

FHWA Major Projects Program

Cost Estimate Review (CER) Effectiveness

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FHWA is the source for all
images in this presentation.

Major Projects Background

- 2002 Flyvbjerg Study
 - Project increased by 23.6% in North America
- Major Projects prior to 2000
 - 5 Projects
 - Total Cost is 111% over the Initial Cost Estimate
- TEA-21 Section 1305 in 1998
 - Initiated Major Project requirements
 - Financial Plans for Projects over \$1 Billion
- SAFETEA-LU Section 1904 in 2005
 - Added Project Management Plans
 - Reduced threshold to \$500 Million

Major Project Definition

- What is a Major Project?
 - Projects requiring Federal assistance that are over \$500 million in cost
 - Project scope is determined by the National Environmental Policy Act (NEPA) decision document
- What are the requirements for Major Projects?

Major Project Requirements

23 USC 106(h)

(h) Major Projects.—

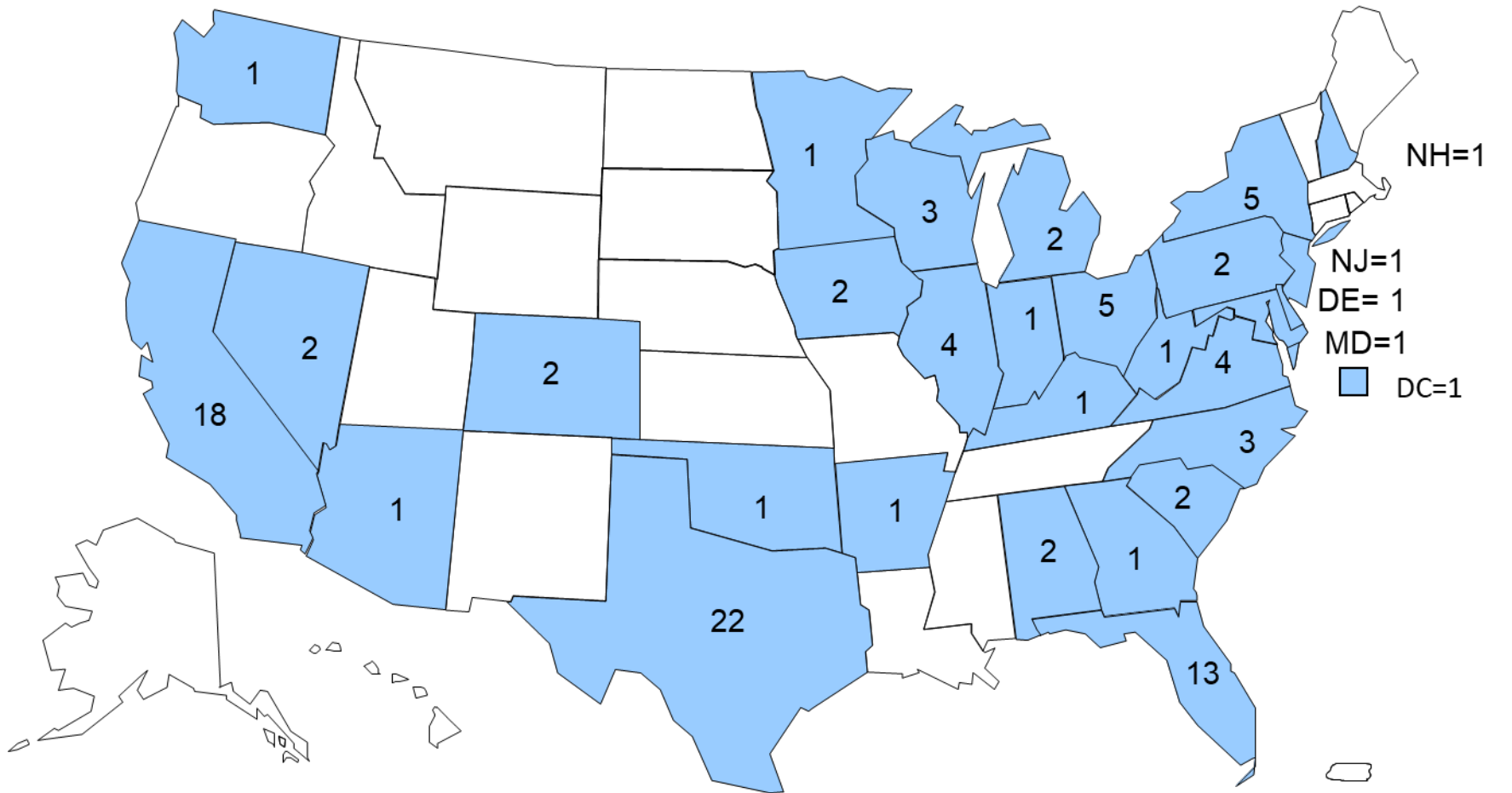
(1) In general.—Notwithstanding any other provision of this section, a recipient of Federal financial assistance for a project under this title with an estimated total cost of \$500,000,000 or more, and recipients for such other projects as may be identified by the Secretary, shall submit to the Secretary for each project—


(A) a project management plan; and

(B) an annual financial plan, including a phasing plan when applicable.

Active Major Projects

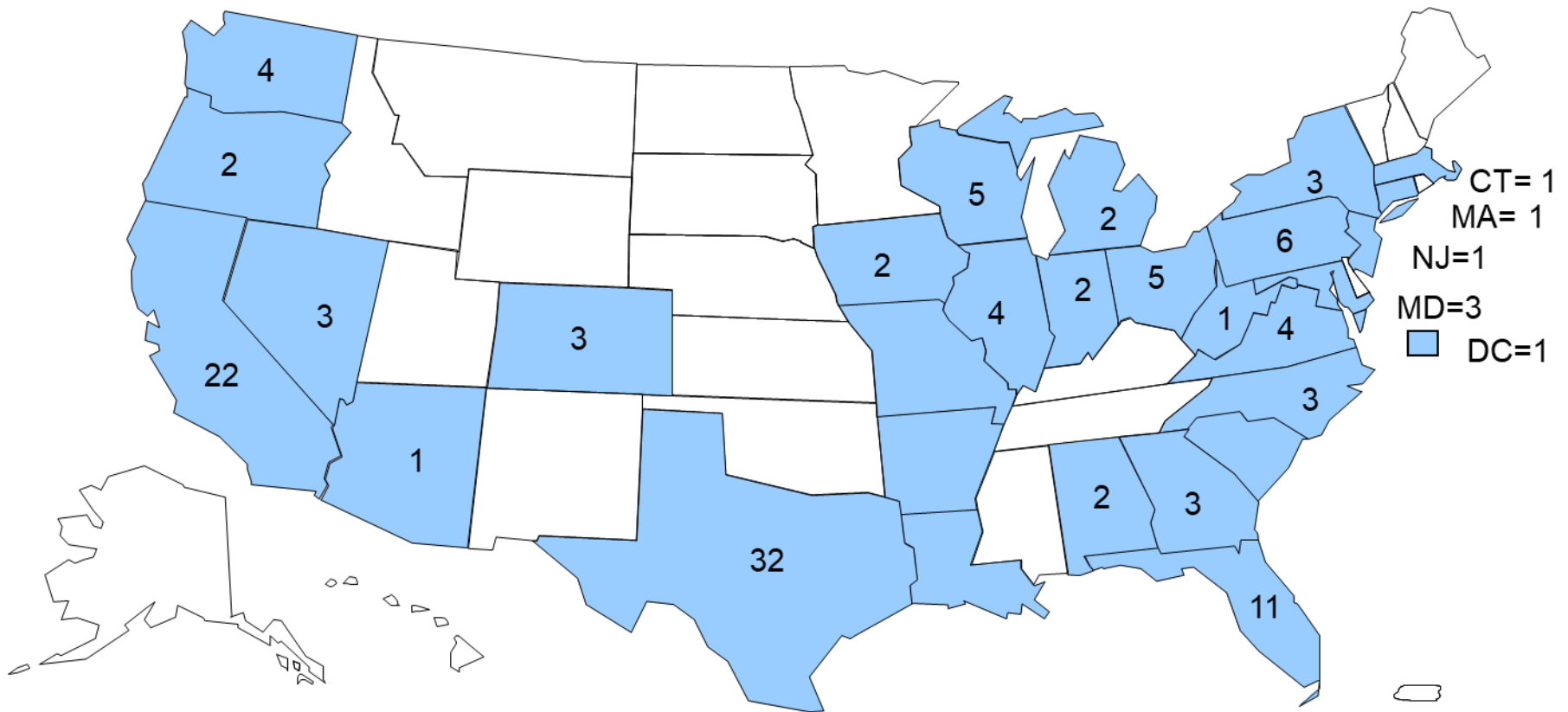
106  Number of Active Major Projects in FY 20
(96 Active Major Projects last year)




As of 7/19/2019

3-Year Forecast of Major Projects

137 ■ Number of Active Major Projects + Future Major Projects to be active in 1-3 years



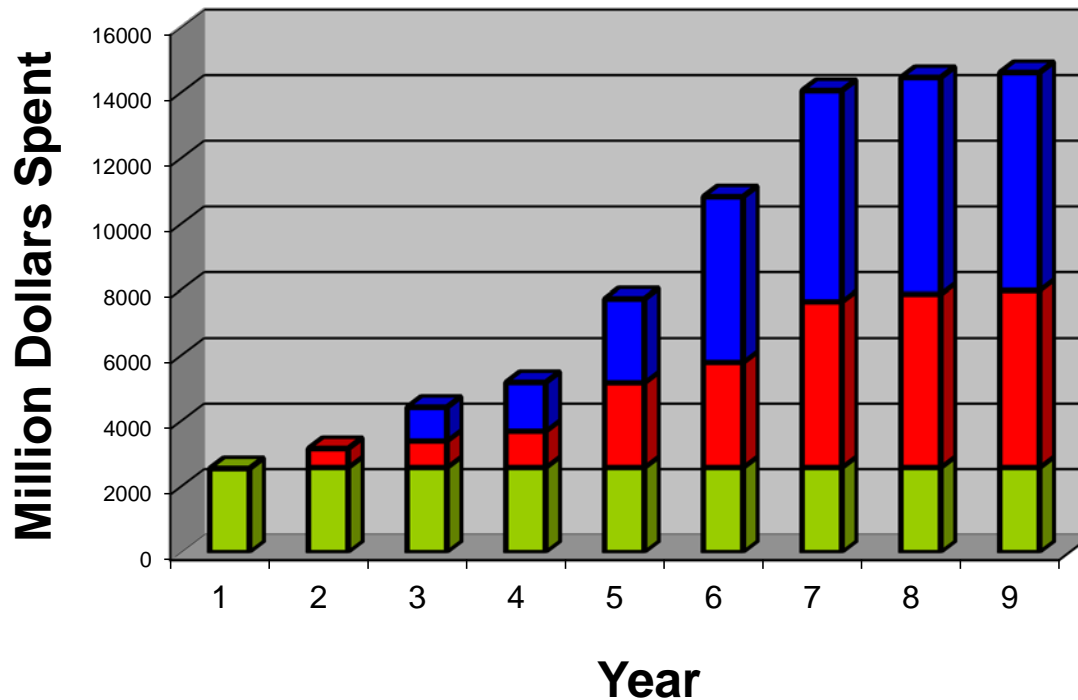
As of 7/19/2019

Major Project Identification

- “Project” means the entire scope of NEPA document.
- “Cost > \$500 M” means entire project cost including
 - Previous expenditures
 - Preliminary Engineering (PE)
 - Environmental Decision
 - Right of Way
 - Construction
 - Escalation

So Why Are We Doing This?

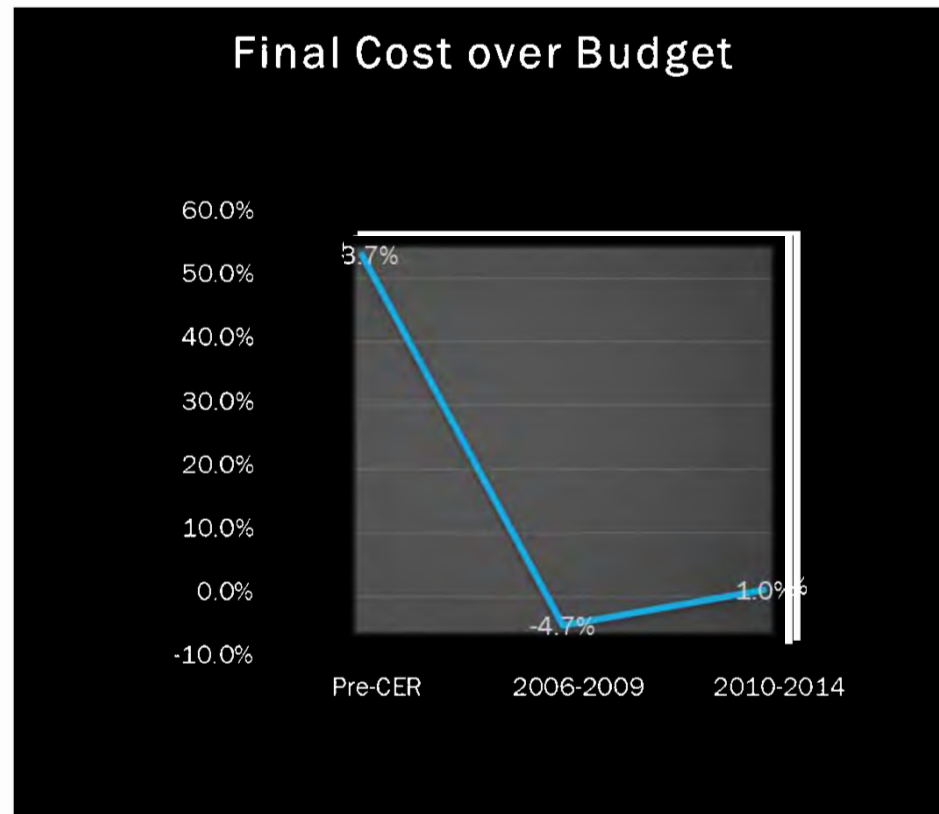
- How effective has the program been?
- Does anyone remember the Central Artery Tunnel Project?



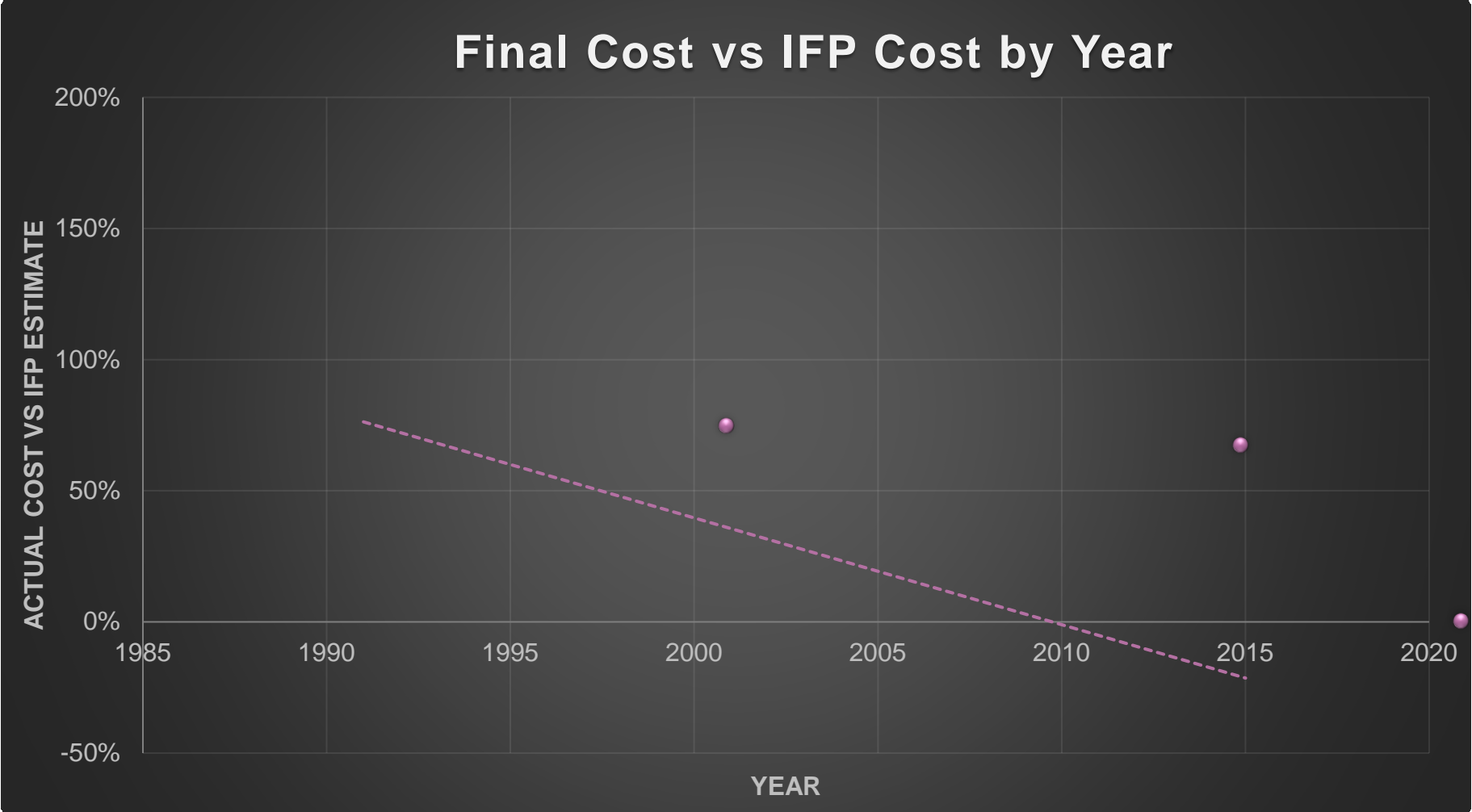
Major Project Metrics

Long Term Cost

- Final Cost vs IFP Estimate
 - 21 Projects prior to CER
 - Total Cost 53.7% over budget
 - 21 Projects 2006 - 2009
 - Average 4.7% under budget
 - 14 Projects 2010 - 2014
 - Average 1.0% over budget



Completed Projects

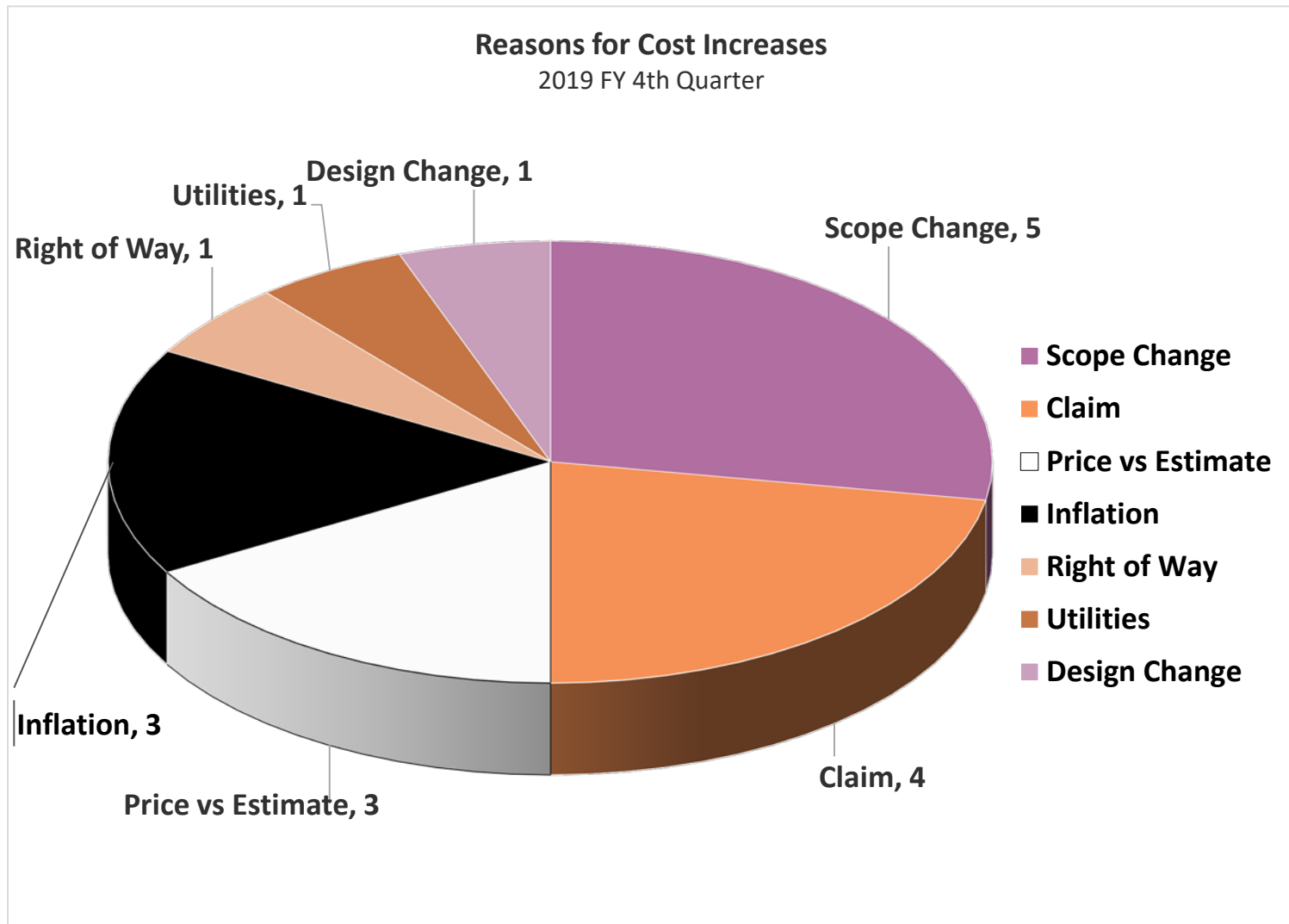


Major Project Metrics

Effectiveness in Dollars

Time Frame	Number of Projects Completed	IFP Initial Cost Projection (Billions)	Final Dollar Amount (Billions)	Amount Over/Under Initial Estimate
2005 & Before	21	\$30.15	\$46.36	\$16.21 Billion Over
2005 thru 2009	21	\$24.14	\$23.00	\$1.14 Billion Under
2010 and Later	14	\$18.22	\$18.56	\$0.34 Billion Over

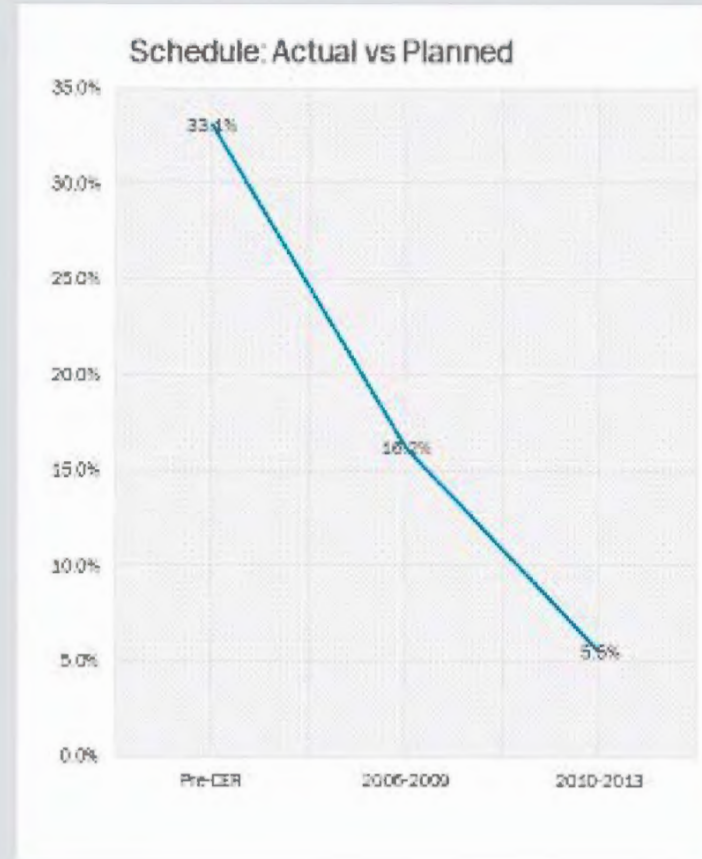
Reasons for Cost Increases



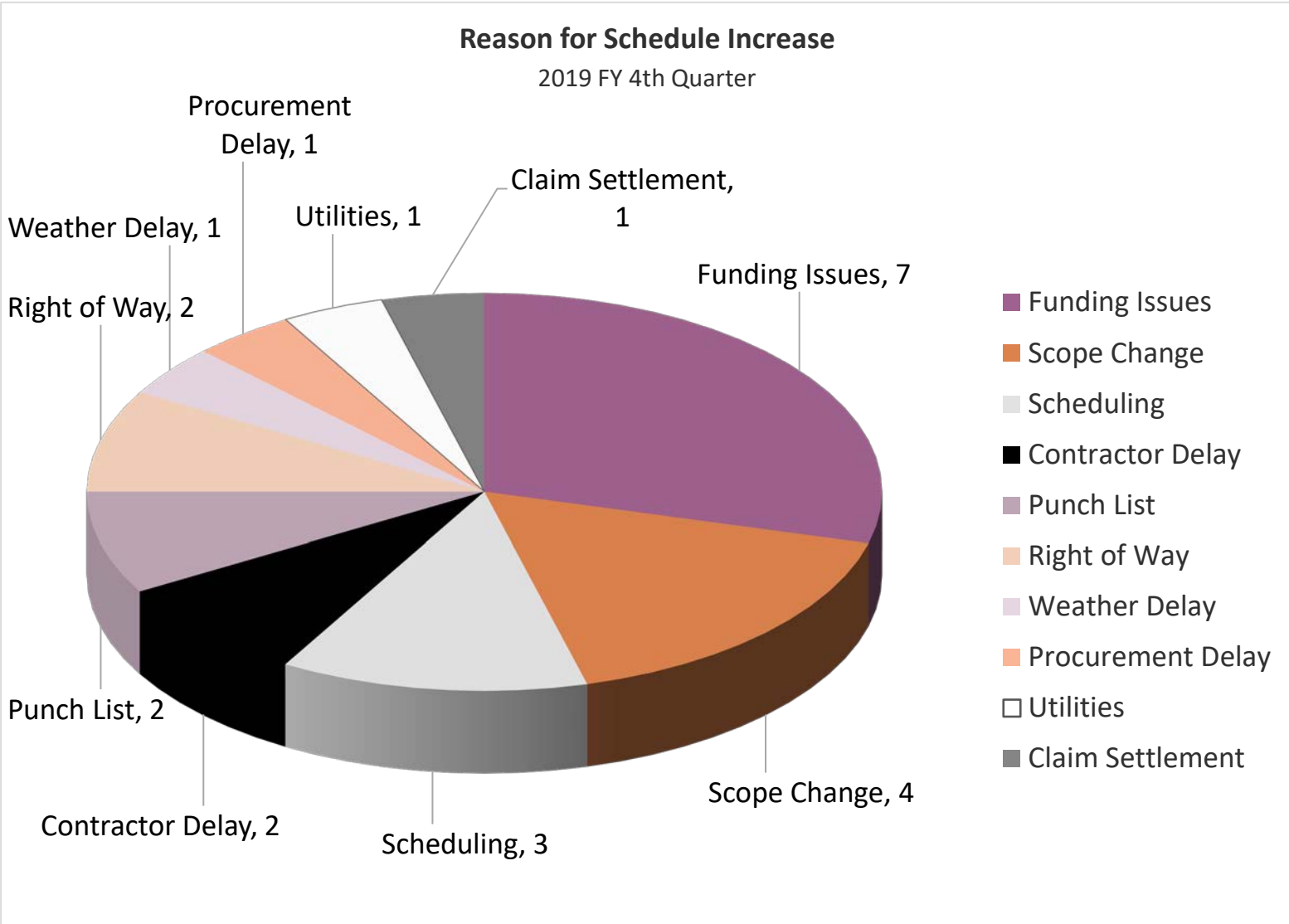
Major Project Metrics

Long Term Measurement: Schedule

- Final Project Duration vs Planned Project Duration
 - *Pre-CER*
 - 33.1% over Schedule
 - 2006 to 2009
 - 16.2% over Schedule
 - 2010 to 2014
 - 5.5% over Schedule



Reasons for Schedule Increase



Thank You!!!

Questions?