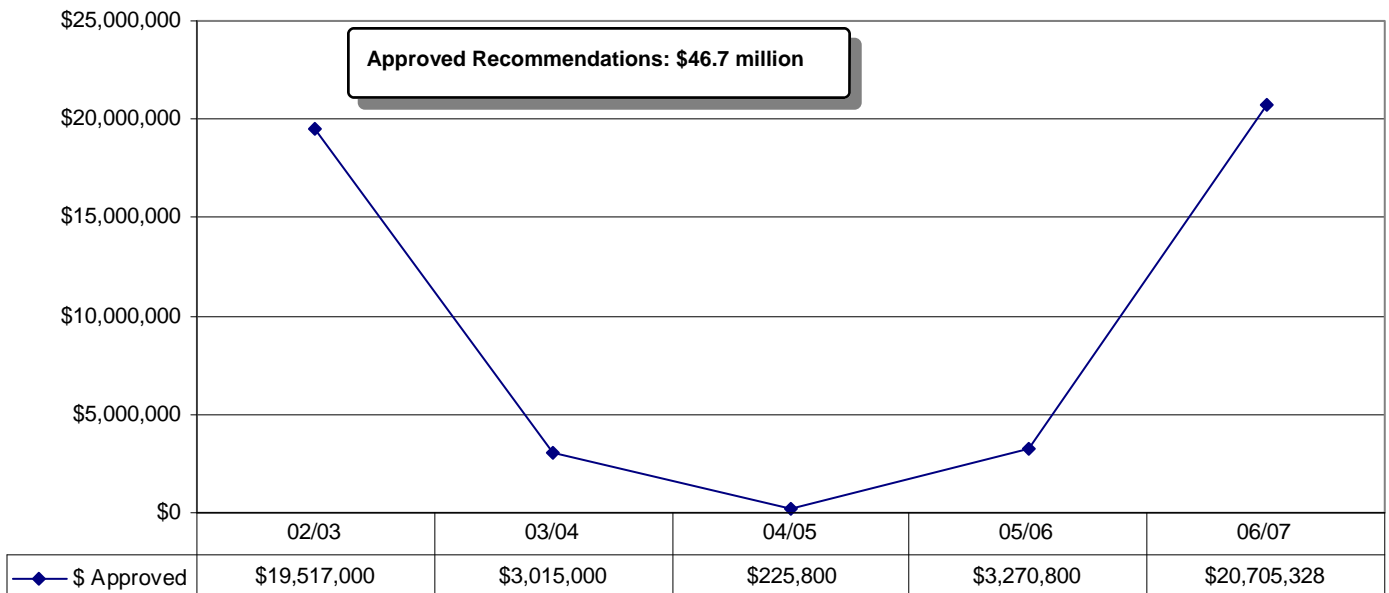


P4: Annual # Pending Recommendations
District 1

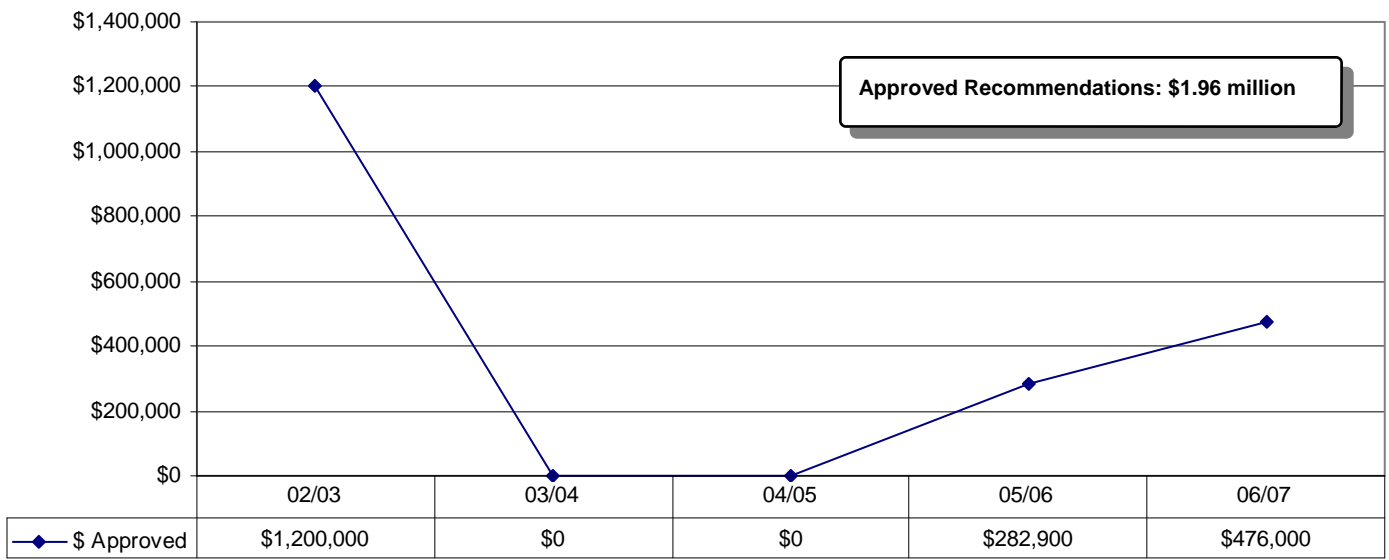


District 2

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

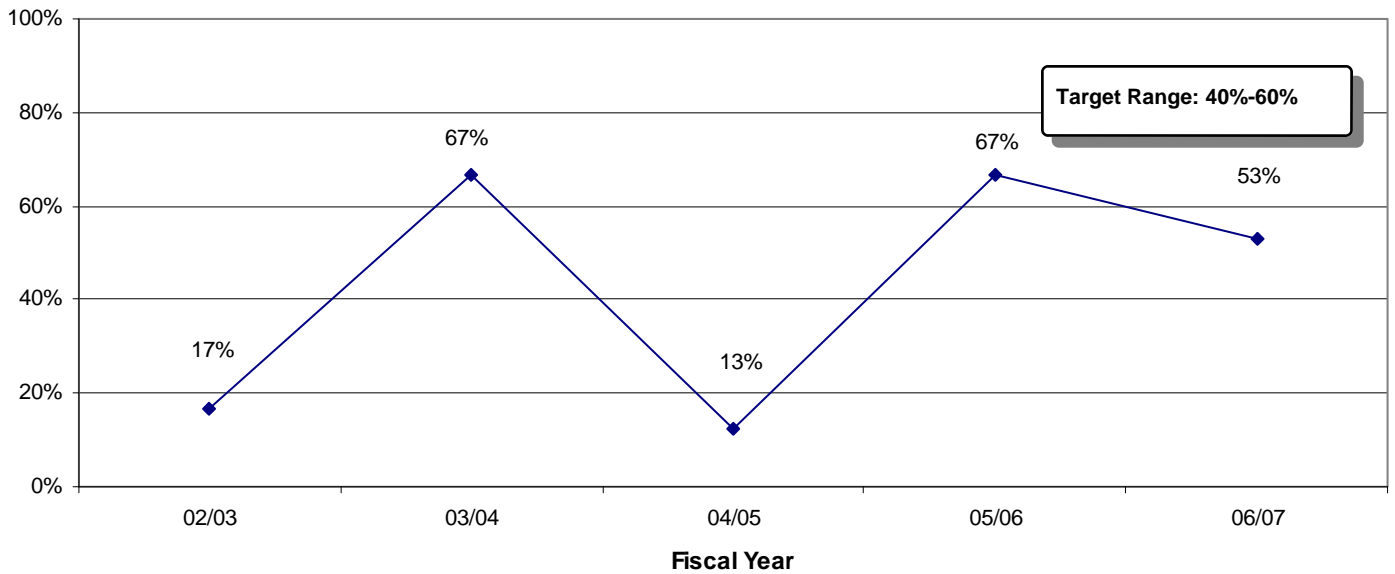


**Q2: Annual Approved Value Added Recommendations
District 2**

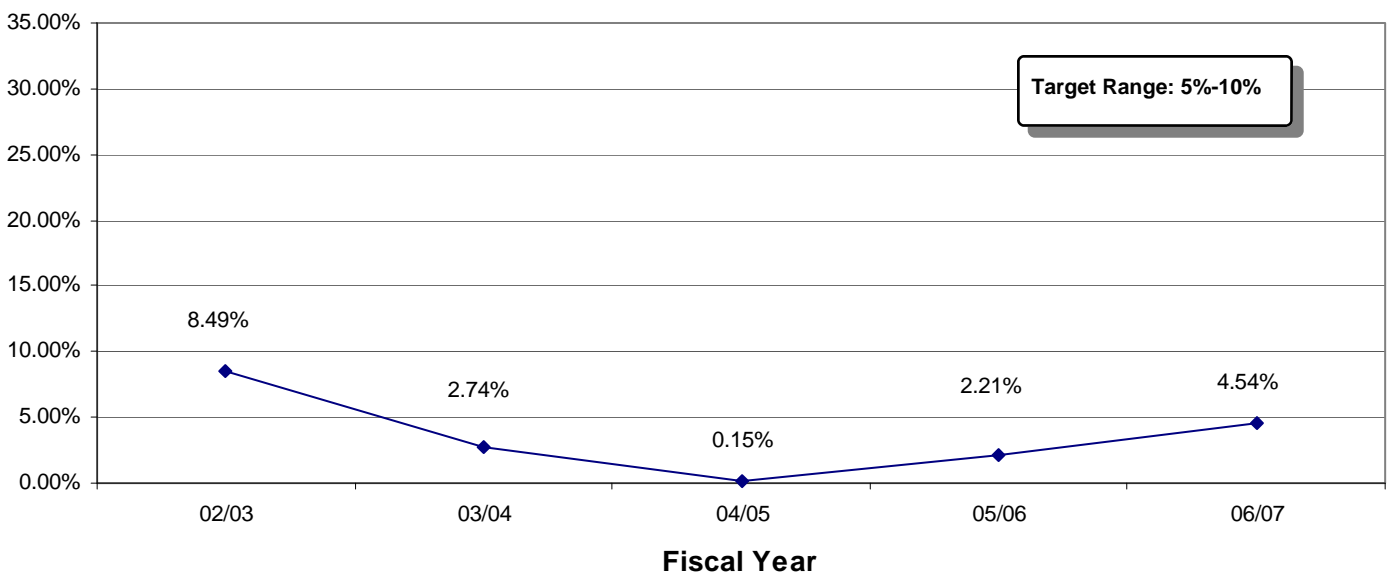


District 2

Q3: Annual Adoption Rate District 2

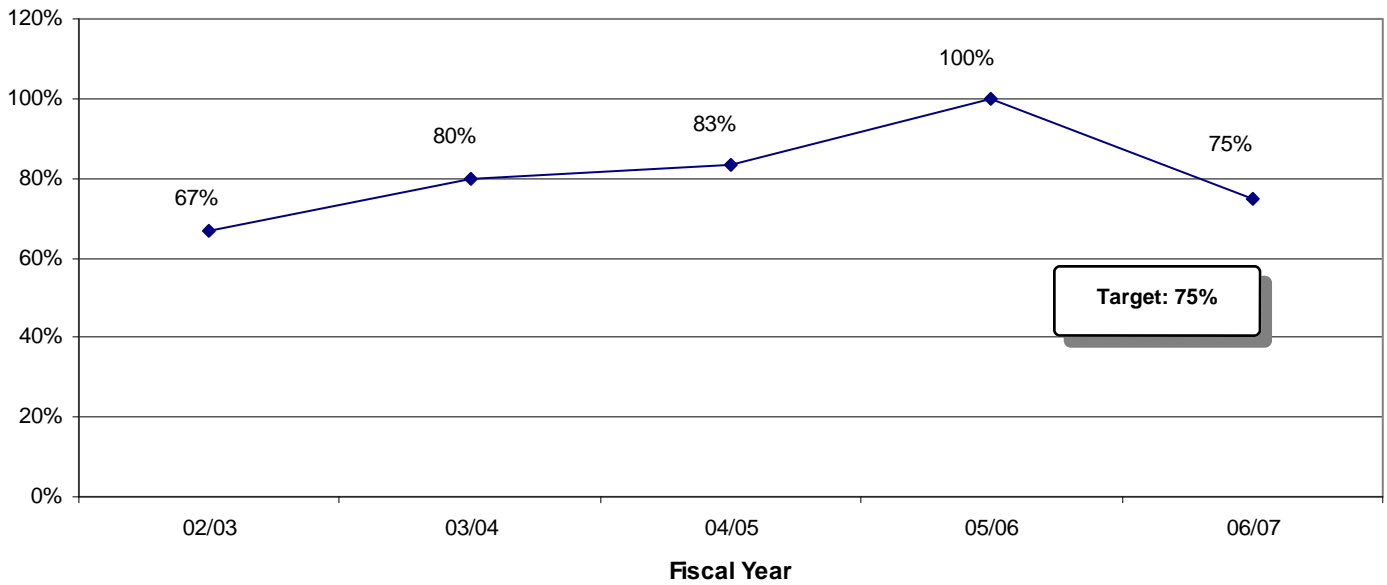


Q4: Annual Percent Project Saved District 2

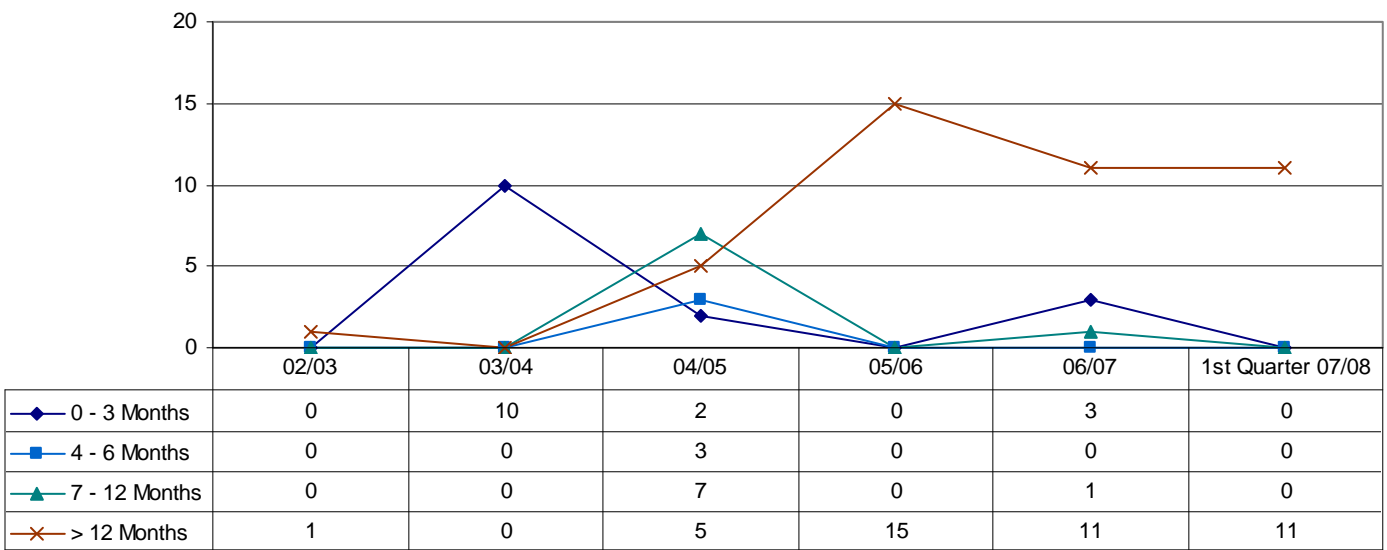


District 2

P1: % Scheduled VE Studies Completed
District 2

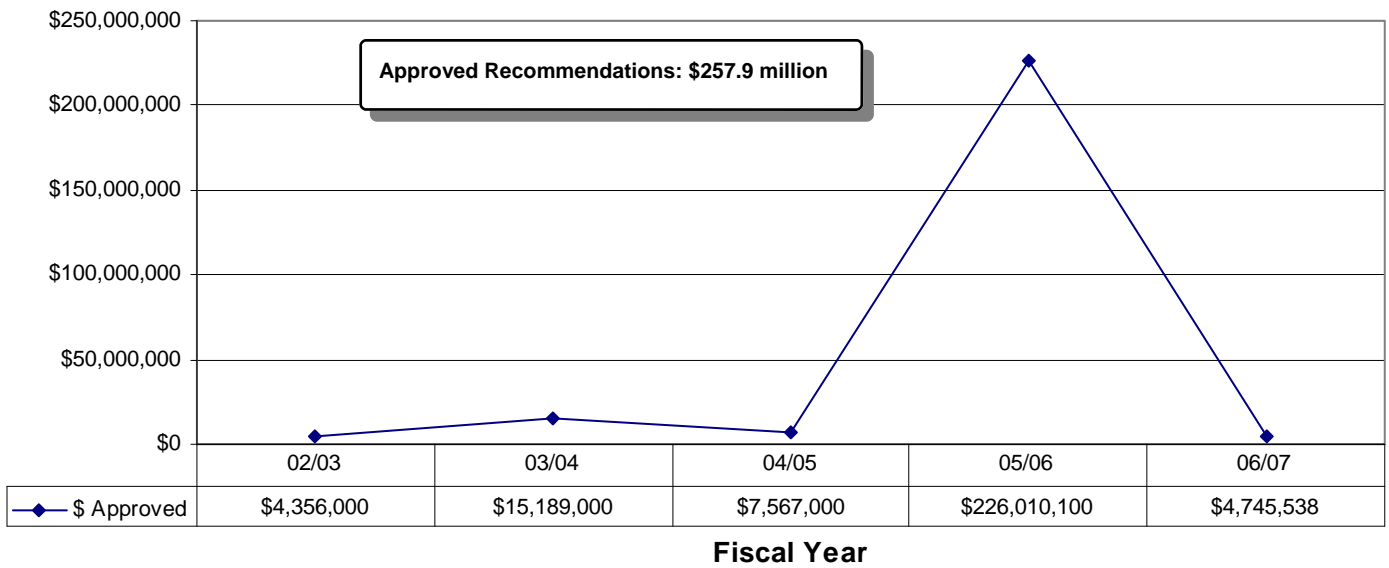


P4: Annual # Pending Recommendations
District 2

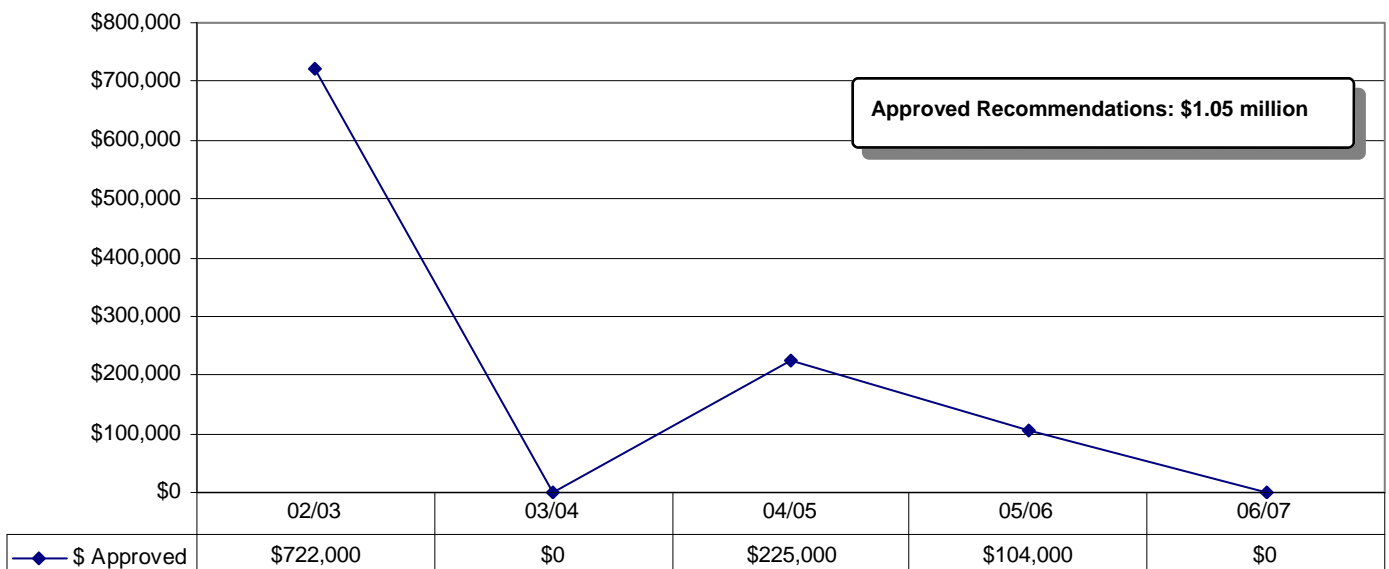


District 3

**Q1: Annual Approved Cost Avoidance/Savings
District 3**

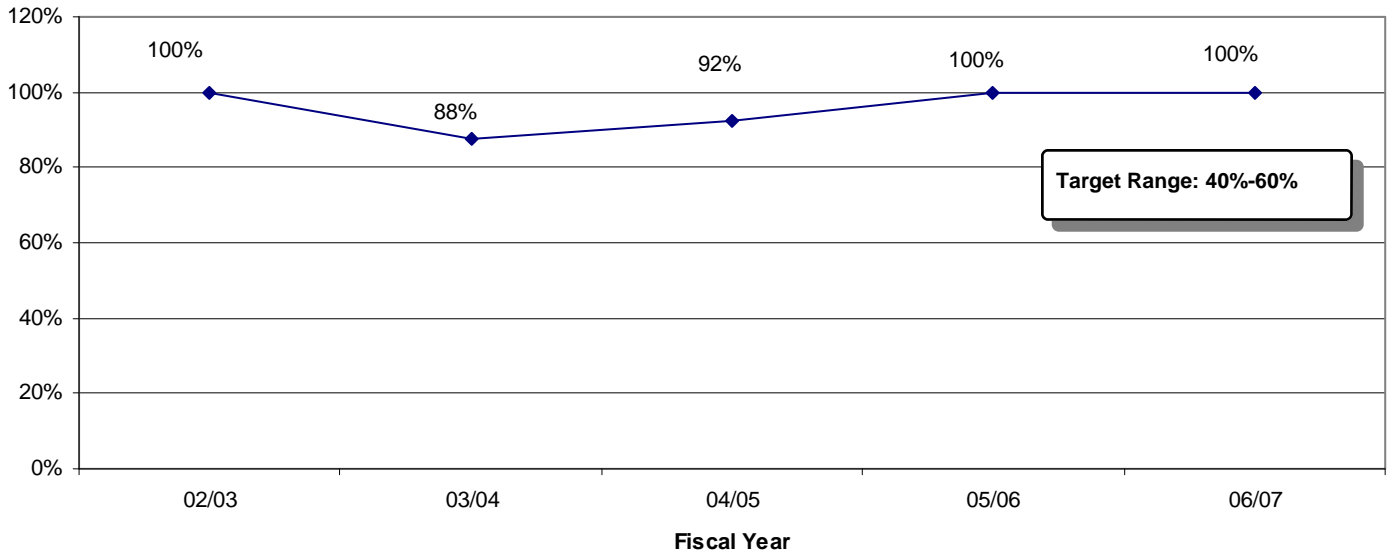


**Q2: Annual Approved Value Added Recommendations
District 3**

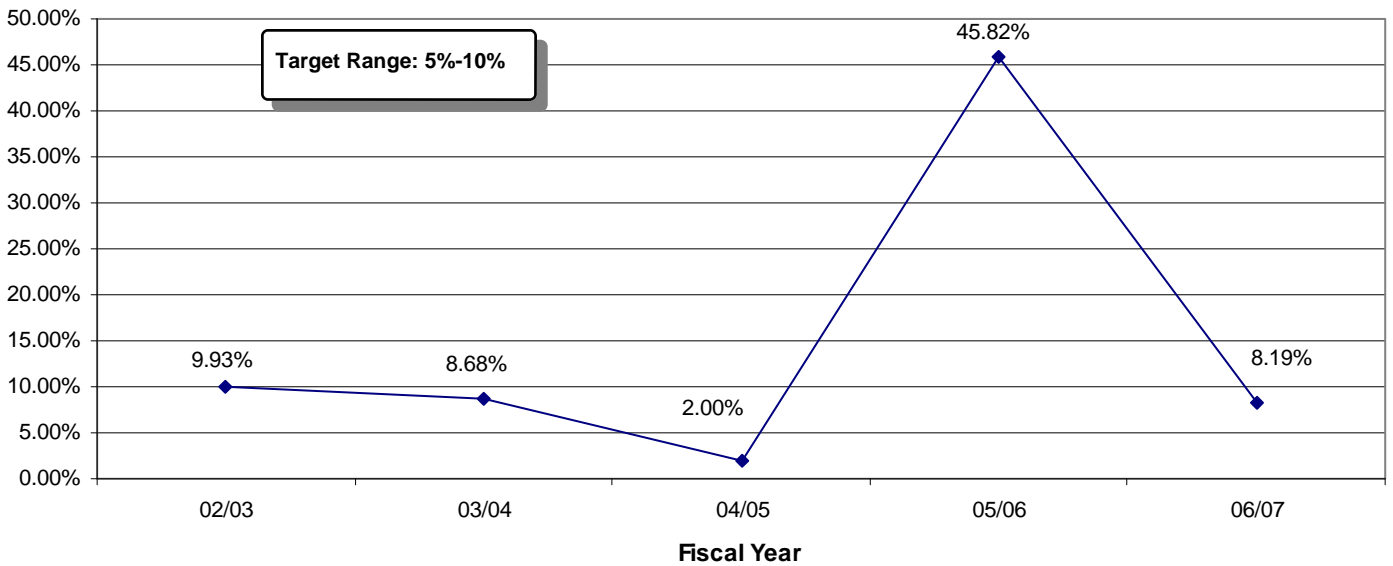


District 3

Q3: Annual Adoption Rate District 3

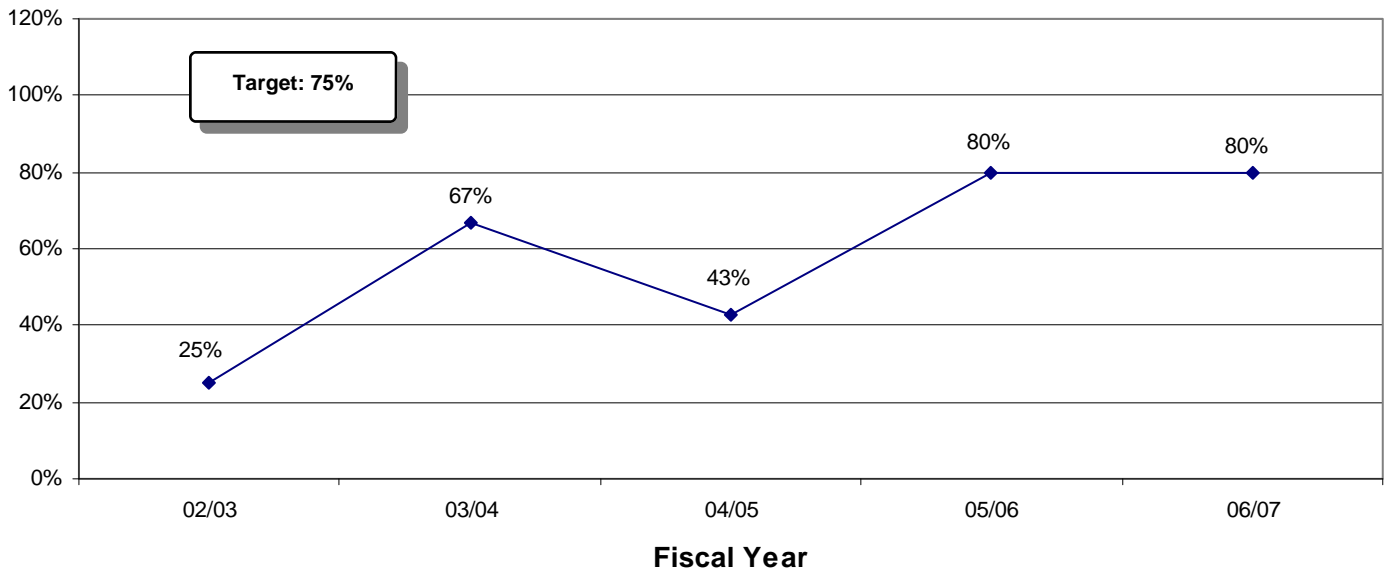


Q4: Annual Percent Project Saved District 3

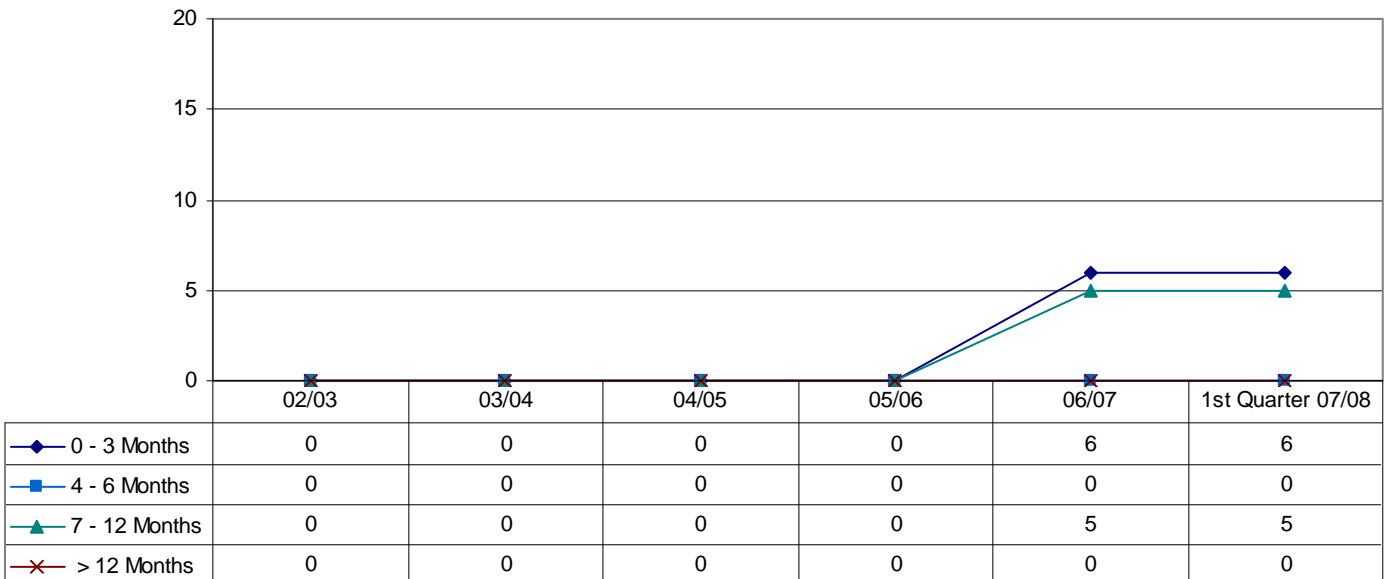


District 3

P1: % Scheduled VE Studies Completed
District 3

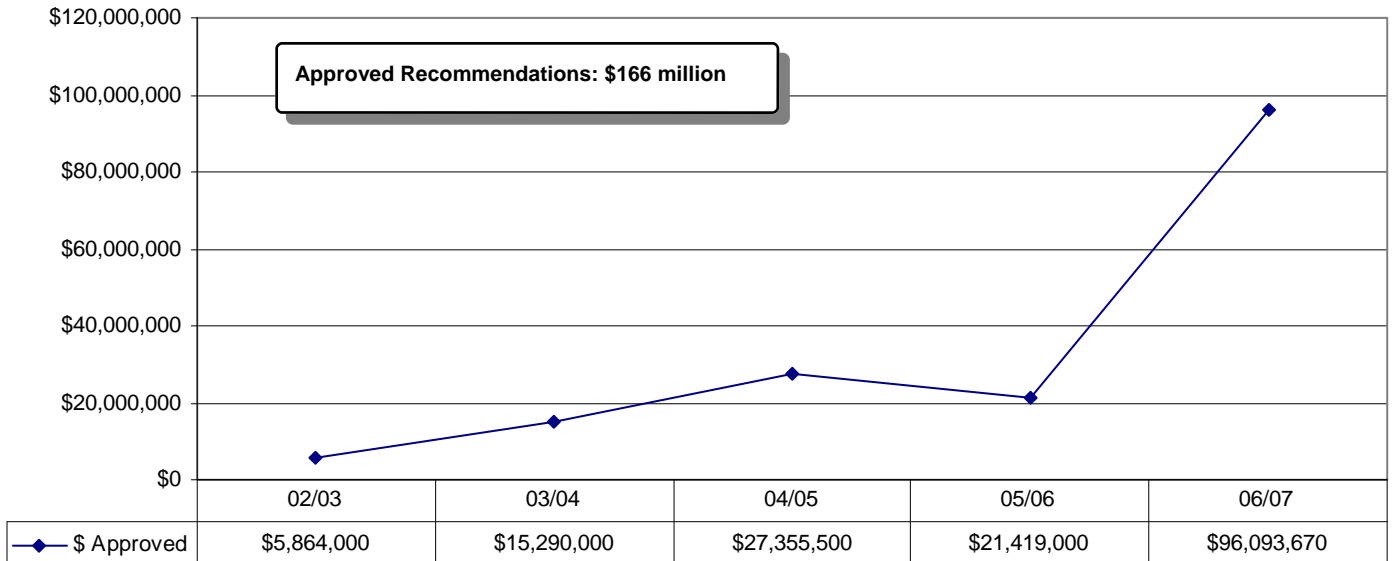


P4: Annual # Pending Recommendations
District 3

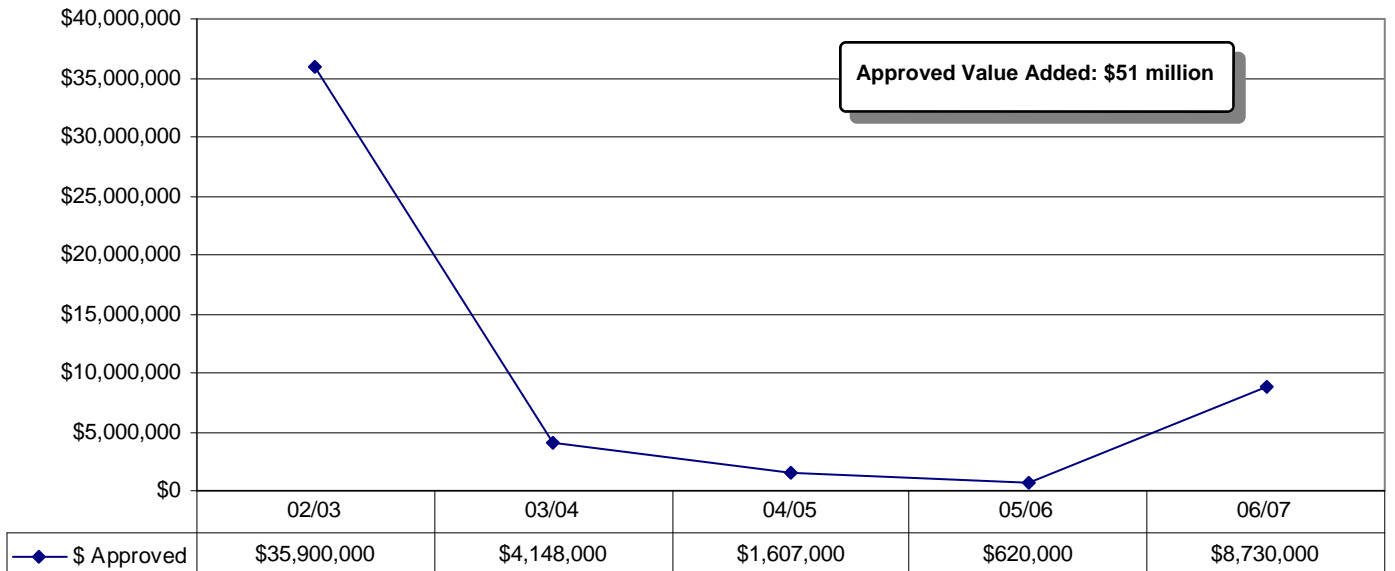


District 4

Q1: Annual Approved Cost Avoidance/Savings
District 4

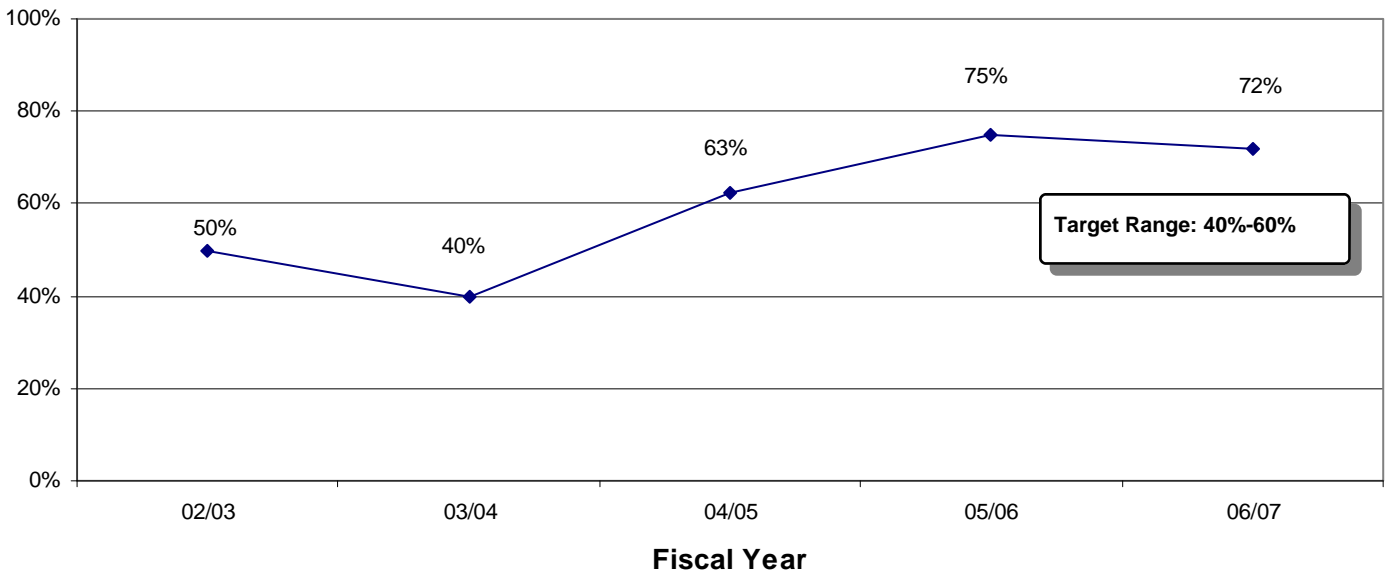


Q2: Annual Approved Value Added Recommendations
District 4

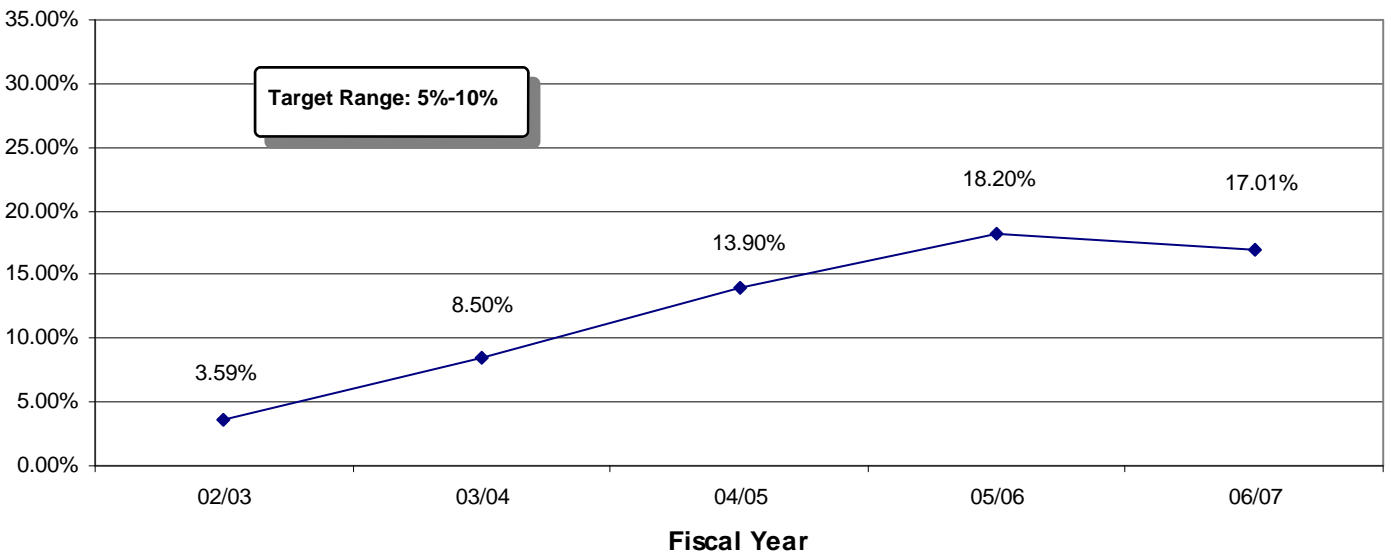


District 4

Q3: Annual Adoption Rate District 4

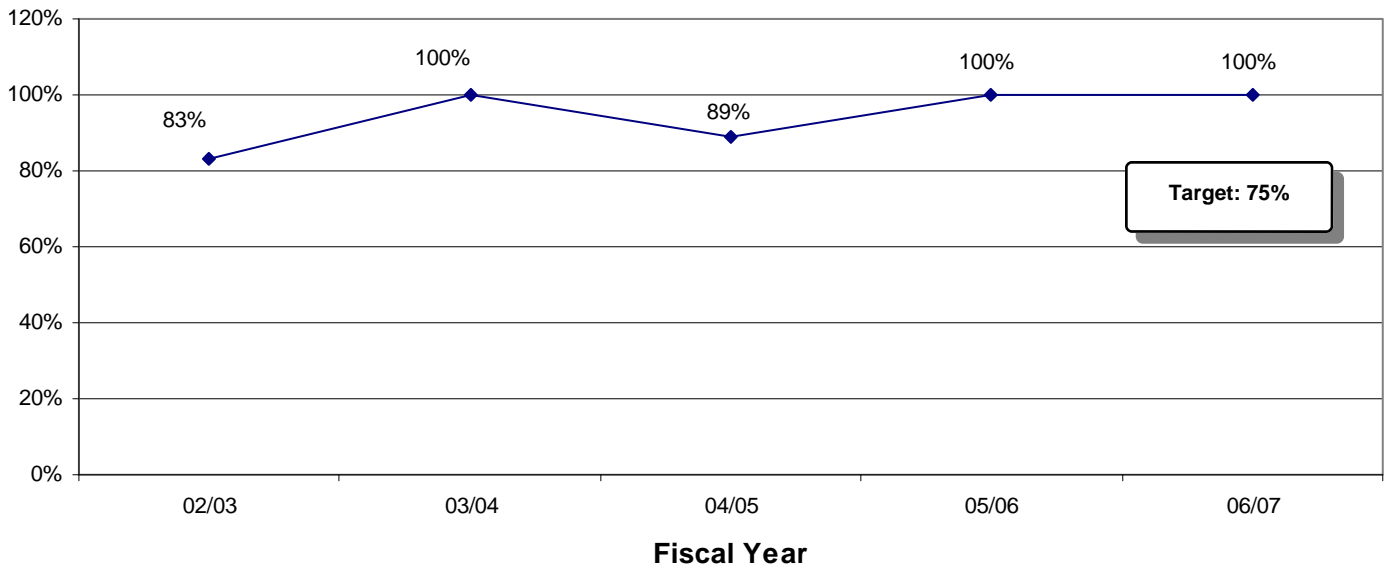


Q4: Annual Percent Project Saved District 4

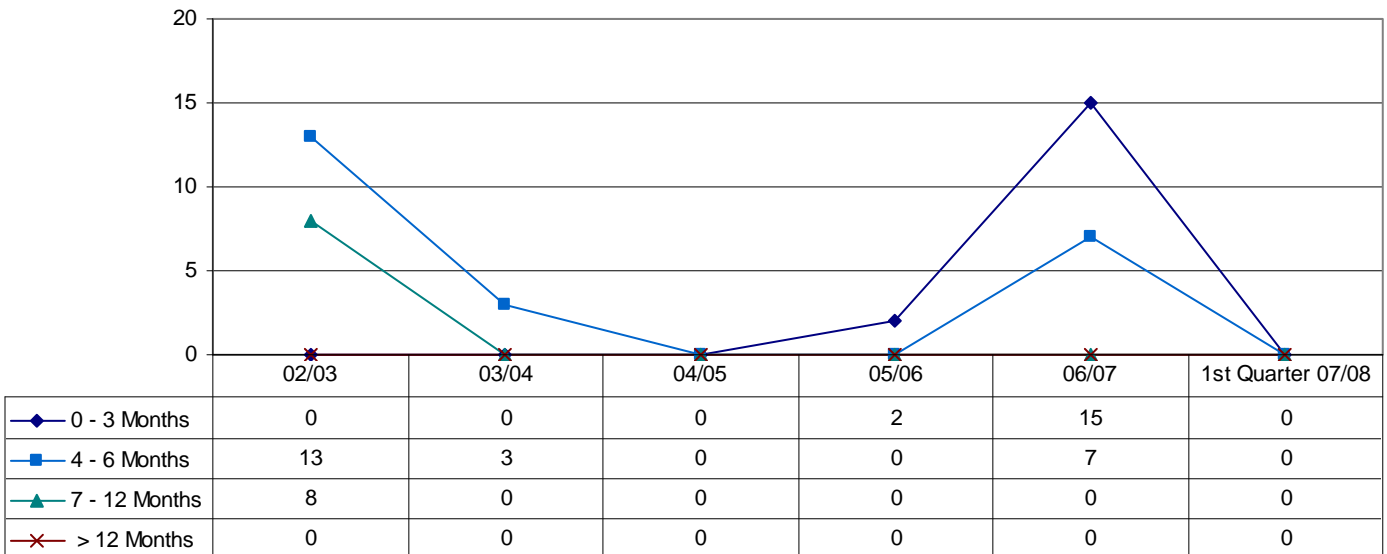


District 4

P1: % Scheduled VE Studies Completed
District 4

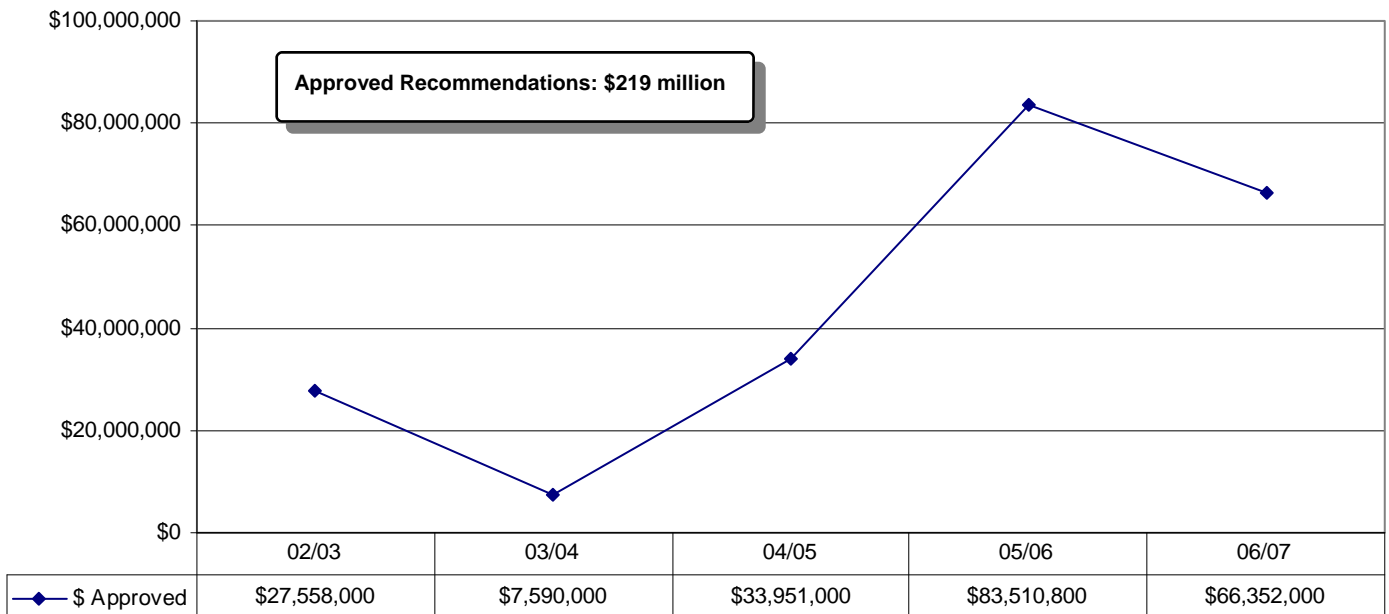


P4: Annual # Pending Recommendations
District 4

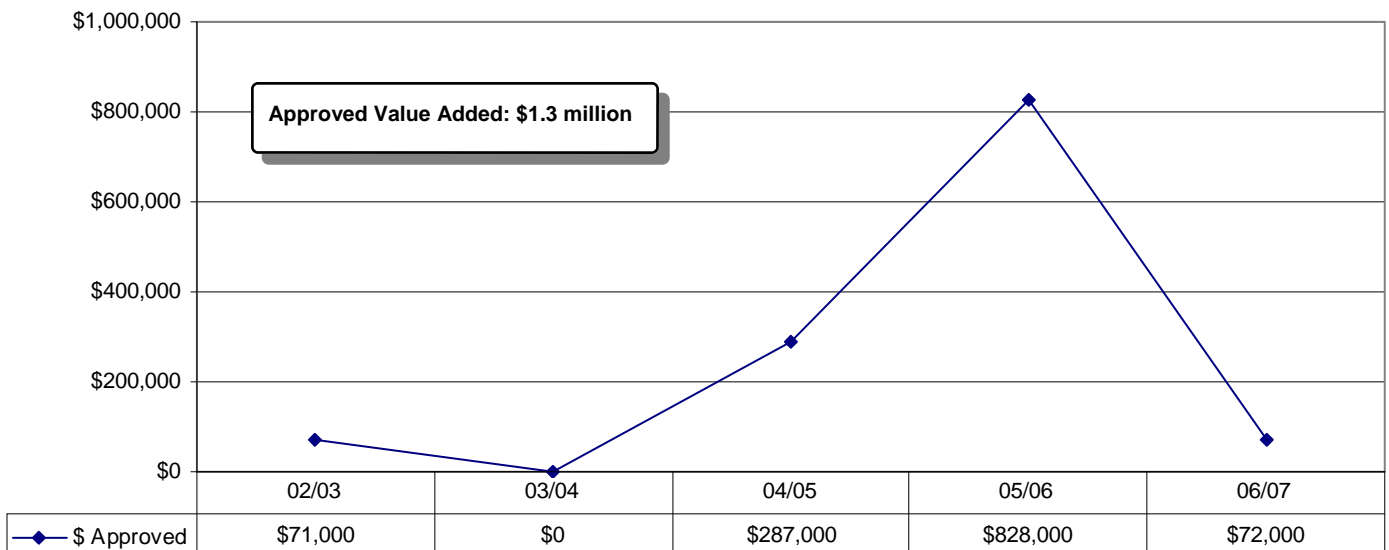


District 5

Q1: Annual Approved Cost Avoidance/Savings
District 5

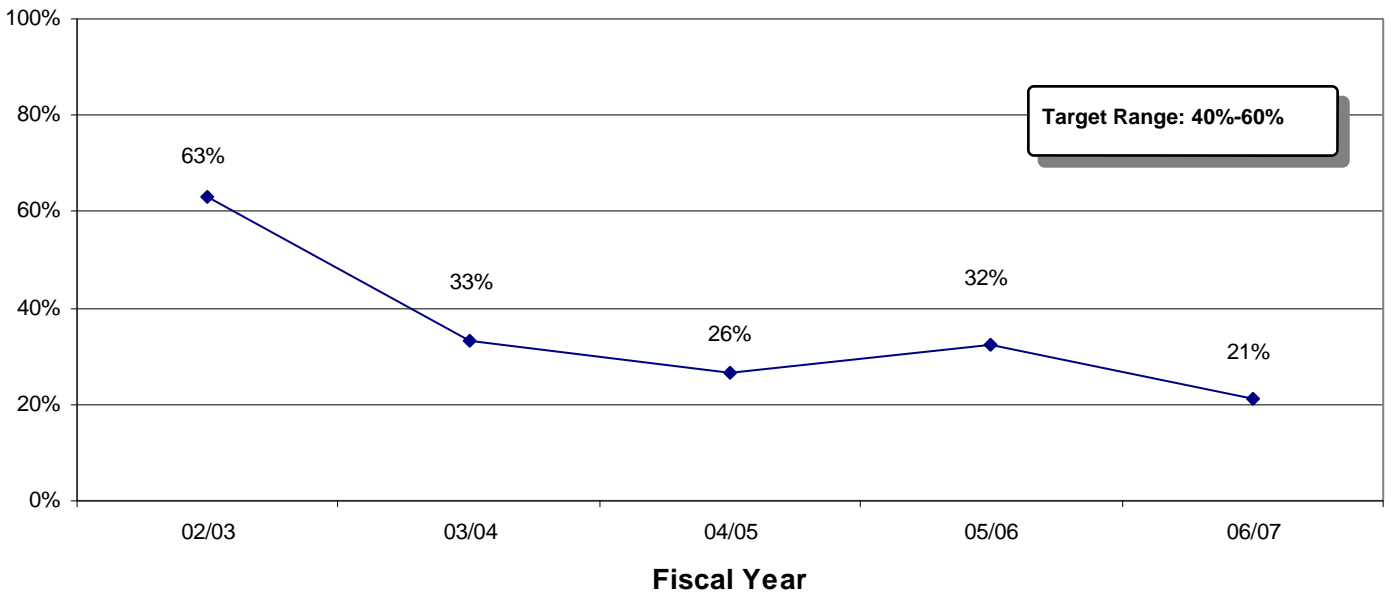


Q2: Annual Approved Value Added Recommendations
District 5

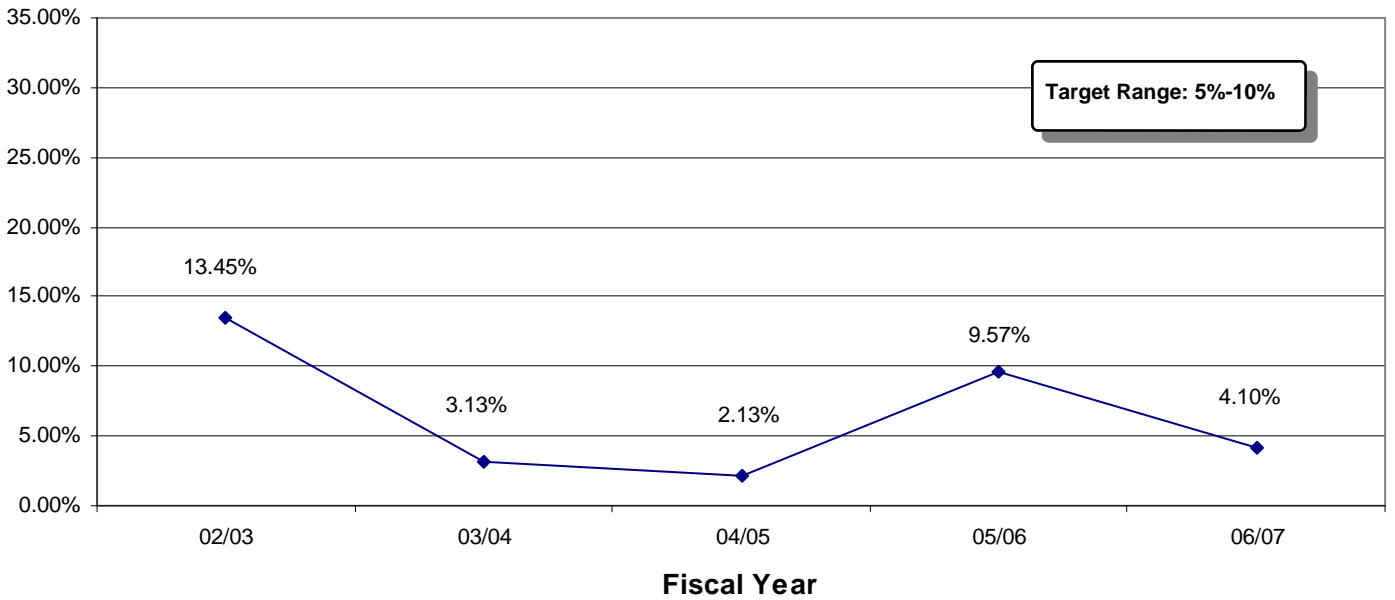


District 5

Q3: Annual Adoption Rate District 5

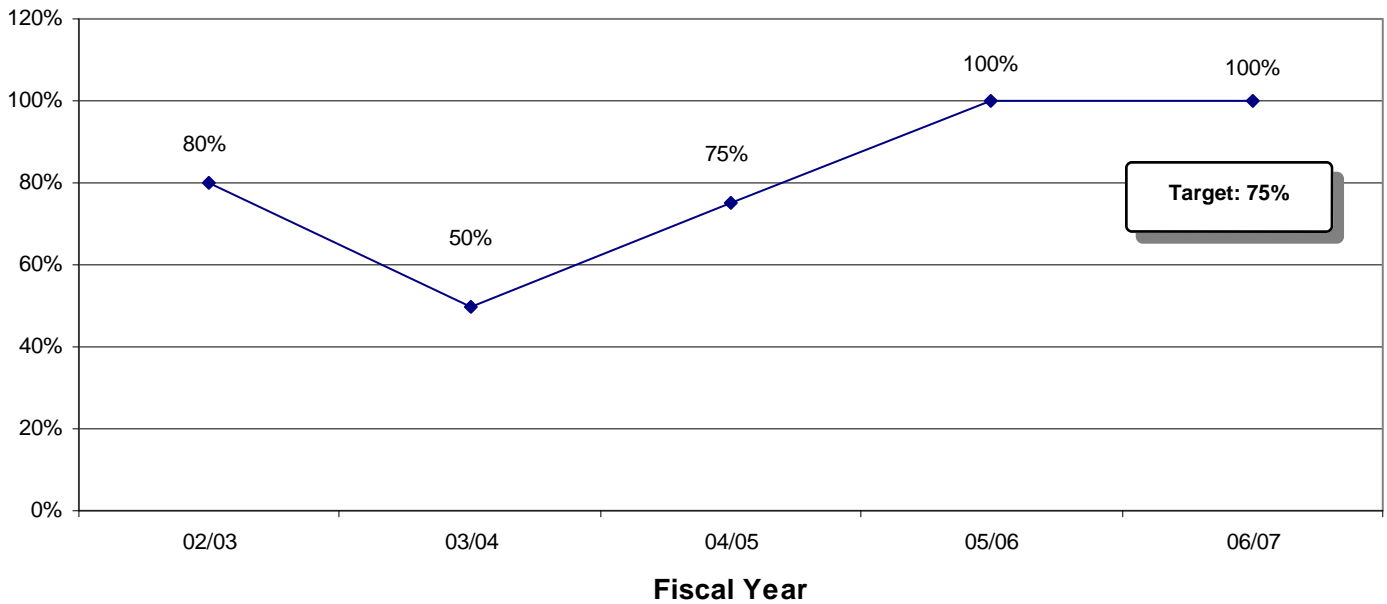


Q4: Annual Percent Project Saved District 5

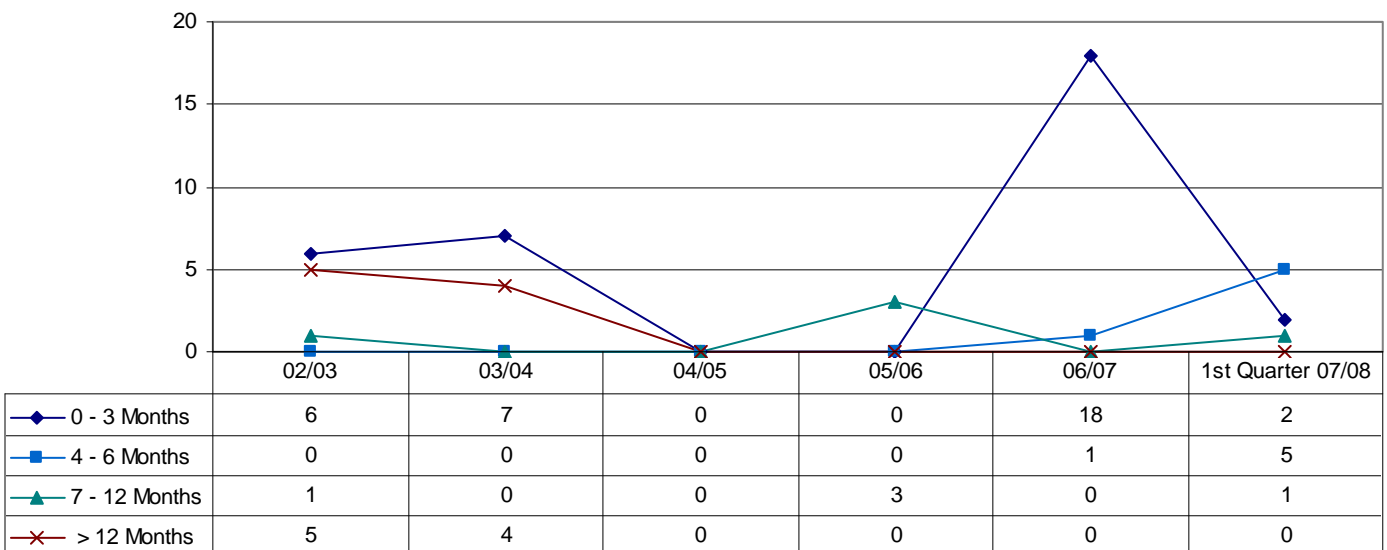


District 5

P1: % Scheduled VE Studies Completed
District 5

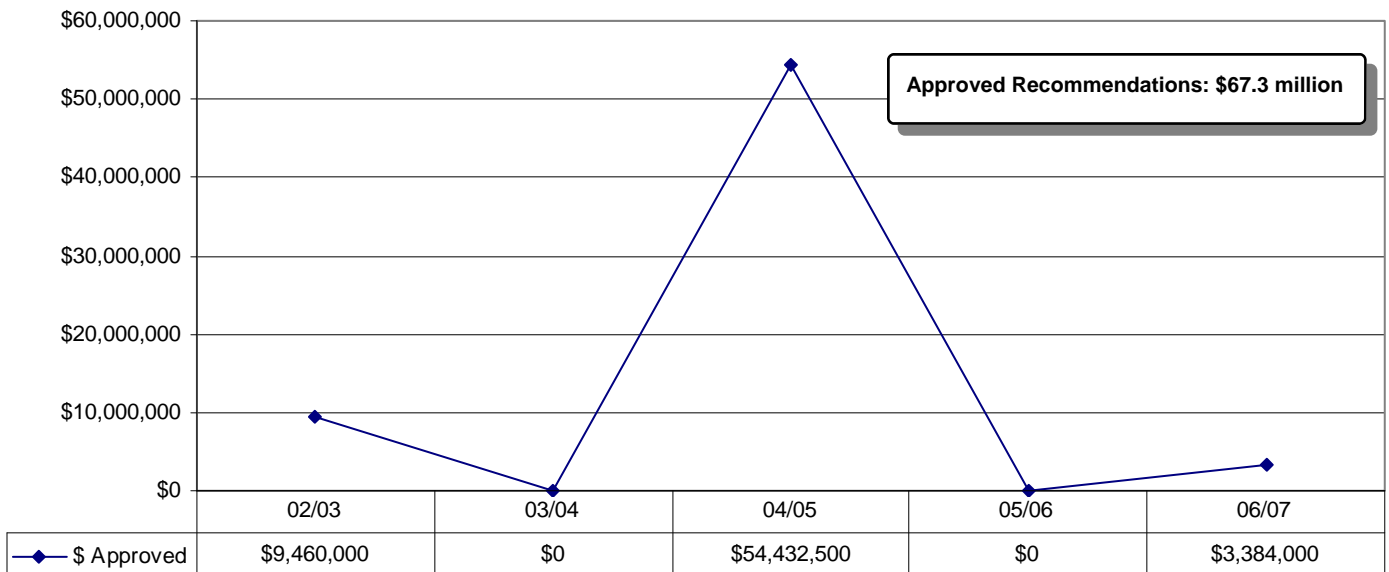


P4: Annual # Pending Recommendations
District 5

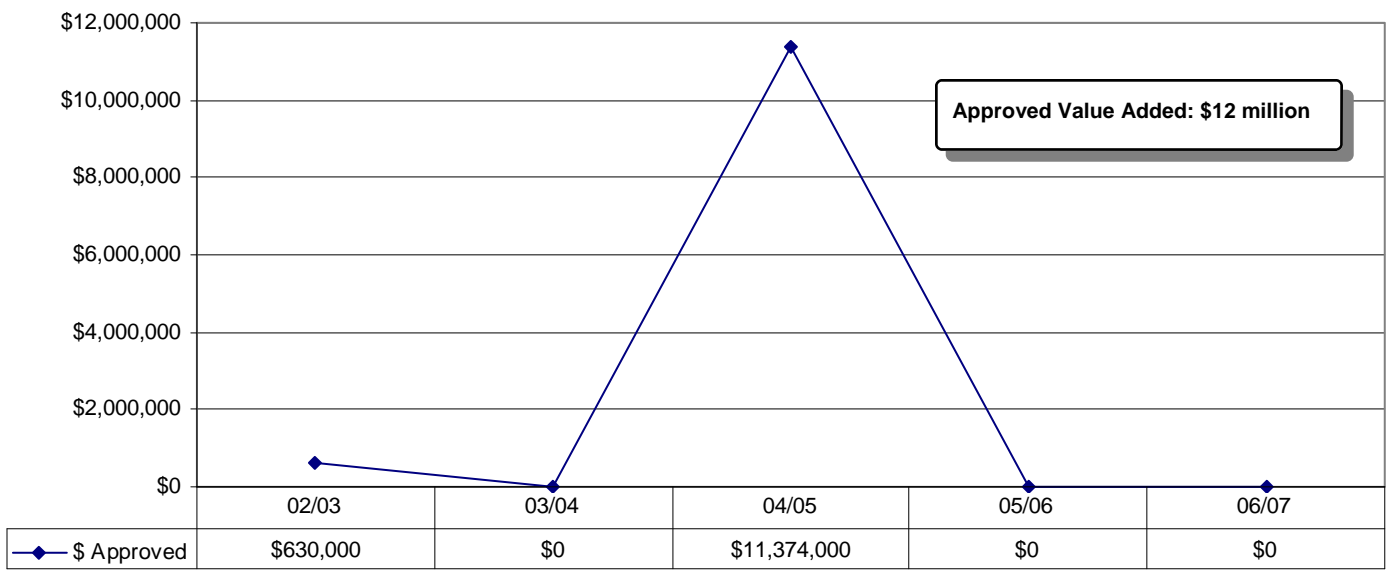


District 6

**Q1: Annual Approved Cost Avoidance/Savings
District 6**

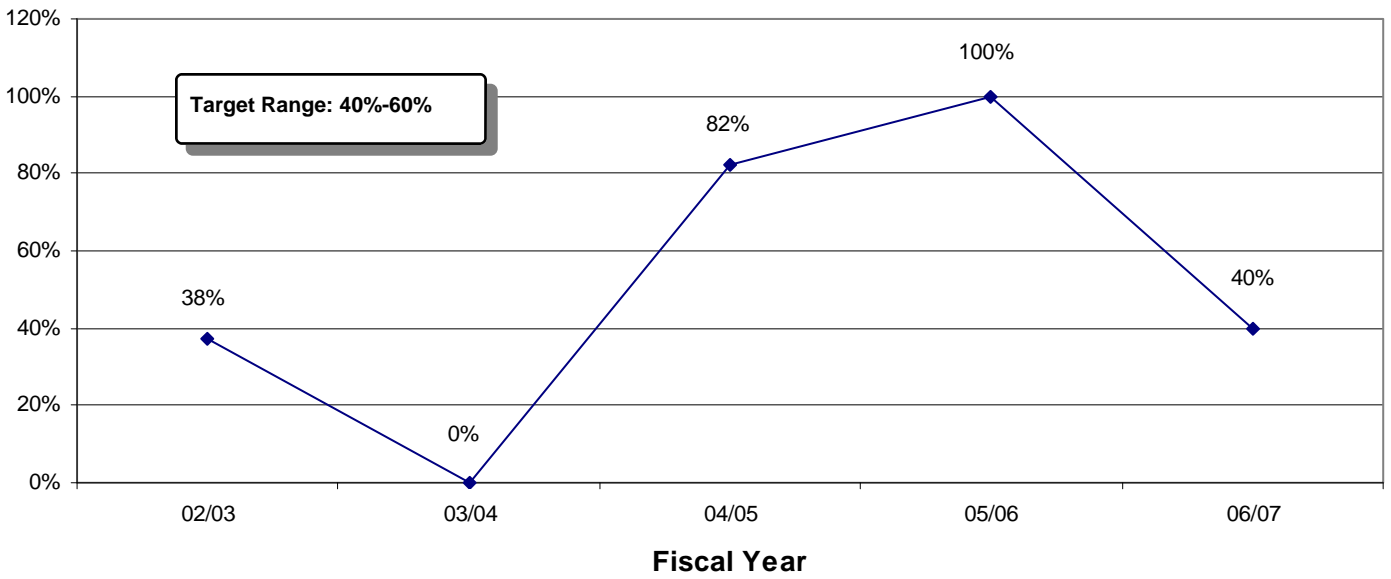


**Q2: Annual Approved Value Added Recommendations
District 6**

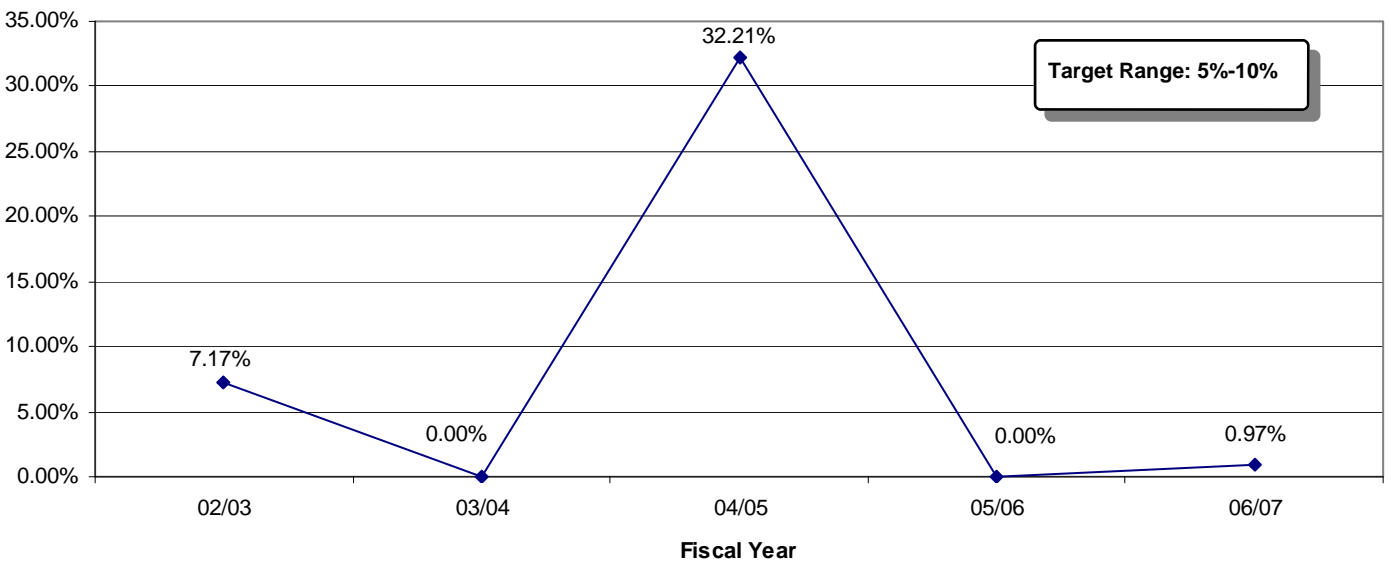


District 6

Q3: Annual Adoption Rate District 6

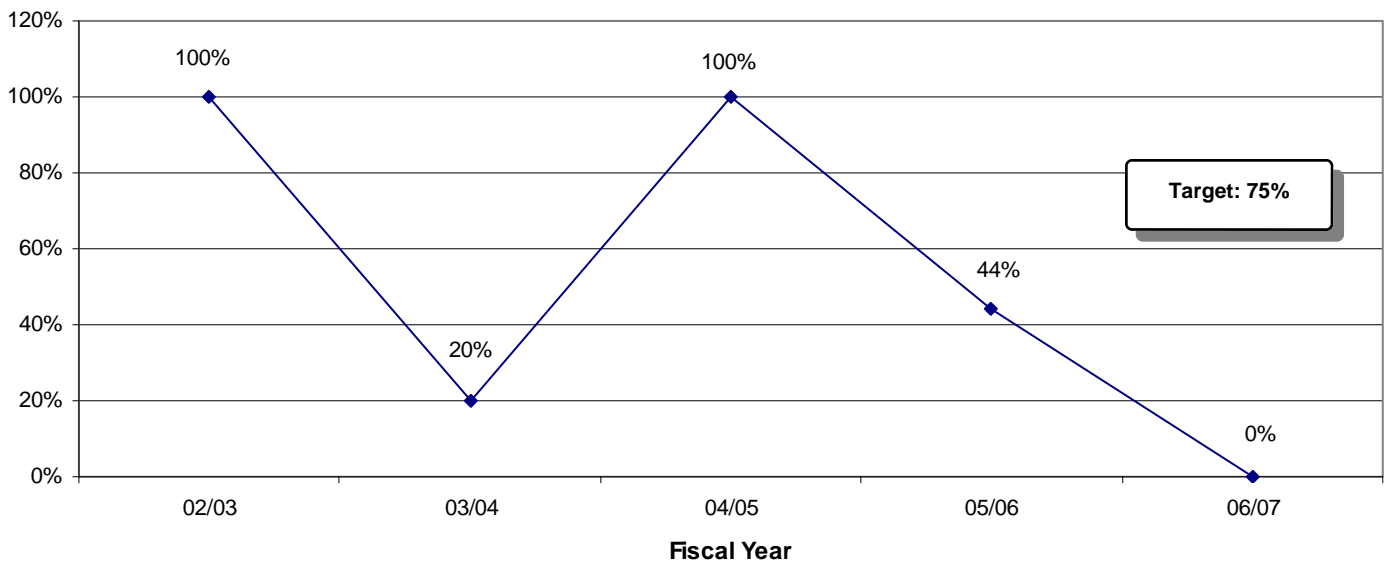


Q4: Annual Percent Project Saved District 6

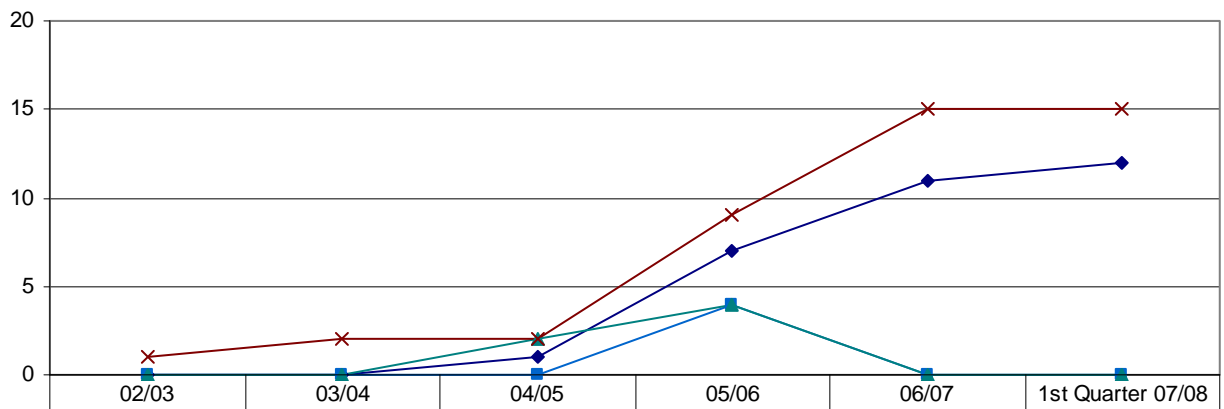


District 6

**P1: % Scheduled VE Studies Completed
District 6**



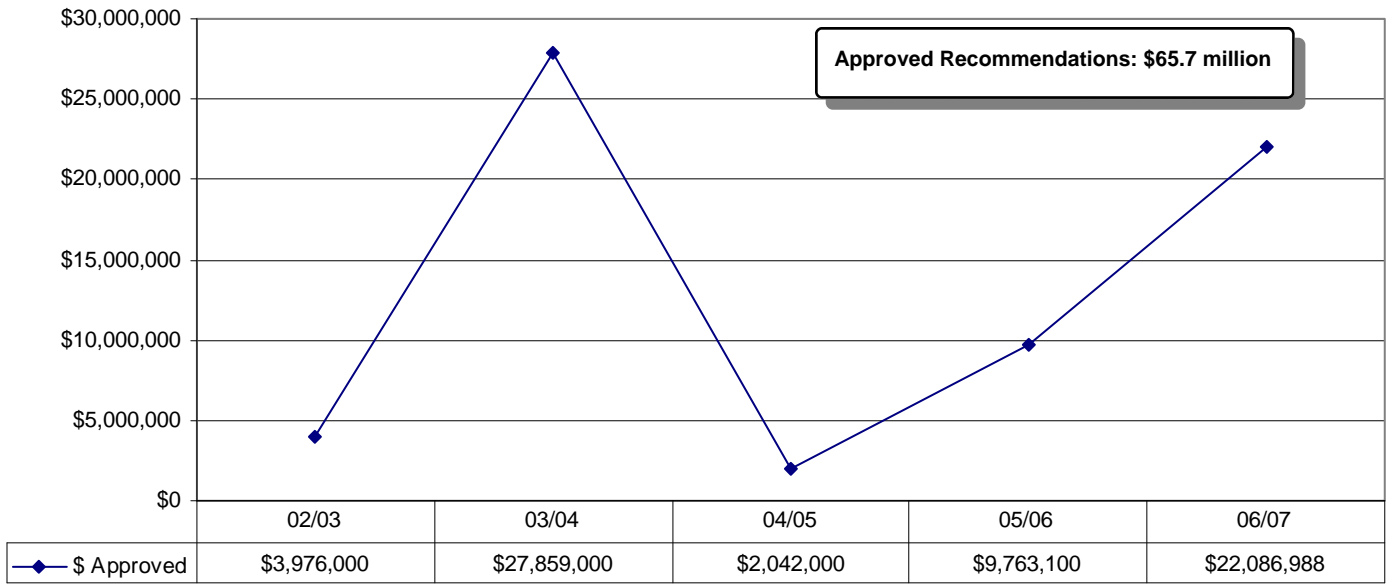
**P4: Annual # Pending Recommendations
District 6**



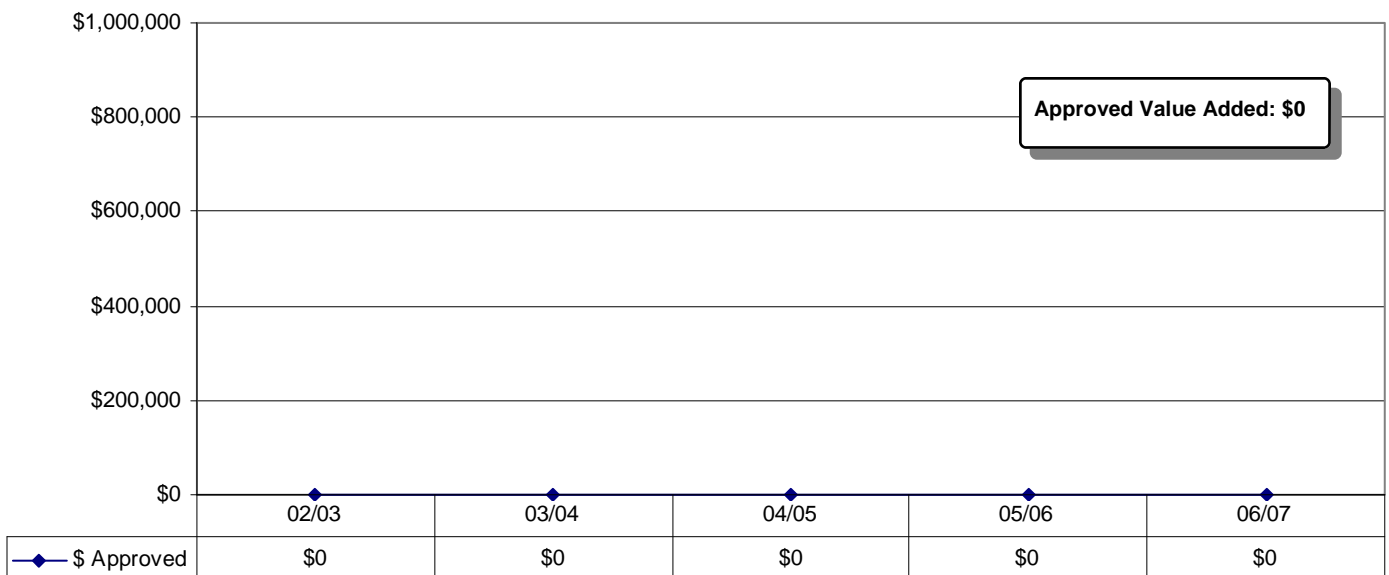
	02/03	03/04	04/05	05/06	06/07	1st Quarter 07/08
0 - 3 Months	0	0	1	7	11	12
4 - 6 Months	0	0	0	4	0	0
7 - 12 Months	0	0	2	4	0	0
> 12 Months	1	2	2	9	15	15

District 7

**Q1: Annual Approved Cost Avoidance/Savings
District 7**

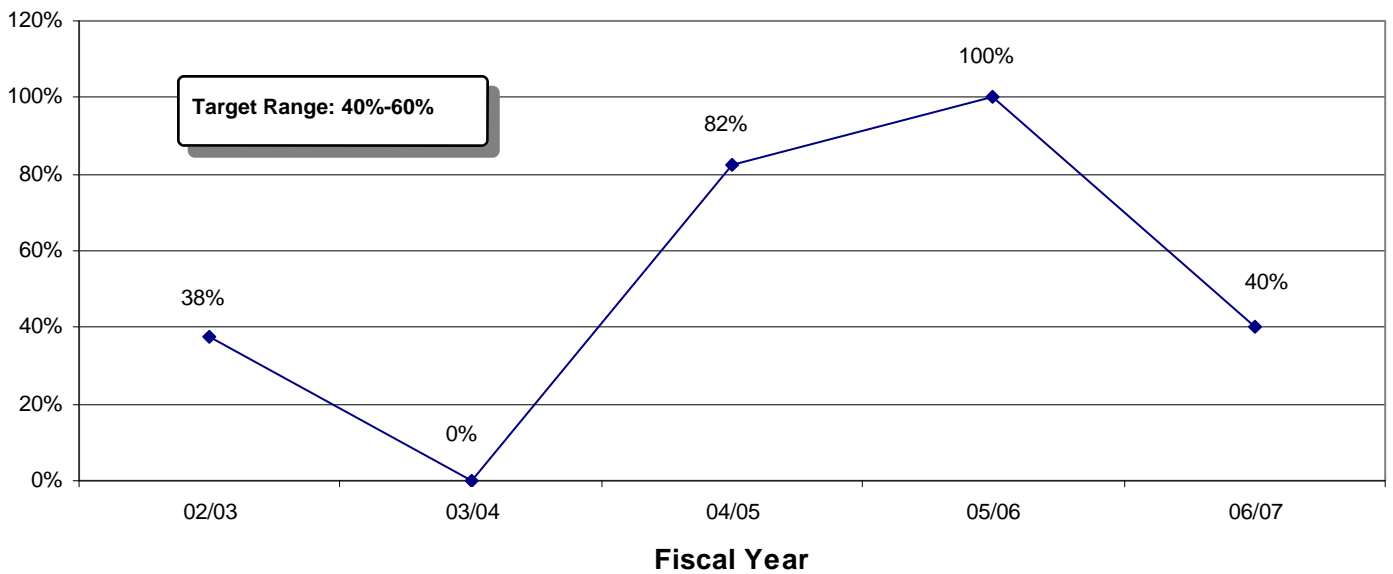


**Q2: Annual Approved Value Added Recommendations
District 7**

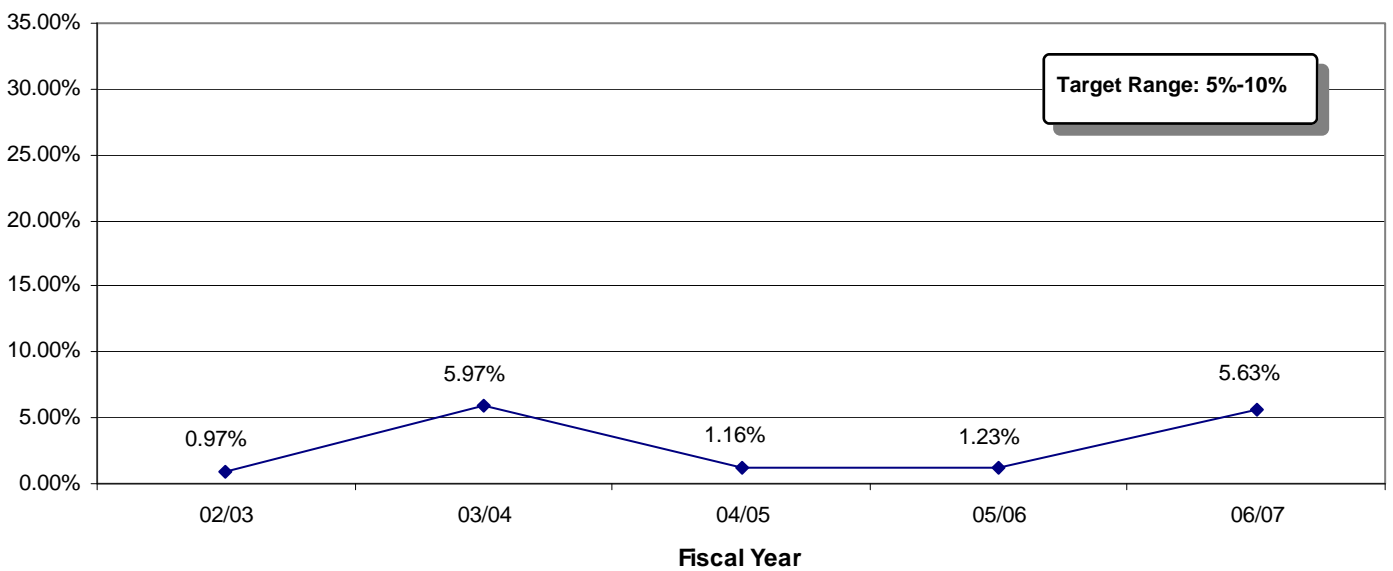


District 7

Q3: Annual Adoption Rate District 7

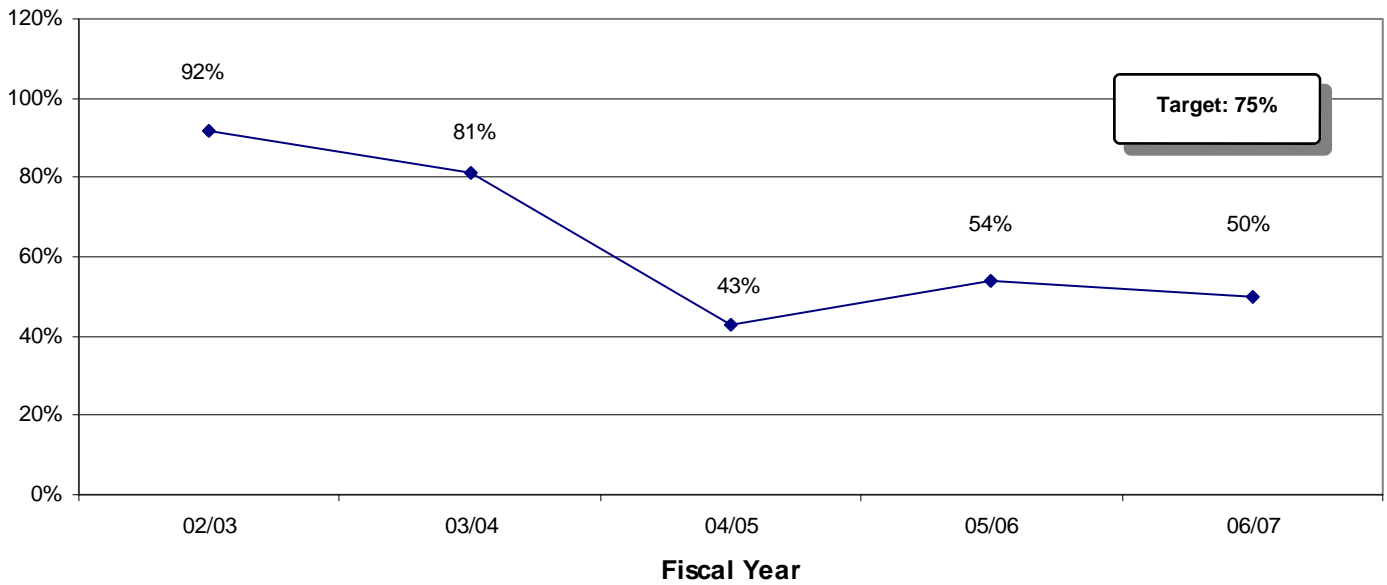


Q4: Annual Percent Project Saved District 7

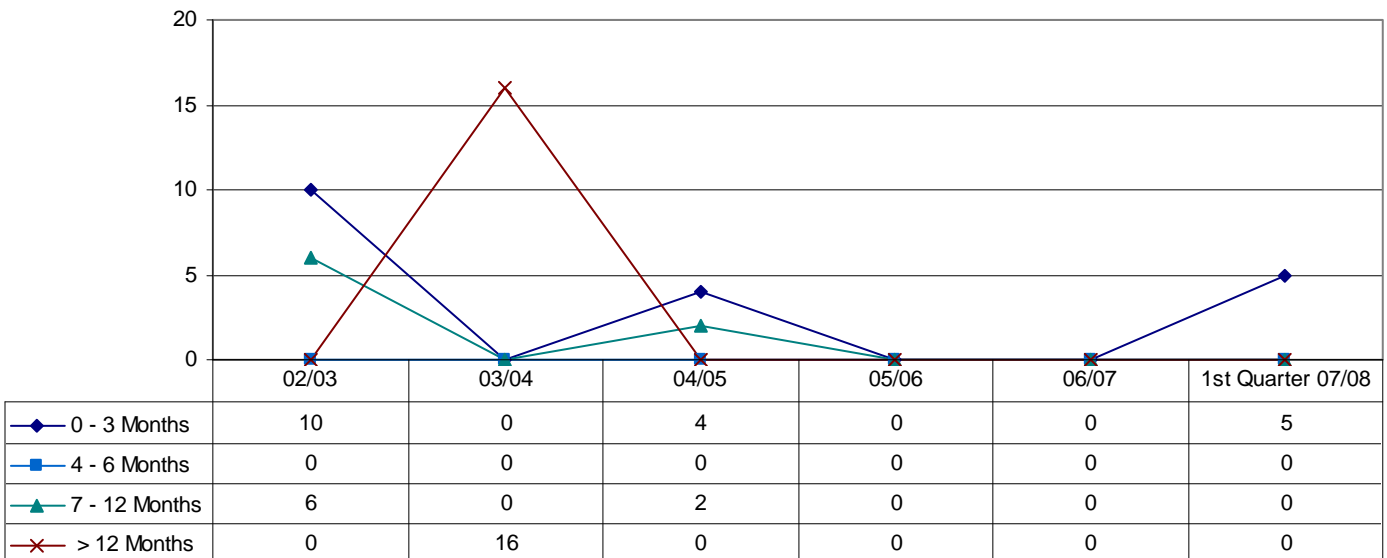


District 7

P1: % Scheduled VE Studies Completed
District 7

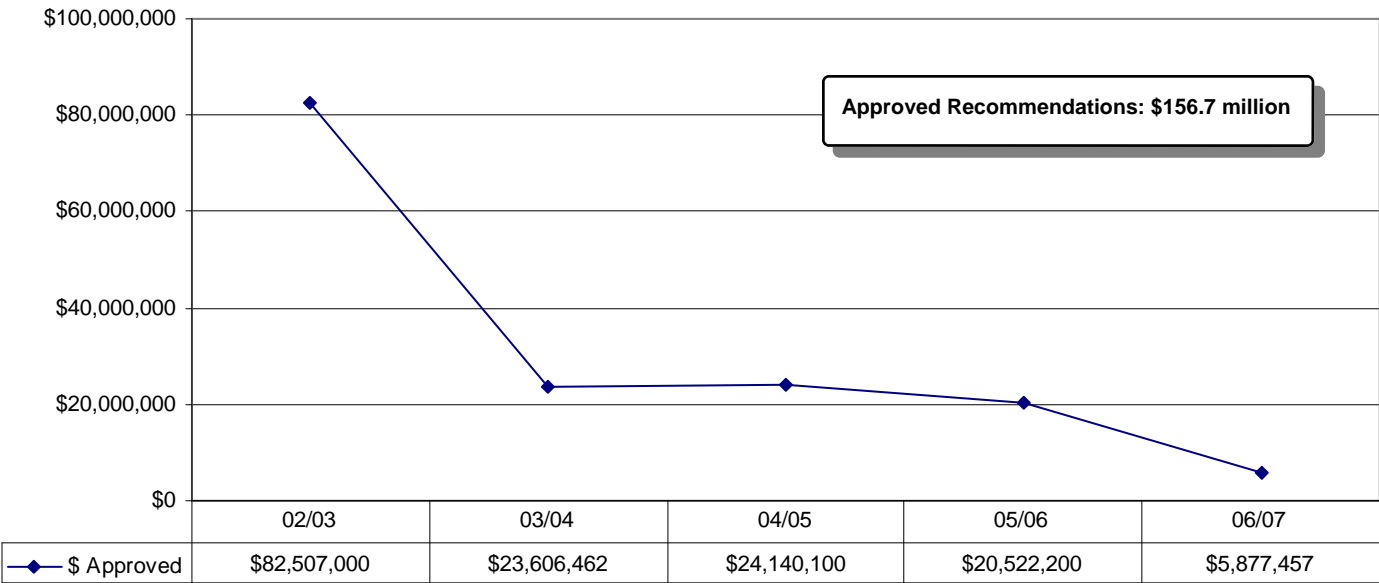


P4: Annual # Pending Recommendations
District 7

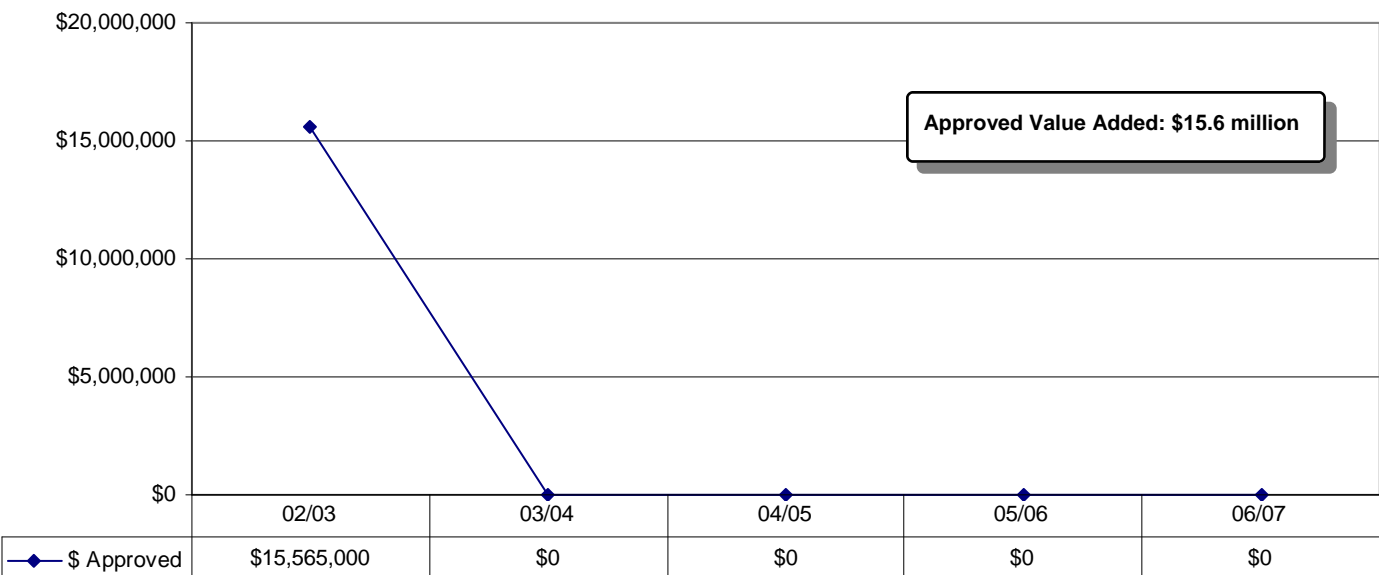


Turnpike

**Q1: Annual Approved Cost Avoidance/Savings
Turnpike**

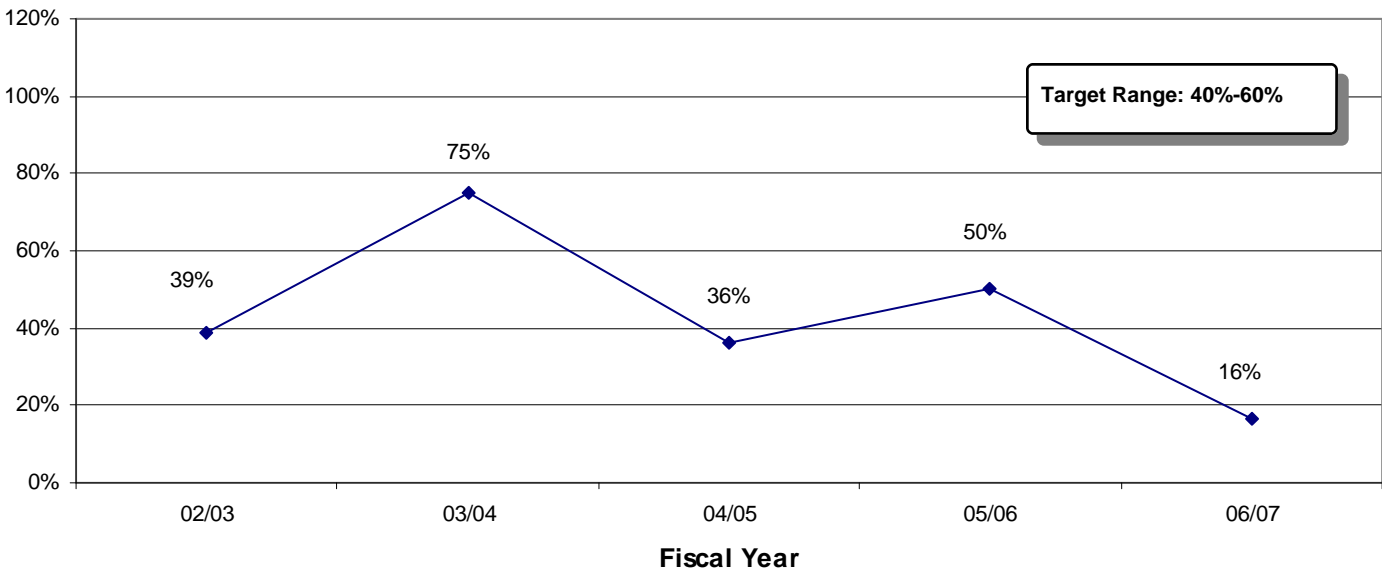


**Q2: Annual Approved Value Added Recommendations
Turnpike**

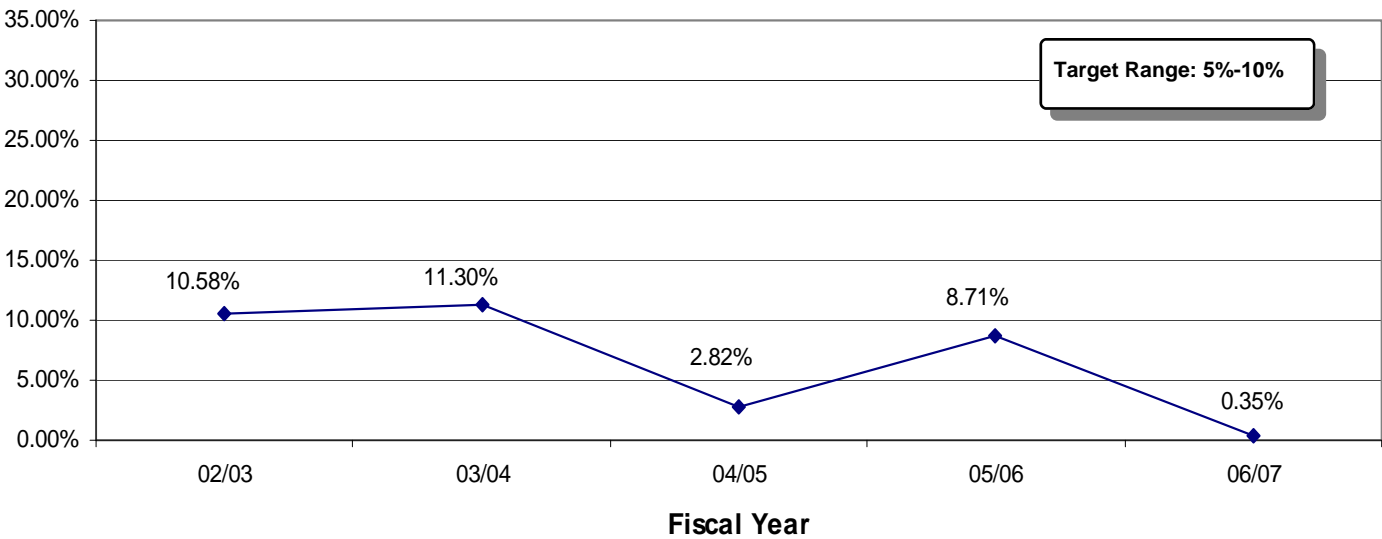


Turnpike

Q3: Annual Adoption Rate Turnpike

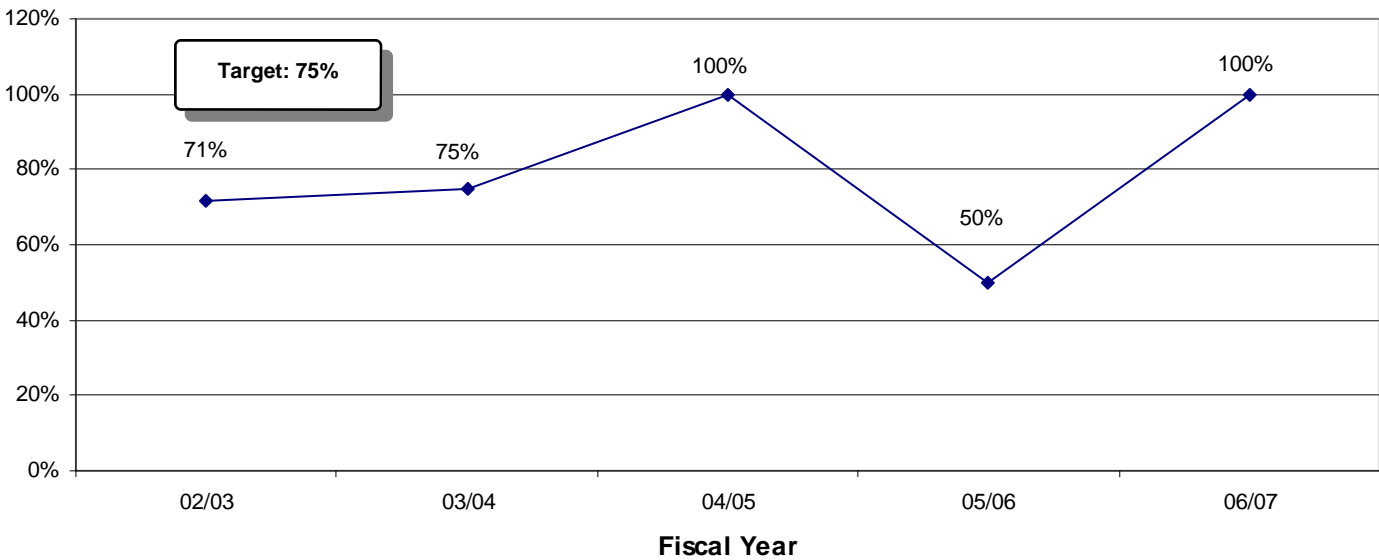


Q4: Annual Percent Project Saved Turnpike

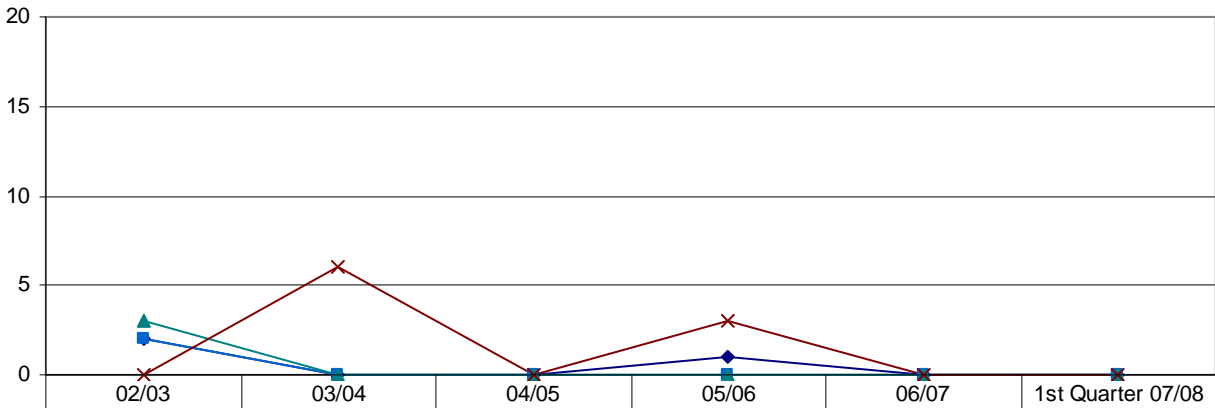


Turnpike

**P1: % Scheduled VE Studies Completed
Turnpike**



**P4: Annual # Pending Recommendations
Turnpike**



◆ 0 - 3 Months	2	0	0	1	0	0
■ 4 - 6 Months	2	0	0	0	0	0
▲ 7 - 12 Months	3	0	0	0	0	0
× > 12 Months	0	6	0	3	0	0

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	Customer's Valid Requirement(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.
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Input(s): Projects Supplier(s): Work Program	Flow Chart			Process and Quality Measures (QA/QC)		Checking / Measurement Monitoring			Miscellaneous Information				
Dept / Person Step / Time	DISTRICT VALUE ENGINEER	VALUE ENGINEERING TEAM	STATE VALUE ENGINEER	Process Measures	Control Limits	Checking Item	Timeframe (Frequency)	Responsibility	QAR	- Abbreviations - Procedure Reference - Notes, etc.			
				Quality Measures	And Specs / Targets	What is to be checked?	When to check?	Who will check?	Date of Last Review				
PROJECT SELECTION	<pre> graph TD P1((P1)) --> PS(Project Selection Process) P2((P2)) --> PS P3((P3)) --> PS PS --> TS(Team Selection Process) TS --> CVES(Conduct Value Engineering Study) CVES --> RR(Recommendation Resolution Process) P4((P4)) --> RR RR --> RT(Reporting/Tracking Process) </pre>			P1	% scheduled studies completed	75%	VER & Work Plan	Quarterly	SVE	D1: 11/2006 C	Federal Regulation 23 CFR 627		
TEAM SELECTION				P2	# projects > \$25 million never studied	0	Work Program	Annual	SVE				VE Procedure 625-030-002
STUDY				P3	% projects studied in PD&E	75%	VER	Quarterly	SVE				D2: 12/2006 C 1999 AASHTO Guidelines for VE
RESOLUTION				P4	# of pending rec. per time perio		VER	Quarterly	SVE				D3: 12/2006 C D4: 5/2007 C NCHRP Synthesis 352 - Value Engineering Applications in Transportation
REPORTING					Q1	\$\$\$ Saved per time period		VER	Quarterly	SVE			D5: 1/2007 C
		Q2	Value Added \$\$\$ over time period		VER	Quarterly	SVE			D6: 5/2007 C			
		Q3	Adoption Rate	40%-60%	VER	Quarterly	SVE						
		Q4	Percent Saved	5% - 10%	VER	Quarterly	SVE						
		Q5	Return on Investment	\$130 to \$1	VER	Annual	SVE			D7: 11/2006 C			
		Q6	% Customer Satisfaction		Surveys	Annual	DVE			TPK: 1/2007 C			
										CODES: C- Compliance NC- Noncompliant BP Best Practice			

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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	Valid Requirement(s): All projects with the most potential for improvement have a VE Analysis.
			Regulator's Valid Requirement(s): All projects on the NHS system with estimated total costs > \$25 million have a VE analysis

Step / Time	Dept / Person	Flow Chart	Process and Quality Indicators		Checking / Indicator Monitoring			Miscellaneous Information	
			Process Indicators	Control Limits	Checking Item	Timeframe (Frequency)	Responsibility		QAR
			Quality Indicators	And Specs / Targets	What is to be checked?	When to check?	Who will check?	Date of Last Review	
NEED			P1	100%	Work Plan Received	Annual	SVE	D1: 11/2006 C	Federal Regulation 23 CFR 627 VE Procedure 625-030-002 AASHTO Guidelines for VE NCHRP Synthesis 352-Value Engineering Applications in Transportation
REVIEW			Q1	75%	VER & Work Plan	Quarterly	SVE	D2: 12/2006 C	
REVIEW			Q2	0	Work Program	Annual	SVE	D3: 12/2006 C	
REVIEW			Q3	60%	VER	Quarterly	SVE	D4: 5/2007 C	
DEVELOP								D5: 1/2007 C	
DEVELOP								D6: 5/2007 C	
APPROVAL								D7: 11/2006 C	
APPROVAL								D7: 11/2006 C	
APPROVAL								D7: 11/2006 C	
DISTRIBUTE			P1					TPK: 1/2007 C	
DISTRIBUTE									
EXECUTE									CODES: C- Compliance NC- Noncompliant BP Best Practice

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

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
Valid Requirement(s): Team makeup has the required disciplines, leadership skills and VE experience to study the selected project.
Regulator's Valid Requirement(s): Mult-disciplined team of individuals not personally involved in the design of the project

Input(s): Project disciplines Supplier(s): Department Heads, Consultants		Flow Chart			Process and Quality Indicators		Checking / Indicator Monitoring			Miscellaneous Information
Dept / Person	DISTRICT VALUE ENGINEER	DEPARTMENT HEAD	STATE VALUE ENGINEER	Process Indicators	Control Limits	Checking Item	Timeframe (Frequency)	Responsibility	QAR	- Abbreviations - Procedure Reference - Notes, etc.
Step / Time				Quality Indicators	And Specs / Targets	What is to be checked?	When to check?	Who will check?	Date of Last Review	
NEED				Q1	0	VER & VE Study Report	Annual	SVE	D1: 11/2006 C	Federal Regulation 23 CFR 627 VE Procedure 625-030-002 AASHTO Guidelines for VE NCHRP Synthesis 352 - Value Engineering Applications in Transportation
CONSULTANT REQUESTS				Q2	0	VER & VE Study Report	Annual	SVE	D2: 12/2006 C	
CONSULTANT REQUESTS				Q3	0	VER, VE study report, SAVE, FLPE, TRESS	Annual	SVE	D3: 12/2006 C	
TEAM SELECTION									D4: 5/2007 C	
TEAM SELECTION						D5: 1/2007 C				
TEAM SELECTION						D6: 5/2007 C				
TEAM SELECTION						D7: 11/2006 C				
NOTIFICATION						TPK: 1/2007 C			CODES: C- Compliance NC - Noncompliant BP Best Practice	

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

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 & DVE. 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.
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Input(s): Project Information Supplier(s): Project Manager		Flow Chart				Process and Quality Indicators		Checking / Indicator Monitoring			Miscellaneous Information		
Step / Time	Dept / Person	DISTRICT VALUE ENGINEER	VALUE ENGINEERING TEAM				Process Indicators	Control Limits	Checking Item	Timeframe (Frequency)	Responsibility	QAR	- Abbreviations - Procedure Reference - Notes, etc.
							Quality Indicators	And Specs / Targets	What is to be checked?	When to check?	Who will check?	Date of Last Review	
NEED		Conduct VE Study					Q1 Adoption Rate	40%-60%	VER	Quarterly	SVE	D1: 11/2006 C	Federal Regulation 23 CFR 627
INVESTIGATION		Feedback	Investigation Phase - 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.									D2: 12/2006 C	VE Procedure 625-030-002
ANALYSIS			Analysis Phase: - Team identifies the elements with the greatest potential for value improvement.									D3: 12/2006 C	NCHRP Synthesis 352 - Value Engineering Applications in Transportation
SPECULATION			Speculation Phase: - Team generates alternatives to the proposed design by using brainstorming techniques									D4: 5/2007 C	
EVALUATION			Evaluation Phase: - Team evaluates the alternatives and determines which offer the greatest potential for savings and approval. Advantages and disadvantages are considered at this point.									D5: 1/2007 C	
DEVELOPMENT			Development Phase: - Team develops the alternatives selected. Sketches, cost estimates, validation of data and other technical work are done at this point.									D6: 5/2007 C	
PRESENTATION			Presentation Phase: - 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.									D7: 11/2006 C	
RESULTS		Post Study Surveys of Team, Project Manager and Management. Feedback results to Project Selection and Team Selection Processes & Team Leader.										TPK: 1/2007 C	CODES: C- Compliance NC- Noncompliant BP Best Practice
		Enter data into VE database											

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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
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		Flow Chart	Process and Quality Indicators		Checking / Indicator Monitoring				Miscellaneous Information	
Input(s): Recommendations Supplier(s): VE Team	Dept / Person	DISTRICT VALUE ENGINEER	STATE VALUE ENGINEER	Process Indicators	Control Limits	Checking Item	Timeframe (Frequency)	Responsibility	QAR	- Abbreviations - Procedure Reference - Notes, etc.
Step / Time				Quality Indicators	And Specs / Targets	What is to be checked?	When to check?	Who will check?	Date of Last Review	
NEED		Resolve Pending Recommendations		Q1 Adoption Rate	40%-60%	VER	Quarterly	SVE	D1: 11/2006 C	Federal Regulation 23 CFR 627
REVIEW		Distribute Study report to project team and Decision Makers		Q2 # of pending rec. per time period		VER	Quarterly	SVE	D2: 12/2006 C	VE Procedure 625-030-002
RESOLUTION MEETING		Recommendations not resolved at presentation? YES Schedule Resolution Meeting Are Decision Makers Available? YES Conduct meeting - Obtain Decisions (Adopt, Modify, Pending, Reject) Decisions Made? YES Update the database Monitor Pending Recommendations							D3: 12/2006 C	NCHRP Synthesis 352 - Value Engineering Applications in Transportation
MONITOR									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	

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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
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Input(s): Study Results Supplier(s): DVE	Flow Chart		Process and Quality Indicators		Checking / Indicator Monitoring			Miscellaneous Information	
Dept / Person Step / Time	STATE VALUE ENGINEER	DISTRICT VALUE ENGINEER	Process Indicators	Control Limits And Specs / Targets	Checking Item	Timeframe (Frequency)	Responsibility	QAR	- Abbreviations - Procedure Reference - Notes, etc.
			Quality Indicators		What is to be checked?	When to check?	Who will check?	Date of Last Review	
NEED	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; width: fit-content; margin: 5px auto;">Report the results of the VE program to management</div>		P1			Quarterly	SVE	D1: 11/2006 C	Federal Regulation 23 CFR 627
MAINTAIN FILES	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Enter data into VE database at conclusion of study</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">File copy of final study report in District files</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Send copy of final study report to SVE</div>		Q1			Quarterly	SVE	D2: 12/2006 C	VE Procedure 625-030-002
DATA VERIFICATION	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Send e-mail reminding DVEs to enter activity for the quarter</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Prepare Draft Quarterly Report & e-mail to Districts</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Correct database and notify SVE</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Review Draft Quarterly Report</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> </div> <div style="text-align: center; margin: 5px auto;"> P1 → Is Draft Report accurate? </div>		Q2	FHWA Annual Report to Division Office by Nov 1		Annual	SVE	D3: 12/2006 C D4: 5/2007 C D5: 1/2007 C D6: 5/2007 C D7: 11/2006 C	1999 AASHTO Guidelines for VE NCHRP Synthesis 352 - Value Engineering Applications in Transportation
REPORT	<div style="text-align: center; margin: 5px auto;"> Is this the Annual Report? </div> <div style="display: flex; justify-content: space-around; margin: 5px auto;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Prepare Final Annual Report</div> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Prepare Annual FHWA Report</div> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: fit-content;">Prepare Final Quarterly Report</div> </div> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Distribute Reports</div>						TPK: 1/2007 C		

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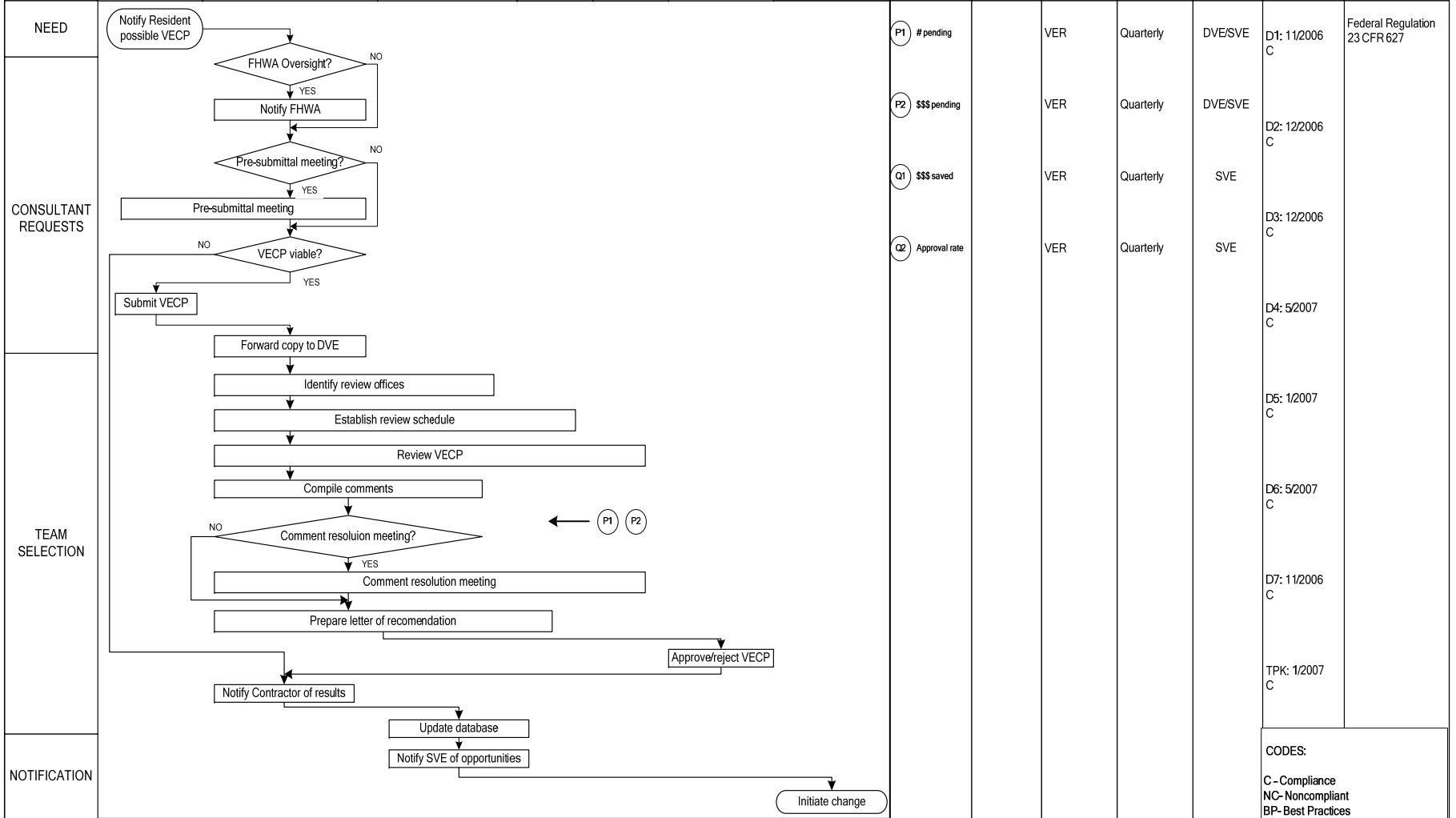
CODES:
C- Compliance
NC- Noncompliant
BP Best Practice

Process Control System

Process Name: Value Engineering Change Proposal
Product/Service: Resolution on submitted VECP by the contractor
Primary Customers: Management, Contractor
Customer's Valid Requirement(s): Review and either approve or reject the VECP in a timely manner.
Regulator's Valid Requirement(s): Program that encourages the use and resolution of VECP's during construction.

Input(s): Contractor Submittal
Supplier(s): Contractor
Flow Chart
Process and Quality Indicators
Checking / Indicator Monitoring
Miscellaneous Information

Step / Time	Dept / Person	CONTRACTOR	RESIDENT ENGINEER	DISTRICT VALUE ENGINEER	DISTRICT ENGINEER		DISTRICT MANAGEMENT	STATE VALUE ENGINEER	Process Indicators	Control Limits	Checking Item	Timeframe (Frequency)	Responsibility	QAR	Miscellaneous Information
					Quality Indicators	Specs / Targets			What is to be checked?	When to check?	Who will check?	Date of Last Review			



CODES:
 C - Compliance
 NC - Noncompliant
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Date: _____
Process Owner: District Value Engineer
Rev #: 1.5
Rev Date: 8/2007