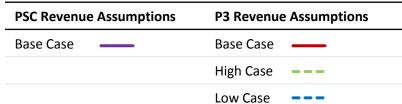
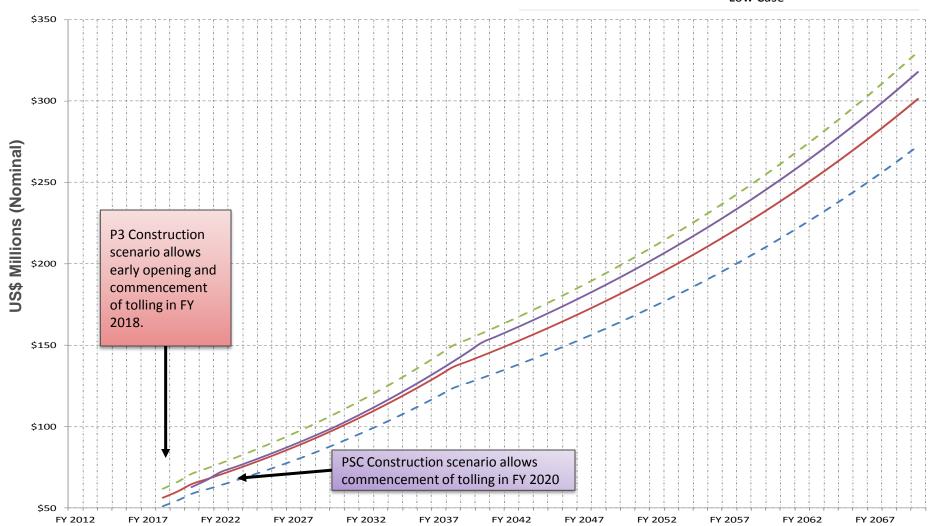
# Financial Model Inputs (SR 509 Express Toll Lanes)

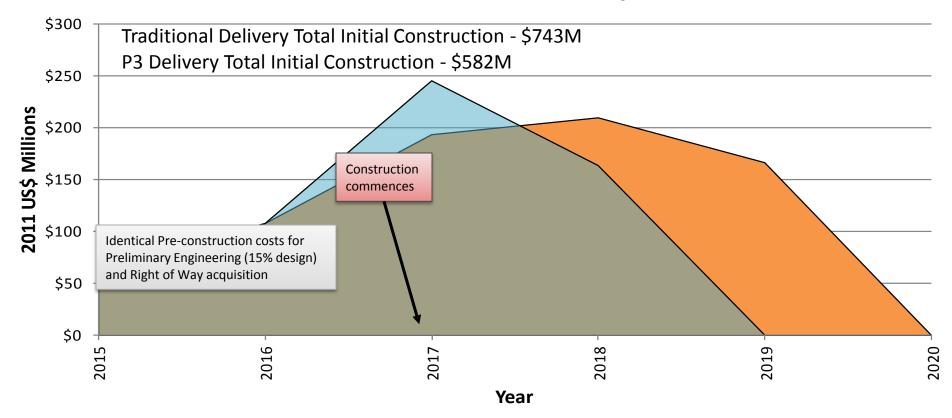
# Revenue Assumptions





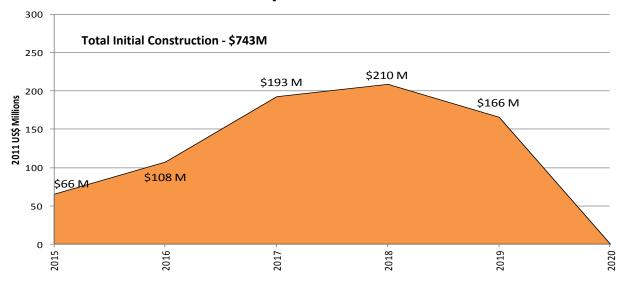
P3 Case assumes accelerated construction schedule

#### **Initial Construction Costs Comparison**



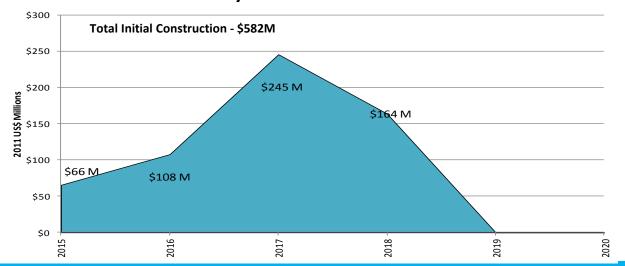
■ Total Traditional Delivery Initial Construction Costs ■ Total P3 Delivery Initial Construction Costs

#### **Traditional Delivery Initial Construction Costs**



Right of Way and Design costs are assumed the same for both forms of delivery

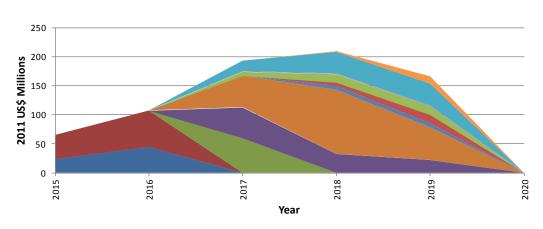
#### **P3 Delivery Initial Construction Costs**



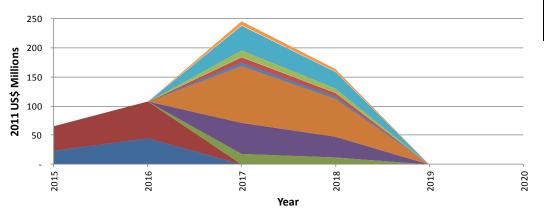
Initial Construction Costs Savings for the P3
Delivery method are based on the ability of
the private sector to complete construction
within 4 years instead of 5, reducing all time
dependant costs such as Mobilization &
Preparation and Traffic Control, and to a
lesser extent other costs such as Design

The private sector would have the ability to bulk purchase materials such as steel which could potentially provide significant savings . This has been assumed for this project.

SR 509 Express Toll Lanes
Traditional Delivery Initial Construction Costs

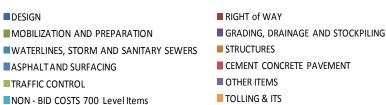


SR 509 Express Toll Lanes
P3 Delivery Initial Construction Costs

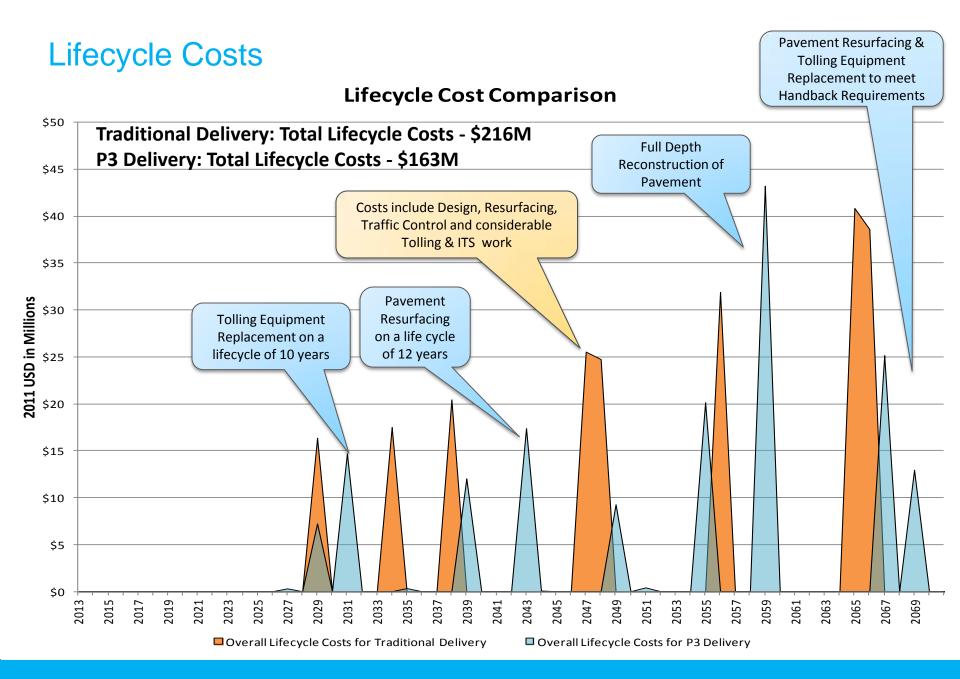


SR 509 Express Toll Lanes Initial Construction Costs (Millions)	Traditional Delivery	P3 Delivery	
DESIGN	\$68	\$68	
RIGHT of WAY	\$105	\$105	
MOBILIZATION AND PREPARATION	\$60	\$30	
GRADING, DRAINAGE AND STOCKPILING	\$108	\$89	
WATERLINES, STORM AND SANITARY SEWERS	\$0	\$0	
STRUCTURES	\$221	\$164	
ASPHALT AND SURFACING	\$13	\$10	
CEMENT CONCRETE PAVEMENT	\$21	\$16	
TRAFFIC CONTROL	\$37	\$19	
OTHER ITEMS	\$2	\$2	
NON - BID COSTS 700 Level Items	\$93	\$70	
TOLLING & ITS	\$14	\$11	
Total Construction Cost	\$743	\$582	
+ a.l   .   .   L   B   .     0   0   (4   E   )   0	1 11 61		

<sup>\*</sup> Other Items include Design, QAQC (15%), Guardrail, Signage other minor items, Environmental mitigation like recon of wetlands, stream restoration etc, differing site conditions



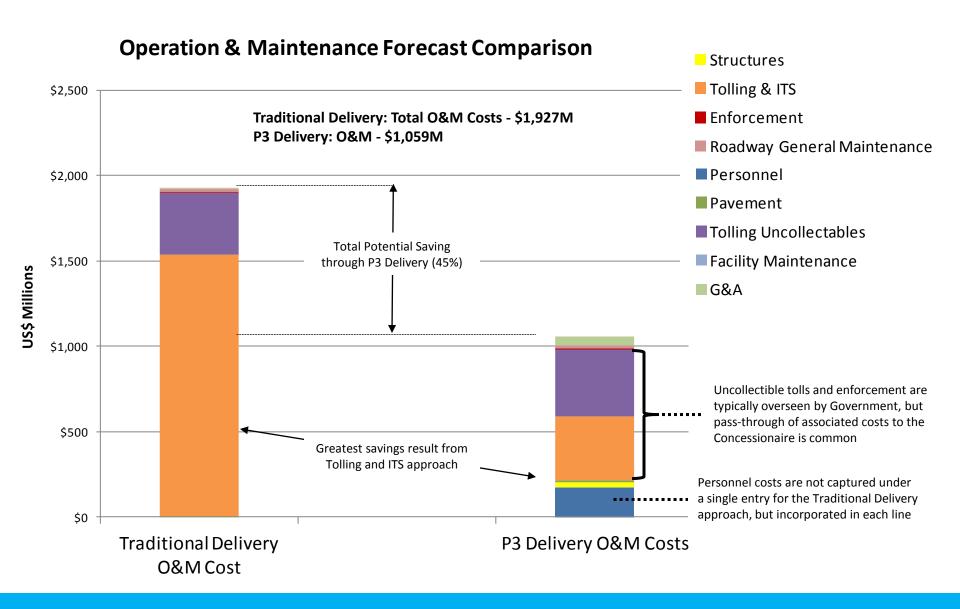
<sup>\*\*</sup> Non Bid Costs include sales tax, construction engineering (WSDOTs own and sub costs to inspect during construction) contingency, stipend for failed bidders



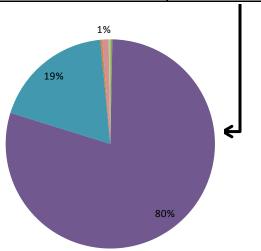
# Lifecycle Costs

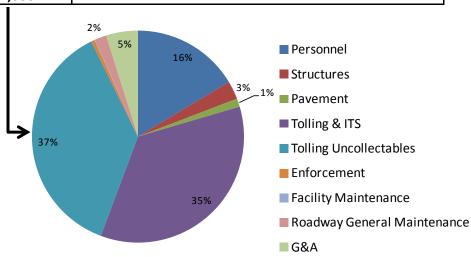
SR 509 Express Toll Lanes Lifecycle	Traditional	P3 Delivery
Costs (Millions)	Delivery	rs belivery
Roadway Maintenance	\$23.53	\$1.90
Pavement Maintenance	\$51.72	\$80.94
Structures	\$0.00	\$1.11
Tolling & ITS Maintenance	\$87.46	\$43.91
Other Misc. Items	\$27.03	\$0.00
Engineering, Construction Mgmt. and Testi	\$14.96	\$0.00
Design	\$0.00	\$0.00
Mobilization and Preparation	\$11.50	\$0.00
General Contingencies	\$0.00	\$35.34
Total Over Concession	\$216.21	\$163.19

- Overall, P3 costs are 25% lower in nominal (2011) dollars
- P3 case actually spends significantly more on pavement repairs
- Majority of savings are on Tolling and ITS (\$43.5M or 50% of the total savings)



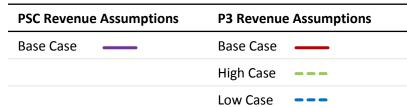
SR 509 Express Toll Lanes O&M Costs (Millions)	Traditional Delivery	P3 Delivery	Comment
Personnel	\$0.00	\$173.62	WashDot personnel costs are incorporated within each of the line items such as structures, pavements etc.
Structures	\$0.20	\$29.39	Includes bridges, safety barriers and retaining walls
Pavement	\$5.96	\$13.43	Includes asphalt & concrete pavement
Tolling & ITS	\$1,531.34	\$373.25	Includes annual maintenance, fixed back office costs, transaction based cost & credit card fees
Tolling Uncollectables	\$359.97	\$391.93	For both delivery methods assumed 4.5% of Revenue
Enforcement	\$5.71	\$5.81	Assumed the same for both delivery methods
Facility Maintenance	\$0.00	\$0.83	
Roadway General Maintenance	\$18.97	\$18.89	Includes drainage, landscaping etc.
G&A	\$4.69	\$51.46	General & Administrative costs
Total Over Concession Years	\$1,927	\$1,059	

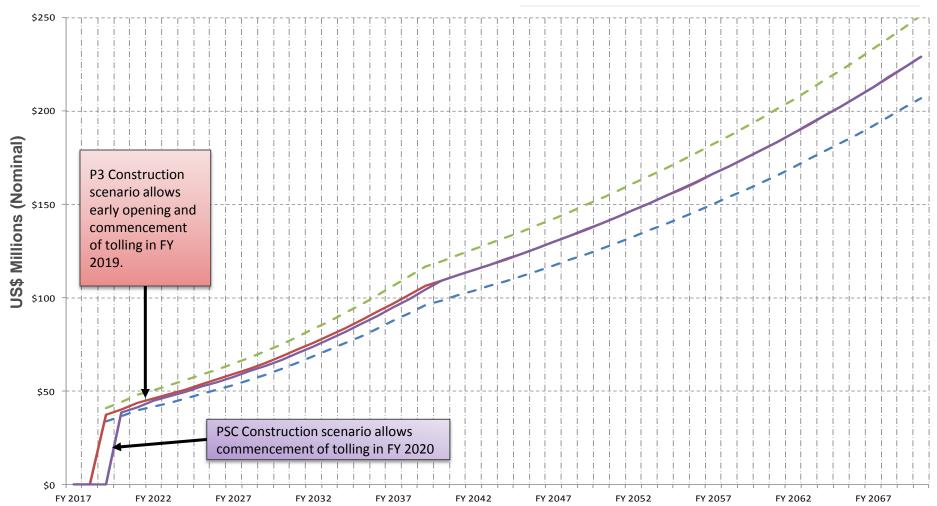




# Financial Model Inputs (SR 167 Express Toll Lanes)

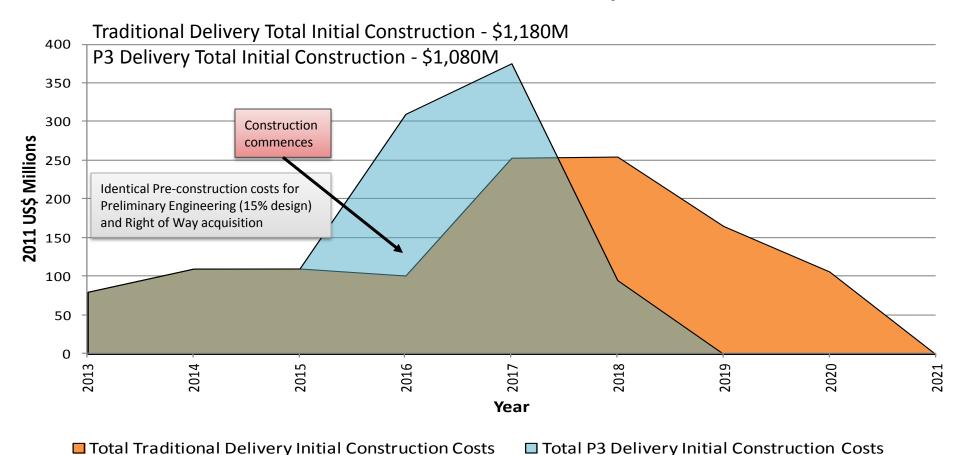
# Revenue Assumptions



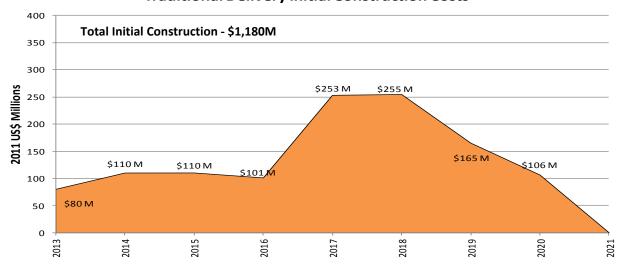


P3 Case assumes accelerated construction schedule

#### **Initial Construction Costs Comparison**

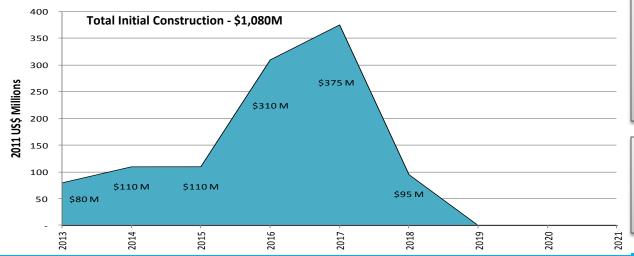


#### **Traditional Delivery Initial Construction Costs**



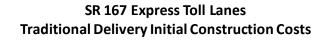
Right of Way and Design costs are assumed the same for both forms of delivery

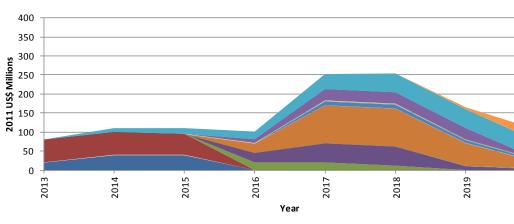
#### **P3 Delivery Initial Construction Costs**



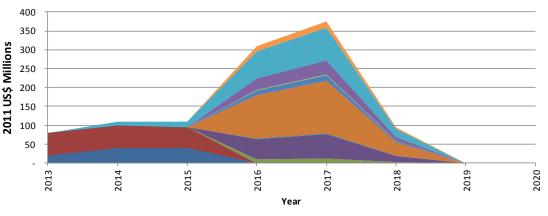
Initial Construction Costs Savings for the P3
Delivery method are based on the ability of
the private sector to complete construction
within 4 years instead of 5, reducing all time
dependant costs such as Mobilization &
Preparation and Traffic Control, and to a
lesser extent other costs such as Design

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.





**SR 167 Express Toll Lanes P3 Delivery Initial Construction Costs** 



SR 167 Express Toll Lanes Initial Construction	Traditional	P3 Delivery
Costs (Millions)	Delivery	P3 Delivery
DESIGN	\$100	\$100
RIGHT of WAY	\$175	\$175
MOBILIZATION AND PREPARATION	\$52	\$26
GRADING, DRAINAGE AND STOCKPILING	\$138	\$133
WATERLINES, STORM AND SANITARY SEWERS	\$5	\$5
STRUCTURES	\$303	\$289
ASPHALT AND SURFACING	\$31	\$30
CEMENT CONCRETE PAVEMENT	\$0	\$0
TRAFFIC CONTROL	\$9	\$5
OTHER ITEMS*	\$102	\$77
NON - BID COSTS 700 Level Items**	\$232	\$206
TOLLING & ITS  Total Construction Cost	\$34	\$34
Total Construction Cost	\$1,180	\$1,080

- \* 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
  - RIGHT of WAY
  - GRADING, DRAINAGE AND STOCKPILING

  - **CEMENT CONCRETE PAVEMENT**
  - OTHER ITEMS
  - **TOLLING & ITS**

- MOBILIZATION AND PREPARATION
- ASPHALT AND SURFACING
- TRAFFIC CONTROL

DESIGN

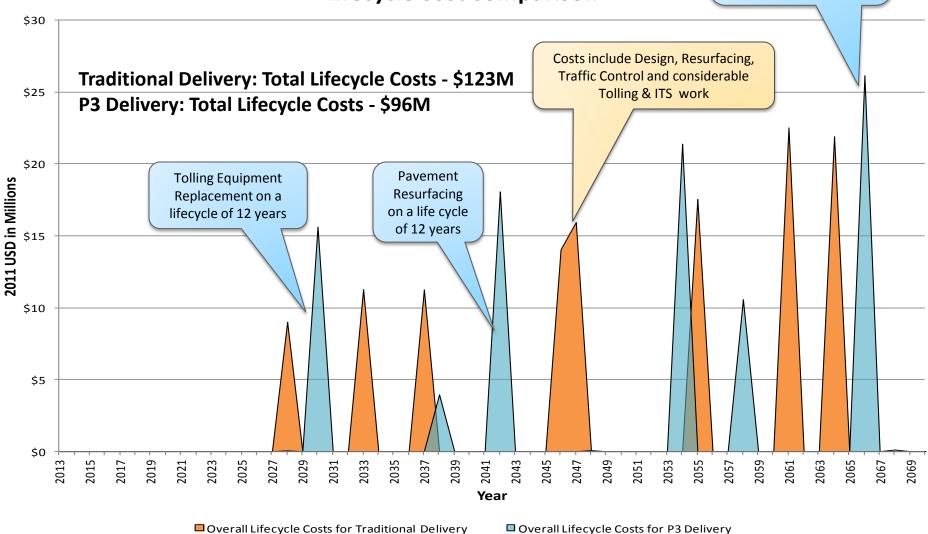
NON - BID COSTS 700 Level Items

- **STRUCTURES**

# Lifecycle Costs

Pavement Resurfacing,
Bridge Structure Repair &
Tolling Equipment
Replacement to meet
Handback Requirements

#### **Lifecycle Cost Comparison**



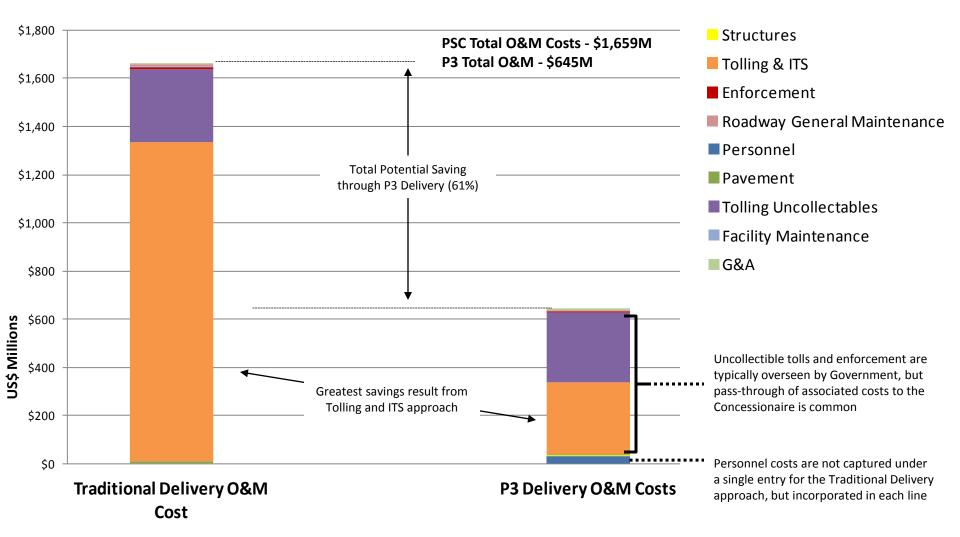
# Lifecycle Costs

SR 167 Express Toll Lanes Lifecycle Costs (Millions)	Traditional Delivery	P3 Delivery			
Roadway Maintenance	\$12.93	\$0.28			
Structures \$51.83		\$35.45 <b>-</b>	\$41.28		
Pavement Maintenance	<b>L</b> \$28.34	<b>\$16.10</b>			
Tolling & ITS Maintenance	\$47.14	\$23.47			
Other Misc. Items	\$17.74	\$0.00			
Engineering, Construction Mgmt. and Testing Fees	\$9.81	\$6.02			
Design	\$0.00*	\$3.77			
Mobilization and Preparation	\$7.55	\$4.52			
General Contingencies	\$0.00*	\$6.51			
Total Over Concession	\$123.51	\$96.12			
* Cost is included within Engineering, Construction Mgmt. and Testing Fees					

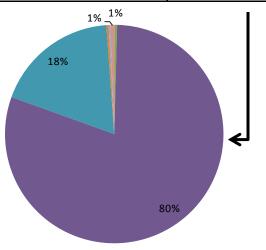
- Overall, P3 costs are 22% lower in nominal (2011) dollars
- P3 case actually spends significantly more on pavement and structure repairs
- Majority of savings are on Tolling and ITS (\$24M or 50% of the total savings)

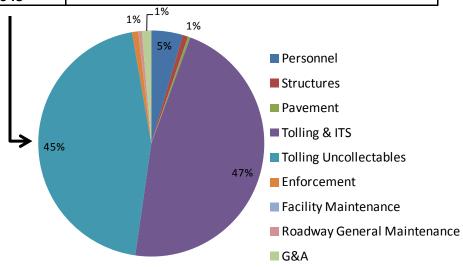
WA JTC Policy Working Group Meeting

# O&M Costs Operation & Maintenance Forecast Comparison



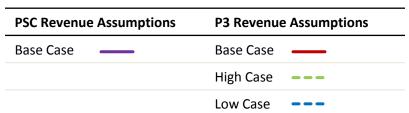
SR 167 Express Toll Lanes O&M Costs (Millions)	Traditional Delivery	P3 Delivery	Comment
Personnel	\$0.00	\$29.10	WashDot personnel costs are incorporated within each of the line items such as structures, pavements etc.
Structures	\$1.06	\$4.93	Includes bridges, safety barriers and retaining walls
Pavement	\$6.04	\$2.25	Includes asphalt & concrete pavement
Tolling & ITS	\$1,328.14	\$301.09	Includes annual maintenance, fixed back office costs, transaction based cost & credit card fees
Tolling Uncollectables	\$304.35	\$290.36	For both delivery methods assumed 4.5% of Revenue
Enforcement	\$5.71	\$5.76	Assumed the same for both delivery methods
Facility Maintenance	\$3.72	\$0.14	
Roadway General Maintenance	\$9.55	\$3.17	Includes drainage, landscaping etc.
G&A	\$0.17	\$8.63	General & Administrative costs
Total Over 55 Years	\$1,659	\$645	40/

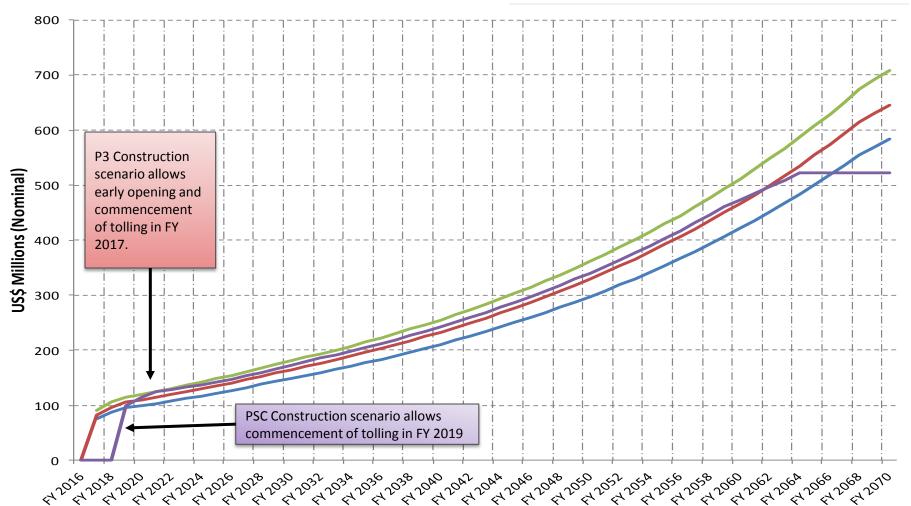




# Financial Model Inputs (Columbia River Crossing)

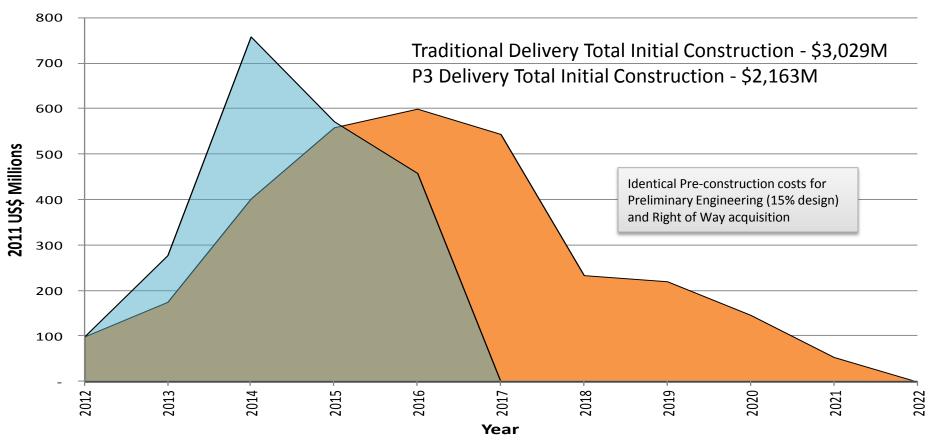




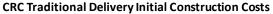


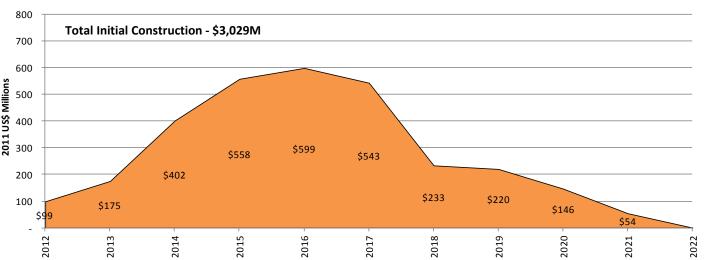
#### P3 Case assumes accelerated construction schedule

#### **Initial Construction Comparison**

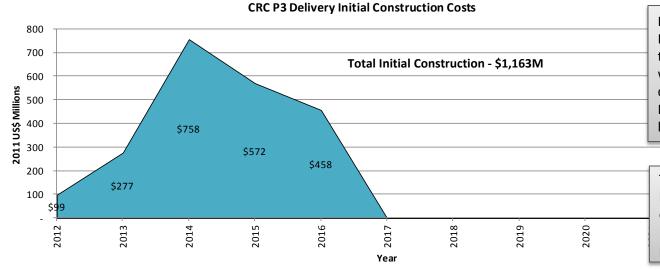


■ Total Traditional Delivery Initial Construction Costs ■ Total P3 Delivery Initial Construction Costs



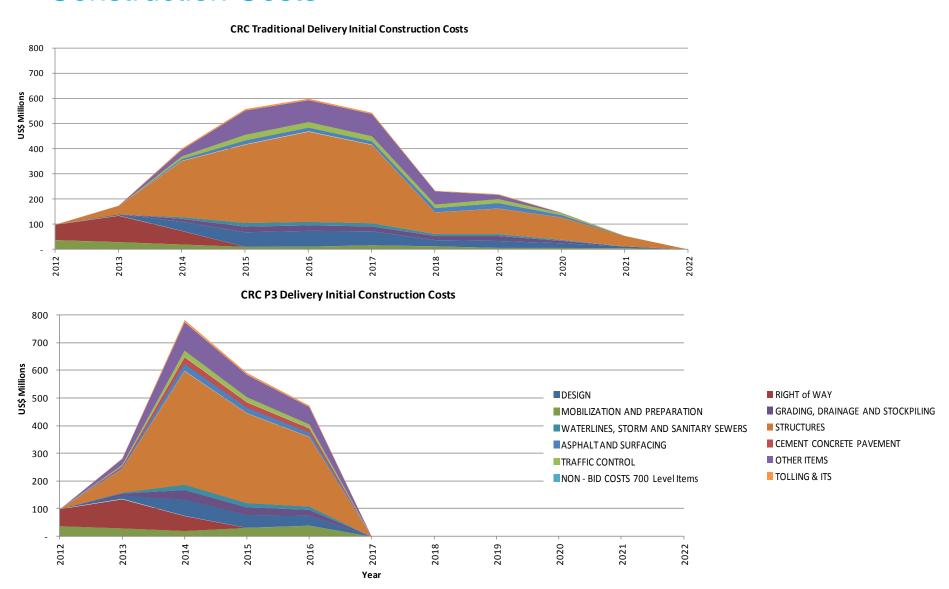


Right of Way and Design costs are assumed the same for both forms of delivery



Initial Construction Costs Savings for the P3
Delivery method are based on the ability of
the private sector to complete construction
within 4 years instead of 8, 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.



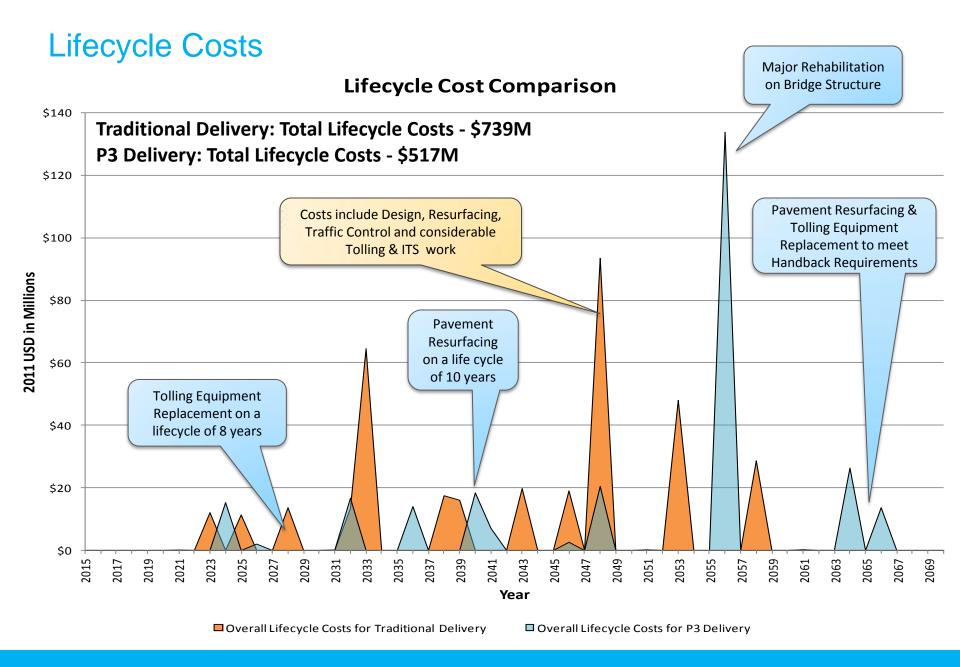
#### **Initial Construction Costs**

CRC Toll Lanes Initial Construction Costs (Millions)	Traditional Delivery	P3 Delivery
DESIGN	\$157	\$157
RIGHT of WAY	\$220	\$220
MOBILIZATION AND PREPARATION	\$293	\$151
GRADING, DRAINAGE AND STOCKPILING	\$120	\$92
WATERLINES, STORM AND SANITARY SEWERS	\$68	\$52
STRUCTURES	\$1,553	\$1,071
ASPHALT AND SURFACING	\$101	\$70
CEMENT CONCRETE PAVEMENT	\$0	\$0
TRAFFIC CONTROL	\$122	\$63
OTHER ITEMS*	\$368	\$267
NON - BID COSTS 700 Level Items **	\$0	\$0
TOLLING & ITS	\$27	\$20
Total Construction Cost	\$3,029	\$2,163

<sup>\*</sup> Other Items include Design, QAQC (15%), Guardrail, Signage other minor items, Environmental mitigation like recon of wetlands, stream restoration etc, differing site conditions

- Overall, P3 costs are 30% lower in nominal (2011) dollars
- Design & Right of Way costs are the same for both forms of delivery
- Majority of savings are on Mobilization and Preparation

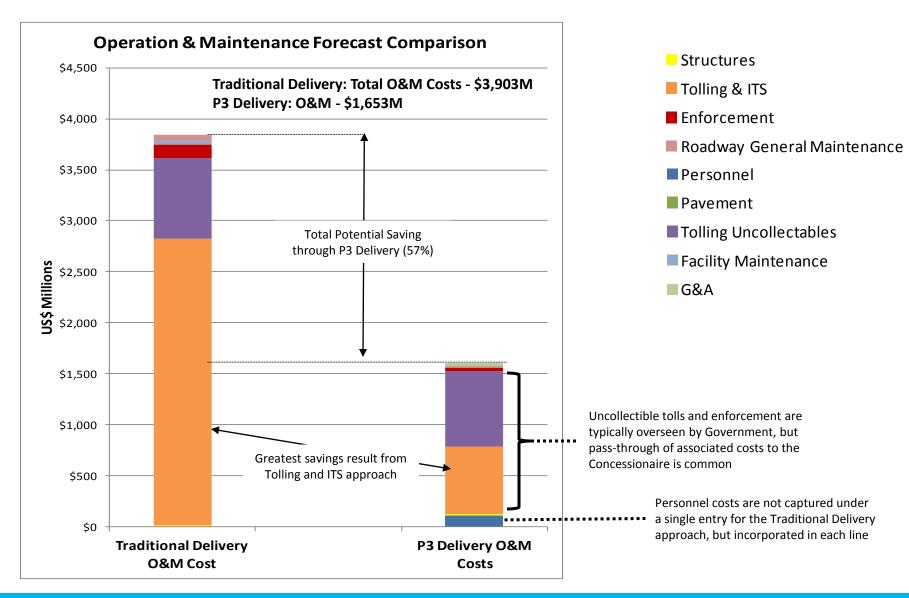
<sup>\*\*</sup> Non Bid Costs include sales tax, construction engineering (WSDOTs own and sub costs to inspect during construction) contingency, stipend for failed bidders



### Lifecycle Costs

CRC Toll Lanes Lifecycle Costs (Millions)	Traditional Delivery	P3 Delivery
Roadway Maintenance	\$42.41	\$1.61
Pavement Maintenance	\$105.33	\$22.93
Structures	\$0.00	\$120.42
Tolling & ITS Maintenance	\$109.91	\$60.66
Other Misc. Items	\$50.58	\$0.00
Engineering, Construction Mgmt. and Testing Fees	\$27.98	\$20.56
Design	\$0.00	\$10.28
Mobilization and Preparation	\$21.52	\$12.34
General Contingencies	\$0.00	\$22.62
Total Over Concession	\$357.73	\$271.42

- Overall, P3 costs are 25% lower in nominal (2011) dollars
- P3 case actually spends significantly more on Structure repairs



CRC Toll Lanes O&M Costs (Millions) *	Traditional Delivery	P3 Delivery	Comment
Personnel	\$0.00	\$106.32	WashDot personnel costs are incorporated within each of the line items such as structures,
			pavements etc.
Structures	\$9.13	\$15.00	Includes bridges, safety barriers and retaining walls
Pavement	\$0.00	\$6.86	Includes asphalt & concrete pavement
Tolling & ITS	\$2,812.59	\$659.66	Includes annual maintenance, fixed back office
Tolling & 115	Ψ2,012.39	ψ059.00	costs, transaction based cost & credit card fees
Tolling Uncollectables	\$796.24 \$732.10 Fo		For both delivery methods assumed 4.5% of
Tolling Oriconectables	φ130.24	φ132.10	Revenue
Enforcement	\$127.42	\$41.92	Assumed the same for both delivery methods
Incident Response	\$8.36	\$34.63	Assumed the same for both delivery methods
Facility Maintenance	\$34.56	\$0.42	
Roadway General Maintenance	\$60.14	\$9.64	
Winter Maintenance	\$54.78	\$13.48	Assumed the same for both delivery methods
Landscaping	\$0.00	\$6.75	Assumed the same for both delivery methods
G&A	\$0.00	\$26.26	General & Administrative costs
Total Over Concession	\$3,903	\$1,653	

