Washington JTC Policy Working Group Meeting

Discussion Materials
October 24, 2011





Welcome

- Opening remarks
- Housekeeping
- Objectives
 - "to provide a general understanding to the Policy Work Group of how a P3
 assessment will take place and the multiple factors that must be considered"
 (Consultant Team Scope of Work)
 - Finalize Screening Tool and review results through an interactive exercise
 - Review status of Financial Model inputs and development
 - Walkthrough Draft Financial Model
 - Discuss next steps:
 - Policy and Legislation
 - Administration and Organizational Issues

Agenda

Time	Item	Presenter
10:00 AM	Welcome / Overview	Rep. Judy Clibborn / Simon Shekleton
10:15 AM	Screening Tool Review - Final modifications - Summary of WSDOT results - Notes on Future use by State	Simon Shekleton / Sam Barend
10:30 AM	Screening Tool Interactive Exercise	Review / complete one project per table
11:30 AM	Break	
11:45 AM	Financial Model Inputs Update - Project Revenues - Construction Costs	Simon Shekleton
12:15 PM	Working Lunch	General Q&A
1:00 PM	Financial Model Inputs Update (continued) - Long term Capital Costs - Operating Costs - Risk Registers / VFM Inputs	Simon Shekleton / Susan Kehoe
2:00 PM	Financial Model Walkthrough	lan Flanagan / Liam Kelly
3:00 PM	Break	
3:15 PM	Next Steps - Analysis of Policy and Legislation - Administration / Organizational guidelines	Sam Barend
4:00 PM	Close	

Process Update

Milestones and key findings

- 2 Day Informational Workshop complete
- Screening Tool Complete (pending any specific feedback)
 - WSDOT Staff inputs complete
 - Critical public interest criteria have been identified and subsequent "Minimum Public Interest Protections" defined (refer Screening Tool)
- Financial Model scenarios under development
 - Pending additional inputs for Costs and Risk Registers
- Reporting
 - Nov 28: Draft Report due to SWG
 - Dec 6: Final PWG Meeting
 - Dec 7: Presentation of preliminary findings, recommendations and Draft Report to JTC

Screening Tool Review

Development of a Screening Tool for Washington

Complete

Essential Considerations

- Good Screening Tools assess common, comprehensive criteria
 - Public interest
 - Project viability
 - Risk
 - Numerous others (per following slide)
- Asking the rights questions is key, but it is equally important to:
 - Weigh responses to suit values and objectives of the State
 - Establish clear and objective requirements for inputs to the screening tool for consistency
 - Establish appropriate fatal flaws

Local Calibration

- Draft criteria have been presented through material and workshops
- The list of criteria has been set, in consideration of:
 - Fatal Flaws
 - Weighting of objective criteria
 - Assessment and weighting of subjective criteria
 - Potential legal / legislative hurdles

Evolution of Screening Tool

- First distributed to SWG on September 2nd
- Initial comments fielded prior to and during SWG Meeting on 15-16 September
- Screening Tool Review / Dry-Run with PWG during September 29 Meeting, comments incorporated
- No subsequent PWG or SWG feedback to date
- Screening tool distributed to WSDOT Staff
 - Screening Tool Instructional Call held with WSDOT Staff and Consultant team on October 5th
 - All Responses were completed and received by October 10th
 - See following for detail

Final Screening Tool Modifications

- Minimum Public Interest Protections have been defined
- Land ownership issues has been restored as a Fatal Flaw question
- Comments Column added
- Recent PWG Comments already taken into account, including State Apprenticeship requirements
- Any final feedback?

High Level (Final) Screening Tool Summary

- Criteria are "scored" based on project characteristics from 0 (best) to 4 (worst)
- Screening Tool Criteria are divided in the following manner

	Number of Criteria			
Category	Tier 1 (fatal flaw criteria)	Tier 2 (other criteria)		
1 Public Interest	2	1		
2 Is there ability for P3 to potentially add value	1	8		
3 Will the project attract private sector interest	2	4		
4 Regulatory, legal and political feasibility	2	3		
Total:	7	16		

- 3 ways a project can fail
 - Answering Yes to any single Fatal Flaw (Tier 1) criteria
 - A cumulative Tier 1 score greater than 11
 - A cumulative Tier 2 score greater than 24

Screening Tool Results (From WSDOT Staff)

- 4 Projects pass the screening tool and will progress to Financial Analysis
- 1 Project failed and will not progress to Financial Analysis

	Tier 1 Criteria			Tier 2 Criteria		Overall
	Fatal Flaws	Pass with Limitations Scores		Pass with Limitations Scores		Result
Project	Triggered?	Score Result Failing Score		Score Result	Failing Score	Pass/Fail
I-405/SR 167	No	5	11	17	24	Pass
I-5/SR 509	No	0 11		10	24	Pass
SR 167 new segment	No	10	11	12	24	Pass
I-5 Crossing (CRC)	No	4	11	11	24	Pass
Monroe Bypass	Yes (2)	17	11	20	24	Fail

- Notes on Results
 - Both Tier 1 and 2 criteria are sound and functional (range of scores is good)

Notes on Screening Tool Use

- State to consider appropriate treatment of Category 3 assessment (will the project attract private sector interest)
 - Currently, all 5 projects are subject to identical market condition assessment
 - Assessment of future projects requires real time understanding of market conditions
- Some Tier 2 criteria responses are currently constrained due to preliminary nature of the projects; standardized responses apply for now

Criteria		Default Position	Score
2.02.02	Provides value for money	Pass	0
2.02.06	Whole life costing	Pass with limitations	2
2.03.02	Project's ability to attract TIFIA, Private Activity Bonds (PABs)	Pass or Pass with limitations	0 or 1
2.04.02	Need for new or change in legislation	Fail	4
2.04.03	No specific legislative approval required post award	Fail	4

Treatment of Failed Projects

- Projects that fail the Screening Process are not yet ready for further financial analysis as P3s (these are no-go projects)
- Failing is not the end, but rather a guide for project promoters to identify a list
 of issues they must address in order for the project to proceed in future
- In the case of Monroe Bypass these most critically include:
 - 1.01.01 Affordability: Due to a lack of a viable revenue stream, the project is not self supporting and no additional sources of funding have been identified. The project can therefore not be considered affordable to the public until this situation improves
 - 1.04.01 Environmental Approvals expected within 3 years: this will not be possible until the project EIS is recompleted, submitted and nearing approval

Treatment of Failed Projects

Potential next steps to address fatal flaws if P3 delivery is still desirable

Criteria		Potential Course of Action
1.01.01	Affordability	The project is not affordable either because user fees would be too high or the project is not a priority for public funds. To address: a) Appropriate more State money for the project b) Identify additional revenues e.g. developer levies, special taxation zones, beneficiary contributions, advertising, etc (market study) c) Advocate for prioritization of project based on needs
1.01.02	Support from elected officials and the public	Combination of political advocacy and public and stakeholder relations. Controversial projects require a proactive approach to garner public support.
1.02.01	Financial Feasibility	Same as 1.01.01; AND, assess potential for innovative methods of public financial support; i.e. shadow toll or availability payment approaches
1.03.01	Return Justifies Risk	Reconsider State risk apportionment preferences and "must haves"
1.03.02	Suitable Deal Size	If too small, consider expanding or consolidating projects
1.04.01	Environmental Approvals expected within 3 years	Accelerate approvals to the greatest extent possible.
1.04.02	Are land ownership issues likely to stop the project	Assess potential to re-design project around affected properties; use of eminent domain; land swap deals

Financial Model Overview

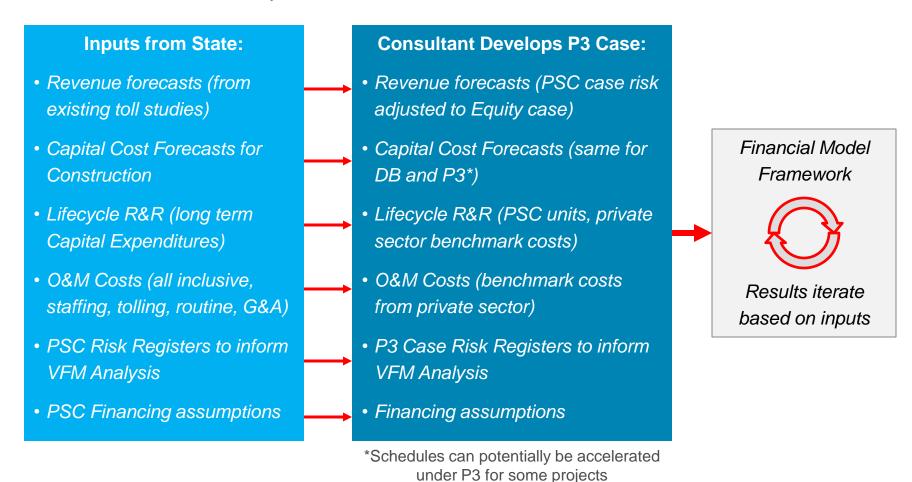
Consultant Team Evaluating 11 Financial Model Scenarios

		PRIVATE SECTOR			
	Public Secto	or Comparator (PSC	Shadow Bid Delivery Model		
Project	GO Bond	Toll Revenue Bond	Delivery Model	Toll Concession	Availability Payment Model
I-405/SR 167	Х	Х	DB	Х	
I-5/SR 509		Х	DB	Х	Х
SR 167 new segment		Х	DBB	Х	
I-5 Crossing (CRC)	Х	Х	DB		Х
Monroe Bypass	NA	NA	NA	NA	NA

- PSC selection based on discussion with Staff Work Group and WSDOT
- Shadow Bid selection based on preliminary information on user fee and other potential funding sources (or lack there of)

Summary of Minimum Financial Model (FM) Inputs

Information transfer is required to populate each Financial Model as outlined below. Critical path constraints are shown with red arrows



Discussion of Inputs

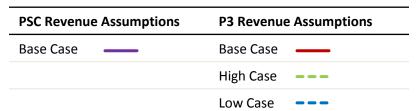
Following slides cover PSC and P3 assumptions for the 405 Project

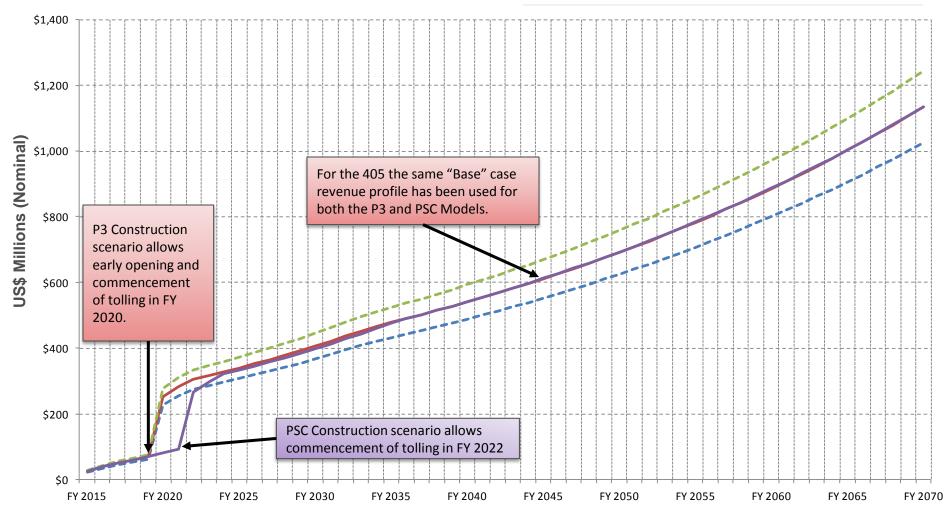
- Project Revenues
- Construction Costs (Initial Capital Expenditures / CAPEX)
- Lifecycle CAPEX (Repairs and Replacement / R&R, aka preservation)
- Operation and Maintenance (O&M) Costs (OPEX)
- Risk Weighted Costs (through value for money analysis)

- Both cases consider 50 years of operations
- Input assumptions for other projects are still under development

Financial Model Inputs (Sample Project: 405 HOT Lanes)

Revenue Assumptions



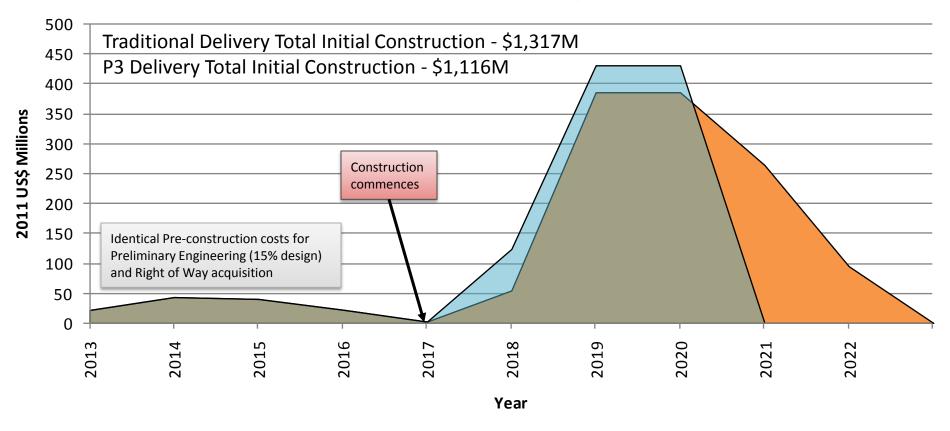


Revenue Assumptions

- PSC Revenue Line taken from Wilbur Smith tolling study
 - "Base" case numbers are considered aggressive
 - It is unlikely that private equity financiers would take a more aggressive view
 - Only difference between PSC and P3 revenue profiles is the year tolls starts being collected
- The consultant team may assume a more aggressive equity position on revenues for the other three projects
 - e.g. the "High" case line illustrated above, which represents a 25th percentile risk weighting

P3 Case assumes accelerated construction schedule

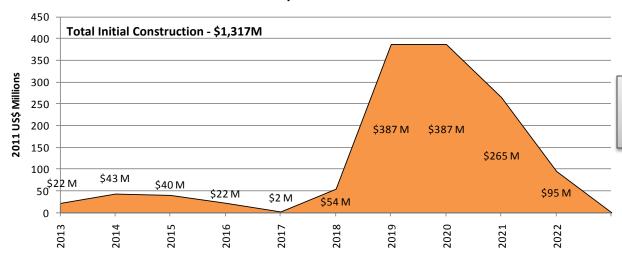
Initial Construction Costs Comparison



■ Total Traditional Delivery Initial Construction Costs

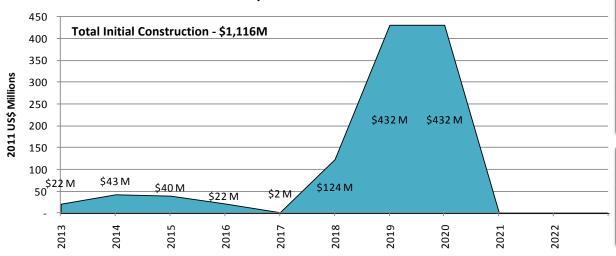
☐ Total P3 Delivery Initial Construction Costs

Traditional Delivery Initial Construction Costs



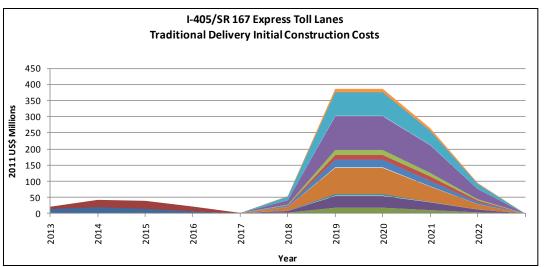
Right of Way and Tolling & ITS costs are assumed the same for both forms of delivery

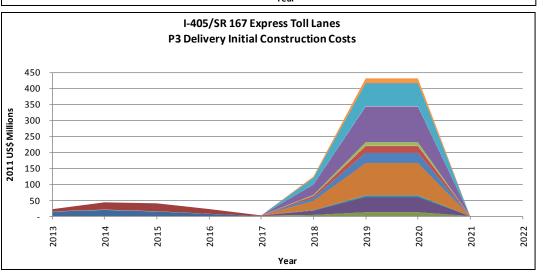
P3 Delivery Initial Construction Costs



Initial Construction Costs Savings for the P3
Delivery method are based on the ability of
the private sector to complete construction
within 2.5 years instead of 5, reducing all time
dependant costs such as Mobilization &
Preparation and Traffic Control, and to a
lesser extent other costs such as Design

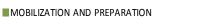
The private sector would have the ability to bulk purchase materials such as steel which could potentially provide significant savings . However, this has not been assumed for this project.





I-405/SR 167 Express Toll Lanes Initial	Traditional	Р3
Construction Costs (Millions)	Delivery	Delivery
DESIGN	\$57	\$57
RIGHT of WAY	\$72	\$72
MOBILIZATION AND PREPARATION	\$54	\$27
GRADING, DRAINAGE AND STOCKPILING	\$112	\$108
WATERLINES, STORM AND SANITARY SEWERS	\$14	\$13
STRUCTURES	\$239	\$234
ASPHALT AND SURFACING	\$74	\$73
CEMENT CONCRETE PAVEMENT	\$50	\$49
TRAFFIC CONTROL	\$51	\$26
OTHER ITEMS*	\$340	\$257
NON - BID COSTS 700 Level Items **	\$220	\$166
TOLLING & ITS	\$35	\$35
Total Construction Cost	\$1,317	\$1,116

- * Other Items include Design, QAQC (15%), Guardrail, Signage other minor items, Environmental mitigation like recon of wetlands, stream restoration etc, differing site conditions
- ** Non Bid Costs include sales tax, construction engineering (WSDOTs own and sub costs to inspect during construction) contingency, stipend for failed bidders



- WATERLINES, STORM AND SANITARY SEWERS
- ASPHALT AND SURFACING

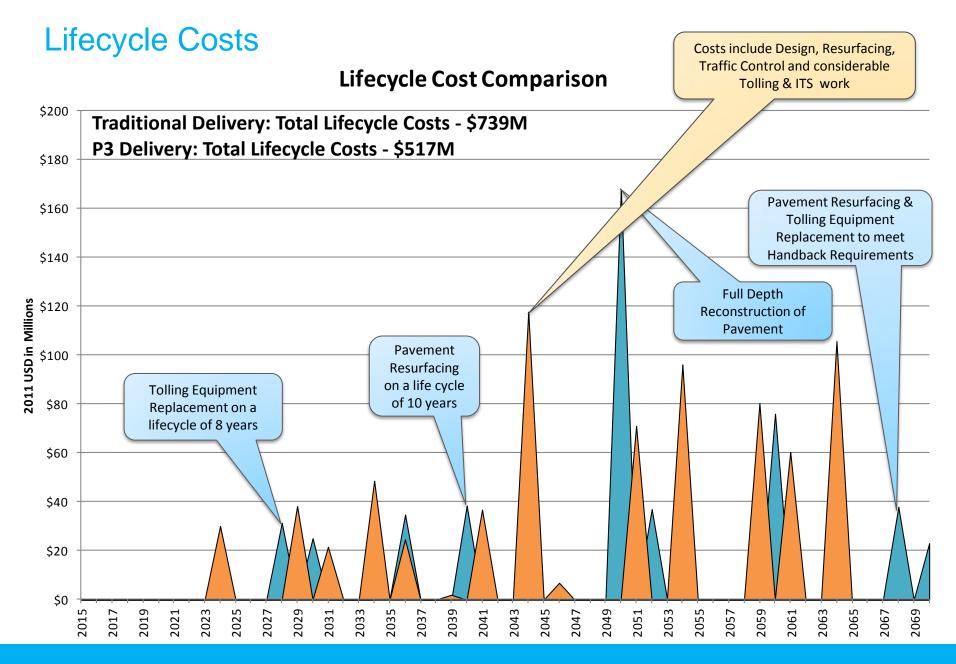
DESIGN

■ TRAFFIC CONTROL

NON - BID COSTS 700 Level Items

- RIGHT of WAY
- GRADING, DRAINAGE AND STOCKPILING
- STRUCTURES
- CEMENT CONCRETE PAVEMENT
- OTHER ITEMS
- TOLLING & ITS

- PSC developed by WSDOT based on existing studies
 - Costs divided into distinct categories, staged by Financial Year
 - Schedule established based on legislation, funding and typical construction schedules experienced by WSDOT in the past (as affected by weather etc)
 - Assumes 4 year "lead in" period (for preliminary design and land acquisition), followed by a 5
 year construction period under DB procurement
- P3 Shadow bid assumes time savings, and costs savings as a result
 - Each cost item has a "time dependent" component (e.g. costs for mobilization are 100% time dependent but material purchases are 0% time dependent)
 - Time savings have been applied to time dependent costs
 - NO cost savings are currently assumed due to economies of scale, labor or material costs



Lifecycle Costs

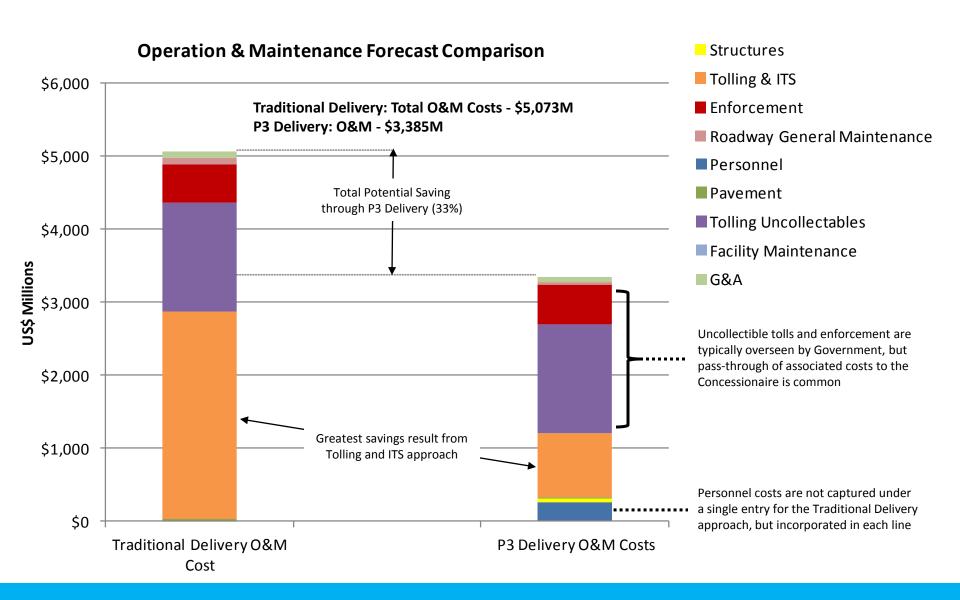
I-405/SR 167 Express Toll Lanes Lifecycle Costs (Millions)	Traditional Delivery	P3 Delivery	
Roadway Maintenance	\$67.43	\$3.21	4.00 -0
Pavement Maintenance \$152.65	\$85.22	\$190.38	\$193.59
Structures	\$0.00	\$0.52	
Other Misc. Items	\$153.83	\$54.79	
Tolling & ITS Maintenance	\$336.22	\$143.17	
Design	\$54.79	\$19.60	
Mobilization and Preparation	\$42.14	\$23.52	
Engineering, Construction Mgmt. and Testing Fees	\$0.00	\$39.21	
General Contingencies	\$0.00	\$43.13	
Total Over Concession	\$739.63	\$517.54]

- Overall, P3 costs are 30% lower in nominal (2011) dollars
- P3 case actually spends significantly more on pavement repairs
- Majority of savings are on Tolling and ITS (\$193M or 87% of the total savings)

Lifecycle Costs

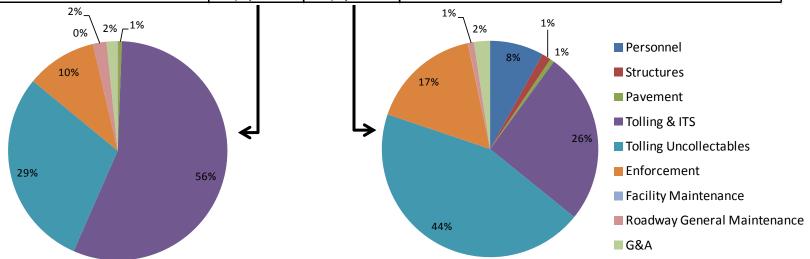
- PSC developed by WSDOT based on existing studies
 - Type, schedule and Cost of Capital Improvements over time is based on WSDOT experience
 - While most approaches are best practice, the program of R&R work is not optimized according to Net Present Value (NPV) considerations
- P3 Shadow bid developed with available WSDOT quantities and <u>actual US</u> private sector Concession data
 - Cost items have been set to match the PSC format and available quantity information
 - Frequency of works is based on <u>actual US</u> private sector Concession budgets (good standard of care requirements apply in all cases)
 - Benchmarks have been applied to ensure sensibility of results
 - Costs are NPV optimized to balance condition and handback requirements with lifecycle issues

O&M Costs



O&M Costs

I-405/SR 167 Express Toll Lanes O&M Costs (Millions)	Traditional Delivery	P3 Delivery	Comment
Personnel	\$0.00	\$270.72	WashDot personnel costs are incorporated within each of the line items such as structures, pavements etc.
Structures	\$4.26	\$45.82	Includes bridges, safety barriers and retaining walls
Pavement	\$27.21	\$20.95	Includes asphalt & concrete pavement
Tolling & ITS	\$2,838.68	\$865.86	Includes annual maintenance, fixed back office costs, transaction based cost & credit card fees
Tolling Uncollectables	\$1,490.64	\$1,489.52	For both delivery methods assumed 4.5% of Revenue
Enforcement	\$527.23	\$554.73	Assumed the same for both delivery methods
Facility Maintenance	\$0.00	\$1.29	
Roadway General Maintenance	\$102.23	\$29.46	Includes drainage, landscaping etc.
G&A	\$82.93	\$80.25	General & Administrative costs
Total Over 55 Years	\$5,073	\$3,359	



O&M Costs

- PSC developed by WSDOT based on existing studies
 - Type, schedule and Cost of O&M activities over time is based on WSDOT experience
 - Overhead costs for WSDOT operations is assumed identical to the P3 case (no data available)
 - Tolling costs are most costly (including credit card fees, annual maintenance of tolling and ITS equipment, back of house and customer service)
- P3 Shadow bid developed with available WSDOT quantities and <u>actual US</u> private sector Concession data
 - All costs start 2.5 years sooner than the PSC (in line with revenues and construction)
 - Uncollectable tolls (4.5% of rev) are the greatest single cost item, assumed equal to the PSC
 - Significant savings have been identified in relation to tolling and ITS

Financial Model Walkthrough (Sample Project: 405 HOT Lanes)

Next Steps

Study Guide to Policy, Legislation and Administration

- The Consultant Team is tasked with producing a report that provides guidance and recommendations to the State in relation to
 - Administrative and organizational options the State may consider in support of any future efforts to develop a P3 program or pre-procurement process
 - Policy, constitutional and legislative challenges it may need to address
 - A roadmap of milestones and schedule for progressing projects that are deemed potentially good P3 delivery candidates
- The following slides are designed to stimulate discussion of these issues with the Policy Group
 - Examples are presented to raise the relative pros and cons of various approaches
 - Our goal is to understand Washington State's objectives, preferences and/or concerns in relation to each topic

Steps for Developing a Control Framework for P3

The following slides expand on points 1-3 below:

- 1. Creation of clear public policy goals and guiding principles
- Passage of P3 legislation that upholds policy goals and is acceptable to the private sector
- 3. Development of a P3 controlling body (office) with the resources and power to
 - establish and enforce uniform standards
 - interface public and private sector entities; and channel private sector expertise and interest
 - provide transaction support to public agencies and control the project procurement process
 - Screen/identify and sign-off on candidate projects under a standard value for money approach
 - Provide authority across all disciplines (technical, financial, legal, project development)

Policy Goals / Guiding Principles

- Minimum Public Interest Protections that must form binding requirements of all future P3 projects have been identified through this study (see slide 37)
- Such protections are implemented and enforced through statutes and/or mandatory guidelines at a project level (through RFP and Concession Agreement control mechanisms)
- Other States have developed similar guidelines including, for reference,
 Virginia (see next slide)

Policy Goals / Guiding Principles (continued)

Policy Goals of Virginia's P3 Office

- Facilitate timely delivery of PPTA projects, within established laws and regulations;
- Develop multimodal and intermodal solutions that are consistent with state, regional and local transportation policies and plans;
- Encourage competition for innovation and private sector investment to create value for the Commonwealth;
- Promote transparency and accountability coupled with informed and timely decision making;

- Establish reliable and uniform processes and procedures to encourage private sector investment;
- Seek efficiencies by standardizing processes;
- Foster efficient management of Commonwealth resources, both financial and organizational;
- Achieve cost efficiencies through the whole–life costs basis; and
- Promote economic growth and job creation.

Policy Goals / Guiding Principles (continued)

12 Minimum Public Interest Protections have been identified to date

- Maintaining control and/or ownership over the asset
- Use of upfront funds generated by P3 projects
- 3. Quality of service
- 4. Setting and controlling fares/tolls
- 5. Preventing excessive returns
- 6. State Apprenticeship Requirements

- 7. Responding to poor service delivery
- 8. Solvency of private partners
- Termination of the concession
- Handback and asset condition
- 11. Prevailing Wage
- 12. Minority and Women-Owned Business Enterprises (MWBEs) should be encouraged to participate in P3 initiatives

Is this list comprehensive / are there other policy concerns unique to WA State that should be included?

Legal Review

- Identify existing problems with current legislation
- Discuss issues other States have encountered in advancing P3 projects due to incomplete or overly prescriptive legislation
- Review best practices in P3 legislation in other States (such as VA, TX, Puerto Rico, Florida)
- Provide recommendations on legislative changes that would ensure the finaceability of transportation P3 projects and uphold public policy protections in Washington State

Legal Review (continued)

Discussion: Common Points of Focus

Sound Approach (Workable Solution)	Compromised Approach (Reduced Value to Public Sector)	Ineffective Approach (Potential Fatal Flaws)
Pre-procurement independent agency approval of P3 use	Post-procurement hearings, reviews and other procedures before contract award	Post-procurement legislative approval of contract
Risk allocations as procuring agency determines best	Limits on public risk requiring large contingencies in pricing	No public risk allowed
Toll regime and maximum rates governed by contract	Regulated utility model for setting future tolls	Legislative approval of tolls and changes in toll rates
No mandatory removal of tolls	Removal of tolls when all P3 contract obligations satisfied	Removal of tolls upon termination of P3 contract
Various forms of payment and performance security sufficient to protect against risk	Various forms of 100% payment and performance security	100% payment and performance bonds; no alternate security permitted
Public and private financing authorized	No agency authority to issue revenue bonds	No private debt issuance or equityNo public financing

Legal Review (continued)

Discussion: Common Points of Focus

Sound Approach (Workable Solution)	Compromised Approach (Reduced Value to Public Sector)	Ineffective Approach (Potential Fatal Flaws)
Ad valorem property tax exemption	Legal uncertainty over property tax exemption	No property tax exemption
Maximum term long enough to produce material present value (e.g. 50 – 60 yrs.)	Excessively long maximum term with little or no revenue sharing	Short, inflexible maximum term
At most, targeted prohibitions on private investors and operators (e.g. no firms doing business with government of X country)	Mandatory % of domestic equity investment	No foreign investors or operators
Project labor compliance, apprenticeship, prevailing wages, DBE requirements	Protection of public sector employees from job loss	Mandatory use of public sector employees for broad project functions

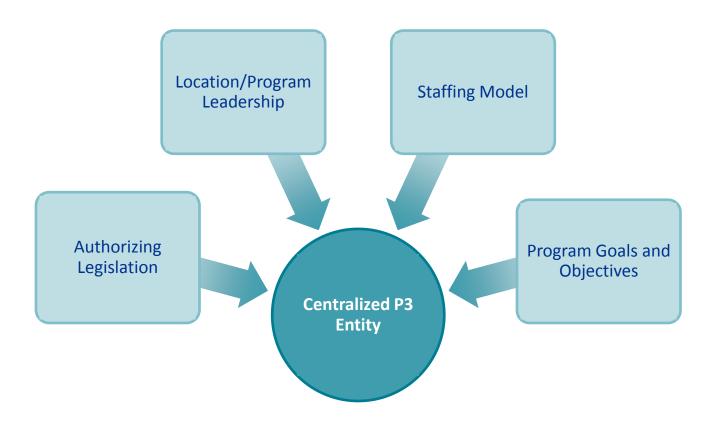
Organizational Context

States that establish P3 Offices deliver more projects with better success

- Over 30 US States and the Federal government have now used P3s
- US P3 market has not developed as quickly due to an ad hoc approach
- Bidders' are selective in where to invest due to a history of:
 - Cancelled procurements, lengthy negotiations and excessive bid costs
 - Decentralized efforts without a central P3 Unit
 - Use of non-uniform documents, forms and procedures that do not adhere to market standards or that are otherwise not tailored for P3s
 - Absence of formal monitoring mechanisms and policy making authority
 - Inexperienced advisers
 - Lack of structured government training and stakeholder participation
 - Narrow legislative authorizations

Organizational Context (continued)

A number of important initial considerations must be addressed when considering a P3 program and the associated development of a controlling entity



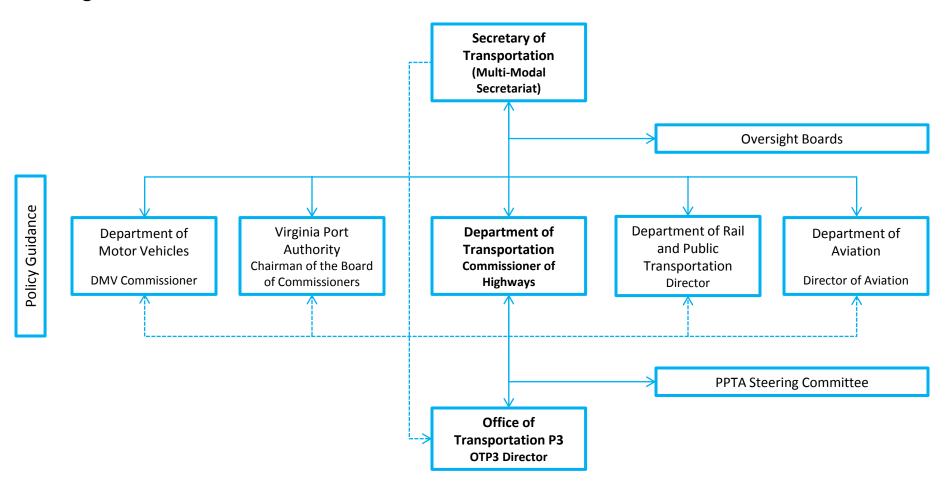
Organizational Context (continued)

Virginia's P3 Office Responsibilities and Objectives

- The P3 Office is responsible for developing, implementing and administering P3 projects across all modes of transportation to address Virginia's transportation needs
- The primary objective of the PPTA Office is to accomplish the timely delivery of PPTA projects that address priority transportation needs
- The PPTA Office is empowered by the Secretary of Transportation to drive the P3 agenda, which includes:
 - serving as the champion to bring P3 projects to fruition
 - being the primary point of contact for P3 projects serving all modes of transportation
 - acting as a resource to public sector agencies, private entities and other stakeholders working to advance PPTA projects

Organizational Context (continued)

Virginia's P3 Office Structure



Funding a P3 Office

- A P3 office will need initial seed capital to fund organizational costs such as staff, normal administrative expenses, and outside technical, legal and financial advisors.
- The P3 Office could aim for partial cost recovery over a 2-3 year period through a combination of
 - application fees
 - transaction fees
 - periodic/ongoing service fees

Funding a P3 Office (continued)

The Virginia Model

- The P3 Office covers the initial project screening and prioritization phase
- Once a decision is made to advance a project as a P3 the relevant
 Department will be responsible for identifying and securing the funding
 necessary to support the project development and procurement phase
 activities, as well as any public funding contribution a given project may
 require
- The P3 Program Director will coordinate with the Department Administrator to ensure that the Department identifies and plans for funding needs well in advance to allow qualifying transportation projects to move efficiently through the P3 Project Delivery Framework

Funding a P3 Office (continued)

The Infrastructure Ontario (IO) Model

- This P3 unit is a corporation without share capital that is fully funded by the Ontario provincial government
- Infrastructure Ontario's costs for project management of P3 projects comes from individual project budgets, as approved in the related ministry's capital budget
- For example, a courthouse P3 project's IO-related costs would be covered through the capital budget for the Ministry of the Attorney General. Such project delivery costs are charged on a flat-rate basis, as a percentage of the Cabinet-approved project budget. Administrative costs, on the other hand, are recovered through a grant by the Ministry of Energy and Infrastructure