

# EFFICIENCIES IN THE CONSTRUCTION AND OPERATION OF STATE TRANSPORTATION PROJECTS

July 24, 2013



# Introductions & Presentation Objectives



## PRESENTATION OBJECTIVES

- ▶ Provide an overview of our project team, approach, and schedule
- ▶ Share findings from initial conversations on cost drivers
- ▶ Hear from JTC Members
  - Thoughts on cost drivers
  - Important considerations
  - Desired outcomes
  - Questions

# Project Objectives & Approach

## PROJECT OBJECTIVES

- ▶ To develop a broad understanding of the costs of transportation projects and what drives these costs
- ▶ To identify potential efficiency measures or reforms
- ▶ Results of this effort will support policy discussions regarding potential transportation funding package

## KEY ELEMENTS OF APPROACH

- ▶ Integrate the Advisory Panel and Staff Workgroup to facilitate common understanding
- ▶ Develop a robust and objective assessment of cost drivers and the relationship to policies and practices
- ▶ Clearly identify policy trade-offs and implications of potential efficiency measures
- ▶ Effectively communicate study results

### PROJECT TEAM

- Michael Hodgins, Project Manager (BERK)
- Allegra Calder, Advisory Committee Facilitator & Policy Analyst (BERK)
- Kathy Scanlan, Policy Analyst (Scanlan Consulting)
- Kjrystine Lund, Strategic Advisor (Lund Consulting)

# Project Participants



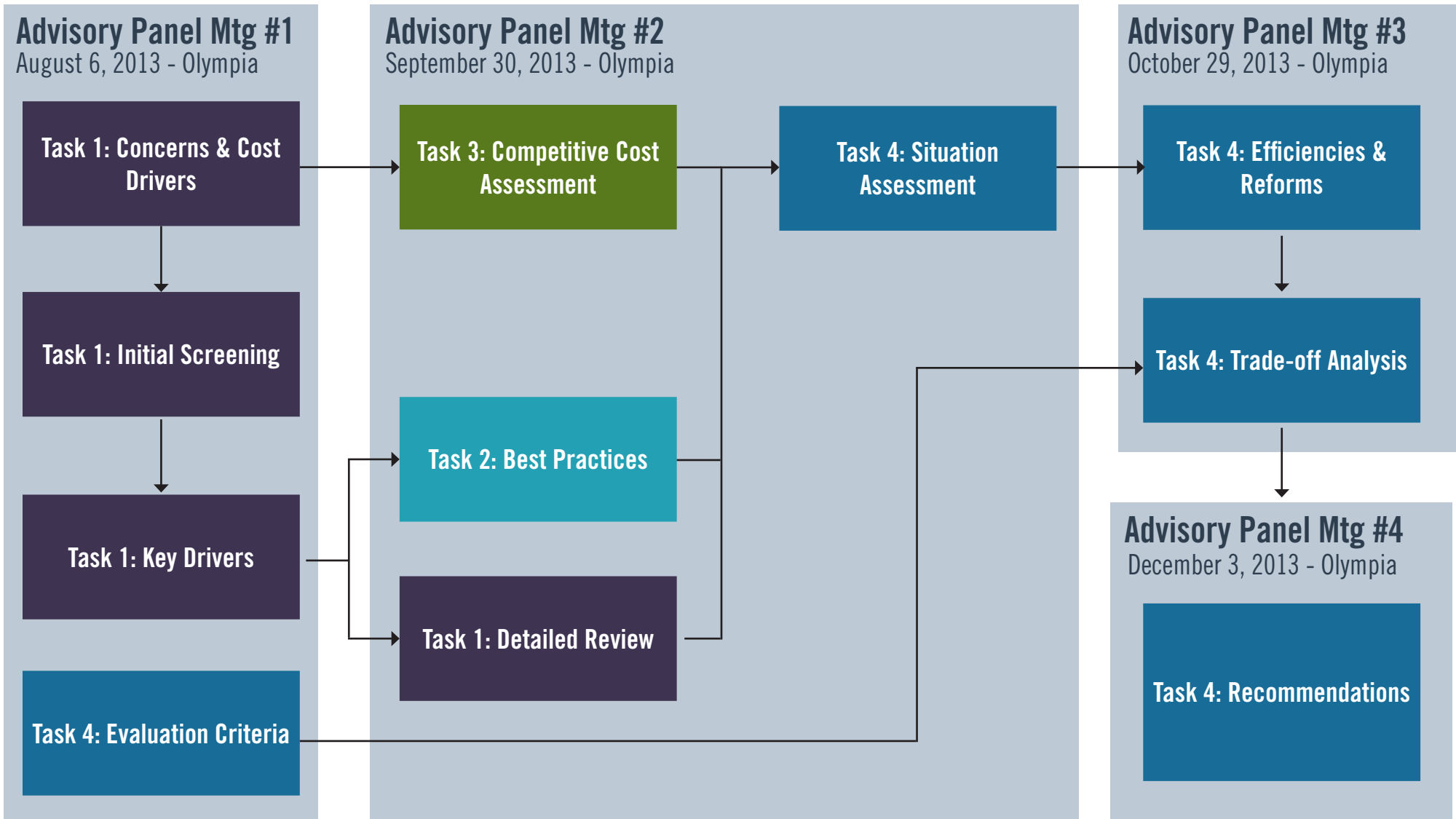
## ADVISORY PANEL

- Rep. Judy Clibborn
- Sen. Curtis King
- Sen. Tracey Eide
- Rep. Ed Orcutt
- WSDOT Secretary Lynn Peterson
- Carrie Dolwick, Transportation Choices Coalition
- Mike Ennis, Association of Washington Businesses
- Vince Oliveri, Professional and Technical Employees, Local 17
- Duke Schaub, Associated General Contractors

## STAFF WORK GROUP

- Beth Redfield, Project Manager, JTC
- Mary Fleckenstein, JTC
- Alyssa Ball, House Transportation Committee
- Amy Skei, House Transportation Committee
- Clint McCarthy, Senate Transportation Committee
- Lyset Cadena, Senate Democratic Caucus
- Jackson Maynard, Senate Majority Coalition
- Samantha Gatto, House Republican Caucus
- Rashi Gupta, House Democratic Caucus
- Cheri Keller, OFM
- Jay Alexander, WSDOT, Capital Program Management
- Pasco Bakotich, WSDOT, Development Division
- Keith Metcalf, WSDOT, Chief Engineer
- Matt Neeley, WSDOT, Capital Program Management
- Other agency staff may be added

# Technical Approach Overview



# Approach to Best Practices & Cost Assessments

## ▶ Define current practice

- Which state agencies, in addition to WSDOT, are involved?
- What is required by RCW and what is the legislative intent?

## ▶ Review applicable federal requirements

- Do our legislative requirements differ from federal requirements?

## ▶ Identify costs of current practice

- What does the current practice cost?
- On what types of projects?

## ▶ Review practices in other jurisdictions

- How do these practices differ from ours?
- Could a different practice reduce costs or increase efficiency if applied here?

## ▶ Define potential changes

- Administrative
- Legislative

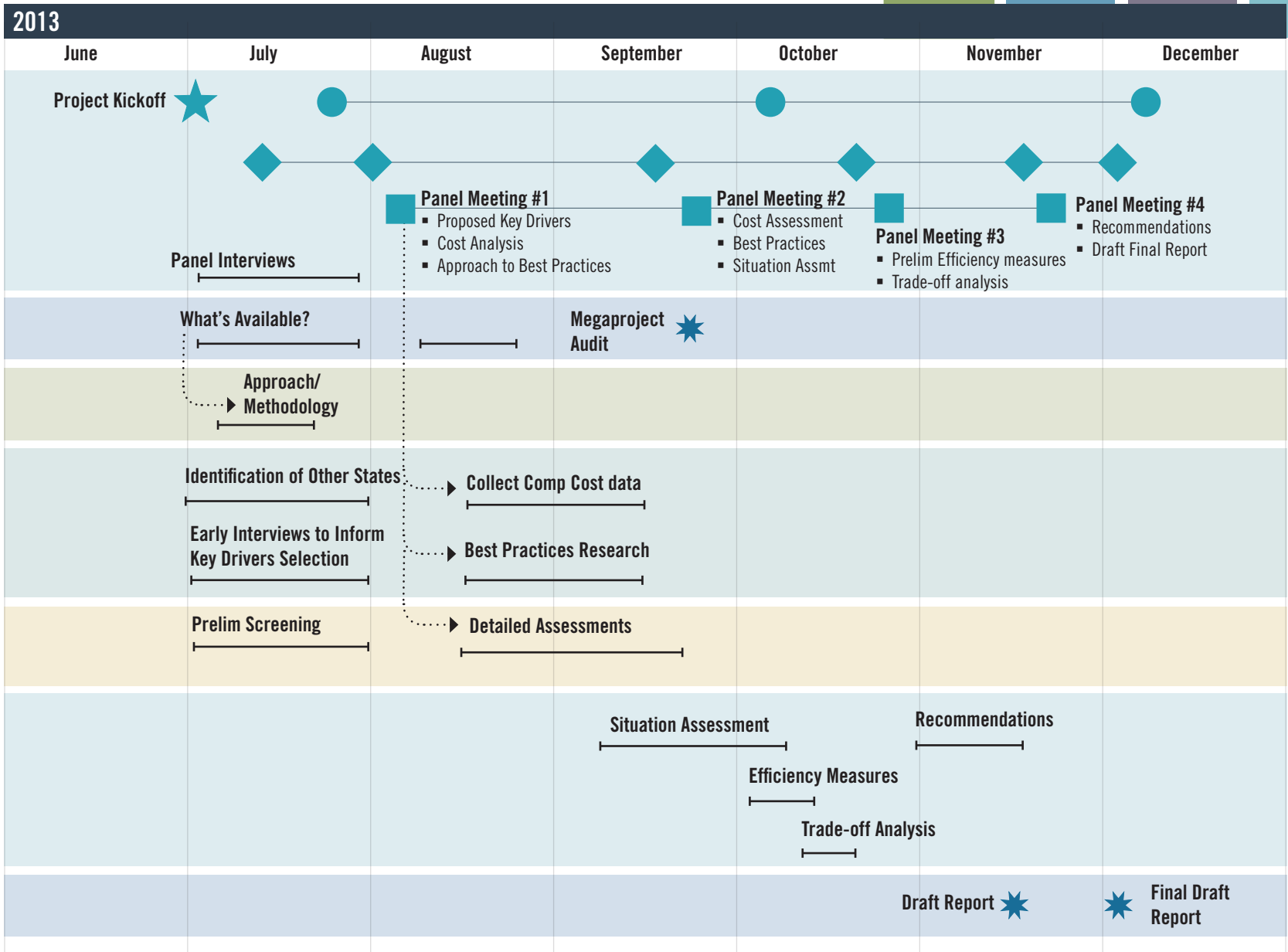
## ▶ Assess potential changes

- Identify potential savings
- Identify policy implications





# Project Schedule



# Concerns Raised During Session

## THE RFP IDENTIFIED THE FOLLOWING CONCERNS:

- Long environmental permitting processes
- High mitigation expenses
- Prevailing wage administration requirements that may be more costly for both public administrators and private companies
- Project management inefficiencies
- Higher public sector design, operations and maintenance and preservation costs as compared to the private sector
- Size of contingency funds for each project
- Tax laws and financing practices that drive up costs
- Workforce challenges, e.g. apprenticeship requirements and an aging workforce
- Specific instances where state standards are higher than federal standards; and
- Inclusion of bike and pedestrian elements in highway projects



# Additions from Preliminary Interviews



## IN ADDITION TO THE CONCERNS OUTLINED, INITIAL INTERVIEWS HAVE ALSO SURFACED THE FOLLOWING:

- Project lifecycle - start and stop nature of some large projects during planning stages
- Excessively high engineering and environmental standards
- Projects that are oversized - need for rightsizing
- Insufficient use of Design/Build contracting
- Balance of transportation demand management and capacity needs to shift
- Short closure windows to complete construction (to minimize traffic disruptions)
- Risk sharing
- Financing costs and use of debt for projects with shorter lifecycles
- Buy local requirements

# Preliminary Cost Drivers By Construction Phase

COST DRIVER	PROJECT PHASE					
	Planning	Permitting	Design	Construction	Finance	Operations
<b>Permitting</b>						
Long permit times						
Cost of local permits						
Environmental standards						
Consecutive vs. concurrent						
<b>Design elements</b>						
Local preferences						
Non-highway features						
Engineering standards						
Design/build utilization						
Demand forecast						
<b>Prevailing wage</b>						
State vs. federal						
Calculation method						
Project criteria						
Administration						
<b>Mitigation</b>						
SEPA / NEPA						
Cost vs. schedule						
Local agreements						

# Preliminary Cost Drivers By Construction Phase



COST DRIVER	PROJECT PHASE					
	Planning	Permitting	Design	Construction	Finance	Operations
<b>Estimating/budgeting</b>						
Contingencies	■		■	■		
Schedule vs. Cost	■	■	■	■		
Treatment of risk/uncertainty	■		■	■		
Planning without secure funding	■					
<b>Contracting</b>						
OMWBE requirements				■		
Risk assignment				■		
Use of private contractors			■	■		■
Apprenticeship				■		
<b>Construction</b>						
Materials cost				■		
Short closure windows				■		
Change orders				■		
Project/program management				■		
Sales tax on construction				■	■	

# Questions & Discussion

- ▶ Are the cost drivers identified to date the right ones? What's missing?
- ▶ Our definition of operations is roadway maintenance and operations. Is that consistent with how you think about it?
- ▶ What considerations should we keep in mind as we begin our work?
- ▶ Other questions or comments