Washington JTC
P3 Educational Workshop

AECOM
KPMG
NOSSAMAN LLP

Discussion Materials
August 3rd

Agenda Day 2

Time	Item	Presenter
10:00 AM	Value For Money (VfM) Analysis	Liam Kelly
10:30 AM	Overview of Selected Projects	Rick Smith, WSDOT
	•I-405/SR 167 Corridor Express Toll Lanes •I-5/SR 509 Corridor Completion and Freight Improvement Project •SR 167-Tacoma to Edgewood New Freeway Construction •I-5 Columbia River Crossing •Monroe bypass	
11:15 AM	P3 Case Studies	Consultant Team
11:45 AM	P3: A Programmatic Approach	Tim Wilschetz/Sam Barend
12:15 PM	Traditional vs P3 Procurement	Simon Shekleton/Liam Kelly
12:45 PM	Working Lunch	
1:15 PM	Public Perspective	Sam Barend/Discussion
1:45 PM	Investor Perspective	Simon Shekleton
2:15 PM	Legal & Legislative Issues	Fred Kessler
2:45 PM	Questions & Answers	
3:00 PM	Close	

Overview of Selected Projects

Rick Smith
Capital Program Development and Management

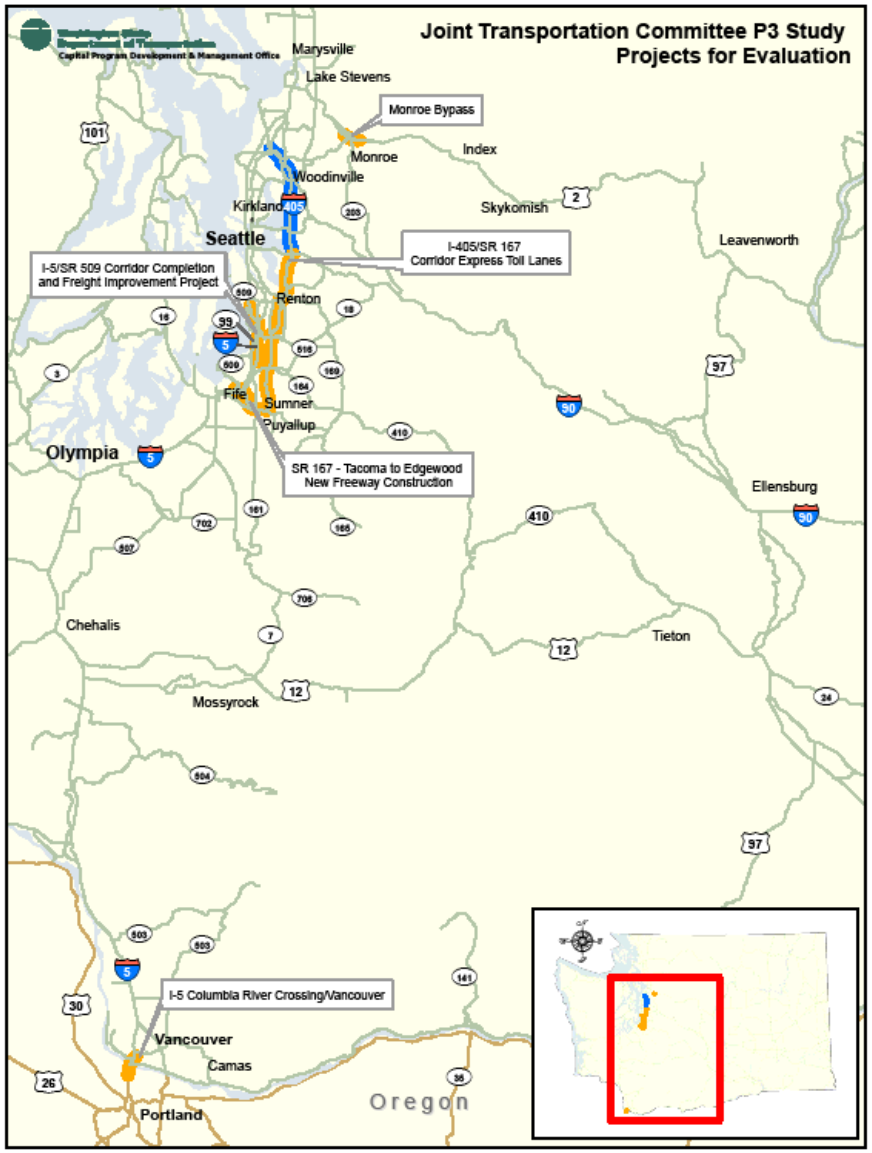
Paula Hammond
Secretary of Transportation

David Dye
Deputy Secretary

Steve Reinmuth
Chief of Staff

Projects for Evaluation

- US-2 Monroe Bypass
- I-405/SR 167 Express Toll Lanes
- SR 509 Extension
- SR 167 Tacoma to Edgewood
- Columbia River Crossing

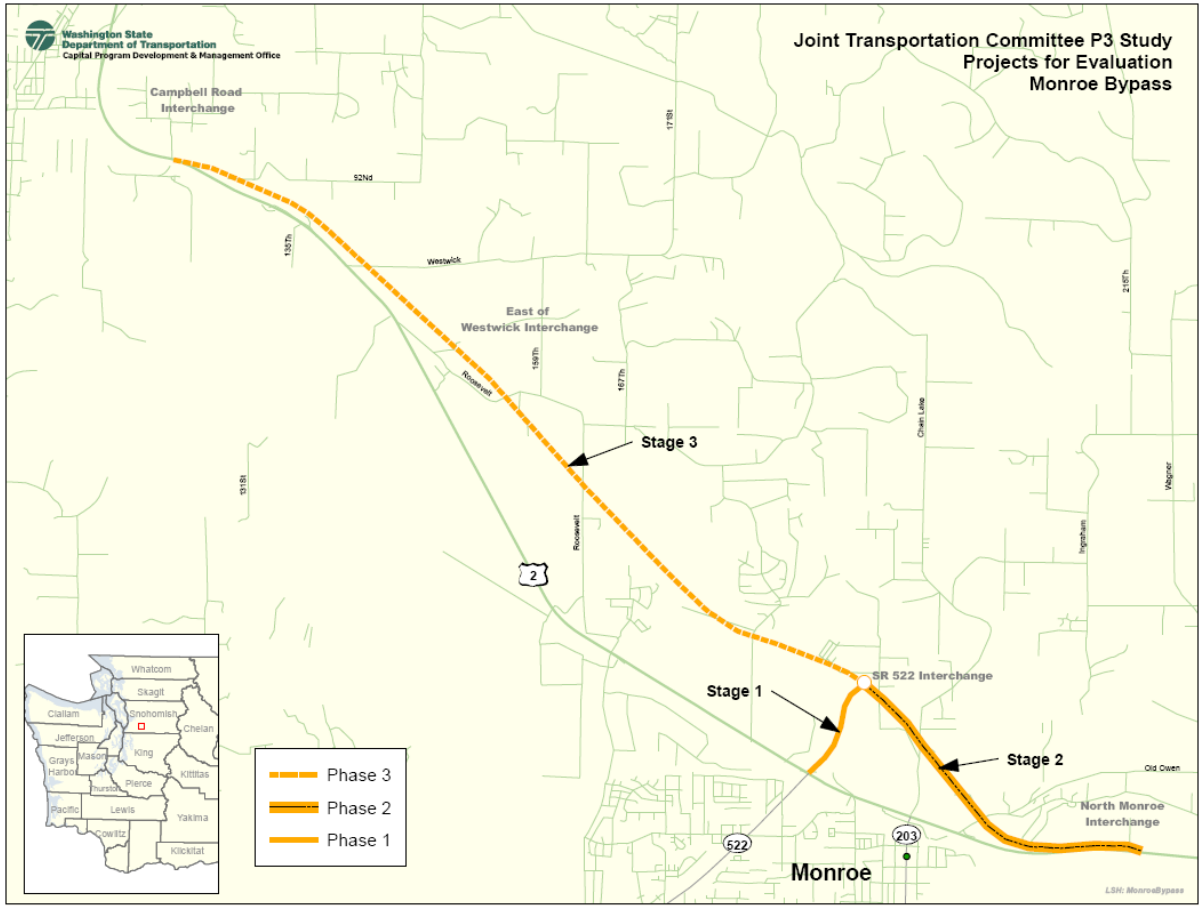


Projects for Evaluation

- **Projects named for this study in ESHB 1175, Section 204**
- **Projects are at various stages of development**
- **Each project has different characteristics**
- **Some projects may be more suitable for P3 than others**
- **Basic project information – much more available**
- **Limited information on tolling**

US-2 Monroe Bypass

- One of only 2 East-West all-weather highways in Washington
- High rates of growth in both population and thru traffic



US-2 Monroe Bypass

- US-2 west of Monroe currently 2 lanes, no median barrier
- Primary weekday commuter route
- Weekend tourism route
- Major freight route
- Currently stop and go in Monroe
- Safety concerns – collisions exceed statewide average

US-2 Monroe Bypass

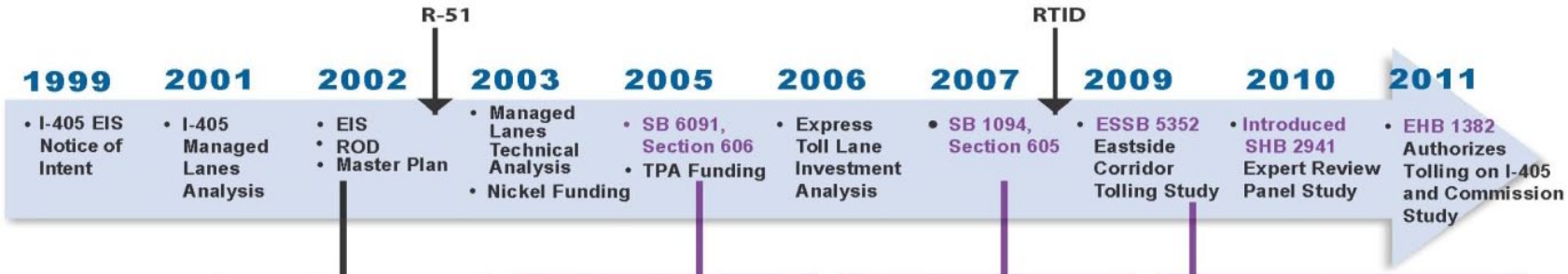
- **Monroe – 272% growth 1990 – 2005**
- **Thru traffic 85% growth 1990 – 2006**
- **2010 Monroe Average Daily Traffic (ADT) 37,000**
- **Forecast 2030 ADT 50,000 – Stop and Go entire area**
- **5 ½ miles new alignment, planned as limited access**
- **Substantial community and stakeholder support**

US-2 Monroe Bypass

- **Design 5% complete on stage 1, 0% on stages 2 & 3**
- **Right of Way acquisition about 90% complete**
- **Construction not funded**
- **1996 estimate inflated to 2011 = $326 million**
- **No revenue or tolling studies completed**
- **Project websites:**

  http://www.wsdot.wa.gov/Projects/US2/RDP/;
  http://www.wsdot.wa.gov/Projects/US2/RDP/monroebypass.htm

I-405/SR 167 Express Toll Lanes



Executive committee recommended further consideration of managed lanes.

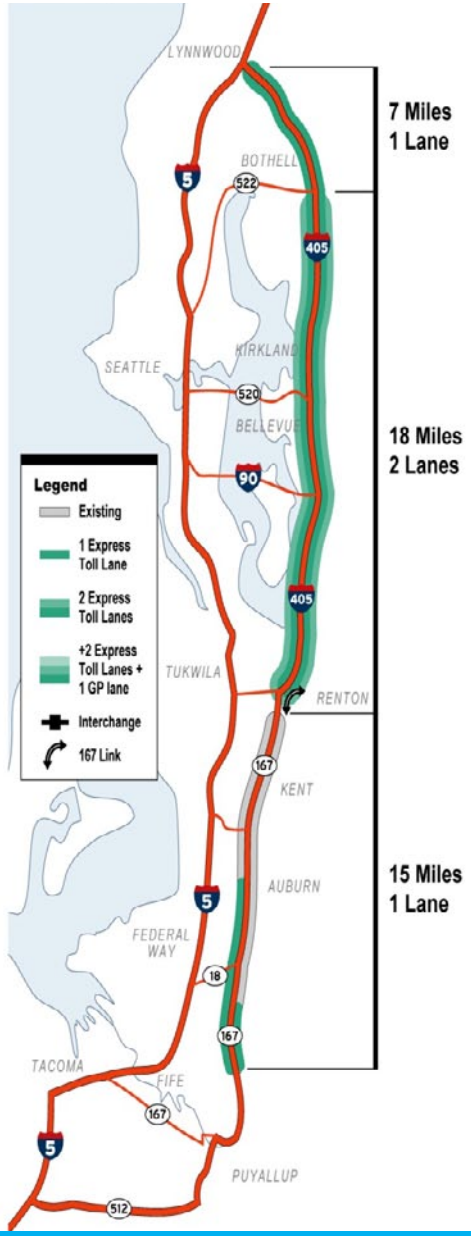
The Legislature intends that tolls be charged to offset costs of widening I-405, including a managed lane concept

The Legislature intends that tolls be charged to offset costs of a managed lanes concept included in the widening of I-405

By January 2010, the department must prepare a traffic and revenue study for Interstate 405 in King county and Snohomish county that includes funding for improvements and high occupancy toll lanes, as defined in RCW 47.56.401, for traffic management. The department must develop a plan to operate up to two high occupancy toll lanes in each direction on Interstate 405.

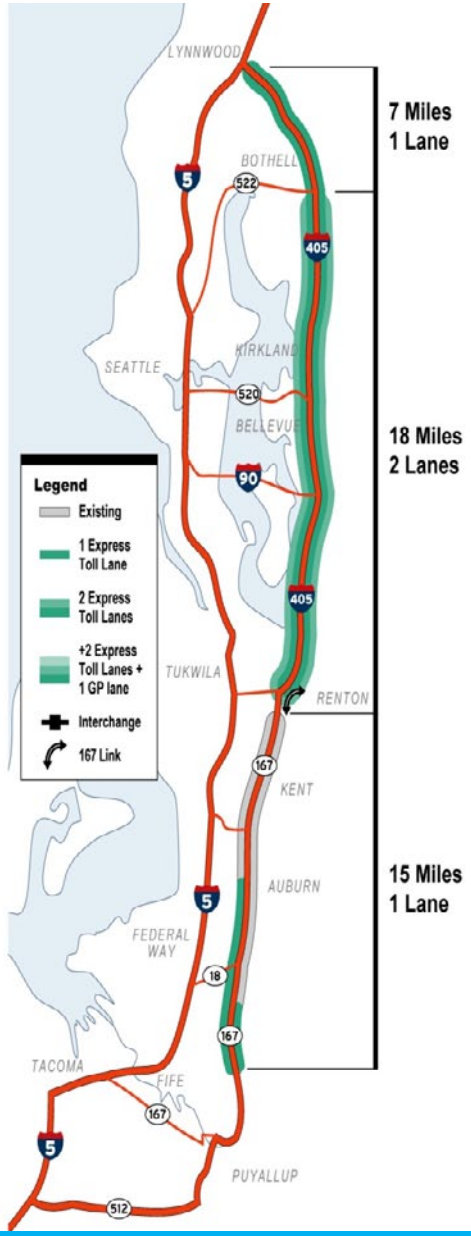
I-405/SR 167 Express Toll Lanes

- I-405 currently 2 general purpose lanes, 1 HOV lane (2+)
- Extensive capacity improvements made during last several years
- SR 167 currently 2 general purpose lanes, one HOV lane (2+), or HOT lane on one part
- EIS complete, some updates might be necessary for some stages



I-405/SR 167 Express Toll Lanes

- 5 options studied
- 40 mile corridor recommended by Executive Advisory Group
- One tolled lane each direction for 7 miles on north end, 15 miles on south end
- Two tolled lanes each direction from Renton north to SR 522 (18 miles)

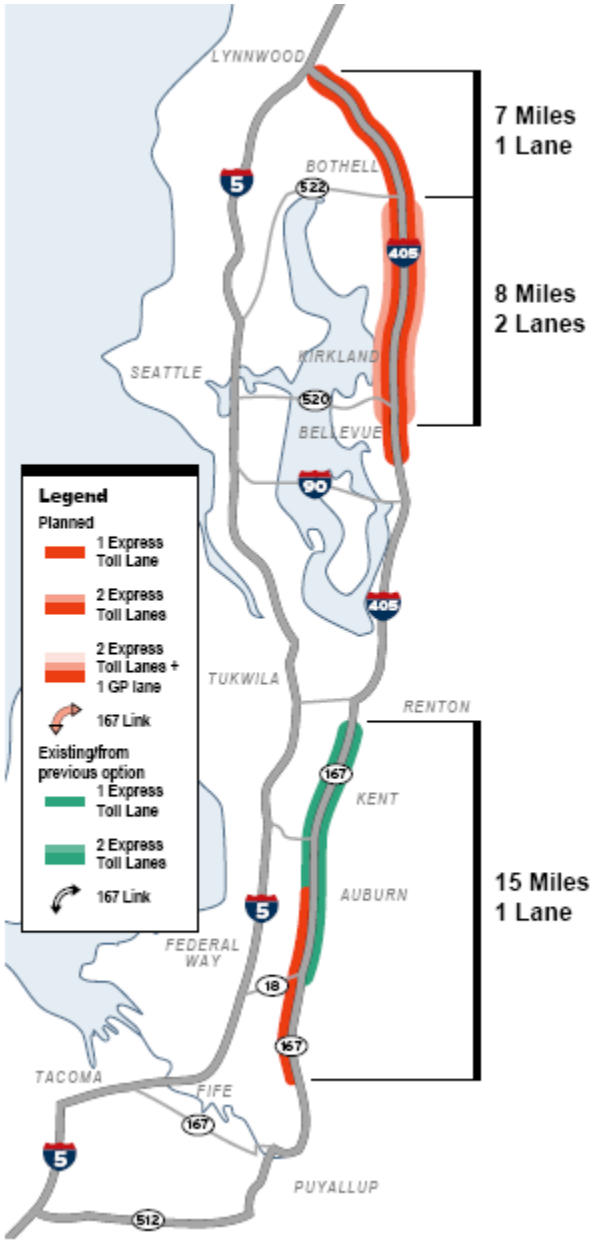


I-405/SR 167 Express Toll Lanes

- **Eastside Corridor estimated at 1.1 million trips per day now, 1.5 million by 2030**
- **Tolling study conducted, shows better performance with tolling than without (more people and cars)**
- **HOV 3+ would use tolled lanes free**
- **In addition to tolled lanes, there would be 2 general purpose, non-tolled lanes (3 lanes Bellevue to SR 522)**
- **Website:** http://www.wsdot.wa.gov/tolling/eastsidecorridor

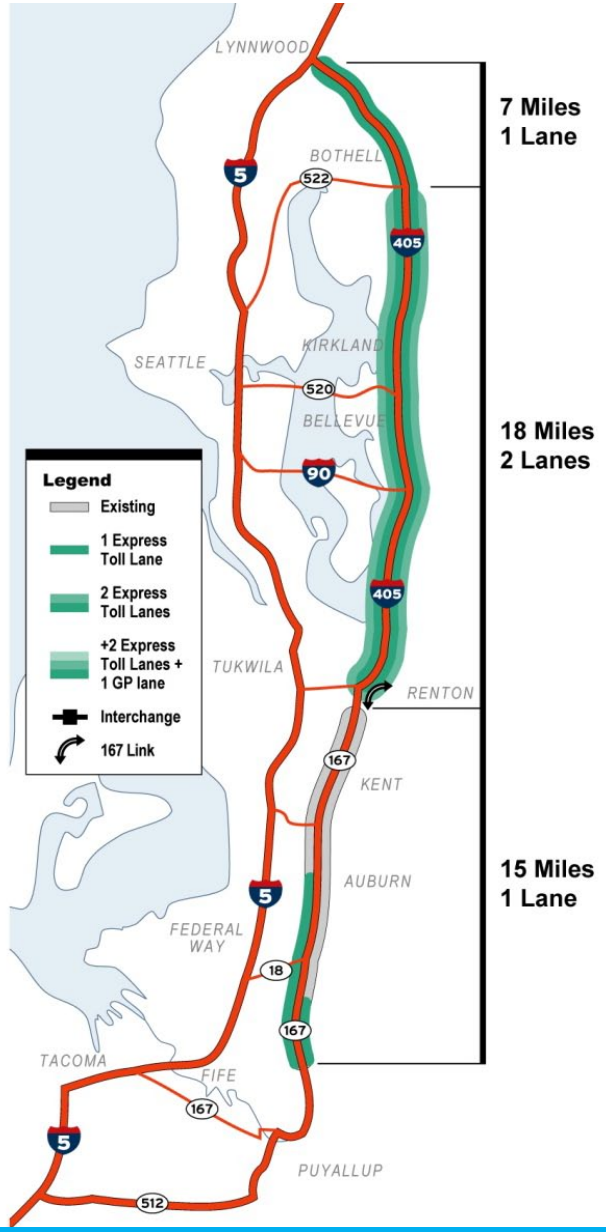
I-405/SR 167 Express Toll Lanes - Funded

- SR 167 HOT Lanes pilot project complete, in operation
- SR 520 to I-5: $383 million funded, RFP issued
- SR167 Southbound Managed Lane: $82 million funded, construction in 2013



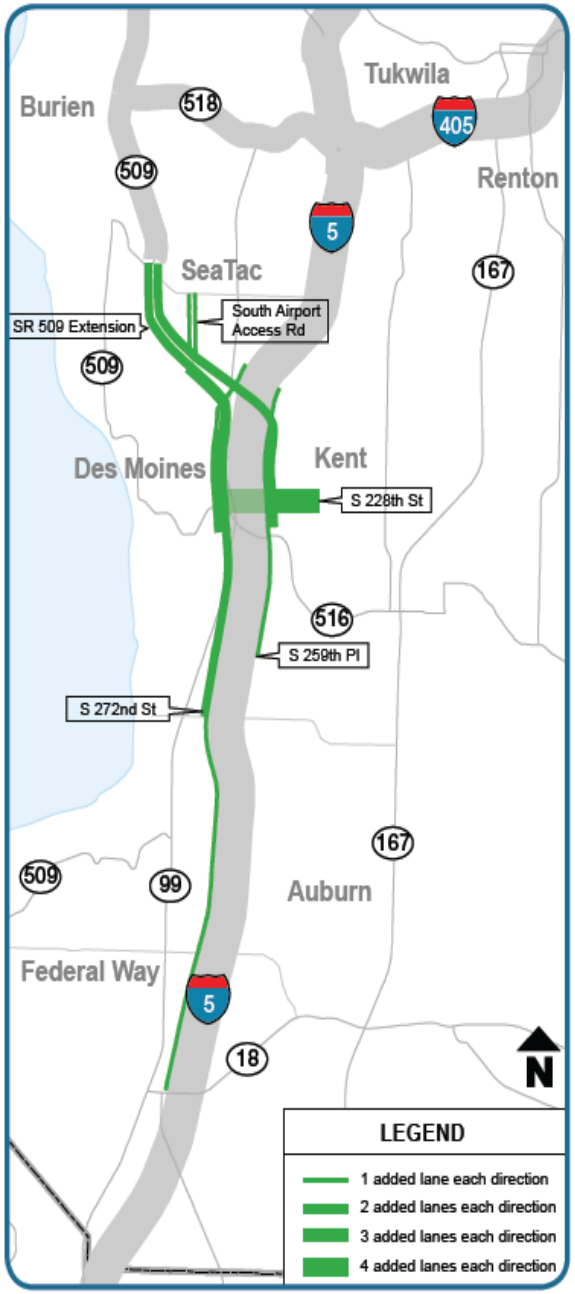
I-405/SR 167 Express Toll Lanes – Not Funded

- SR 167 Direct Connection - $490 million
- SR 169 to SR 520 - $960 million
- SR 167 Northbound HOT lane extension - $36 million
- Total $1.49 billion still needed
- Tolling could provide $965 million to $1.5 billion



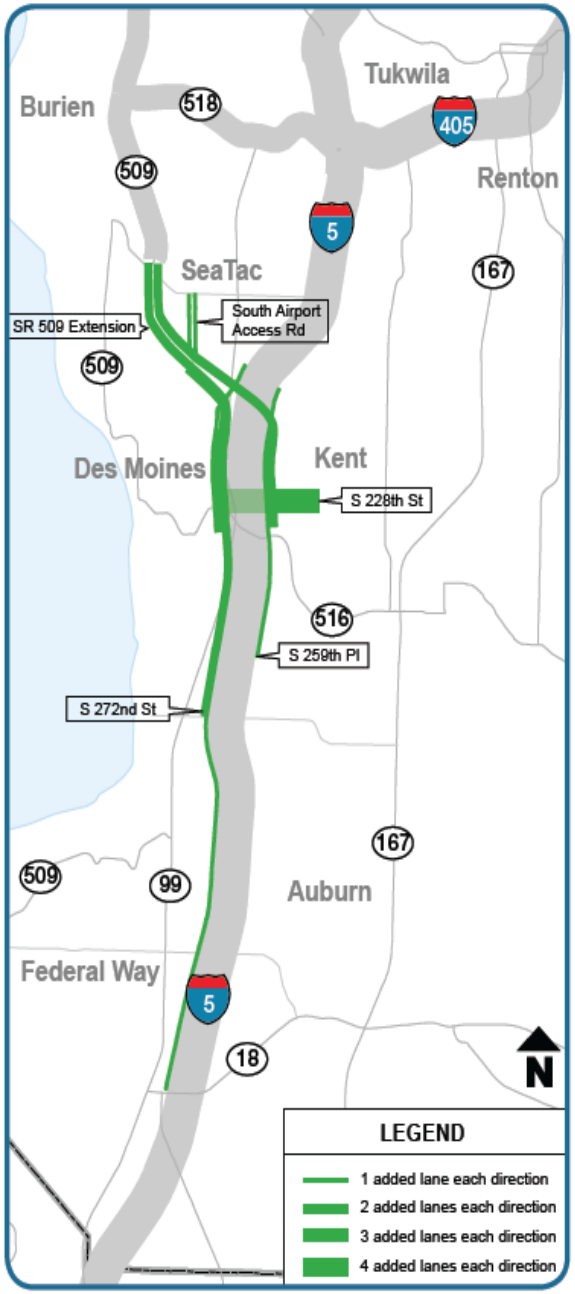
SR 509 Extension

- **Existing SR 509 is limited access freeway from south Seattle to south end of SeaTac Airport**
- **Connects to local streets at each end**
- **Project relieves traffic congestion, improves safety**
- **Addresses freight movement into and out of SeaTac Airport, Kent Valley**
- **Website:** http://www.wsdot.wa.gov/projects/i5/sr509freightcongestionrelief



SR 509 Extension

- Proposed project is a limited access freeway from south Seattle to I-5 in Kent/Des Moines area
- Various options would add lanes, interchanges along I-5
- EIS complete 2003
- Design 30% complete
- Right of Way 40% complete
- $86 million spent, no further funding available



SR 509 Extension Toll Feasibility Study

- **2009 Legislature directed a tolling feasibility study, completed September 2010**
- **Potential for variable tolling to generate revenues for needed transportation facilities within the corridor.**
- **Maximizing the efficient operation of the corridor**
- **Economic considerations for future system investments**

SR 509 Extension Toll Feasibility Study Assumptions

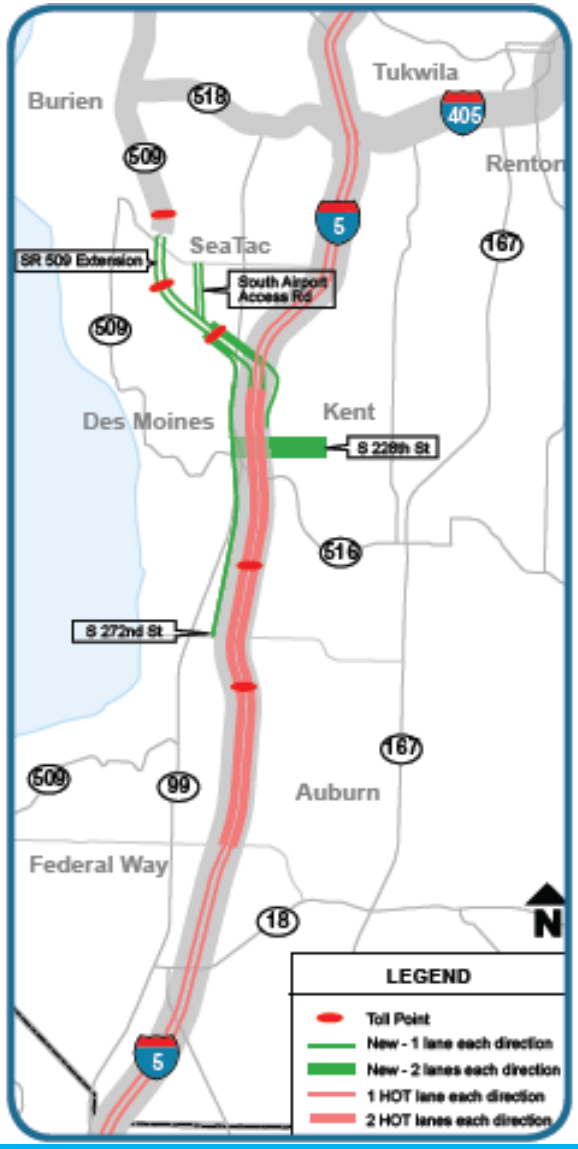
- Corridor construction starts in 2016, complete in 2020
- Toll collection starts in 2020 and continues through 2050
- All vehicles except transit pay a toll
- Toll rates are fixed by time of day based on the level of congestion
- Trucks pay higher tolls based on the number of axles

SR 509 Extension Toll Feasibility Study

- 6 different options studied
- Options vary what is built, tolling concepts, mix of all tolled and tolled + HOT lanes on I-5
- No option recommended, but interest from Stakeholder Committee members focused on option 3a
  - Builds desired connections to Port of Seattle, SeaTac, Des Moines, and Kent, and an apparent toll funding contribution of 70% - 93%

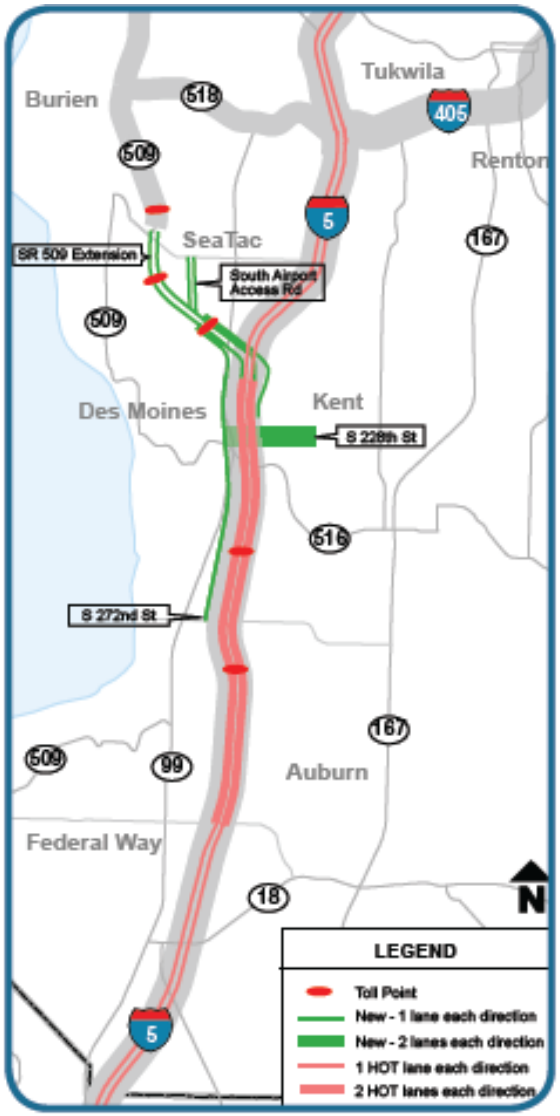
SR 509 Extension Toll Feasibility Study- Option 3a

- One lane each direction S. 188th St. to S. 24th Avenue
- Two lanes each direction S. 24th Avenue to I-5
- Merges with planned I-5 HOT lanes, uses left shoulders on I-5 for 2nd HOT lanes during peak times
- Includes S. 228th St. connection into and out of Kent Valley



SR 509 Extension Toll Feasibility Study

- **Funded and invested to date - $86 million**
- **Funding need range - from $580 million to $930 million**
- **Tolling could provide $250 to $605 million**
- **With tolling, remaining need is $120 million to $675 million**

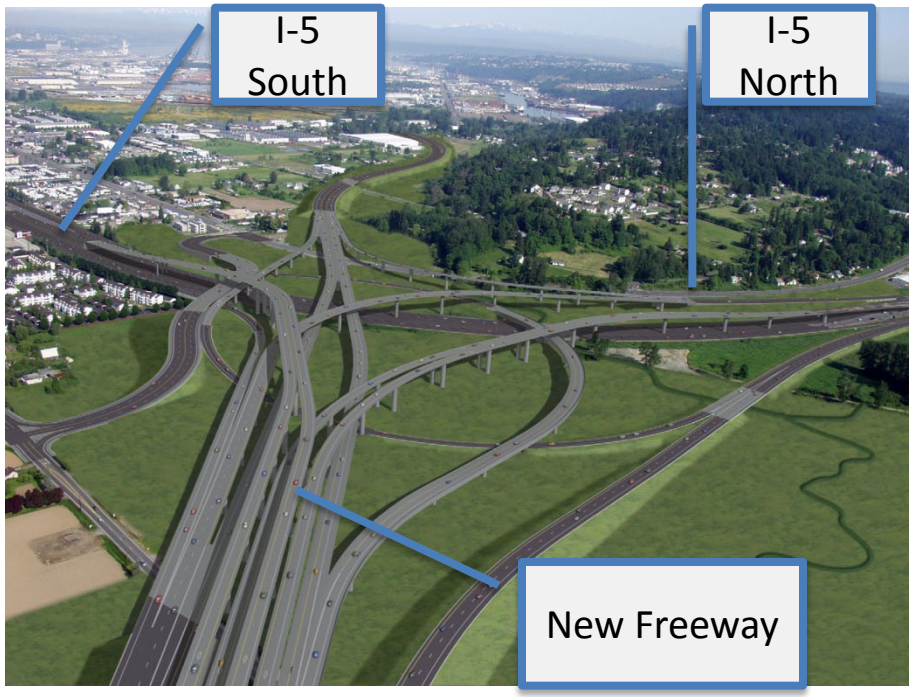


SR 167 Tacoma to Edgewood

- New Freeway – 6 miles
- Planning began over 40 years ago
- Preferred corridor identified in 1999
- Final EIS complete 2006
- 3 lanes east of I-5, 2 lanes west of I-5

SR 167 Tacoma to Edgewood Project Benefits

- Relieve congestion on local roads and other highways
- Move freight faster, more safely and more economically
- Improve regional mobility
- Enhance surface water quality and improve stream habitat



SR 167 Tacoma to Edgewood Toll Feasibility Study

- **2009 Legislature directed a tolling feasibility study, completed September 2010**
- **Potential for variable tolling to generate revenues for needed transportation facilities within the corridor.**
- **Maximizing the efficient operation of the corridor**
- **Economic considerations for future system investments**
- **Website:** http://www.wsdot.wa.gov/projects/sr167/tacomatoedgewood/

SR 167 Tacoma to Edgewood Toll Feasibility Study

- 6 different options studied:
- Options vary what is built, tolling concepts, mix of tolling only SR 167 or 167 + 509 + I-5 HOT lanes
- No single option recommended
- Funding need range - from $900 million to $1.9 billion
- Tolling could provide $265 to $545 million
- With tolling, remaining need is $537 million to $1.6 billion

Columbia River Crossing

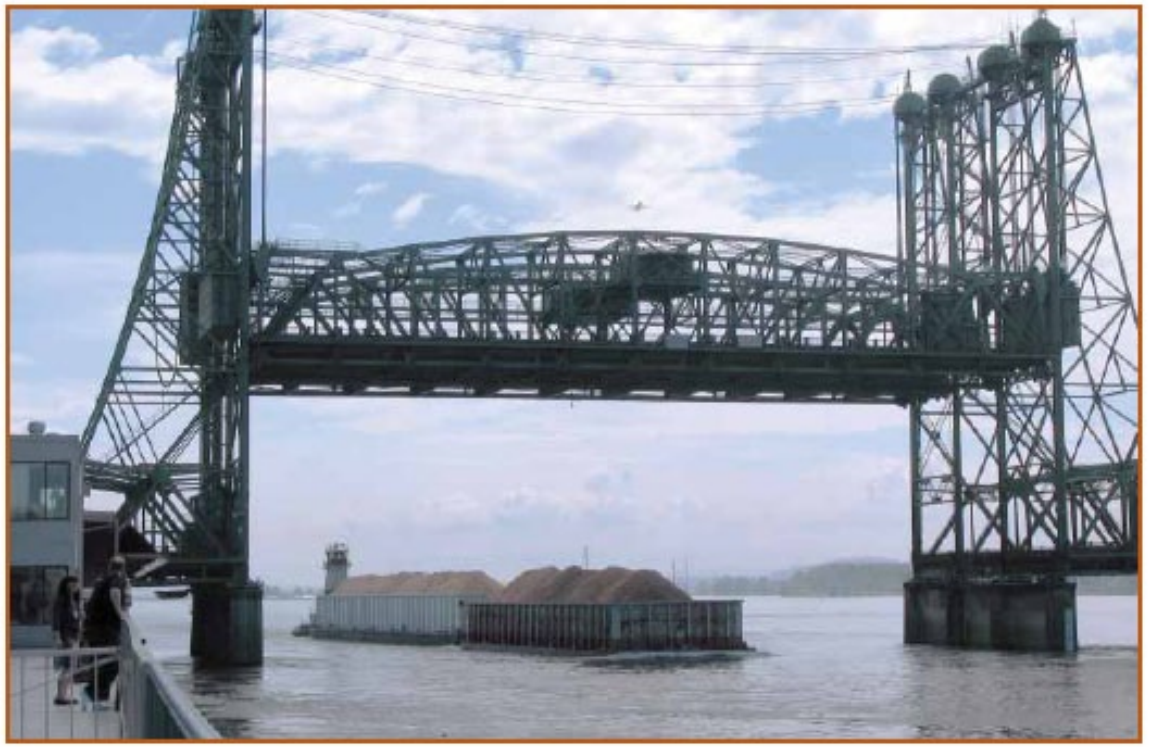
- Project will replace seismically vulnerable bridges built in 1917 and 1958
- Eliminate bridge lifts for river traffic – no more “Stop lights” on I-5
- Add light rail between Portland and Vancouver
- Planned as toll facility

Columbia River Crossing

- One of two crossings in Portland-Vancouver area
- I-205 bridge built in 1983
- I-205 bridge ADT is 138,000
- I-5 bridge ADT is 123,000

Columbia River Crossing

- **Bridge lifts average once per day, 20 minutes maximum**
- **All stop**

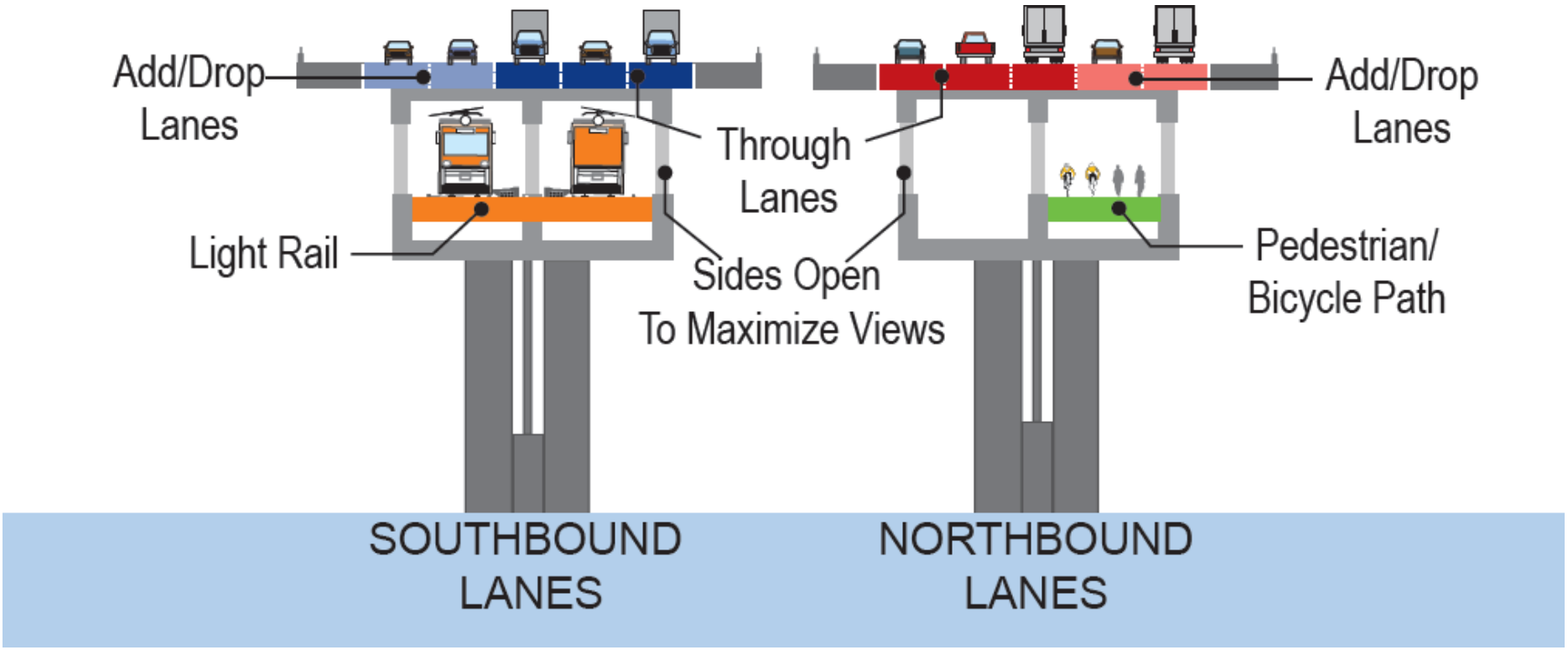


Columbia River Crossing

- Bridge Review Panel convened in 2010
- Several bridge types considered
- Evaluated cost, goals, environment, public concern

- Based on report, Oregon and Washington Governors recommended Composite Deck Truss Bridge

Columbia River Crossing



Columbia River Crossing

A deck truss bridge type selection minimizes impacts to:

- **Construction schedule and risk**
- **Cultural and historic resources**
- **Marine traffic patterns**
- **Airspace of two airports**

Columbia River Crossing

- **Draft EIS issued 2008**
- **Record of Decision (ROD) expected 2011**
- **Two states, two Federal Highways divisions, Federal Transit Administration, nine American Indian tribes**
- **Substantial public input**
- **Right of Way acquisition begins 2012**

Columbia River Crossing

- **Current cost estimate for bridge with light rail, interchange and pedestrian/bicycle improvements on five miles of I-5:**

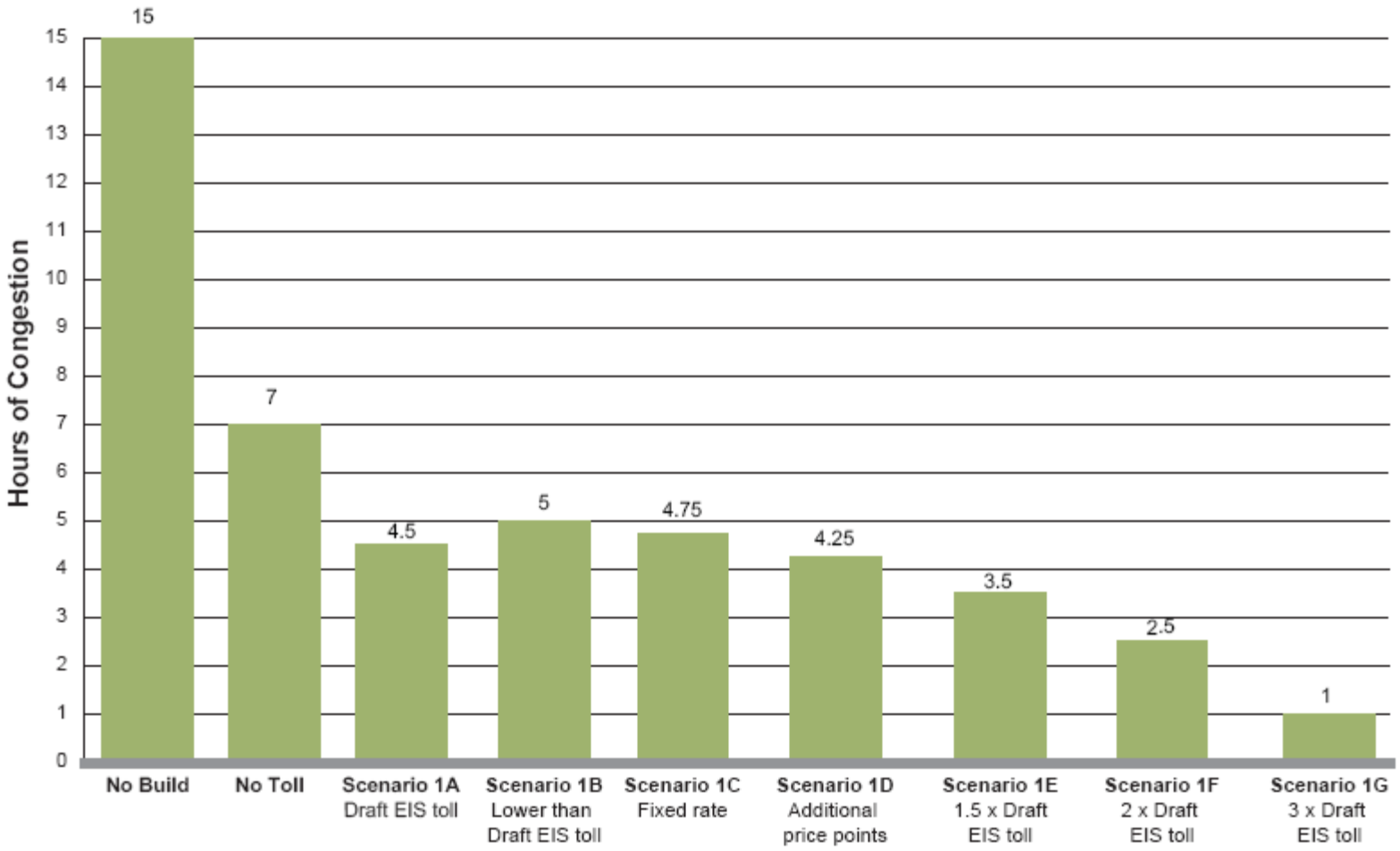
  $3.2 to $3.6 billion

- **Tolling Study conducted 2010**
- **Ten tolling scenarios evaluated**
- **Tolling could provide between $1billion to $3.36 billion, depending on scenario**
- **Project Website:** http://www.columbiarivercrossing.org/Default.aspx

Toll Scenarios at a Glance

	Scenarios Analyzed	Tolls Collected	Toll Schedule Type	Tolling Start Date
Tolling I-5 Only	**Scenario 1A** *DEIS Toll Rate*	Each Way	Variable Toll Schedule	Mid 2018 (FY 2019)
	Scenario 1B *Lower than DEIS Toll Rate*			
	Scenario 1C *Flat Toll Rate*		Fixed Toll Schedule	
	Scenario 1D *Additional Price Points*		Variable Toll Schedule	
	Scenario 1E *1.5x DEIS Toll Rate*			
	Scenario 1F *2x DEIS Toll Rate*			
	Scenario 1G *3x DEIS Toll Rate*			
	Pre-Completion Tolling[1] *DEIS Toll Rate*	Each Way	Variable Toll Schedule	Mid 2013 (FY 2014)
Tolling I-5 and I-205	**Scenario 2A** *DEIS Toll Rate*	Southbound Only[2]	Variable Toll Schedule	Mid 2018 (FY 2019)
	Scenario 2B *Lower than DEIS Toll Rate*			
	Scenario 2C *Lower I-205 Toll*			

Hours of Congestion for I-5 Only Tolling Scenarios



More Information

- **Monroe bypass http://www.wsdot.wa.gov/Projects/US2/RDP/;**
  http://www.wsdot.wa.gov/Projects/US2/RDP/monroebypass.htm
- **I-405/SR 167 corridor express toll lanes**
  http://www.wsdot.wa.gov/tolling/eastsidecorridor
- **I-5/SR 509 corridor completion and freight Improvement project**
  http://www.wsdot.wa.gov/projects/i5/sr509freightcongestionrelief/
- **SR 167-Tacoma to Edgewood**
  http://www.wsdot.wa.gov/projects/sr167/tacomatoedgewood/
- **I-5 Columbia River Crossing**
  http://www.columbiarivercrossing.org/

P3 Case Studies

Recently Closed Transactions

Project	Value ($m)	Description	Winning Consortium Members
Denver FasTracks Eagle	2,100	34-year DBFOM for Denver area commuter rail project	Fluor/John Laing/Uberior
Port of Miami Tunnel	914	30-year DBFOM for construction of a tunnel connecting Watson Island to the Port of Miami-Dade	Meridiam/Bouygues/Jacobs
I-595	1,814	35-year DBFOM for reconstruction, widening and resurfacing of the I-595 mainline in Florida	ACS Infrastructure/Dragados/ EarthTech
North Tarrant Express	2,047	52-year DBFOM for a series of major highway improvements in Texas	Cintra/Meridiam/Dallas Police & Fire Pension System
LBJ/I-635 Managed Lanes	2,800	52-year DBFOM for a construction of new, high-speed managed lanes in Dallas County, Texas	Cintra/Meridiam/Dallas Police & Fire Pension System

Case Study: Defaulted P3 Projects
SR 125, California

- One of the first PPP projects in CA, pilot project under AB 680
- Full concession PPP model that opened for traffic in November 2007
- Faced two key project challenges:
  - Legal dispute between the design/build contractor and the project company
  - Actual traffic and revenue figures significantly lower than projections
- Eventually, the Project Company filed bankruptcy in March 2010
- Outcome:
  - Settlement with creditors
  - Equity provider wrote off interest
  - State of California still owns facility
- Takeaways:
  - Facility continues to operate as usual – end users not affected
  - Long-term revenue projections key to feasibility of project
  - Properly constructed PPP agreement insulates public agency from liability
  - Under PPP model, ownership remains with public sector agency

Case Study: Defaulted P3 Projects
SR 91, California

Background:

- Early PPP project in CA, pilot project under AB 680.
- Built by the a private developer (CPTC) for $134 million under a 35-year franchise agreement in 1995.
- Two-lane express lane facility in each direction, with “soft” barrier separation. Third HOT lane for a portion of the facility.
- Limited state funds led to selecting an alterative delivery model for the project, as the state needed to be able to use its funds over multiple competing projects.
- “Non-compete” provision prevented any improvements along 30 miles of the SR-91, including widening the free lanes of the facility.
- In April 2002, Orange County Transportation Authority (OCTA) purchased the project from CPTC for $207.5 million. Within a few months, OCTA converted the express lanes into HOT lanes.

Takeaways:

- HOV lanes provide an early opportunity to pioneer PPP projects.
- Careful consideration must be given to commercial clauses in long-term agreements (i.e., non-compete provisions).

Case Study: Defaulted P3 Projects
Pocahontas Parkway, Virginia

Background:

- Project located in Greater Richmond, Virginia and involves a new 8.8 mile toll facility four-lane road connecting Chippenham Parkway at I-95 with Interstate 295 south of Richmond International Airport.
- Originally designed and built by Fluor Daniel/Morrison Knudsen.
- Due to overestimates in traffic and revenue projections, project was in danger of default on upcoming debt service payments in 2005. In recognition of the parkway's difficulties, Transurban submitted an unsolicited proposal under Commonwealth's Public Private Transportation Act (PPTA) for a concession of the parkway.
- After completion of the competitive process outlined by the PPTA, Transurban assumed the rights and obligations to manage, operate, maintain and collect tolls on the Pocahontas Parkway and build a much needed airport connector.
- 99-year concession for $611 million signed in 2006 between Transurban and VDOT.

Approach:

- Project was initially procured by VDOT and 63-20 corporation Pocahontas Parkway Association (PPA).
- Second transportation project nationwide to be financed through a 63-20 corporation.
- The project was ultimately restructured from the original 63-20 project vehicle into a P3 concession.

Case Study: Defaulted P3 Projects
Greenville Connector

Background

- A 16-mile four-lane road linking Interstates 85 and 385 in southern Greenville County, South Carolina, completed in February 2001, nine months ahead of schedule.
- About $200 million in toll revenue bonds were issued by the Connector 2000 Association, a public benefit corporation established to finance the project, in addition to contracting for development and operations.
- The Design/Build contract included cost and schedule guarantees
- A 63-20 structure established the ability to tap tax-exempt bond markets.
- Demand forecasts for the Connector were tied to future corridor development
- Ultimately traffic inadequate to permit the Association to pay debt service on the Senior and Subordinate Bonds.
- After the Association depleted its reserves, the Connector 2000 Association defaulted on debt service in January 2010.
- The Connector continues to operate the facility using toll revenues to pay operational expenses.

Case Studies – Flexibility in Procurement Approach – Port Mann/Highway 1 Project – BC, Canada

- The project involves the Cdn $2.6 billion expansion of Highway 1 from Vancouver to Langley, which is the busiest and most economically critical route in Greater Vancouver. This expansion includes the construction of a new 10-lane Port Mann Bridge
- In order to pay to expansion, tolls would be implemented on the bridge through free-flow electronic tolling.
- The planning for this project commenced in 2002 and after extensive value-for-money assessments, it was determined that this project would be procured through a full-concession model which involved the full transfer of revenue risk.
- In August 2008, the consortium consisting of Macquarie (equity), Kiewit (Constructor), and Flatiron (Constructor) was selected as preferred proponent.
- The financial market crisis of 2008 coincided with the announcement of the preferred proponent and the financial close period. The scarcity of capital drive up the cost of financing to a point where value for money could no longer be demonstrated.
- In response, the Province unwound the full-concession deal and entered in a design-build contract with Kiewit and Flatiron in early 2009 and issued Province backed bonds to finance the construction costs.
- The Provincial Crown Corporation, Transportation Investment Corp, that was originally established to oversee the concession agreement, assumed all responsibilities of the contemplated concessionaire.

Case Study: Achieving Value for Money
Port of Miami Tunnel, Fl

- DBFOM availability payment project with a 35 year term
- Construction of a tunnel connection to Watson Island, widening of the McArthur Causeway and access improvements in the Port of Miami
- Non-toll facility with private sector compensated through availability payments

- Developer is responsible for all routine and heavy maintenance with performance metrics throughout the lifetime and at handback
- Developer is also responsible for traffic management and control, traffic safety and ventilation
- Procurement process resulted in competition from 3 international bidding consortia

Case Study: Achieving Value for Money
Port of Miami Tunnel, Fl Cont.

- Procurement resulted in significant cost savings over public sector estimate

Party	Availability Payment	% of Estimate
Public Sector Estimate	$69M	100%
Bidder #3	$65M	94%
Bidder #2	$39M	56%
Bidder #1	$34M	49%

- Technically challenging project with construction and operation risks transferred to private sector
- Major geotechnical risk transferred to private sector

Case Study: Achieving value for money
I-595, Florida

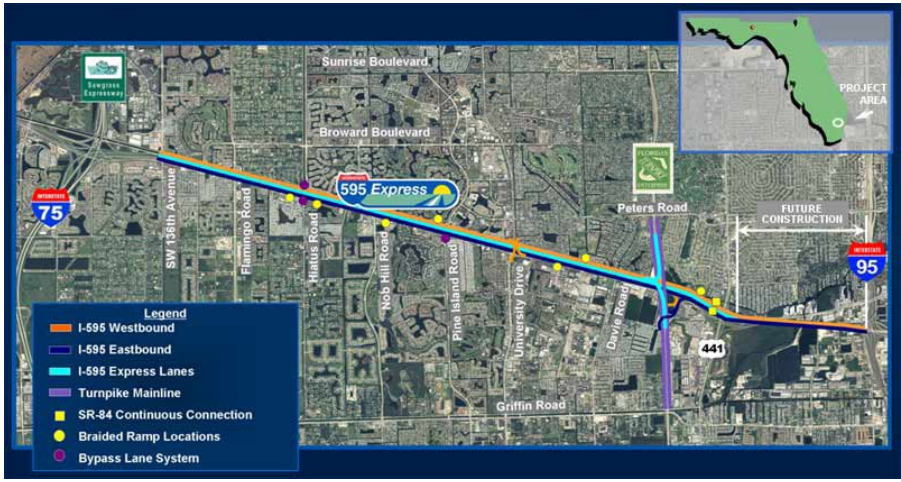
Overview

- Project consists of the reconstruction, widening and resurfacing of the I-595 mainline in Broward County from the I-75/Sawgrass Expressway interchange to the I-95/I-595 interchange, approximately 10.5 miles
- The State of Florida had funded a portion of the project as part of its Strategic Intermodal System Growth Management Plan
- Due to a funding shortfall in the State's plan, other funding options were considered
- In 2007, the State held a PPP forum to evaluate potential funding options and gauge private sector interest in developing a solution
- On October 24, 2008, Florida DOT selected the ACS-Dragados Team as the best value proposer
- Project was procured as a 35-year design, build, finance, operate, and maintain contract with vendor receiving availability payments of approximately $63 million annually in exchange for completing the planned improvements and maintaining the roads

Objectives

- Accelerated schedule (10 years earlier than planned)
- Improved efficiency of design and construction
- Reduced potential for time and cost overruns
- Provision of finance mechanism for the project's funding shortfall

"To maximize the operational efficiency, the lanes are to be tolled at varying rates throughout the day to optimize traffic flow…"



Case Study: Managed Lanes
I-495 Capital Beltway, Virginia

Background

- I-495 circles Washington, D.C. and its inner suburbs in Maryland and Virginia
- The Virginia Department of Transportation (VDOT) is constructing high-occupancy toll (HOT) lanes in Northern Virginia, adding two lanes in each direction from the Springfield Interchange to just north of the Dulles Toll Road, and may include repair of existing, aging infrastructure. This will include replacement of more than 50 bridges, overpasses, and major interchanges

Approach

- 80-year concession term that began in December 2007 – includes 5 years of construction and 75 years of operations
- $1.9 billion fixed-price design build contract
- First-time introduction of HOV to the Capital Beltway and Tysons Corner
- Congestion-free network for carpools, vanpools, transit and toll paying motorists
- Commonwealth retains the ownership of facility, oversees project development, and ensures compliance with safety & design standards and environmental reviews
- Introduction of Dynamic Tolling – Tolls on the HOT lanes for non-HOV vehicles will change throughout the day based on real-time traffic conditions

Takeaway

- Funding sources ($1.9bn) including private equity investment ($349mm), private activity bonds ($586mm), a TIFIA loan ($585mm), and a Commonwealth contribution ($409mm)
- Revenue Sharing: revenues over an agreed upon total return on investment (TRI) will be shared with the Commonwealth

Case Study: Closing the Funding Gap
SH 130 5&6, Texas

Background

- The 40-mile project entails the extension of northern segments of State Highway (SH) 130, extending from I-35 north of Georgetown to I-10 near Seguin. The southern half of SH 130 will be an all-electronic toll system and, upon commissioning in 2012, the complete SH130 will be 91 miles long.
- Capital costs approximately $1.4billion

Approach

- 50-year concession awarded to Cintra/Zachry consortium in December 2005. Commercial close May 2007. Financial close March 2008.
- Total financing of approximately $950M
  - $685M of a 30-year senior debt facility
  - $100M of a liquidity facility
  - $430M of a 35-year TIFIA subordinate debt facility
  - $197M of equity
- Closed $600 million funding gap

Case Studies: Poor Public Perceptions
Chicago parking meters

- Financial close reached in October 2009
- $1.15 billion up-front payment to City of Chicago in exchange for 75-year lease of 36,000 parking meters with revenue of $19 million per year
- Operator performed ‘wholesale system overhaul’ replacing coin operated system
- City remains responsible for rate setting, parking regulation and fine collection
- Consortium – 50.1% Morgan Stanley Infrastructure Partners, 25% Allianz Capital Partners, and 24.9% Abu Dhabi Investment Authority
- Poor public perception:
  - April 2009 – major operational glitches occurred and consortium admitted that it ‘underestimated the resourced required’ to overhaul the system; operational glitches eventually solved
  - June 2009 – Chicago Inspector General released a report criticizing the deal
  - Aug 2009 – Investigation by Illinois Attorney General based on alleged consumer fraud
  - Aug 2009 – Lawsuit filed before financial close challenging legality of transaction

Case Studies: Poor Public Perceptions
407 ETR Toronto

- In 1994, Phase 1 (69 km) was procured as a DBO with public sector funding for CA$1.5bn and toll collection began in 1997
- In 1999, the project was tendered as a 99-year concession with a required to extend the project by 108km for a price of CA$3.1 and awarded to consortium of Cintra and Macquarie
- Poor public perception – rising toll rates perceived as a “luxury” rather than congestion mitigation:
  - July 2004 – independent arbiter determines government approval not required to change tolls or fees
  - Feb 2006 – Divisional Court rules government must order Ontario Registrar of Motor Vehicles to deny vehicle permits to individuals who refuse to pay the 407ETR tolls; Court of Appeal denies Ontario Government’s leave to appeal
  - 2007 – toll rates increase from CA$0.01/km to CA$0.0135/km
  - Jan 2009 – Developer announced increased toll rates includes ‘access fee’ charged irrespective of length driven; results in average of 5% - 7.4% increase
  - Jan 2010 – Developer announces increase to toll rates to fund an investment program that will deliver 20 km of new lanes

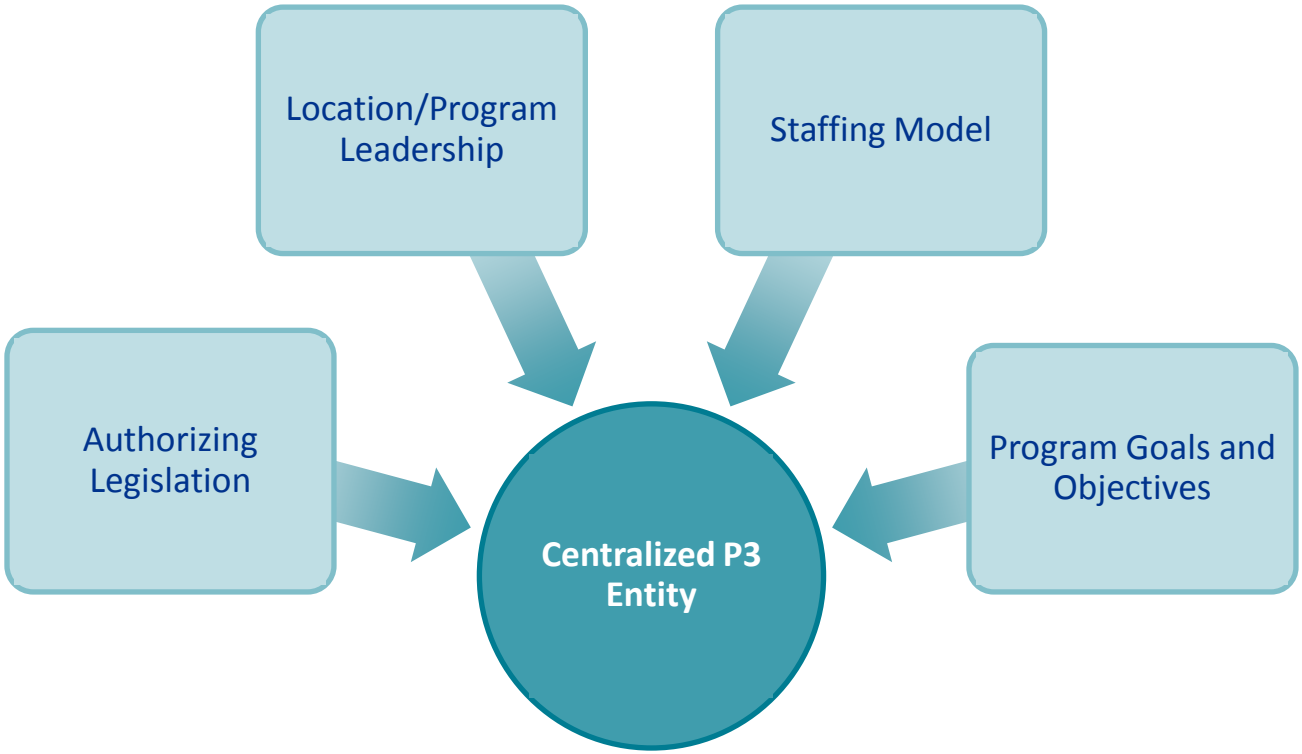
P3s: A Programmatic Approach

Common Elements of Successful P3 Programs

Key Success	Description
One Clear Public Partner	Single unit (P3 Unit) responsible for establishing uniform standards, channeling private sector expertise, providing transaction support to public agencies and managing the project procurement process
Public Champion	A visible public sector champion who is committed to exploring the use of innovative project delivery
Project pipeline	A pipeline of candidate projects that the market can fully understand and bid on at the appropriate point
Standardization	Standardization of core documents, forms and procedures to ensure efficiency and savings on transaction costs
Monitoring	Monitoring mechanisms and input on policy responses regarding lessons learned
Transparency and Fairness	Procurement process should be explicit and standardized protocols should be used. Investors should know the process before investing time and money.

Considerations for a P3 Program

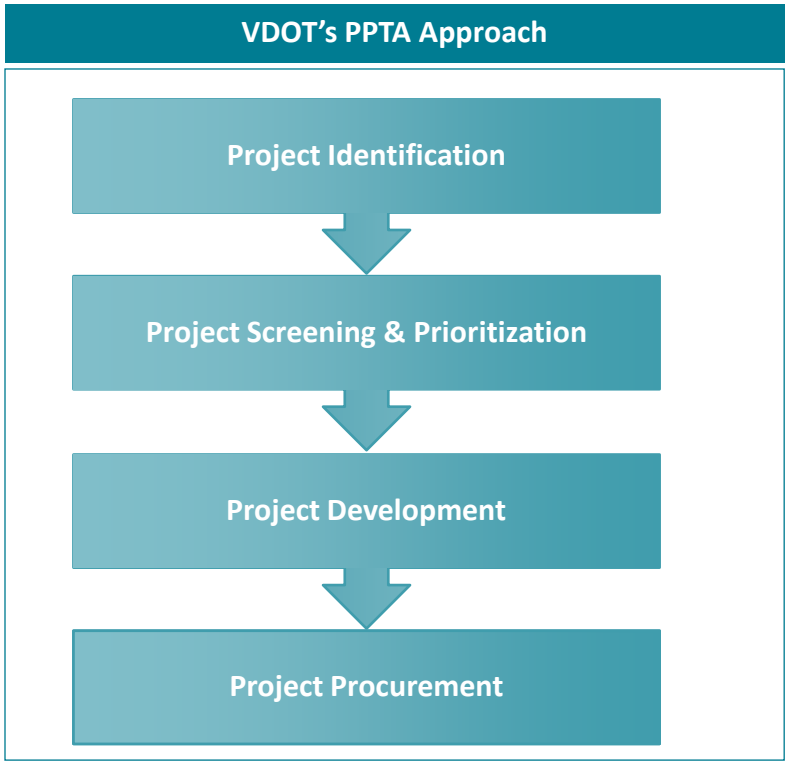
A number of important initial considerations must be addressed when considering a P3 program



P3s Programs in U.S.

Virginia

- In 1995 VDOT enacted its PPTA legislation to allow private entities to enter into agreements to construct, improve, maintain and operate transportation facilities
- In 2010, the Office of the Secretary of Transportation initiated a programmatic review of the 1995 Act to identify opportunities for improving the existing PPTA processes
- Virginia has procured numerous road P3 projects and is now considering P3 delivery for other sectors

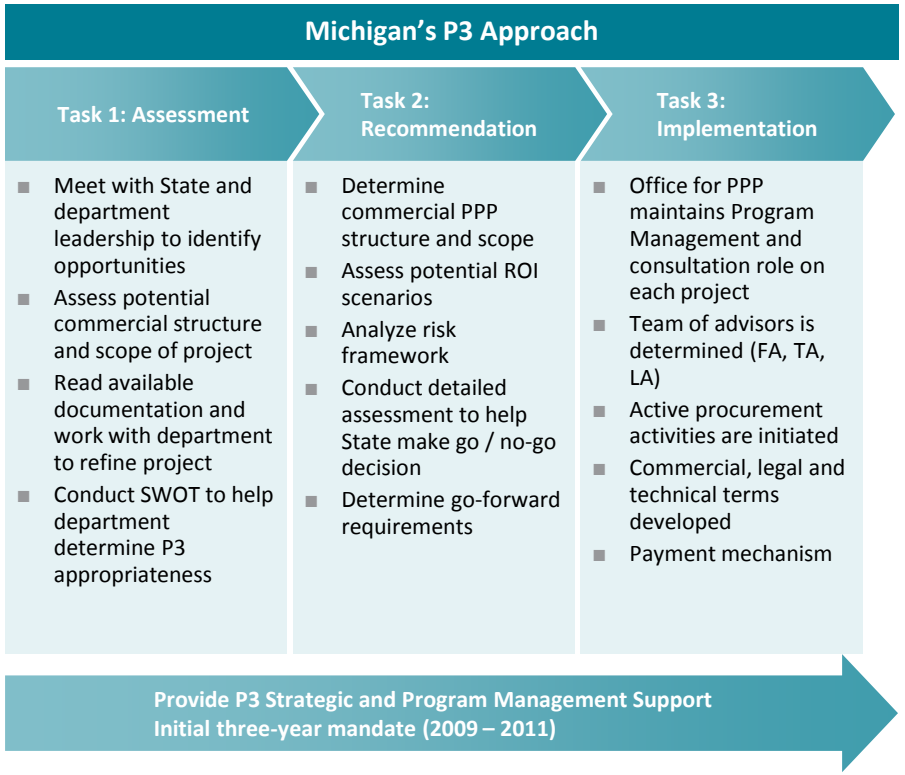


P3s Programs in U.S.

Michigan

- In 2008 the State of Michigan established a centralized office to coordinate the implementation of PPPs throughout state government

- The Office for PPP was established in the Department of Treasury to encourage a broad, enterprise-wide approach to utilizing PPP as a tool in building new and leveraging current infrastructure and financial resources
- P3 legislation for a specific asset has been introduced
- Considering a P3 for a consolidated data center and a number of transportation assets



P3s in Canada

- Canada began to experiment with P3s in the 1980s, with significant adoption beginning in the mid – 1990s
  - The P3 model has been successfully employed to deliver public services in over 25 distinct sectors, at all levels of government

- The regions of British Columbia, Ontario and Québec, and several municipalities such as the City of Ottawa, have embraced P3s as a form of procurement
  - While each has its own approach to P3s, the underlying principles are based on the UK's PFI model
  - The Provinces that have implemented the most number of P3s have set up its own institution to manage the P3 process and to provide guidance in the development of projects

P3s Programs in Canada

Partnerships BC

- Partnerships BC was established in 2002 to address problems on initial pilot projects
- Wholly owned by British Columbia and governed by a Board of Directors
  - Works with a broad range of public agencies and on various asset types
  - Center of expertise for establishing policies and best practices, developing standardized transaction documents and processes
  - Provides planning services to public sector agencies
  - Entry point for the private sector to bring forward ideas and solutions
- Objective is to impose discipline on P3 procurement through:
  - Business planning, case analysis and feasibility studies
  - Clear and stable procurement process
  - Implementation or post-completion advice

P3s Programs in Canada

- **Next to Ontario, British Columbia has undertaken the largest number of completed and ongoing infrastructure P3s of any jurisdiction in North America**
  - British Columbia has completed some of the largest and most significant P3 projects in transportation in Canada
  - Partnerships BC maintains that for capital projects where the Province contributes C$50 million or more, the P3 model is the best case for proceeding unless there is a compelling reason to do otherwise

- **British Columbia has a track record of successfully implementing P3s**
  - 20+ projects that have been, or are scheduled to be, delivered on time and on budget in British Columbia using the P3 model representing a total investment of nearly C$8 billion from private capital
  - Of these, fourteen (seven in transportation) have reached the operational stage and each project was completed either on or ahead of schedule and within budget
  - Of projects under construction, all are on or ahead of schedule and on budget

P3s Programs in Australia

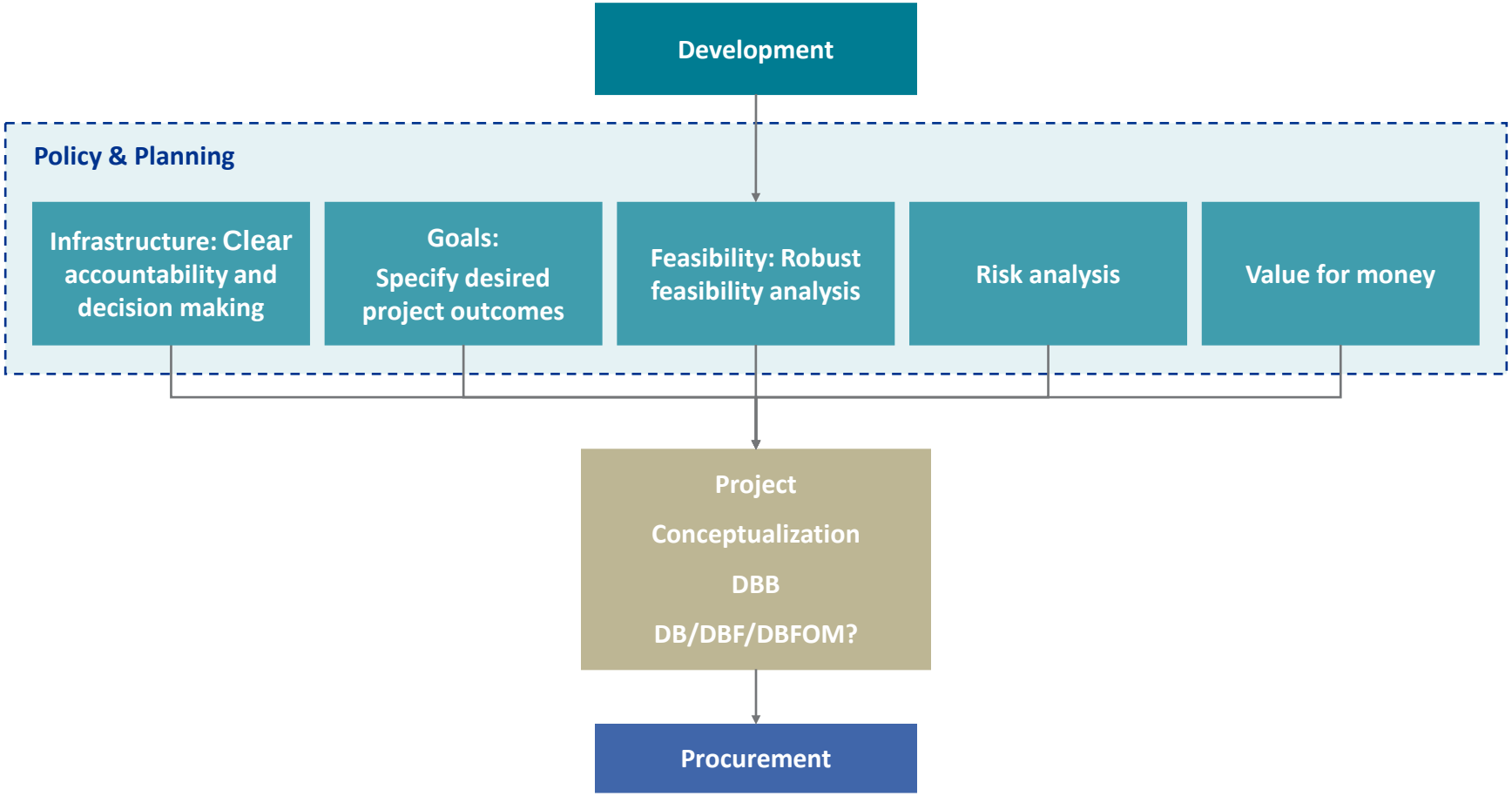
Australia

- Similar to the US and Canada, Australia is a federation with the P3 programs run by the states rather than the Commonwealth
  - The majority of P3 transactions have been in the states of New South Wales, Queensland and Victoria
  - Most P3s are based on toll roads, however Victoria, New South Wales and South Australia have developed some social infrastructure projects using P3s
- Partnerships Victoria was set up in 2000 as a center of expertise
  - 17 Partnerships Victoria projects have closed with around $5.5 billion in capital investments
  - Has produced a comprehensive suite of guidance documents for P3s
  - Focuses on whole-of-life costing, value for money and full consideration of project risks and optimal risk allocation

Traditional vs. P3 Procurement

Procurement Process: Policy & Planning

Before procuring an asset, it is important to think through the following:



Procurement Process

The policy, planning and procurement phases of the asset lifecycle can be broken into the following stages:

- Procurement infrastructure
- Procurement strategy
- Procurement structure

- Tell market what you want
- Shortlist bidders

- Compete on your terms

- Select best VALUE

- Negotiate to close
- Finance the project

Terminology

RFQ = Request for Qualifications – Sometimes referred to as Request for Expressions of Interest (RFEI)
RFP = Request for Proposals

Implementation Process

Concept Stage

- Identify internal project manager for the PPP project, along with staff to provide additional support.
- Engage Stakeholders
- Procure Advisors
- Project/Program Selection
  - ✓ Identify project requirements, identify fit with policy and expected approvals, establish requirements expressed as outputs
- Initial feasibility study
- Identify statutory requirements, and policy objectives

Feasibility Stage

- Outline Business Case
- Analysis of Project Options
- Public Sector Comparator
- Shadow Bid
- Market Sounding
- Definition of output specification
- Consider value engineering
- Issue RFI

Delivery Stage

- Issue RFQ
- Prepare project documentation
- Issue RFP
- Evaluate bids
- Secure financing and finalize costs
- Final business case approval
- Completion of documentation

Lessons Learned in P3 Procurement

- Effective stakeholder communication (approvals)
- Sound financial controls (affordability)
- Good market knowledge and procurement advice
- Adequate skills and resources
- Clearly defined roles and responsibilities
- Robust business case
- Benefits realization process
- Pre-agreed Critical Success Factors
- Ongoing risk management process

Public Perspective

Sample Guiding Principles[1]

What are WA State's key policy issues that should be considered when advancing a P3?

1. P3 should spur quality job creation and economic growth
2. Changes in the management, financing or use of an asset should allow for private sector innovation that accelerates the delivery of capital projects and produces demonstrable cost savings as compared to traditional delivery methods.
3. P3 should optimize the State's share of Federal and private capital resources to expand overall spending targeted for infrastructure development.
4. A transparent government oversight process should be established for public-private partnerships to ensure significant public input and a thorough review of proposals.
5. P3 proposals should conform to the State's public policy goals, ensuring that necessary environmental and labor protections are preserved.
6. Geographical balance should be key factor in the identification of asset maximization opportunities.
7. Minority- and Women-Owned Business Enterprises (MWBEs) should be encouraged to participate in P3 initiatives. Eliminating barriers to MWBE participation in partnering with the private sector is key to realizing the benefits of these projects in every corner of the State.

1 Developed by the NYS Asset Maximization Commission

Common Public Sector PPP Considerations

- Ensuring the public sector's interests are protected throughout the process
- Maintaining control and/or ownership over the asset
- Use of upfront funds generated by PPP projects
- Cost of Capital – Tax exempt Financing vs Private Financing
- Quality of service
- Loss of public sector jobs
- Understanding true value or potential value of asset
- How to fit innovative or alternative delivery methods in to current system (e.g. best value vs lowest cost evaluations)

Public Sector's perspective

- How will the public interest be incorporated into the project process?
  - Clear articulation of program and project objectives
  - Creation of process that includes appropriate checks and balances
    - E.g. business case for investment
    - Assessment of value-for-money
    - Appropriate off-ramps
  - The project agreement between public and private partners

Protecting the Public Interest
Common Policy Considerations in a P3 Project Agreement

- Setting and controlling fares/tolls?
- Allowing excessive returns?
- Responding to poor service delivery?
- Insolvency of private partners?
- Termination of the concession?
- Handback: What happens to the assets?
- Cost of Capital: Tax exempt vs. Private financing?

Protecting the Public Interest
Common Policy Considerations in a P3 Project Agreement

Setting and controlling fares/tolls

- Demand risk with public or private sector?
- Availability payment structures
- With demand risk, balance various factors:
  - Degree of freedom to set tariffs
  - Policy considerations
  - “Value" of the concession to the private sector
- Contractual formula or independent regulation
- Certainty and scope for political manipulation

Protecting the Public Interest
Common Policy Considerations in a P3 Project Agreement

Policing excessive returns?

- “Super-profits"
  - Deal priced in competitive environment
  - Should upside be capped?
- Refinancing gain
  - Reduced risk profile after construction
  - Reduced risk profile of maturing market
  - Public sector share in any gain?
- Equity disposals

Protecting the Public Interest
Common Policy Considerations in a P3 Project Agreement

Responding to poor service

- Calibration and operation of payment tools
- Performance monitoring regime
- Escalation of remedies:
  - Warning
  - Direct specific action
  - Termination
- Step-in and self-help remedies
- Responding to emergency situations

Protecting the Public Interest
Common Policy Considerations in a P3 Project Agreement

Insolvency of private partners

- Concession company:
  - Visibility and time to plan
  - Commercial debt incentivised to assist
  - Ultimate control of assets
  - Take in-house or hand to replacement contractor
  - “Work-out" most likely in practice
- Sub-contractor:
  - Private partner incentivised to manage
  - Control over unsuitable replacement
- Provider of finance

Protecting the Public Interest
Common Policy Considerations in a P3 Project Agreement

Termination of the concession

- Ultimate right if service is not acceptable
  - Long-term inadequate service
  - One-off "material" failure
- Ability to control ownership of assets
- Public sector windfall?
- Compensation to private financiers
  - Bankability and cost of capital
  - Basis of calculation

Protecting the Public Interest

Handback: What happens to the assets?

- Public sector direction
  - Decided at the outset
  - Option close to expiry
- Main options
  - Revert to public ownership
  - Private sector retain decommissioning risk/residual value risk
- Asset condition at expiry
  - Requirement for specified condition?
  - Retentions/reserves in final years of concession

Investor Perspective

Drivers for investor interest…

- Potential deal flow
- Return sufficient to justify risk
- Access to (preferably long-term) debt market
- Grantor agency is capable of delivering on its requirements in a timely and adequate manner
- Credible Agency advisors (across all disciplines) with knowledge of market conditions familiar to participants
- Inter-agency, inter-regulatory and inter-municipal issues affecting project resolved
- Financial issues - funding is secure and in place where needed

Potential Private Sector Partners

	Contractors/Developers	Operators	Investment Funds	Pension Funds
Examples	• Acciona • ACS Dragados • Bouygues • Cintra/Ferrovial • FCC • Flatiron • Fluor • Local Contractors • Global Via • Kiewitt • Odebrecht • OHL • Skanska • Hochtief	• Abertis • Brisa • Itenere • Iridium • Transurban	• Alinda • Borealis • Meridiam • Carlyle • Citi Infrastructure • Morgan Stanley • UBS • JP Morgan • Macquarie	• Caisse de Depot • CalPERS • CalSTRS • CPPIB • Ontario Teachers • Regional U.S. public pension funds
Typical motivators	• Construction contract size • Construction margins • Long term returns • Project visibility	• ROI • O&M and toll operation margins • Long term returns	• ROI • Project visibility • Long term returns • Need for dividend income quickly	• Stability / predictability • Lower risk • Proven track record • Long term returns • ROI • Need for dividend income quickly
Typical concerns	• Approval processes • Development restrictions • HAZMAT/Site conditions • Competition • Environment risks • Political considerations • Long stop date • Ramp-up period	• Development term • Ramp-up period • Risk allocation • Construction management • Performance requirements • Political considerations • Competition	• Uncertain demand forecasts • Approval processes • Risk allocation • Construction risk and management • Political considerations • Competition	• Uncertain demand forecasts • Approval processes • Risk allocation • Construction risk and management • Competition

Legal and Legislative Issues

Key Features of Washington Transportation Innovative Partnership Act

- Eligible Projects
  - Transportation projects for people or goods; must be in WTP or identified as a priority need
  - Concurrent facilities and properties to generate supporting revenues
  - Concurrent unrelated public projects

Key Features of Washington Transportation Innovative Partnership Act

- Transportation commission authority
  - Approve contract
  - Adopt rules governing:
    - Procurements
    - Evaluation criteria and procedures
    - Types of contracts
    - Projects allowed
  - Solicit proposals, direct WSDOT to evaluate proposals, if first complete
    - Tolling feasibility study
    - Procurement rules
    - Comparison demonstrating advantages of P3 over traditional project delivery

Key Features of Washington Transportation Innovative Partnership Act

- Eligible Subcontractor and Labor Protections
  - Local subcontracting opportunities
  - Prevailing wages
  - Maintenance and asset management consistent with collective bargaining agreements, Personnel System Reform Act, civil service laws

Key Features of Washington Transportation Innovative Partnership Act

- Financing Sources
  - All indebtedness for transportation project must be issued by state treasurer
    - No privately-arranged financing
  - GARVEES, subject to legislative approval
  - TIFIA (Transportation Infrastructure Finance and Innovation Act)
  - State infrastructure bank loans
  - State revenue bonds
  - Private entity contributions

Key Features of Washington Transportation Innovative Partnership Act

- Tolling
  - Must first be authorized by legislature
  - Toll expenditures subject to appropriation and available to be used only for:
    - O&M costs
    - Debt service, including required reserves and insurance
    - Funding contributions for project
    - Project improvements
    - Operation of “conveyances” of people or goods
  - Not available to pay return on equity

Key Features of Washington Transportation Innovative Partnership Act

- P3 Project Funds
  - Separate state account for:
    - All bond or other financing proceeds
    - All P3 project revenues
  - Expenditures only with legislative approval
  - Subaccounts by project
  - May pledge funds to secure
    - Public sector debt obligations
    - Private entity debt, subordinate to any bonds

Key Features of Washington Transportation Innovative Partnership Act

- Pre-Conditions to P3 Contract Execution
  - Commission must:
    - Complete financial analysis including all costs, financing costs
    - Give 20-day notice of proposed agreement and public hearing
    - Hold public hearing
    - Wait 20 days after hearing
    - Appoint 5 – 9 member advisory committee ($300M + projects)
    - Receive expert panel review and recommendations on proposed contract
    - Consult with Governor
    - Act to approve, reject or continue negotiation

Essential Elements of P3 Authorizing Legislation

- Scope of Legislation
  - State agencies, regional, counties, municipalities?
  - Specified projects?
  - Types of projects – transportation, water, social infrastructure
- Types of Contracts
  - Contract with private party to design, build, finance, operate and/or maintain (DB, DBF, DBO, DBFO, DBOM and concessions)
  - Build, operate in accordance with performance specifications
  - Authority to vary from standard specifications and manuals

Essential Elements of P3 Authorizing Legislation

- Procurement Authority and Methodology
  - Solicited proposals
  - Unsolicited proposals with opportunity for competition
  - Best price / best value (price and other factors) / quals-based selection
  - Negotiating authority
  - Disclosure of evaluation factors and weight
  - Two-step procurement
    - RFQ, SOQs, shortlist
    - RFP, proposals, selection
  - Stipends for use of work product
  - Alternative technical and financial concepts

Essential Elements of P3 Authorizing Legislation

- Financing Authority
  - To issue toll revenue bonds
  - To mix public and private capital funding
  - To encourage equity investment
- Authorized P3 Agreement Provisions
  - Private party can collect, enforce user fees
  - Public sponsor can share revenues
  - Share development costs and project risks
  - Acquisition of ROW
  - Reconstruction and renovation

Essential Elements of P3 Authorizing Legislation

- Authorized P3 Agreement Provisions
  - Reasonable limits on return on investment
  - Risk allocations
    - Compensation for losses due to certain events, competing facilities
    - Schedule relief due to certain events
  - Defaults, remedies
  - Record keeping and audits

Essential Elements of P3 Authorizing Legislation

- Authorized P3 Agreement Provisions
  - Exemption from property taxes
  - Payment and performance security
  - Termination events and compensation
  - Asset condition requirements at end of term
- Sovereign immunity/immunity from suit
  - Private party ability to sue and obtain enforceable judgments

Essential Elements of P3 Authorizing Legislation

- Tolling Authority
  - Electronic
  - Post-concession
  - Delegable
- Strong toll enforcement mechanisms
  - Video tolling
  - DMV data access
  - Administrative fees and penalties
  - License/registration denial
  - Civil infraction
  - Efficient court processes
  - User privacy

Essential Elements of P3 Authorizing Legislation

- Transparency and Confidentiality
  - Need to balance public's right to know and protection of integrity of procurement process
  - Proposer compliance with requirements of open records act
  - Protect proposals from release until award – except executive summary
  - Protect confidentiality of private sector trade secrets and proprietary information

Essential Elements of P3 Authorizing Legislation

- Special Provisions
  - Collect evaluation fees
  - Hire financial, legal consultants
  - Alternative dispute resolution
  - Exercise eminent domain for property that private party will use in its business
  - Supersede conflicting procurement laws
  - Limit on duration of concessions

Essential Elements of P3 Authorizing Legislation

Workable	Reduced Value to Public Sector	Potential Fatal Flaw
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 equity ▪ No public financing

Essential Elements of P3 Authorizing Legislation

Workable	Reduced Value to Public Sector	Potential Fatal Flaw
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