



California Transportation Commission

## Project Delivery Workshop

by Michael D. Keever

January 29, 2019



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*California Transportation Commission  
Project Delivery Workshop  
Apprenticeship & Pre-Apprenticeship and Small Business  
Overview*

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January 29, 2019

# On-The-Job Training Supportive Services (OJT/SS)

- Provides training to increase the participation of women, minorities, and other disadvantaged individuals in skilled crafts on federal-aid highway construction contracts
- Apprenticeship Program
  - Current OJT/SS contracts include:
    - Field Ironworkers Apprenticeship Program
      - Will train up to 80 new apprentices
      - Including a nationwide women-only boot camp

# On-The-Job Training Supportive Services (OJT/SS)

- Pre-Apprenticeship Programs
  - South Bay Workforce Investment Board – Southern California
  - Ladders of Opportunity – Southern California

# Future Efforts to Increase Apprenticeship Participation

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- For 2019, Caltrans will be working directly with Electricians Union of Northern California and the Operating Engineers Union of Southern California

# Other Efforts to Increase Job Growth in California

- Expanding Opportunities for disadvantaged individuals
  - Second Chance Initiative
  - Caltrans Parolee Work Crew Program
  - Caltrans Heavy Equipment Mechanics Apprenticeship Program

# National Summer Transportation Institute (NSTI)

- NSTI
  - A career awareness initiative designed to introduce disadvantaged secondary school students to all modes of transportation-related careers
  - Encourages students to pursue transportation-related courses of study at the college/university level

# Caltrans' Small Business Program

## SB

25% Overall Goal

State-Funded Contracts  
and Procurements

California Code of  
Regulations

## DVBE

3% Overall Goal

State-Funded Contracts  
and Procurements

California Code of  
Regulations

## DBE

17.6% Overall Goal

FHWA-Assisted Contracts  
and Procurements

Code of Federal  
Regulations

# Caltrans' SB, DVBE, and DBE Participation

SB Participation - 25% Goal			DVBE Participation – 3% Goal		DBE Participation Overall Goal		
FY	SB Dollars	%	DVBE Dollars	%	DBE Dollars	% at Commitment	%
14/15	\$349,378,944	28.4%	\$47,149,004	3.83%	\$275,730,549	12.40%	12.5%
15/16	\$519,879,000	46.05%	\$57,190,818	5.07%	\$314,950,430	13.15%	12.5%
16/17	\$408,919,922	28.86%	\$46,800,099	3.30%	\$264,592,759	12.08%	12.5%
17/18	\$509,017,424	28.51%	\$87,857,147	4.92%	\$359,506,554	14.88%	12.5%
18/19 1 <sup>st</sup> Qtr	\$95,056,771	28.40%	\$11,010,727	3.3%	\$138,269,244	17.91%	17.6%

# OBEO's Training and Outreach Objectives

- Training, technical assistance, and advocacy services
- Training to help prepare small businesses to compete for Caltrans' contracting and procurement opportunities
- Promote awareness of Caltrans' contracting and procurement opportunities
- Develop comprehensive Senate Bill 1 and Senate Bill 103

# New Initiatives To Increase Small Business Participation

- Contractor Boot Camp
- Meet the Primes
- Meet the Buyers

# Disadvantaged Business Enterprise Supportive Services (DBE/SS)

- DBE program is guided by USDOT regulations (*49 CFR Part 26*)

## Program Providers

- Northern Region - Humboldt State University - Sponsored Programs Foundation (Districts 1, 2, 3, and 4)
- Central Region - CSU Fresno Foundation (Districts 5, 6, 9, and 10)
- Southern Region - MiraCosta Community College District (Districts 7, 8, 11, and 12)

# Industry Involvement

- Statewide Small Business Council
  - Standing committees
  - Ad hoc committees
- DBE Participation Committee
  - Task groups
- Meetings with Industry Organizations



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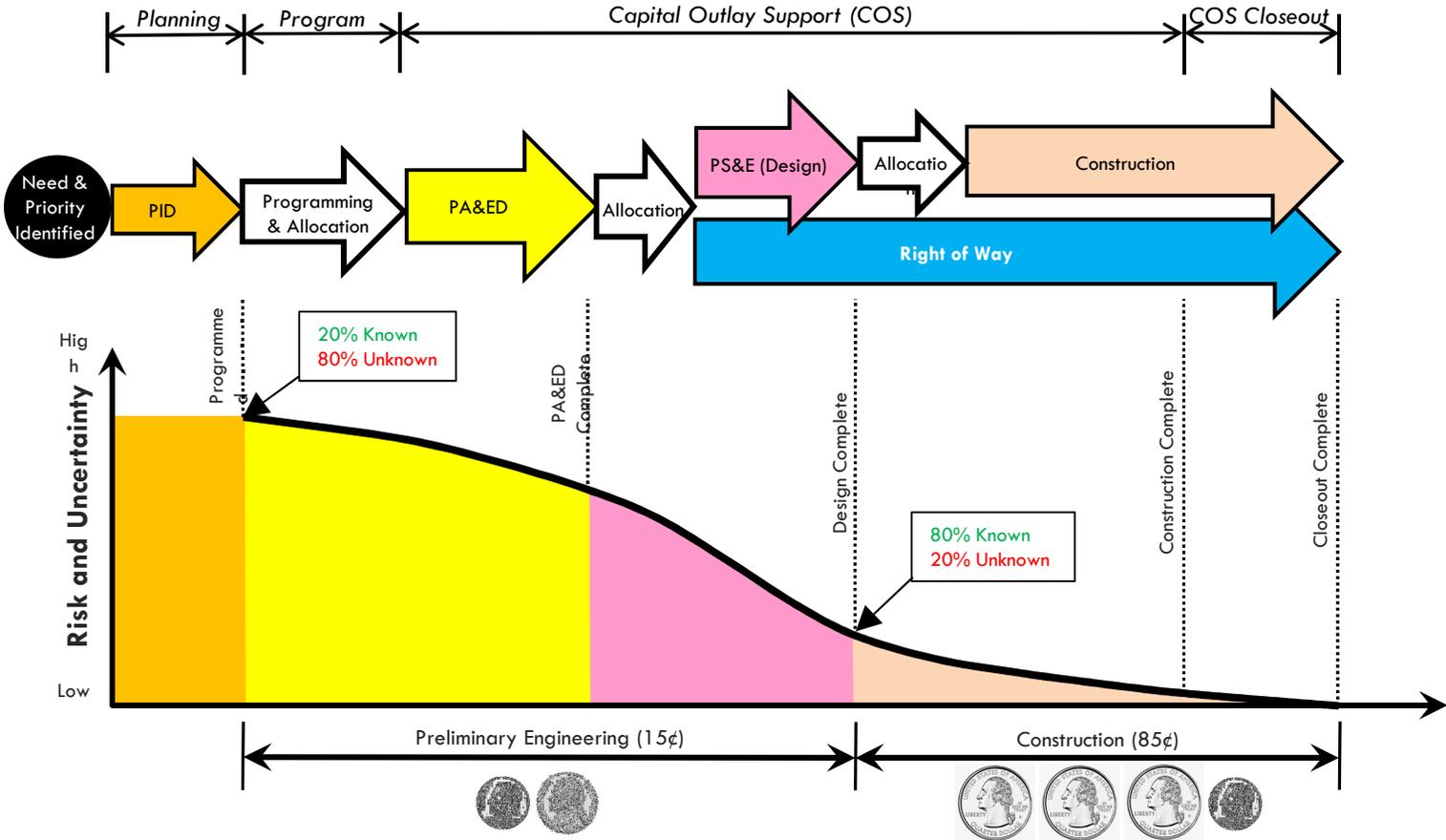
CTC Workshop

# Project Construction Costs and Bidding

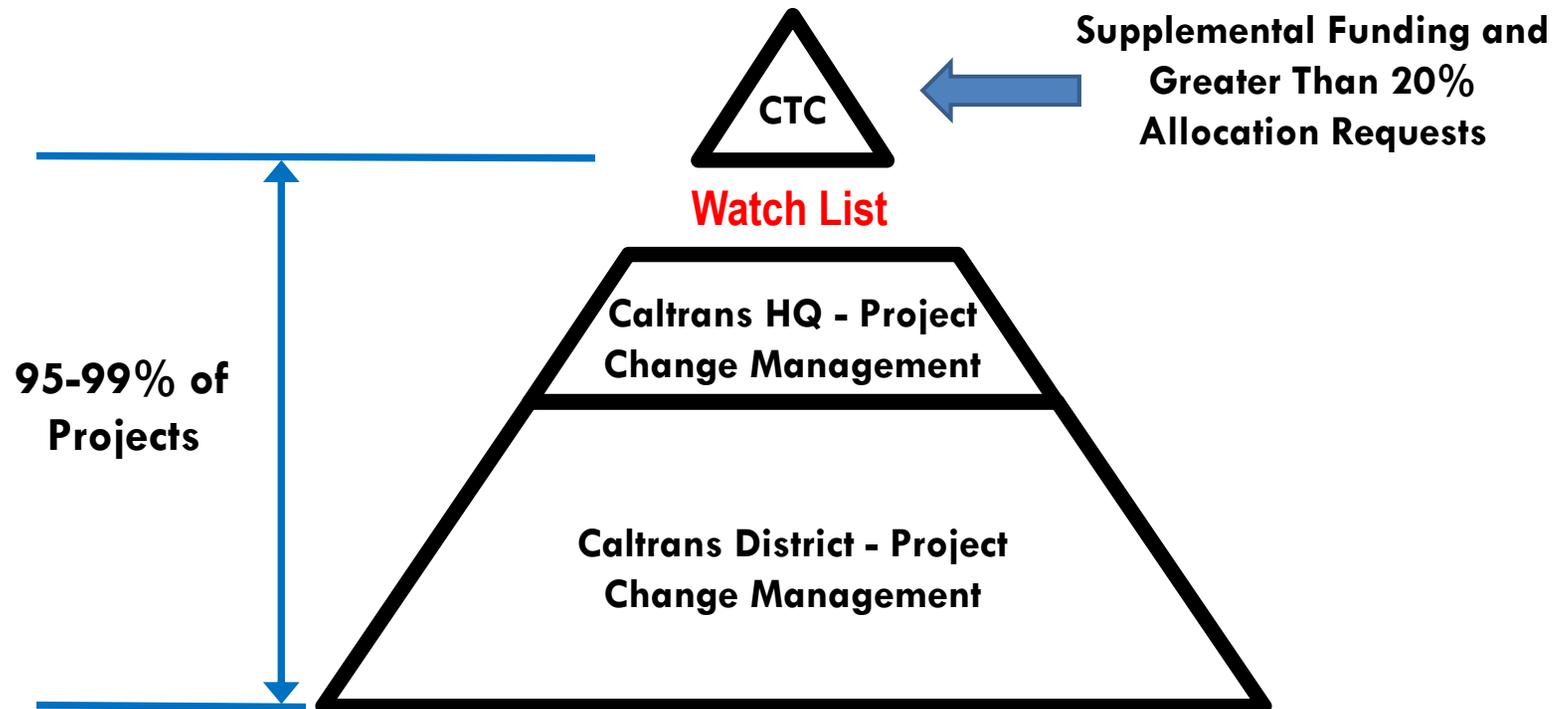
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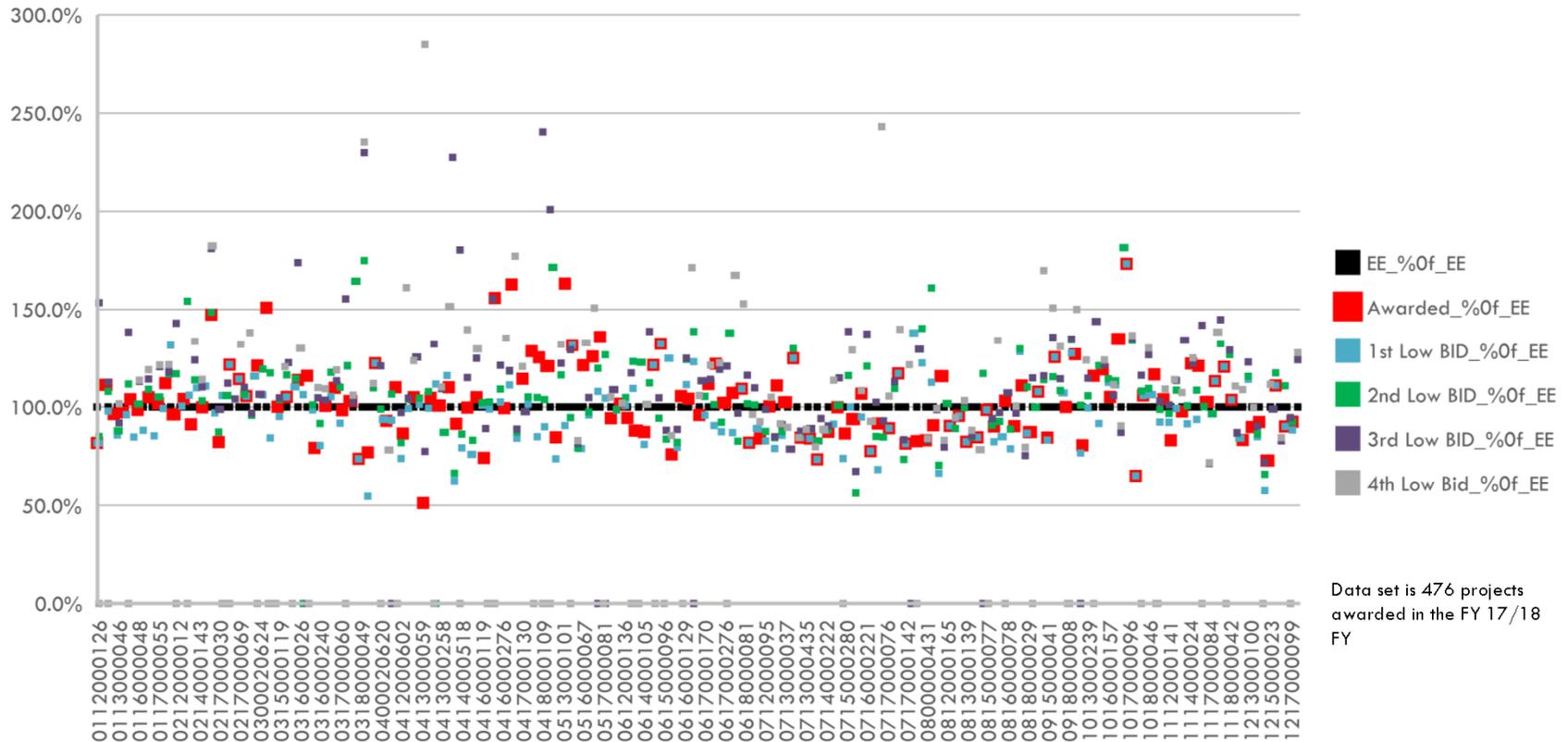
# Phases of Project Development



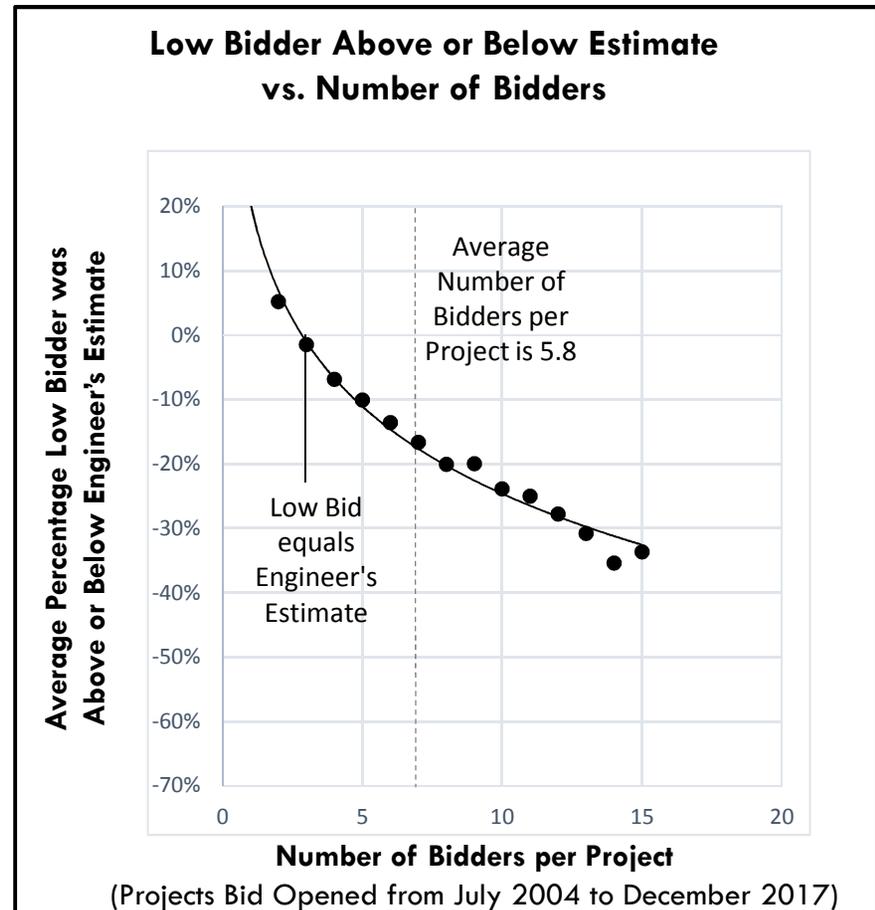
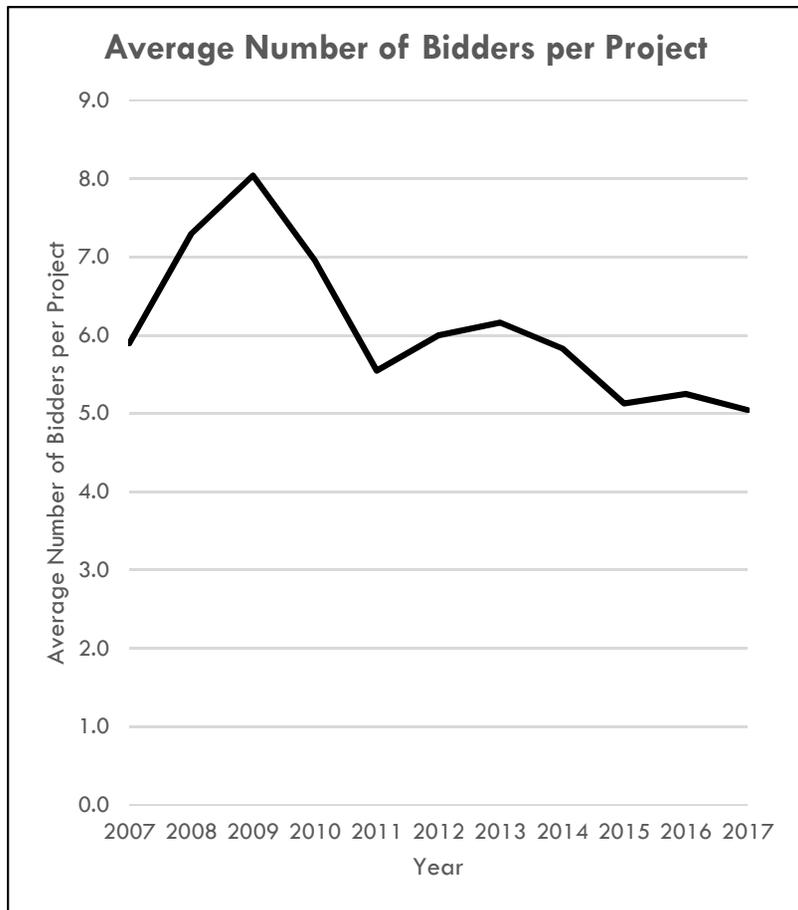
# Project Cost Risk Management



## FY 17/18 BID RESULTS AND AWARDED PRICE AS % OF EE

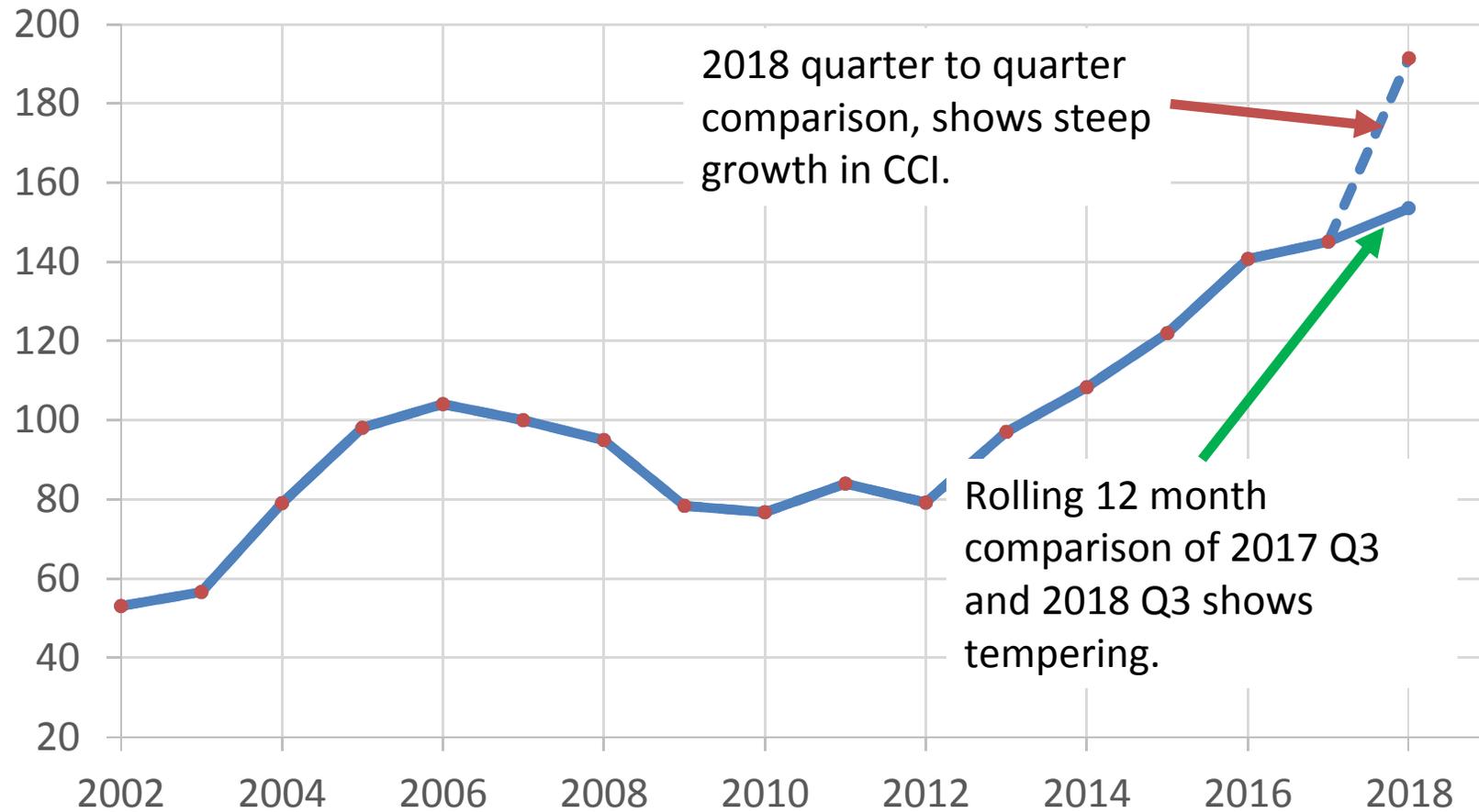


# More Bidders Equals Lower Costs

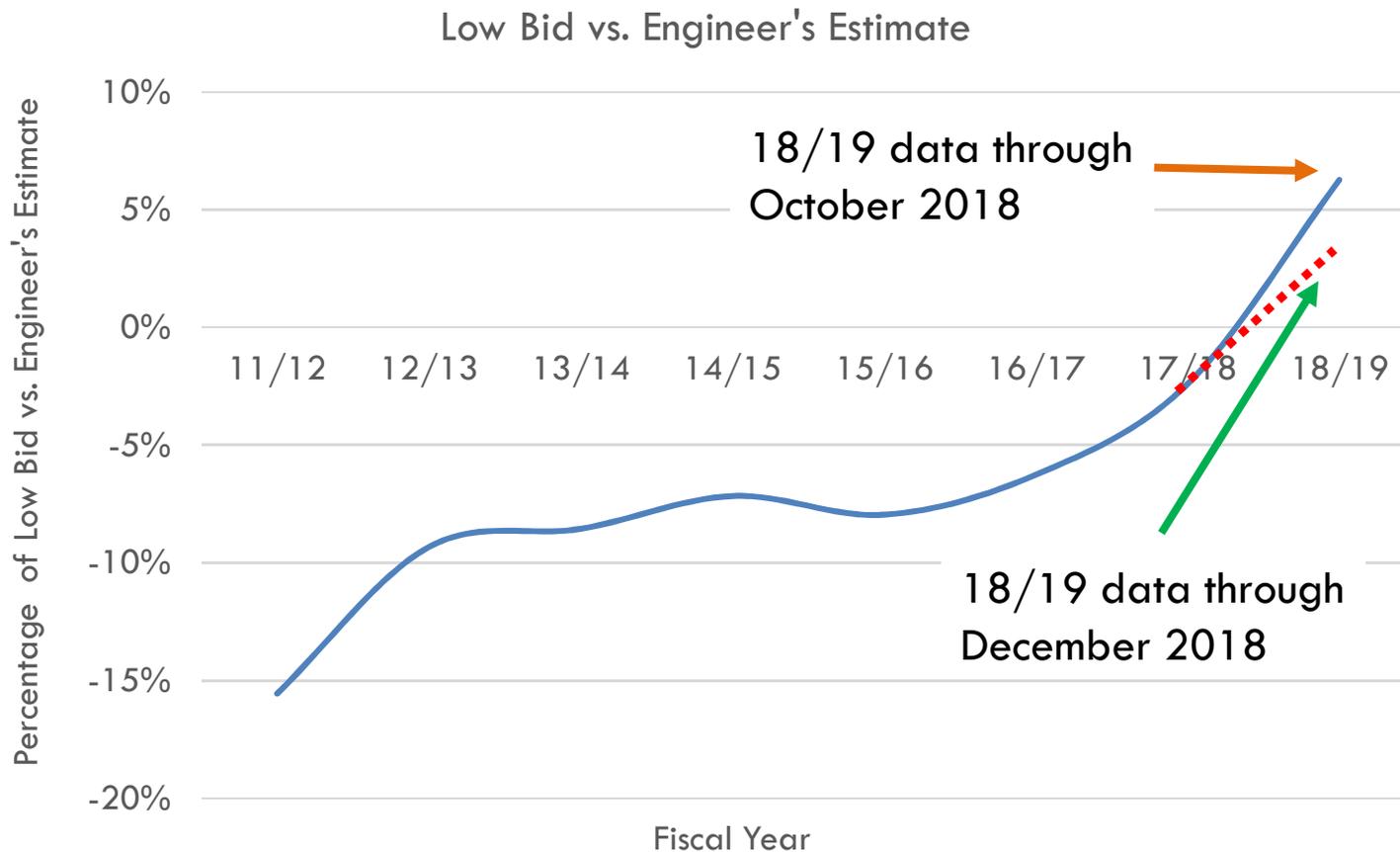


# Bidding Environment

Construction Cost Index ( 2002 through 2018)

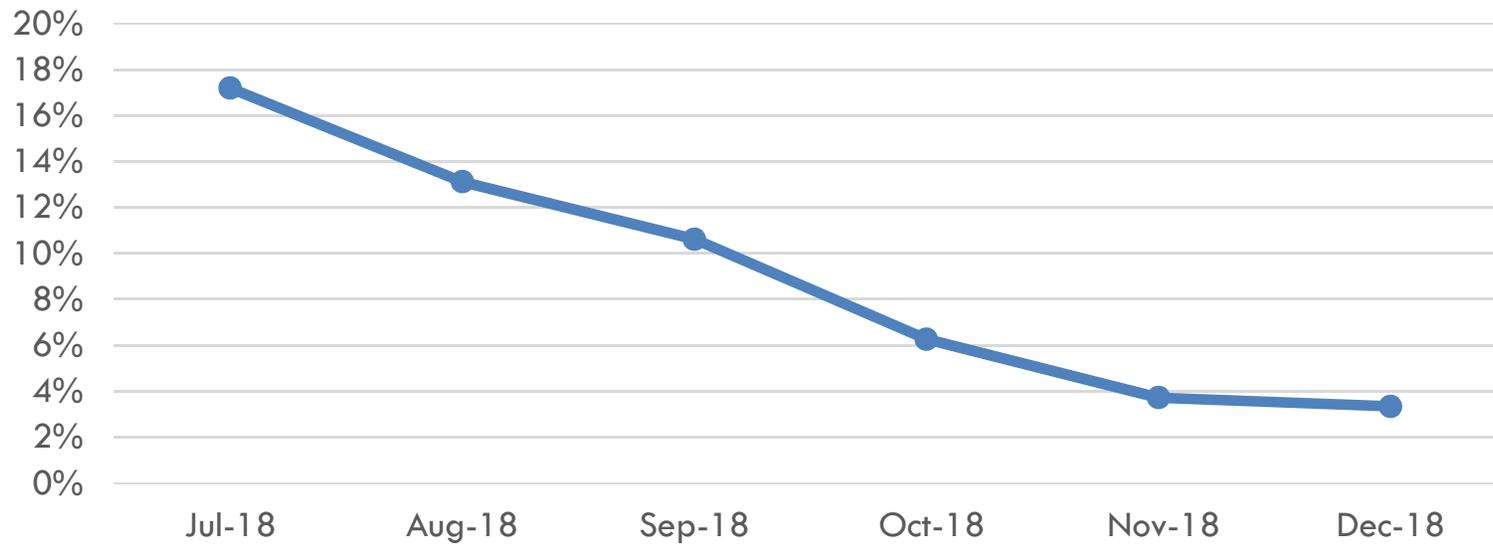


# Bidding Environment



# Bidding Environment

Low Bid vs Engineer's Estimate  
(Cumulative Tracking FY 18/19)



# Factors Potentially Influencing Construction Costs

- General inflation
- Market conditions
  - Material shortage
  - Labor costs
- Highway construction spending
- Unforeseen events
- Insufficient bid competition

# Industry Engagement

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## Ongoing Caltrans/Industry Working Groups

- Enhanced 12 Month Look Ahead
- Specification Modifications
- Changes in Business Practices



# What We are Doing to Improve Cost Estimating?

# Cost Estimating Improvement Initiative

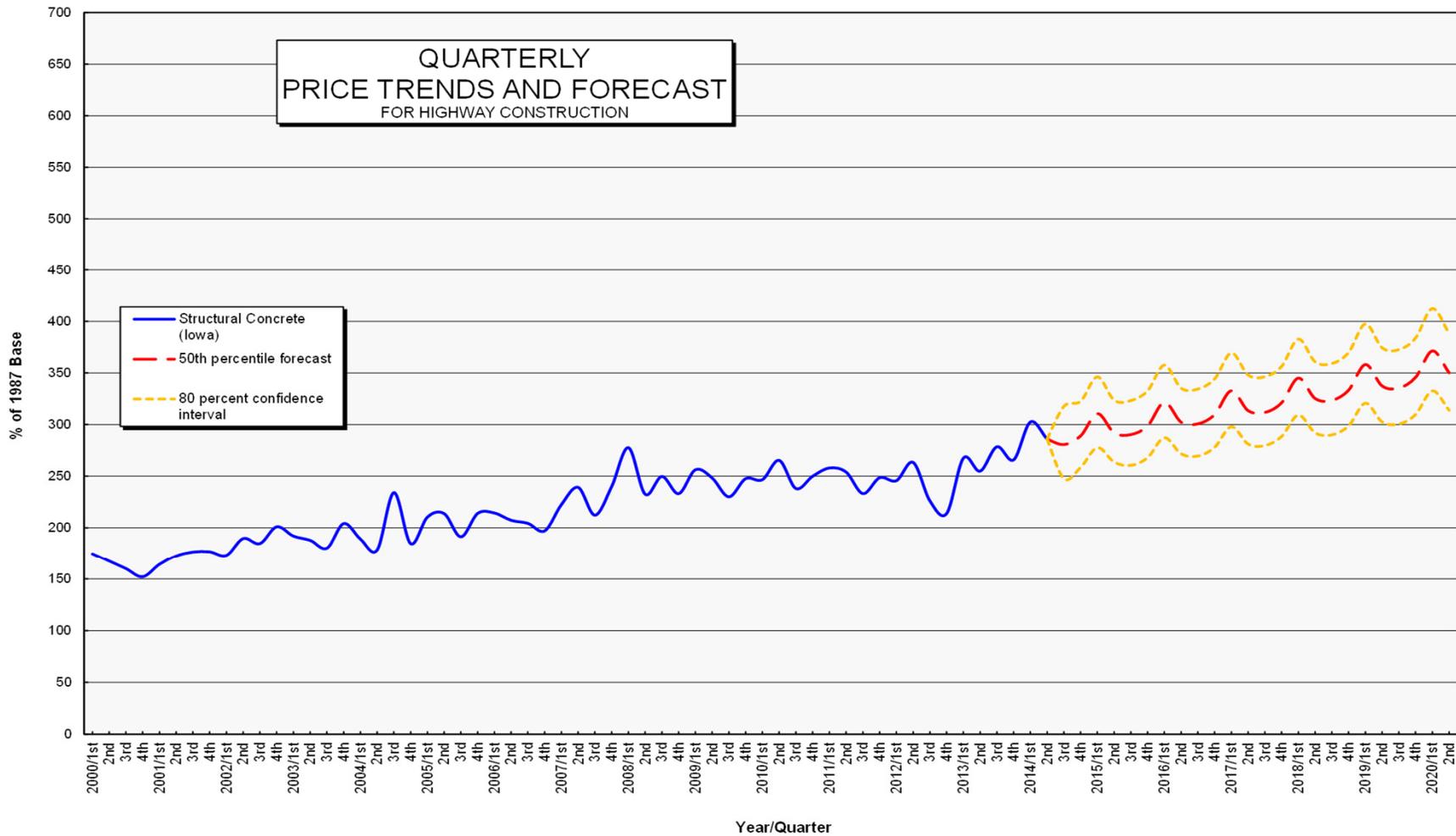
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- Improved Estimating Tools
- Identification of Best Practices
- Quantification of Risk
- Training
- Business Intelligence
- Construction Cost Escalation Study

# Construction Cost Escalation Study

- Research and assess Caltrans' construction cost escalation practices and existing forecast methodology
- Generate risk-adjusted forecasts for the California Highway Construction Cost index (CHCCI)
- Develop regional factors to account for different price dynamics across the State

# Price Trends Forecast





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## CTC Workshop

# Resource Agency Influence on Project Delivery

by Michael D. Keever, Jeremy Ketchum, Jeff Wiley

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# Environmental Laws



Fish and Game Code

Section 4(f)

CLEAN AIR ACT



CA Coastal Act



NHPA

Farmland Preservation

Resource Conservation and Recovery Act



# Environmental Costs

- Determinable
  - Support
  - Specific Capital expenses
  - Right-of-way
- Undetermined
  - Design decisions
  - Environmental Avoidance

# Environmental Documents

## SHOPP Projects

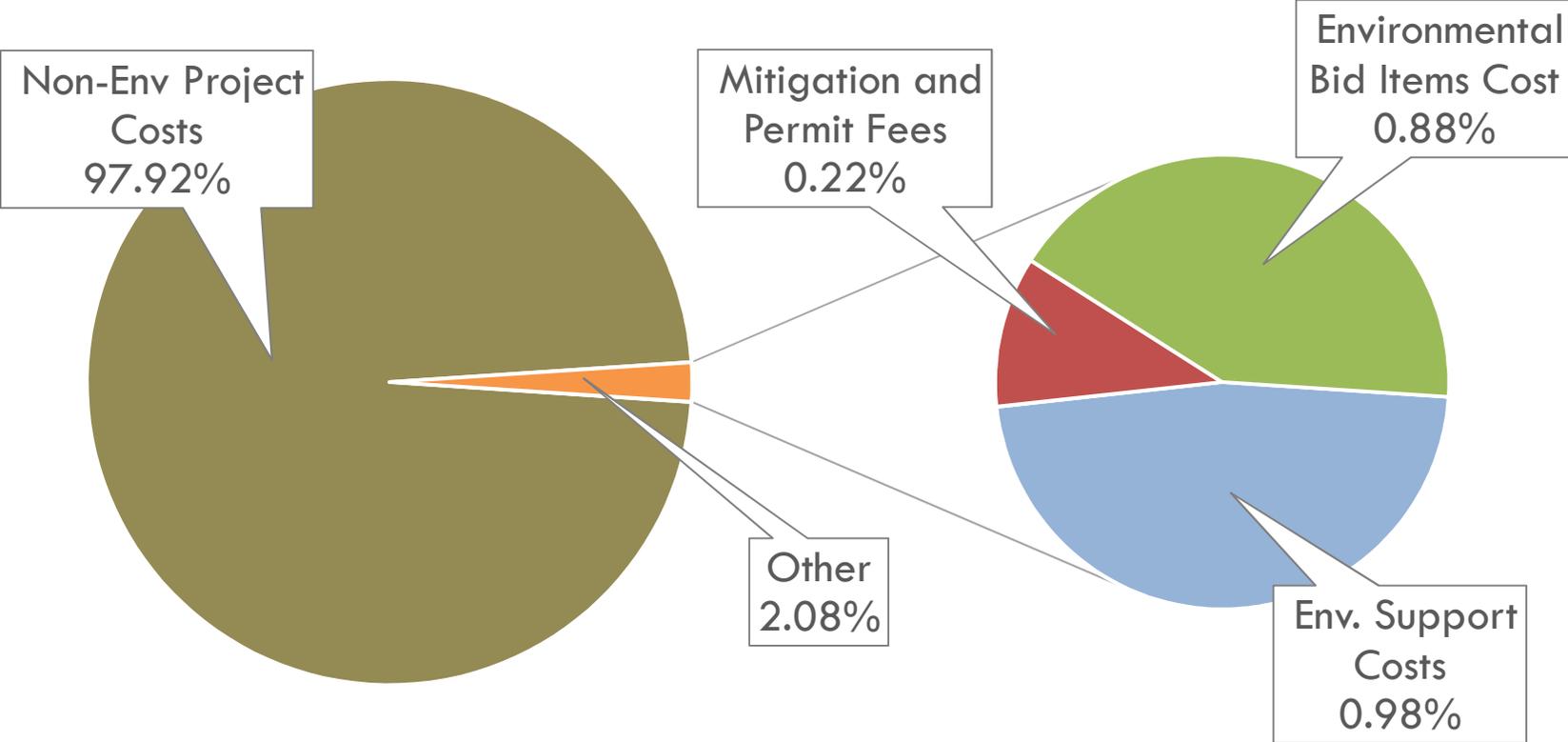
- Categorical Exemptions – Over 90%
- Initial Studies/Negative Declarations – Almost 9%
- Environmental Impact Reports – 0.5%

## STIP Projects

- Categorical Exemptions – 33%
- Initial Studies/Negative Declarations – 41%
- Environmental Impact Reports – 26%

# SHOPP: Environmental Cost vs Total Cost

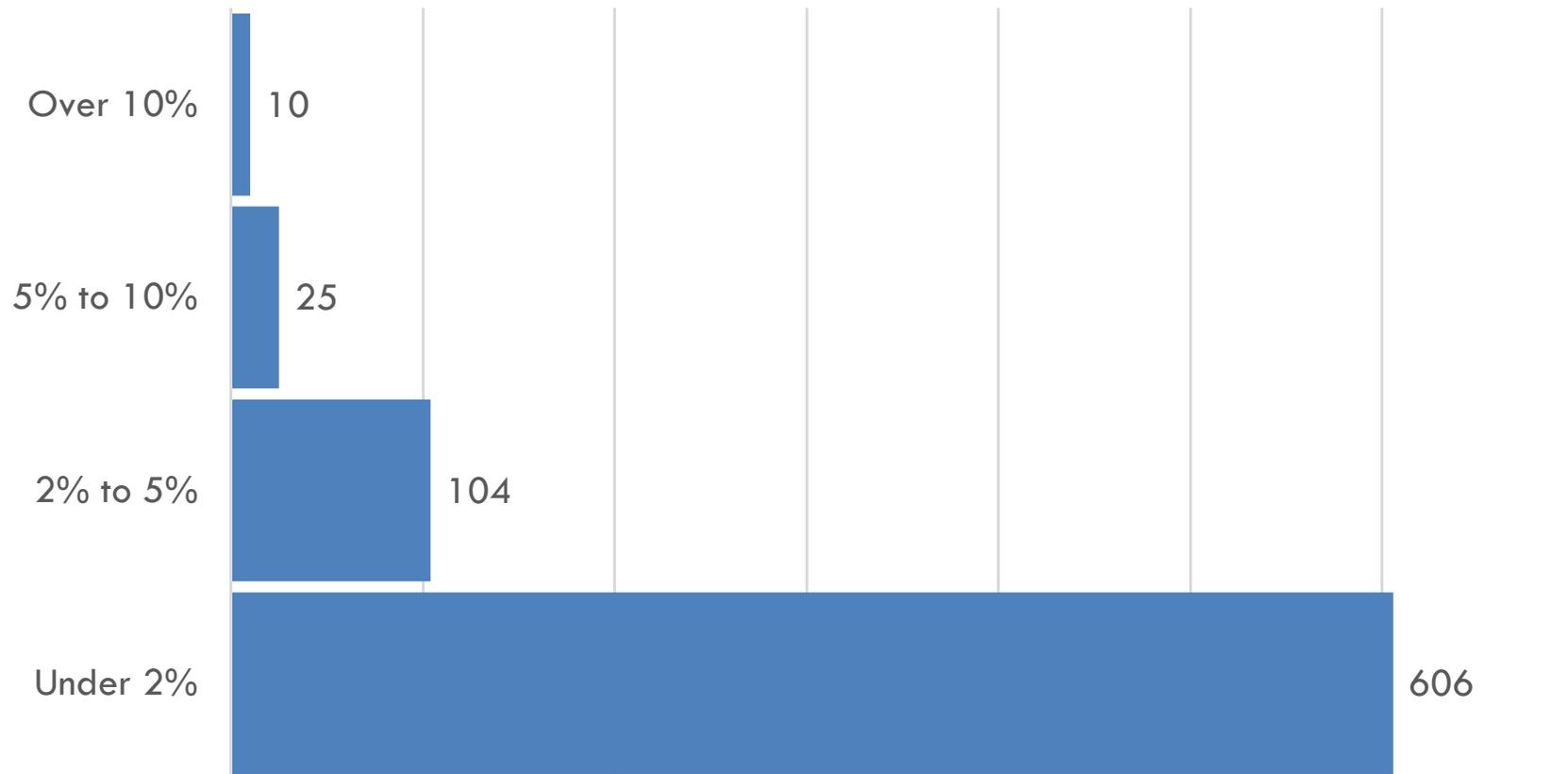
SHOPP Projects  
Environmental vs Total Project Costs



Data set = 434 SHOPP Projects that achieved Construction Completion in FYs 14/15, 15/16, or 16/17

# Distribution of Environmental Cost/Total Project Cost for SHOPP

Number of Projects by Environmental Cost/Total Project Cost (%)



Data set = 745 SHOPP Projects that achieved Construction Completion in FYs 14/15, 15/16, or 16/17

# Efficiencies



- NEPA Assignment
- Advance Mitigation
- AB 1282 – Transportation Permitting Task Force

# NEPA Assignment



- Reduces reviews
- Time-savings for projects
- Requires waiver of immunity

# Advance Mitigation

**Accelerate  
transportation  
project delivery**



**Improve  
environmental  
outcomes**



**Enhance  
communication  
with stakeholders**

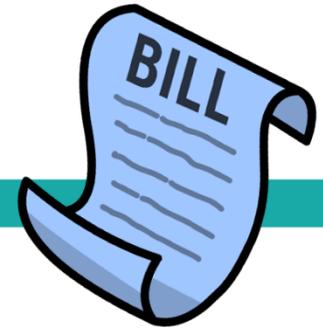


**Ensure the  
Program  
account is  
self-sustaining**



**Advance Mitigation Projects  
Purchase or Create Mitigation**

# AB 1282



Establishes the Transportation Permitting Task Force  
Statutory Goals:

- Early engagement
- Reasonable deadlines
- Greater certainty of permit approval requirements





# Questions?