

Washington JTC Policy Working Group Meeting

Discussion Materials September 29, 2011



Welcome

- Opening remarks
- Introductions
- Housekeeping

Objectives of this meeting:

- *To support Task 2: Develop Screening Criteria and Methodology*
- *To support Task 3: Develop Comparative Financial Model*
- *In both cases, to empower the PWG with a working understanding of both tools, sufficient to solicit its comments and directions to the Consultant team during and after this meeting*
- *The Consultant team shall utilize all such feedback in tailoring these tools to Washington State ahead of the Table Top Exercise*

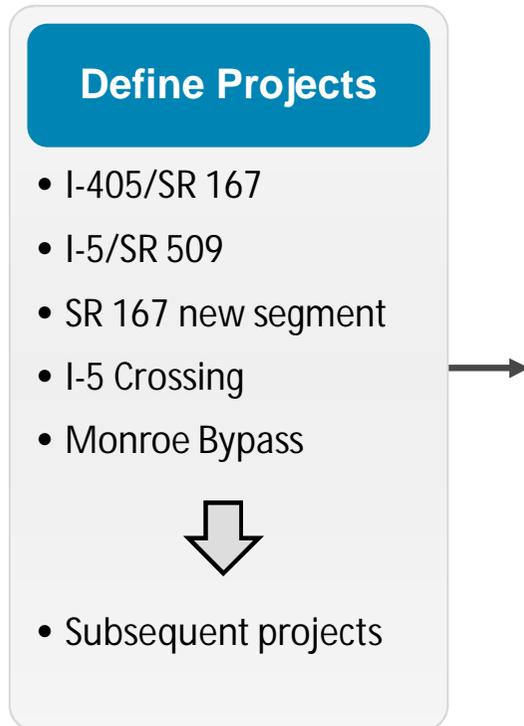
Agenda

Time	Item	Presenter
9:00 AM	Welcome / Overview	Rep. Judy Clibborn / Simon Shekleton
9:15 AM	Process Update	Simon Shekleton
9:30 AM	Value for Money (Educational)	Tim Wilschetz / Sam Barend
10:30 AM	Break	
10:45 AM	Risk Assessment (Educational)	Sam Barend / Simon Shekleton
11:45 AM	Working Lunch	General Discussion, Q&A
12:15 PM	Financial Model	Tim Wilschetz, Ian Flanagan
1:15 PM	Screening Tool Introduction	Sam Barend
1:45 PM	Break	
2:00 PM	Screening Tool Detailed Review	Simon Shekleton
3:50 PM	Next Steps	Simon Shekleton
4:00 PM	Close	

Process Update

Process Update

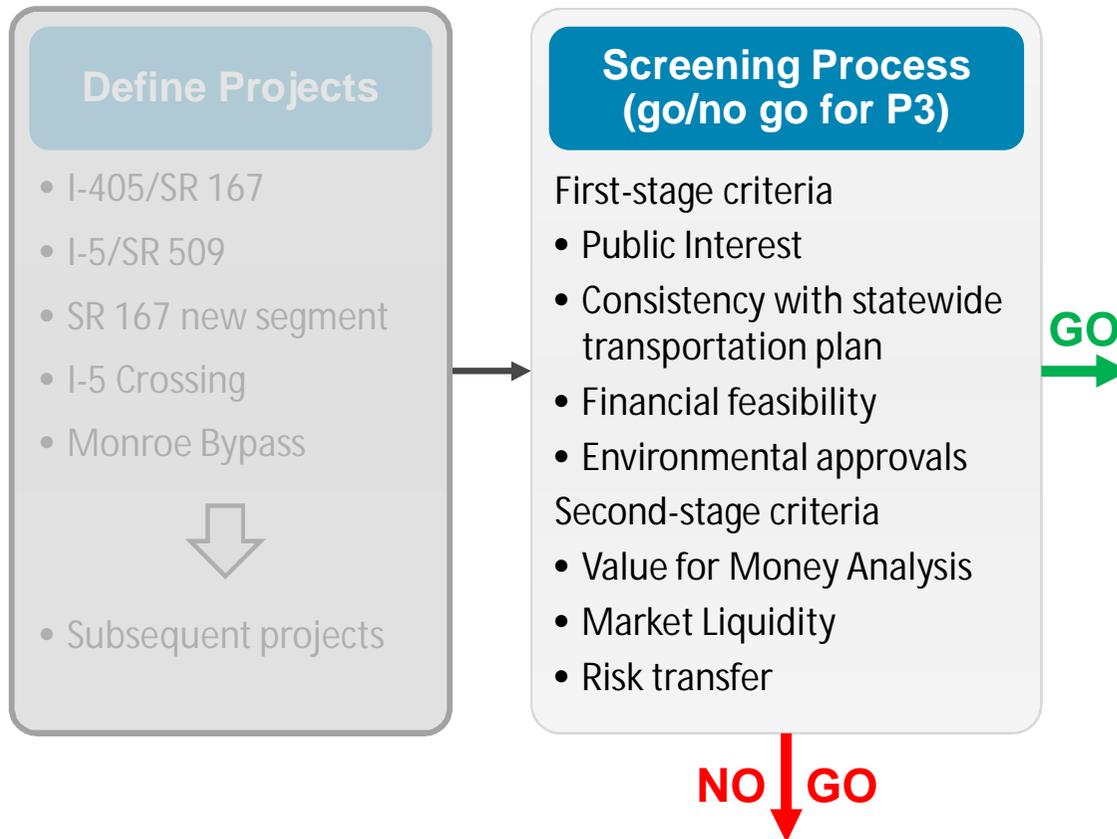
Step 1: Complete



- *“Preferred” alternative selected by WSDOT, Consultant and SWG for each project*
- *Enables Capital and Operating cost; and risk parameters to be fixed for both Public Sector Comparator (PSC) and P3 cases*
- *Confirmation of PSC and P3 Funding and delivery method assumptions ongoing under Step 3*

Process Update

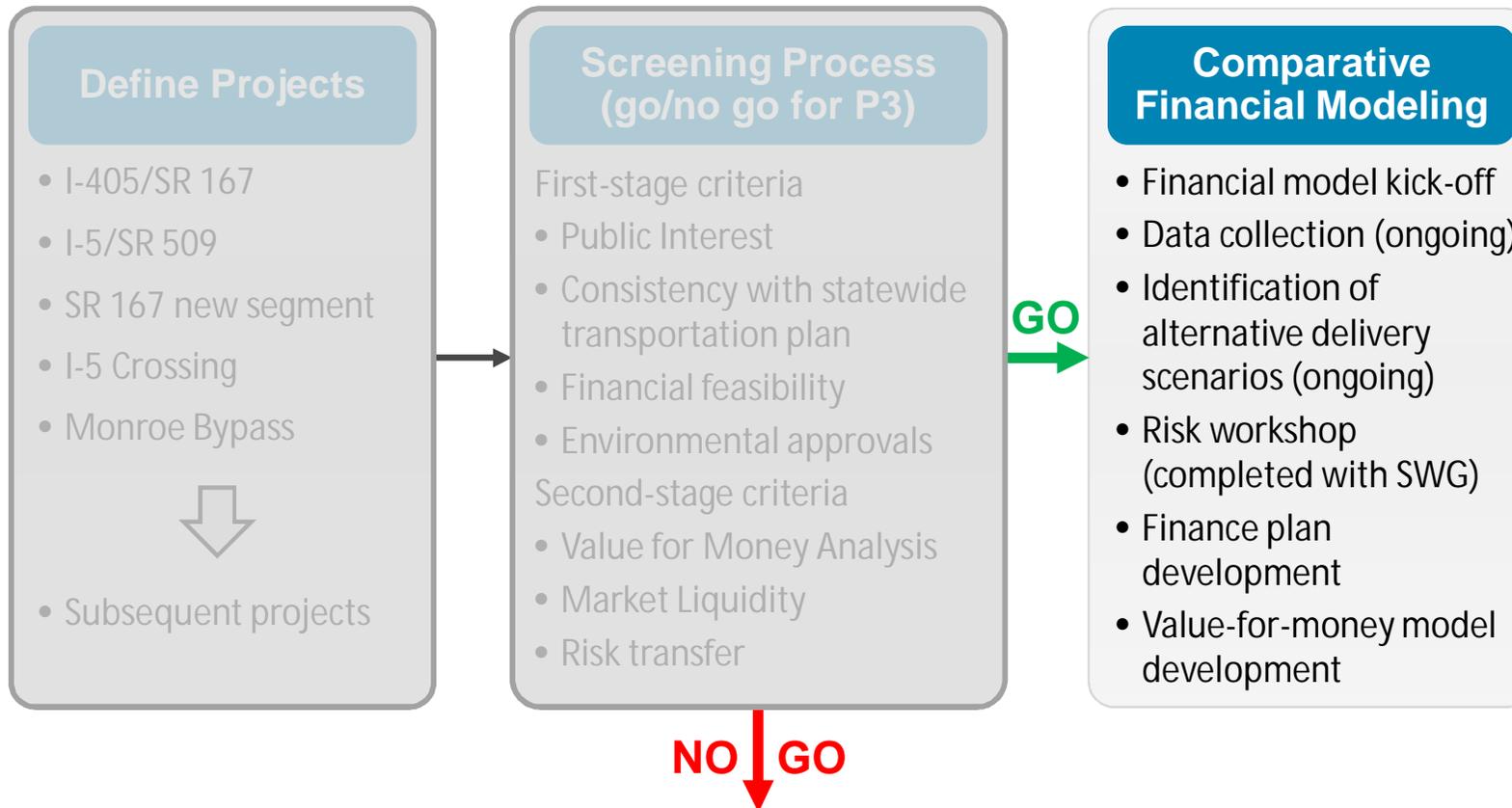
Step 2: Draft Screening Tool complete; pending PWG input



- *Draft Screening Tool distributed to PWG on September 27 for preview / comment*
- *During this meeting we will introduce and seek guidance on:*
 - *Format / legibility*
 - *Content (criteria)*
 - *Scoring*
- *Educational context will also be presented*
- *Particular focus is to be given to WA State considerations*

Process Update

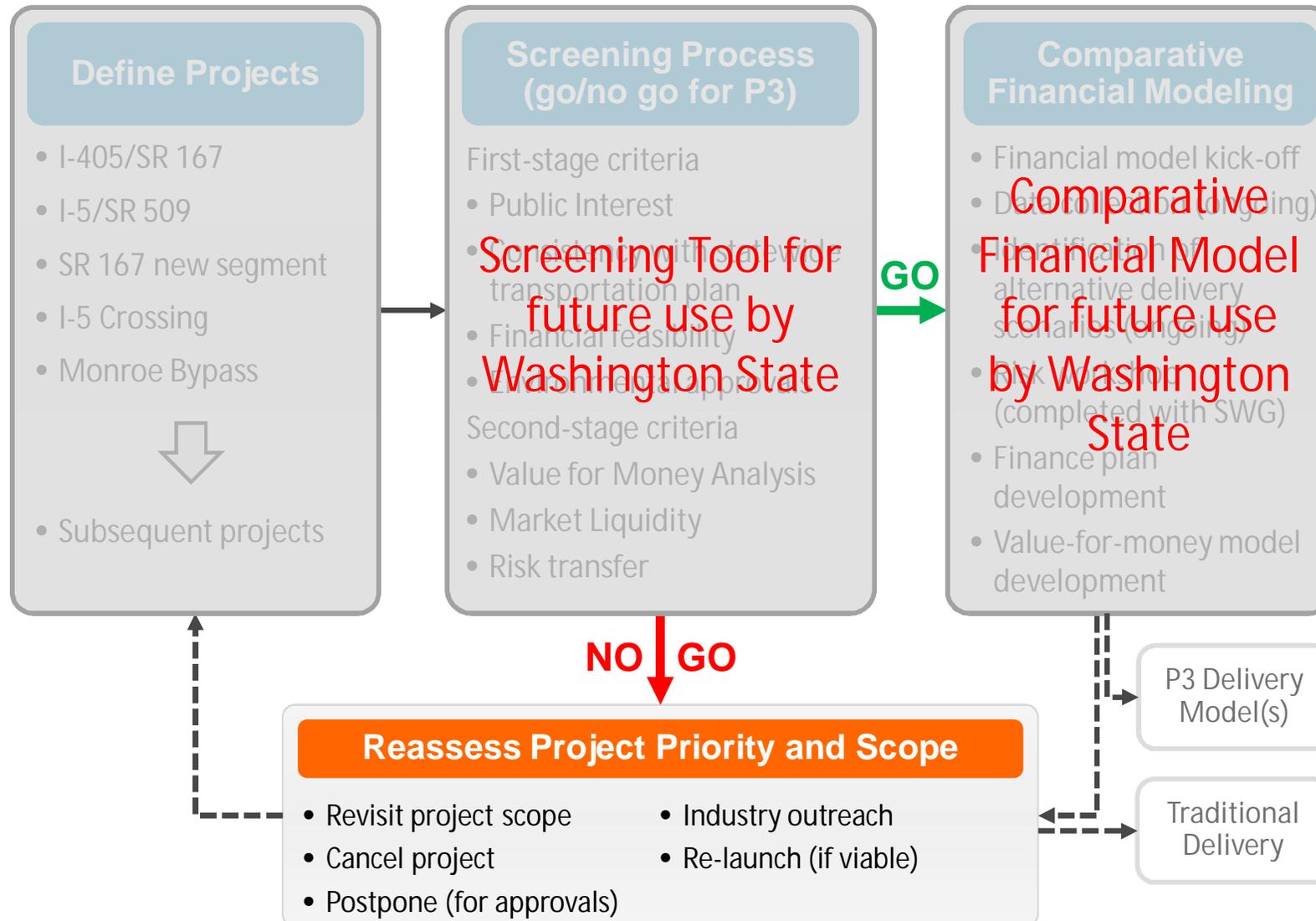
Step 3: In development; to be finalized pre Table-Top Exercise



- *Confirmation of PSC and P3 Funding and delivery methods ongoing through SWG and key State officials*
- *During this meeting we will introduce and seek guidance on:*
 - *Model inputs and sources of data*
 - *Functionality*
- *Educational context will also be presented (including VFM [Value for Money] and Risk analysis)*

Process Update

Context of study findings, once developed



- For the Five selected projects:
 - An assessment of P3 viability based on current conditions
 - If viable, Financial Analysis of relative merits of P3 vs. traditional delivery
 - If non-viable, a list of criteria & conditions precedent to re-consideration of P3 delivery in future
- Define legislative and administrative needs moving ahead

Process Update

Milestones and key findings

- 2 Day Informational Workshop complete
 - Numerous topics covered in detail
 - Follow up during this meeting on Risk Assessment and Value for Money topics
- WSDOT has provided key data and inputs on the Five Projects
 - Traffic and revenue forecasts
 - Operating cost assumptions
 - Capital cost assumptions
- Draft Screening Tool review completed with SWG (9/15/2011)
- Risk Workshop completed with the SWG (9/16/2011)
- Critical public interest criteria have been identified and subsequent “Minimum Public Interest Protections” defined (refer Screening Tool)

Value for Money Analysis

What is Value for Money?

“The optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user’s requirements. VFM is not the choice of goods and services based on the lowest cost bid.”

- VFM analysis:
 - Considers the potential outcomes of alternative procurement options
 - Measures savings across whole-life costs, not lowest-bid costs, thus considering life-cycle efficiencies
 - Quantified through a risk-adjusted analysis that compares traditional procurement options with selected alternative procurement options

Common VFM Drivers

- **Optimal Risk Allocation** – risks should be transferred to the part best able to manage or mitigate that risk
- **Focus on Whole Life Costing** – ensuring whole life costing, not just up-front costs, ensures consideration of operating and refurbishment costs
- **Integrated Planning & Design** – early consideration of operational aspects of the design ensures cost savings in the provision of facilities services
- **Use of Output Specifications** – describing required output, without prescribing a solution, allows bidders to innovate and reduce costs
- **Sufficient Flexibility** – ensuring sufficient flexibility in long-term contracting structures will allow changes to be effected at reasonable costs
- **Proper Incentives** – both rewards and deductions for performance should serve to properly incentivize the parties
- **Long-term Partnerships** – contracts should occur over a period which can be reasonably predicted, while maximizing gains from risk transfer
- **Managing Scale and Complexity in Procurement** – procurement costs should not be disproportionate to the underlying project

Generators of Long-Term VFM

- Establishing and maintaining competitive tension throughout the bidding process
- Providing incentives to the private sector for the delivery of quality services
- Encouraging innovative delivery solutions
- Offering incentives for the benefit of both parties (e.g. periodic cost benchmarking and sharing mechanisms)
- Entering into a long-term contract, to provide a degree of certainty of cost to government and revenue security to the bidder

VFM Assessment Process

There are three steps for assessing VFM

1. Establish baseline project costs:
 - Based on best available estimates or known operating results
2. Conduct risk analysis:
 - Comprehensive risk analysis, including quantification, completed across universe of project-related risks
3. Compare total project costs:
 - Considers retained risks and total life-cycle costs of the project under traditional and alternative delivery methods

Baseline Costing

Two types of baseline costing will apply

- Construction & Operating Estimates
 - Greenfield development will rely on capital cost estimates developed to date
 - Operating costs will be estimated based on comparable projects
- Known Operating costs
 - Where an existing service business is operating, a business-as-usual baseline can be established

Risk Analysis

Risk Analysis includes:

- Identification of the universe of applicable risks
- Quantification of impact cost for each risk
- Estimation of probability of occurrence for each risk

Resulting probability weighted risk cost equation:

$$= \text{Base Cost} \times \text{Impact (of risk)} \times \text{Probability (of risk)}$$

The sum of all of these risks results in the total risk weighted project cost

Comparing Models

- A risk-adjusted comparison of total project costs (to the sponsor [WSDOT]) is compiled and compared across procurement options
- Comparison of options considers
 - Project contract's effective risk transfer
 - Differing potential cost of inputs, such as costs of financing
 - Time value of money, through discounting future obligations to measure all costs in today's dollars

Methodology

- Balance between qualitative and quantitative assessment
- Considers project and market features
- Embeds an evidence-based approach
- Uses generic quantitative models for the PSC and “should cost” P3 solution
- Models include technical adjustments (Optimism Bias, tax etc.)

Qualitative Assessment

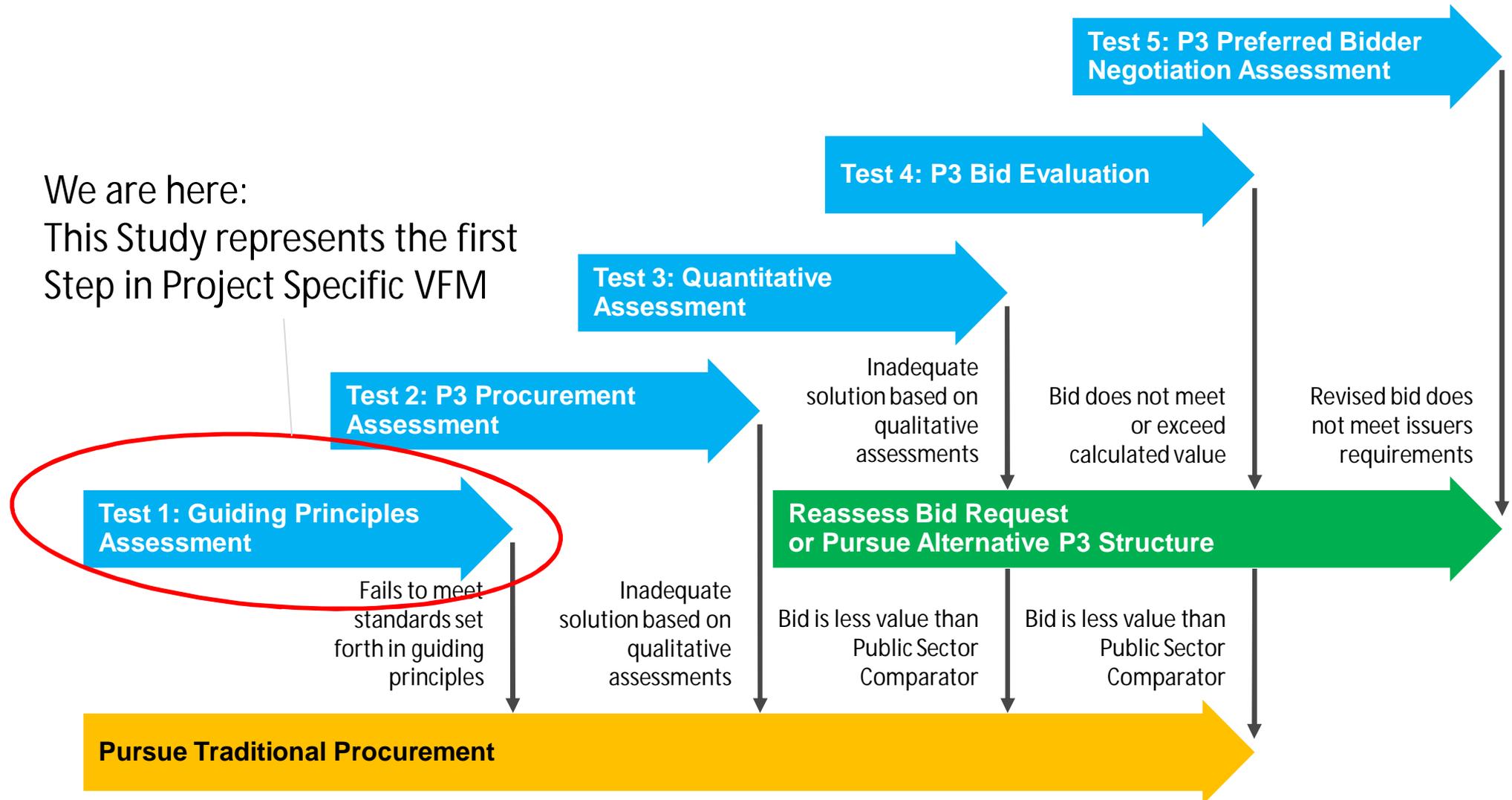
- Viability
 - Measurable and definable outputs, clear scope
 - Operational flexibility
 - Equity/efficiency reasons for private sector service provision
- Desirability
 - Do the benefits outweigh the costs?
- Achievability
 - Market interest, time scales

Issues Regarding Use of Public Sector Comparators

- Policy / legislative context
 - Consensus can be complex
- Advantages
 - helpful with political / public perception / presentation issues
- Challenges
 - Needs empirical data and sector experience (limited at start of program)
 - Reliant on a single-point, cost-based test based on Net Present Values
 - Timing of final output does not help with decision making process
 - Reliant on assumptions that can be manipulated (e.g. optimism bias calculation)
 - Risk of double counting

Assessing Value for Money Over Time

We are here:
This Study represents the first Step in Project Specific VFM



Conclusions

- VFM is a concept that compares options
- Affordability and Compliance are constraints
- VFM is important:
 - Upholding Public Interest
 - Decision making
 - Presentation issues
- The assessment of VFM is a balance between qualitative and quantitative factors

Risk Analysis

Risk Allocation Defines the P3Business Model

A comprehensive risk assessment and allocation profile will help guide the selection of an appropriate delivery model, ranging from traditional delivery to a full P3 concession.

Key: ○ Public Sector takes (pays) Risk
● Private Sector takes (pays) Risk

	Design	Construction	Operations	Maintenance	Financing	Ridership	Collection
Design Bid Build – Traditional	○	○	○	○	○	○	○
Design Build	●	●	○	○	○	○	○
Design Build Maintain	●	●	○	●	○	○	○
Design Build Operate Maintain	●	●	●	●	○	○	○
Design Build Finance Operate Maintain (Availability Payment)	●	●	●	●	●	○	○
Full Concession (Real User Fee)	●	●	●	●	●	●	●

Risk Transfer

Risk and Responsibility Allocation

- Who are potential bearers of risk?
 - Developers
 - Operators
 - Private investors – lenders and equity sponsors
 - Facility users and toll payers
 - Sponsor agency
 - Stakeholders
 - General public / taxpayers
- Which party is best placed to manage each risk?
 - Assess information about the likelihood of the risk (experience is key)
 - Manage and mitigate its occurrence and consequence
 - Provide most efficient pricing
- Risk allocation should be reflected in Value for Money assessment

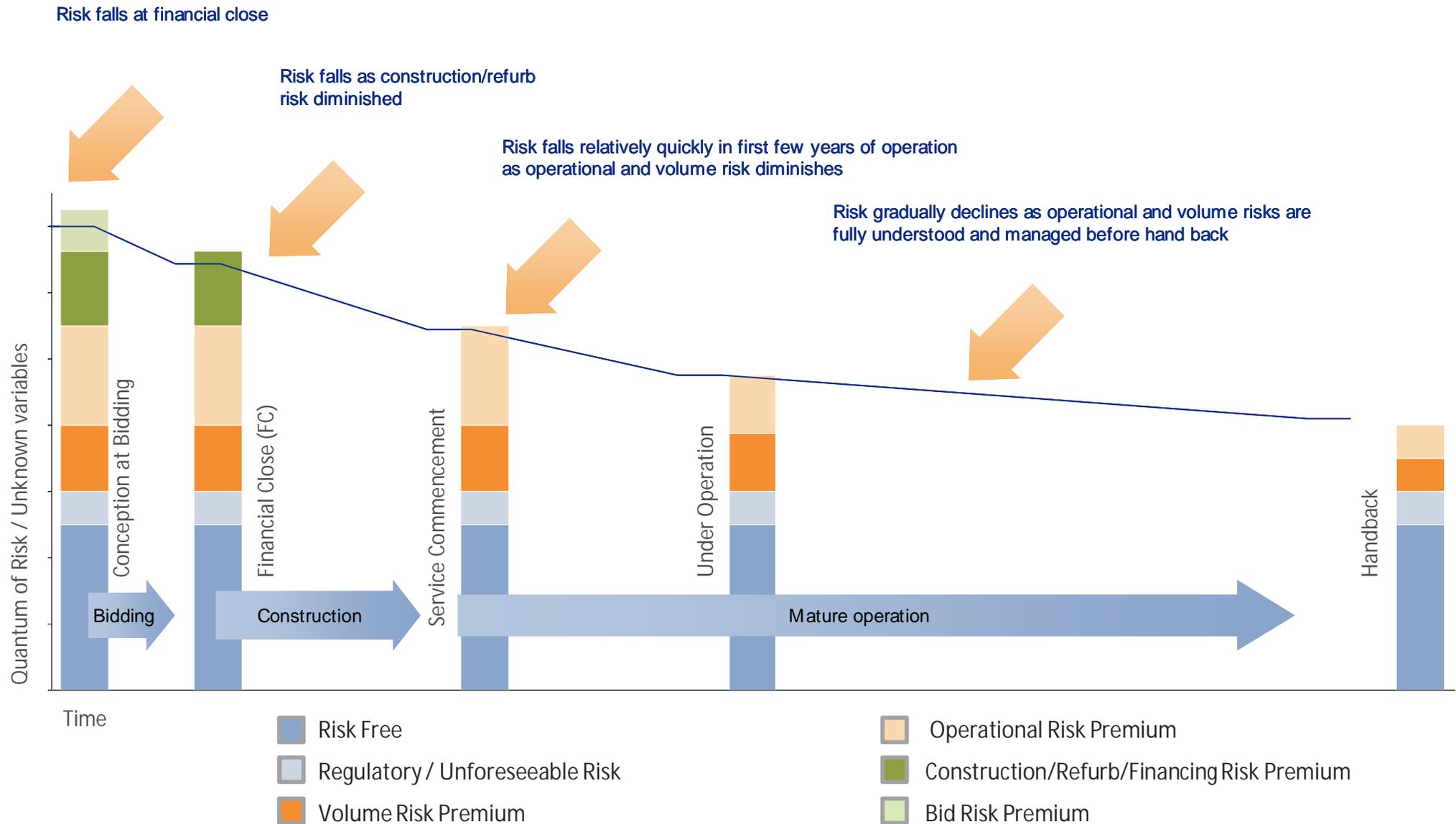
Process for Allocation

- Identify areas of risk
- Evaluate form of risk
- Consider capacity to manage
- Consider Value for Money consequences

Risk Assessment - Methodology

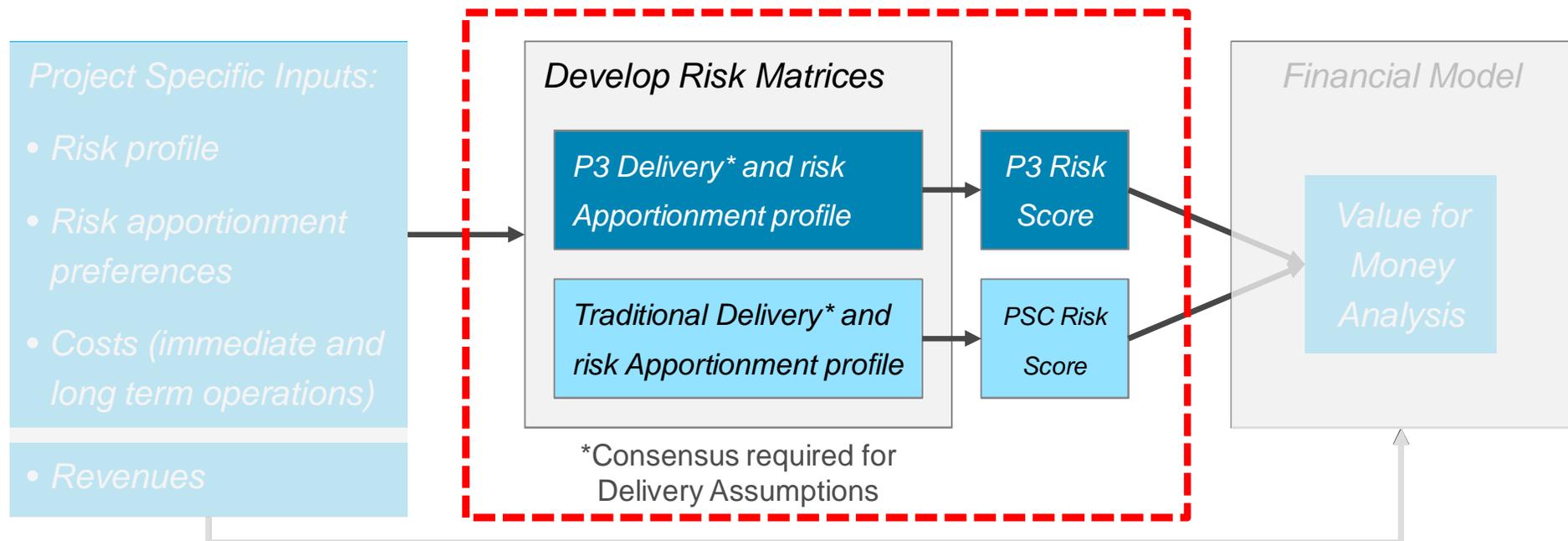
- Undertake a risk assessment workshop with a multi-disciplinary team
 - Identify specific risks
 - Quantify range of impacts
 - Assess probability or likelihood of specific risks
 - Determine mitigation strategies
- Risk Mitigation
 - Reduce the likelihood of risks and related consequences
 - Implication for project scope
- Risk monitoring
 - Use of a risk management plan, linked to the risk register
 - Updated over the project life

Typical Risk Profile of a P3 Project



Project Risk Matrices - Context

- Risk Matrices have been developed for all 5 projects, based on available information, WSDOT input (including CEVPs) and template risks
- Traditional and P3 Delivery risk scenarios are being scored by WSDOT and the Consultant team respectively, as inputs to the VFM Analysis



Project Risk Matrices - Review

- Example Risk Matrix for discussion
- Objective is for the PWG to follow the method by which assumptions are developed and input, and comment on this
- Discussion topics include:
 - Functionality of the registers and their project specific elements
 - Example dialogue of Traditional vs. P3 responses
 - Evolution of the risk matrix approach over time and into procurement

Financial Model

Screening Tool Introduction

Development of a Screening Tool for Washington

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 will be presented through upcoming material and workshops (now)
- Once the list of criteria is set, we will ascertain and define:
 - Fatal Flaws
 - Weighting of objective criteria
 - Assessment and weighting of subjective criteria
 - Potential legal / legislative hurdles

Screening Considerations

Ability for PPP to potentially add value to the project

- Part of capital plan/demonstrable need
- Technical innovation
- Affordability
- Provides value for money
- Economies of scale
- Risk transfer
- Timing benefit
- Whole life costing

Private sector ability to partner

- Current market liquidity
- Return justifies risk
- Suitable size
- Risk tolerance
- Complex construction
- Ability to attract TIFIA, PABs
- Approvals Process

Regulatory, legal, and political feasibility

- Regulatory risks, issues, or flexibility
- Need for new or change in legislation
- Environmental issues
- Political risks or issues
- Accounting and tax treatment
- Land ownership issues
- Accounting treatment

Project Screening and Prioritization Process

Lessons Learned

- Critical to have a process for the selection of transportation projects
- A programmatic approach and methodology for screening and selecting candidate projects
- A process for pro-actively defining the project pipeline rather than assuming a reactive approach based on legislative priorities and unsolicited proposals
- Key decisions, such as public funding commitments, must be made early in the project development process to inform part of the screening and prioritization criteria
- Decisions to move forward or not to move forward with projects should be taken early in the process to avoid abortive work on infeasible projects

Project Screening and Prioritization Examples

National Road Authority, Ireland

- The National Roads Program (2000-2007) was launched with a clearly identified pipeline of 9 toll road projects
- NRA periodically examines Ireland's transport needs and creates an overarching strategic plan to determine which roads are needed and where
- There is a formal screening process
- The criteria for selection include confirmation of the following:
 - Appropriate size for P3 mechanism; commercially bankable; ability to attract substantial private finance; ability to attract sufficient private sector interest to ensure good competition at bid stage and ultimately result in VFM for public sector

Infrastructure Ontario, Canada

- IO launched "ReNew Ontario" (2005 -2010) – targeting 40 P3 projects across multiple infrastructure sectors
- The Ministry of Energy and Infrastructure determines P3 eligibility according to five principles: public interest is paramount, VFM, public ownership must be preserved, accountability must be maintained
- For projects above \$50 million, IO is mandated to set project criteria, bring together public and private sector organizations, conduct a procurement process to select a private-sector consortia and ensure the public interest is upheld throughout the life of the project

Georgia Department of Transportation

- The Public Private Partnership (P3) Program was re-launched in 2009 – with a 4 project multimodal pipeline
- Rules require GDOT to develop a biennial P3 list for Transportation Board consideration
- Comprehensive project screening protocol is carried out to identify near, mid and long-term projects
- Projects may be proposed by GDOT, other state agencies, local authorities and MPOs via a Project Data Request Form. Projects sit within the Strategic Transportation Improvement Program
- Screening factors include: potential for value added by the private sector, the Department's preparedness, public funding, project maturity, market interest, project scope, and financial feasibility

Texas Department of Transportation

- The Comprehensive Development Agreement (CDA) Program was launched in 2002
- There is a formal screening process. At the end of the 2007 legislative session, 87 potential projects were identified
- Screening criteria are based on risks (e.g. system interface, design and construction, O&M requirements, public acceptability, approvals and scheduling, and demand); financial feasibility; and estimated time to procurement

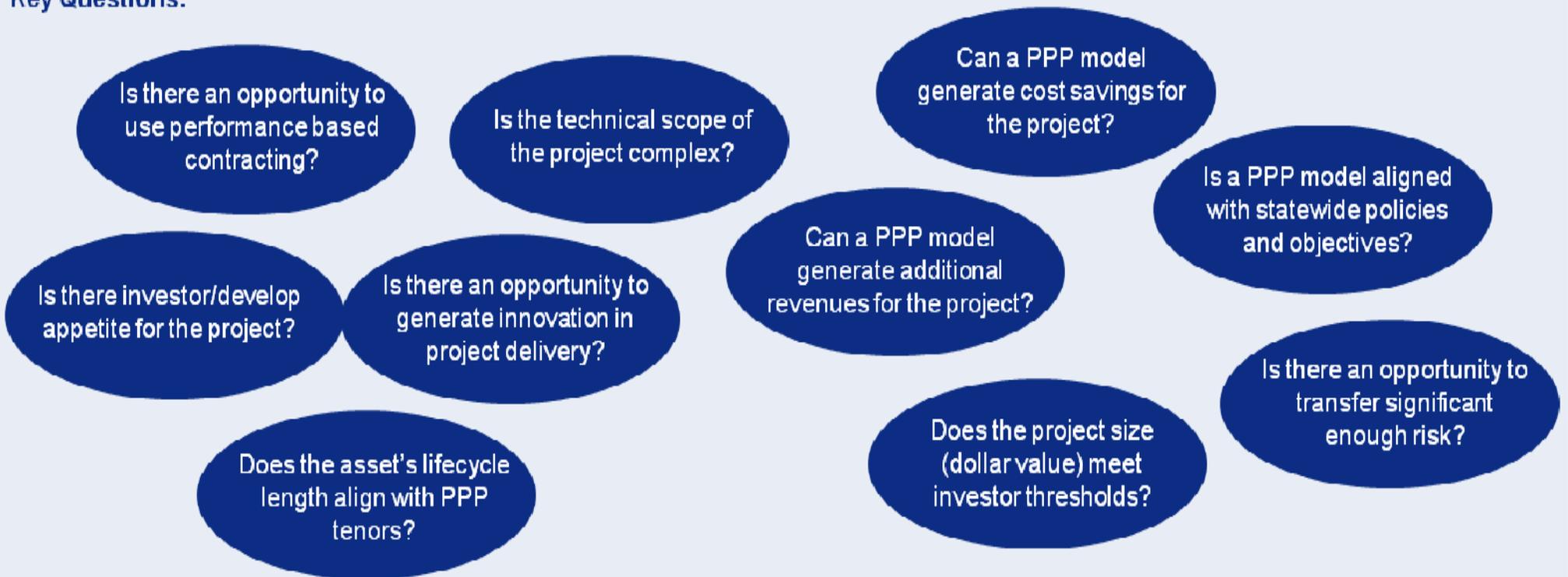
P3 Project Screening Frameworks – Detailed Case Study

State of Michigan, Office for PPP

Step 1: Pre-screening Evaluation

This step involves a preliminary evaluation of the project by asking the following types of questions. During this step, all questions need not be answered in the affirmative. Rather, this step is aimed at identifying any “threshold” issues that may prevent the project from being considered for PPP delivery.

Key Questions:

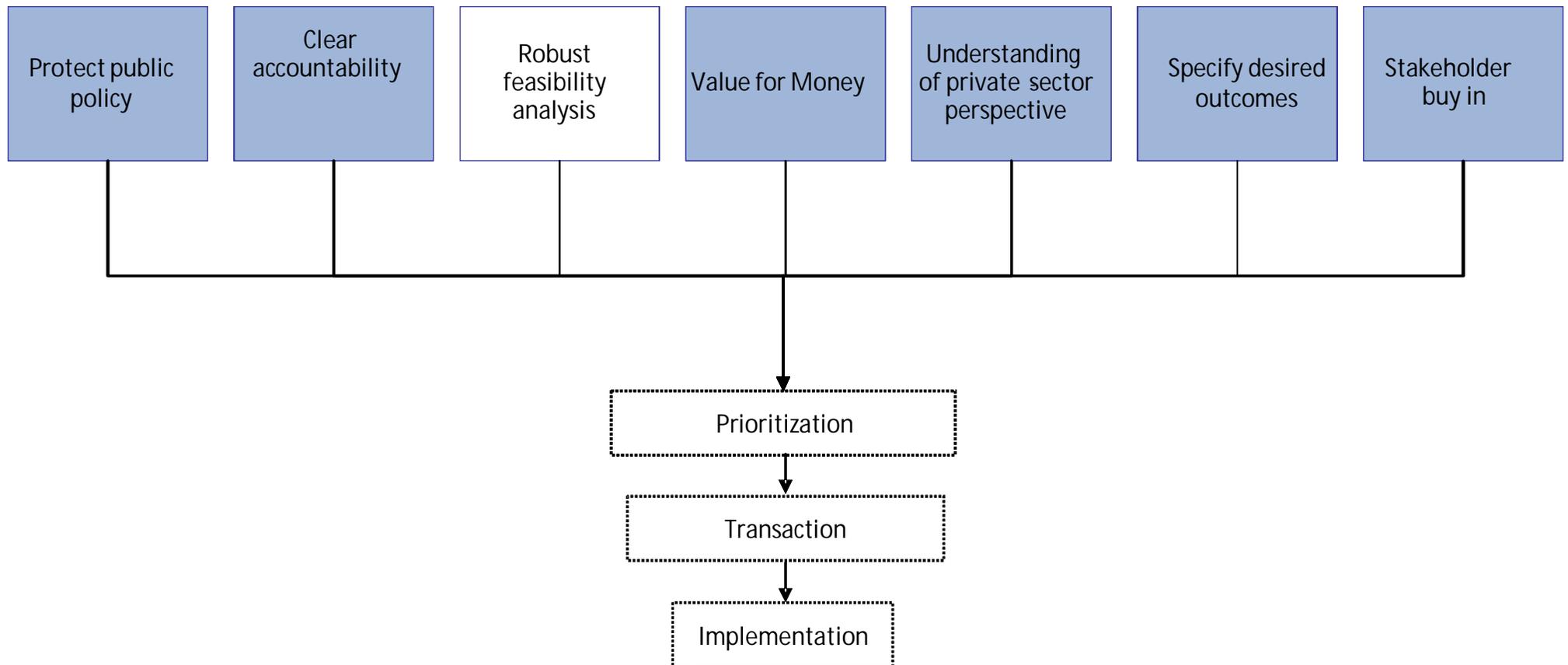


Outcome: Should the project proceed to Step 2 of the project screening?

P3 Project Screening Frameworks – Detailed Case Study

State of Michigan, Office for PPP

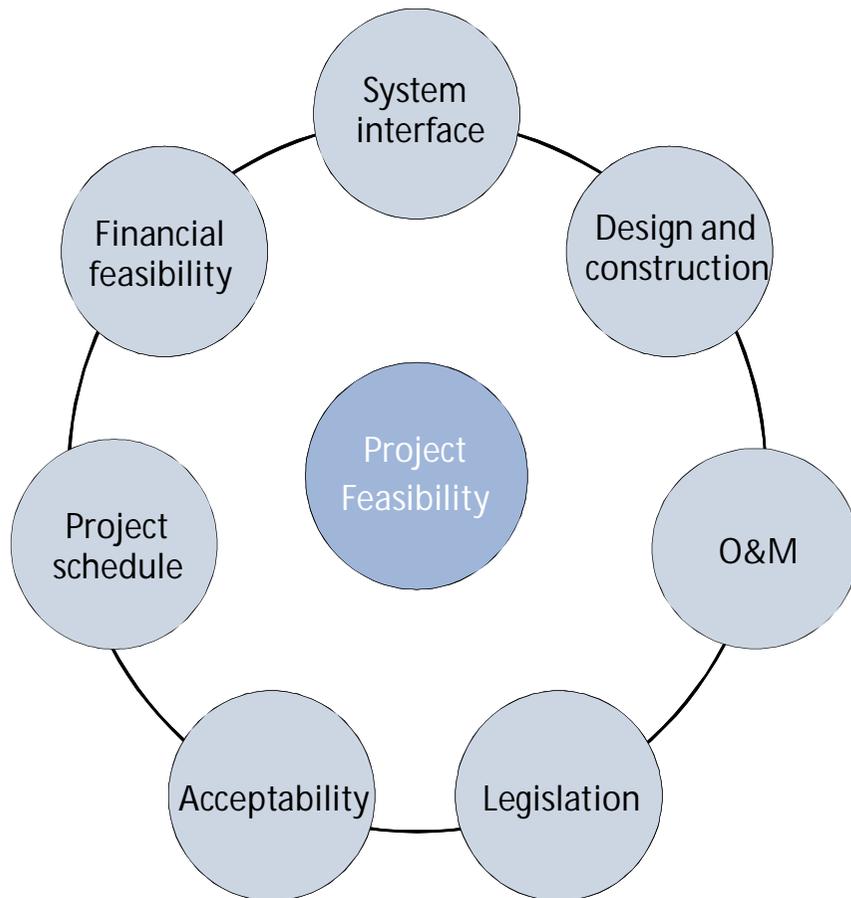
The State of Michigan's project screening framework is one step in a comprehensive implementation plan aimed at meeting a variety of objectives, including:



P3 Project Screening Frameworks – Detailed Case Study

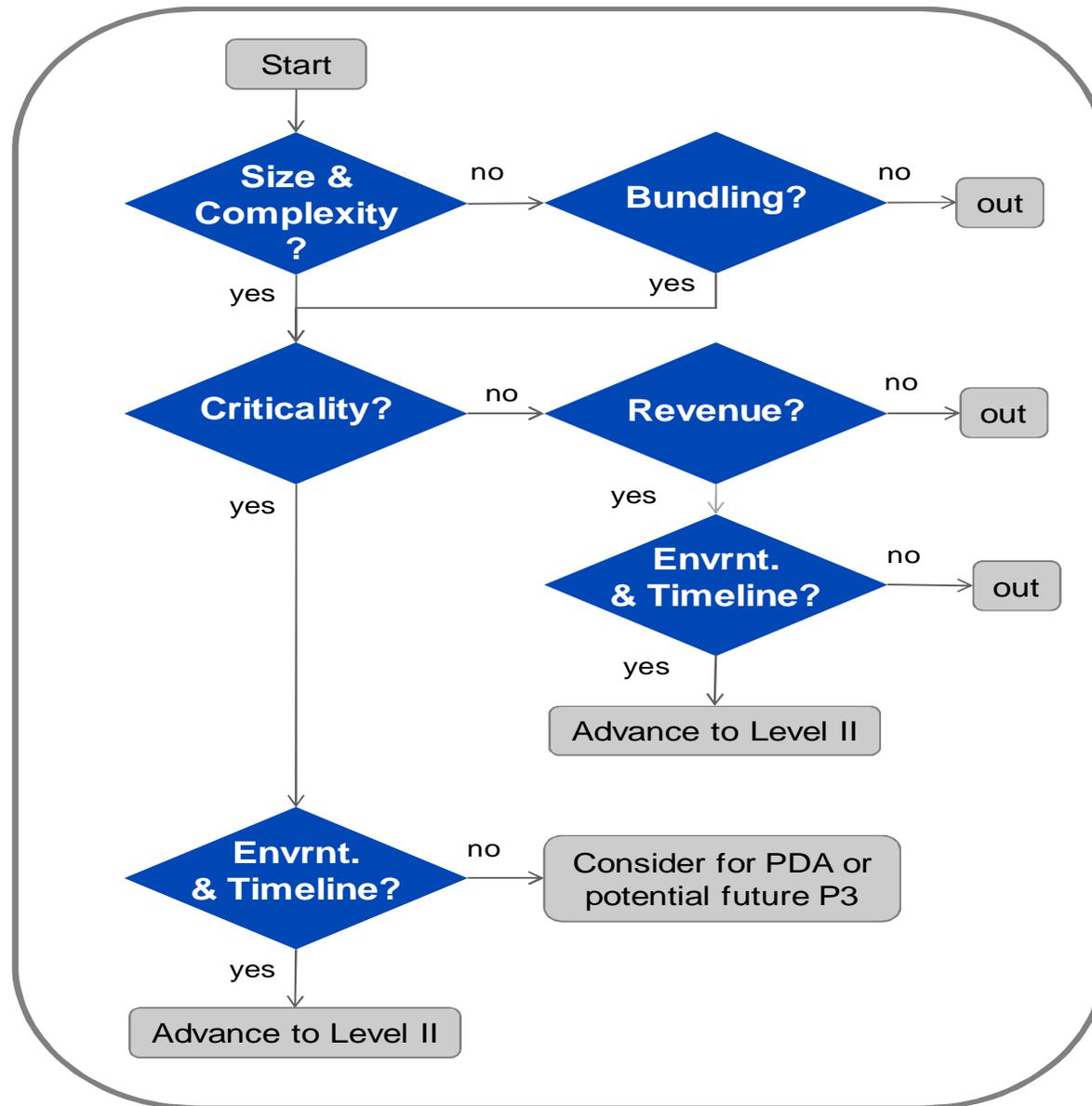
State of Michigan, Office for PPP

If a project process to Step 2 of the project screening evaluation, then a ‘deeper dive’ is performed in order to assess the feasibility of the project if delivered under a P3 model.



System interface	<ul style="list-style-type: none"> Considers how well the planned improvements integrate with existing / other planned infrastructure (interoperability)
Design and construction	<ul style="list-style-type: none"> Addresses significant design and construction constraints including land acquisitions, right-of-way, utilities, geotechnical, hazardous materials and constructability within the context of project cost
O&M	<ul style="list-style-type: none"> Addresses O&M issues such as fence-to-fence responsibility, existing O&M contracts, interoperability of tolling/revenue collection system, regulation and enforcement
Legislation	<ul style="list-style-type: none"> Considers existing and required legislation for tolling and PPPs
Acceptability	<ul style="list-style-type: none"> Addresses the acceptability of the project itself as well as the delivery method, whether it be by way of traditional financing or PPP, as well as the acceptability of tolling/3rd party revenue from both the public and political perspective if appropriate
Approvals / project schedule	<ul style="list-style-type: none"> Considers the complexities of the approvals process including environmental approvals, relevant authorization and Federal programs. Also addresses the importance of the project schedule to a PPP environment
Financial feasibility	<ul style="list-style-type: none"> Considers the project economics in the context of capital costs, O&M costs, rehabilitation costs, revenue potential, expansions, public funding and private financing in a financial feasibility model

Minnesota DOT's Screening Process Flow Chart



FHWA's Suggested PPP Project Selection Criteria

For the Public Sector

- Enabling legislation in place
- Urgent transportation need
- Political and institutional support
- Lack of internal resources, staff/financial, to deliver project in a timely manner
- Leverage public resources and transfer cost/schedule risks to the private sector
- Expedite schedule through access to capital markets and innovative project delivery
- Transfer cost, schedule, and quality risks to capable private partner
- Increased cost-effectiveness through best practices and access to new technology
- Competitive market environment based on firms with proven experience
- Capability to manage transparent procurement/contract administration processes
- Public accountability through monitoring of contract performance standards

For the Private Sector

- Enabling legislation in place
- Pressing transportation need
- Reasonable development timeframe
- Financially feasible (adequate funds to satisfy required rate of return on investment)
- Manageable risks consistent with responsibilities and rewards
- Supportive political climate
- Defined procurement path providing equal opportunity to all interested parties
- Comprehensive market evaluation to assure reasonable traffic & revenue risks
- Public sector sponsorship of environmental clearance and permitting
- Commitment by public sector acquisition of necessary rights-of-way
- Partnership philosophy demonstrated by project sponsor in flexible contract terms
- Opportunity to apply innovative approaches to reduce project costs and risks

Screening Tool Detailed Review

Review Screening Tool

- Review Blank Screening Tool (functionality, layout)
- Discuss scoring mechanisms (and seek opinion on calibration)
- Review Consultant Team Draft Results
 - Walk through one project (405 HOT lanes)
 - Overall results
 - Failed project (Monroe Bypass) – Why, and what needs to be addressed for P3
- Discuss Study, and future scoring protocols
 - What team, how big, representation, training
 - Tailor next steps around PWG preferences and Table-Top Exercise