

Cost Estimating Improvements Initiative by James E. Davis

FY 15-16 4th Quarter Support Costs

SHOPP Program – Comparing Support Costs* to Programmed Budget

FY 2015-16 SHOPP Project Closeout Support Expenditure Analysis

Percentage of Budget Expended	Number of Projects	Percentage of Projects		pproved Support Budget \$1,000's)	Sup	Actual oport Cost \$1,000's}		er (Under) Budget 61,000's)	% Over (Under) Budget
< 80%	71	29%	5	165,972	\$	103,771	5	(62,201)	
80% to 120%	99	40%	\$	201,095	\$	200,384	40	(711)	
> 120%	77	31%	\$	79,388	\$	123,784	\$	44,396	
Total	247	100%	\$	446,455	\$	427,939	\$	(18,516)	(4%)

We have a strike zone of having our support expenditures be within 80 to 120% of the budget. 60% of the projects are not in the strike zone and are either over- or under-estimated. At the portfolio level we are still under budget.



FY 15-16 4th Quarter Capital Costs

SHOPP Program Closeout – Construction Capital Costs

SHOPP Program Closeout - Construction Costs

Program	Commission Initial Construction Allocation	Final Approved Construction Costs	Expended Construction Costs				
Construction Capital (\$1,000's)							
SHOPP Total	\$ 1,233,201	\$ 1,099,757	\$ 974,030				

There was a 21% savings between initial allocation and close-out for 2015-16 projects.



FY 15-16 4th Quarter Final Expenditure Close-out

State Highway Operation and Protection Program Closeout – Program Costs (millions)



Includes Environmental, Design, Right of Way Support and Capital, and Construction Support and Capital.



Project Duration from Programming to Construction Complete (years)

(Projects Achieving Construction Complete in FY 2015-16)

Program	Minimum	Median ¹	Maximum	Typical Range ²
SHOPP	0.2	3.7	15.6	1.7 to 7.6
STIP	1.3	7.8	15.9	6.6 to 11.4
Prop 1B	3.9	6.0	15.1	5.1 to 9.0
All	0.2	4.2	15.9	2.0 to 8.1

¹ Median is the point at which half of projects have a shorter duration and half of projects have a longer duration.



² Typical range is within 68% (one standard deviation) of the median.

Size of Projects

(Projects Achieving Construction Complete from FY 2009-10 to FY 2014-15)

Project Size	% of Projects	% of Const Capital
< \$270k	8%	0.3%
\$270k-\$1M	<mark>80%</mark> 31%	20% 3%
\$1M-\$5M	39%	16%
\$5M-\$10M	11%	14%
\$10M-\$1 <i>5</i> M	4%	8%
\$15M-\$25M	20% 3%	80% 10%
\$25M-\$140M	4%	36%
> \$140M	0.3%	13%
Total	100%	100%

80% of projects we develop are < \$5M, but only account for 20% of capital dollars.

20% of projects we develop are > \$5M and account for 80% of capital dollars.



Construction Capital Supplemental Funds Requests

Construction Capital Supplemental Funds Requests¹

Fiscal Year	Number of Supplementals	Number of Construction Contracts ²	% of Contracts	Amount of Supplementals (millions)	Value of Construction Contracts ² (billions)	% of Dollars
2002-03	17	659	2.6%	\$18.3	\$7.7	0.2%
2003-04	18	586	3.1%	\$19.4	\$8.2	0.2%
2004-05	18	617	2.9%	\$14.1	\$7.7	0.2%
2005-06	46	714	6.4%	\$189.5	\$9.8	1.9%
2006-07	17	646	2.6%	\$58.2	\$10.4	0.6%
2007-08	15	705	2.1%	\$25.5	\$9.4	0.3%
2008-09	17	732	2.3%	\$40.4	\$9.4	0.4%
2009-10	11	664	1.7%	\$30.8	\$9.6	0.3%
2010-11	11	814	1.4%	\$28.7	\$10.9	0.3%
2011-12	24	739	3.2%	\$84.5	\$11.3	0.7%
2012-13	21	713	2.9%	\$43.1	\$12.3	0.4%
2013-14	12	673	1.8%	\$15.1	\$11.1	0.1%
2014-15	13	652	2.0%	\$94.4	\$10.6	0.9%
2015-16	27	817	3.3%	\$140.8	\$8.8	1.6%
Average	19	695	2.7%	\$57.3	\$9.8	0.6%

¹ Includes supplementals to award, complete construction, and closeout. Does not include construction support supplemental funds requests or Greater Than 120% requests.

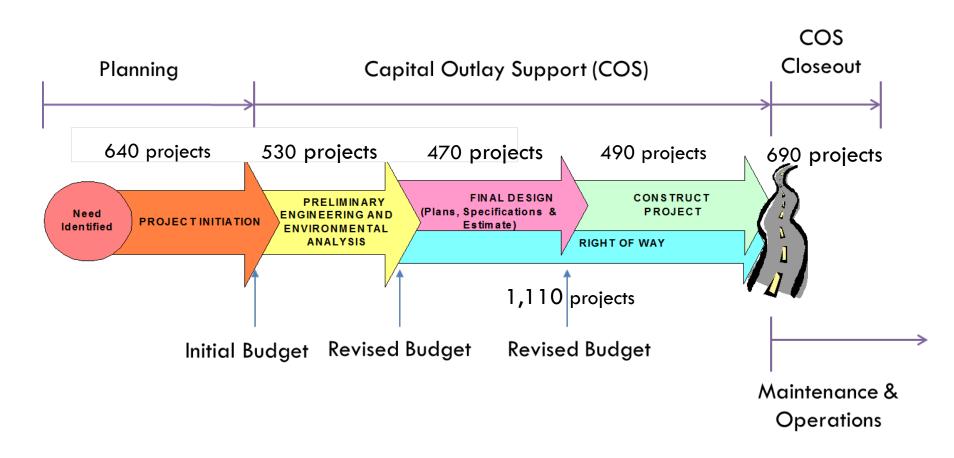
This last year was a little higher in numbers and a lot higher in dollars.

The dollars are attributed to two mega projects (Doyle Drive and Schuyler Heim - \$87 million)



² As of June 30 of each fiscal year.

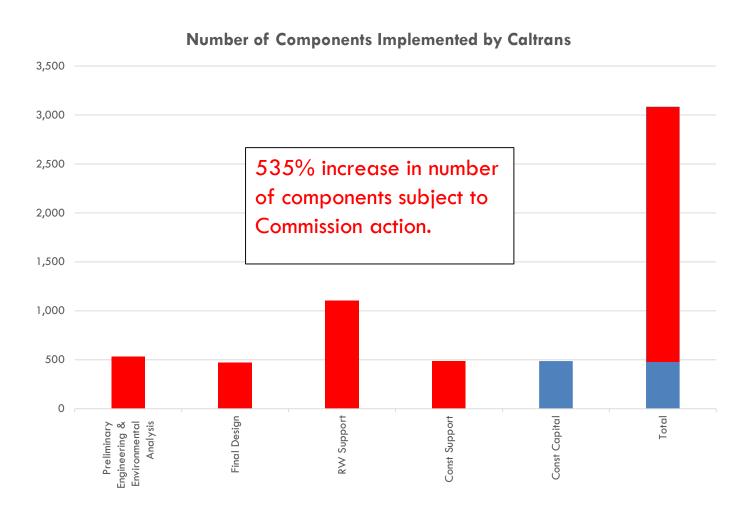
Stages of Project Delivery



Construction projects number of 490 does not include maintenance, minor or local projects.



Implementation of SB 486





Bars in red represent new budgets subject to Commission Action.

Purpose of Cost Estimating Improvement Initiative

- Optimize limited resources to maximize outcomes
- Improve support and capital cost estimating, programming, and management practices
- Align portfolio management practices with Commission performance measures
- Be Performance Driven and Accountable
- Be efficient and be good stewards. Money counts!



Schedule

