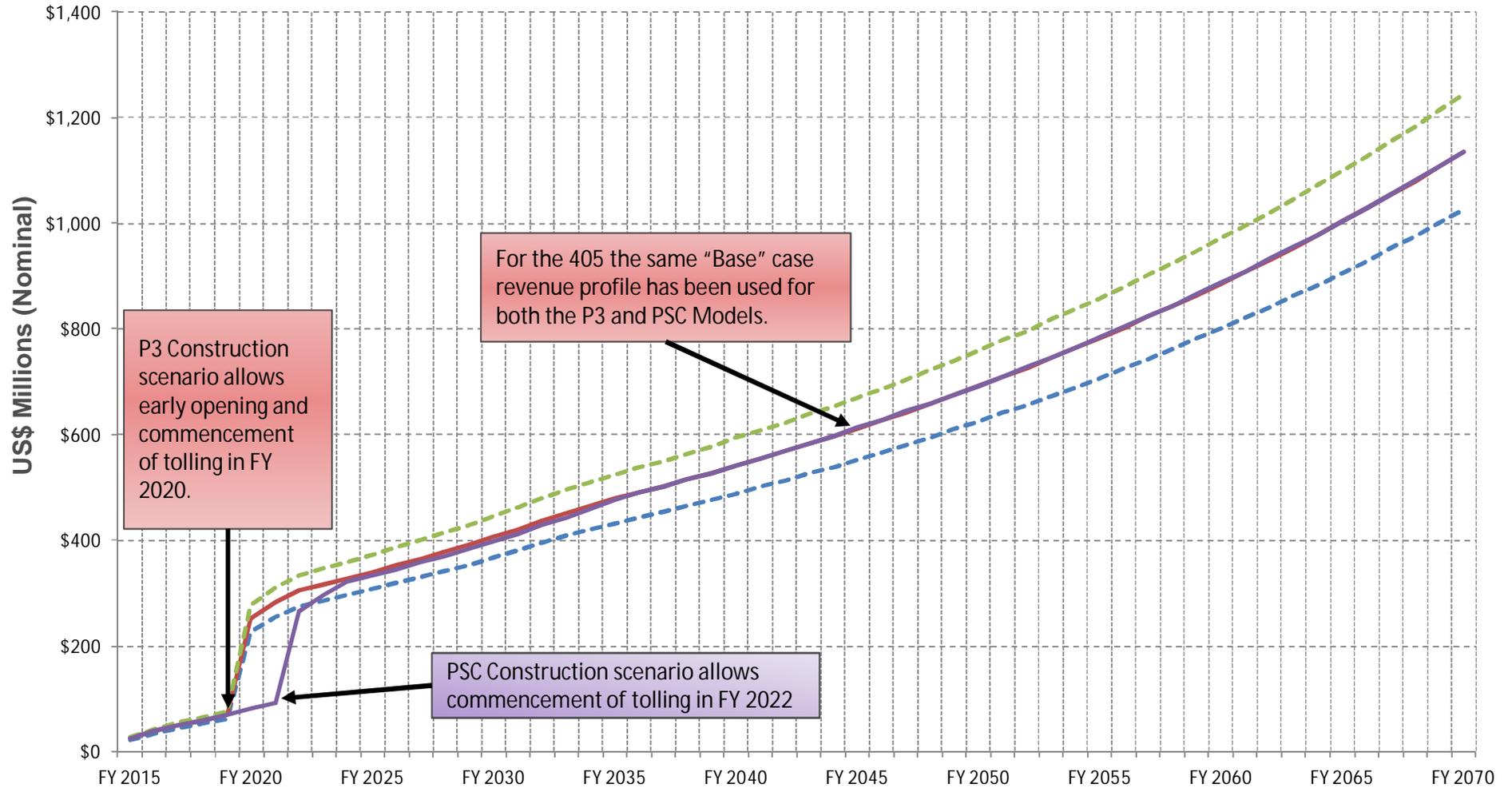


# Financial Model Inputs (I-405 Express Toll Lanes)

# Revenue Assumptions

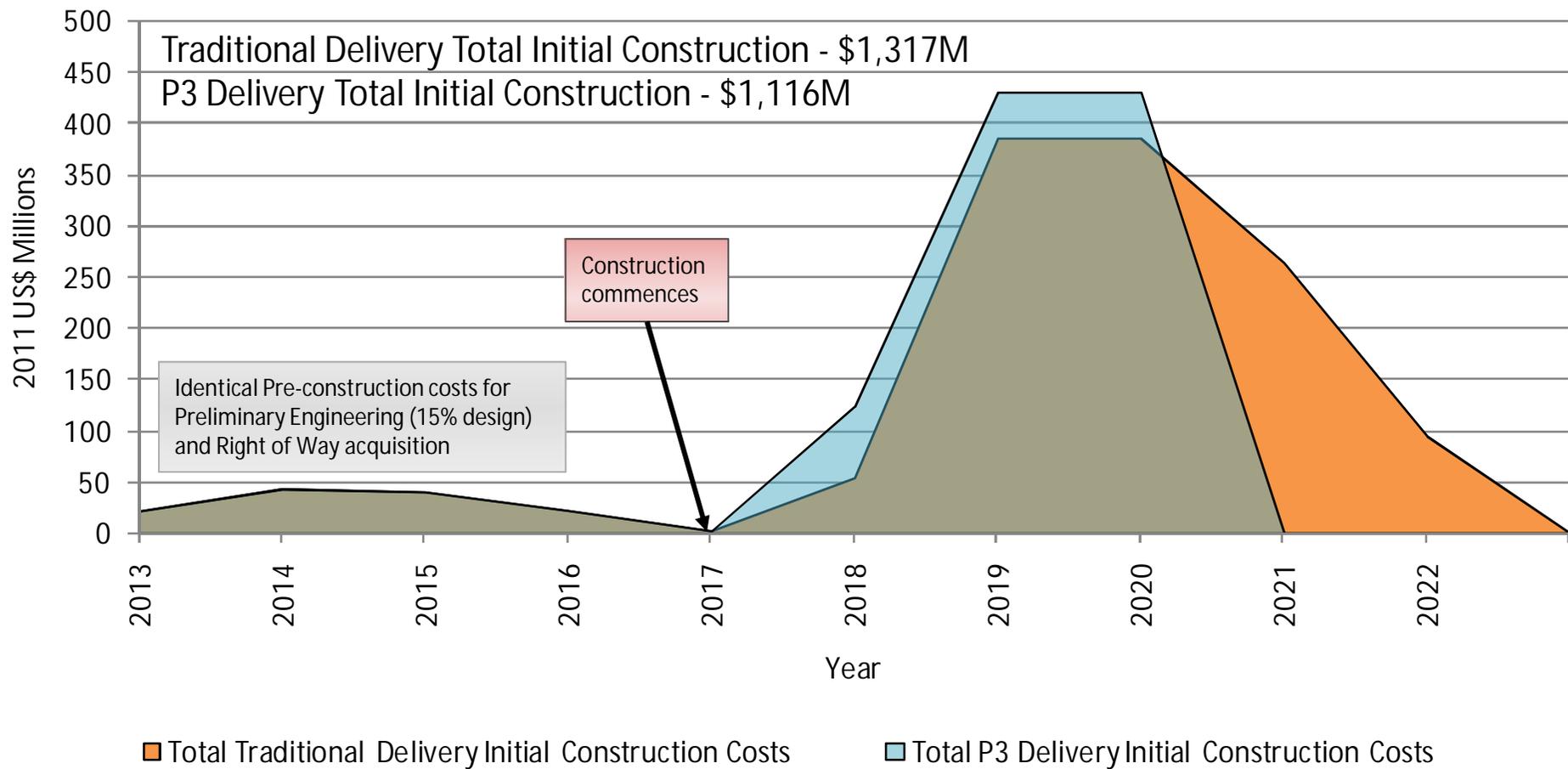
PSC Revenue Assumptions		P3 Revenue Assumptions	
Base Case		Base Case	
		High Case	
		Low Case	



# Construction Costs

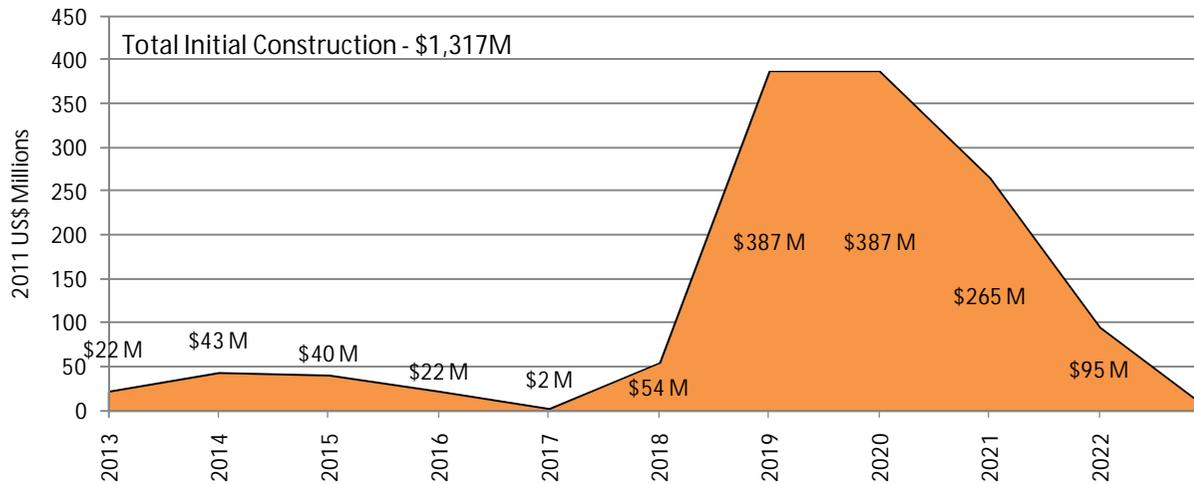
P3 Case assumes accelerated construction schedule

Initial Construction Costs Comparison



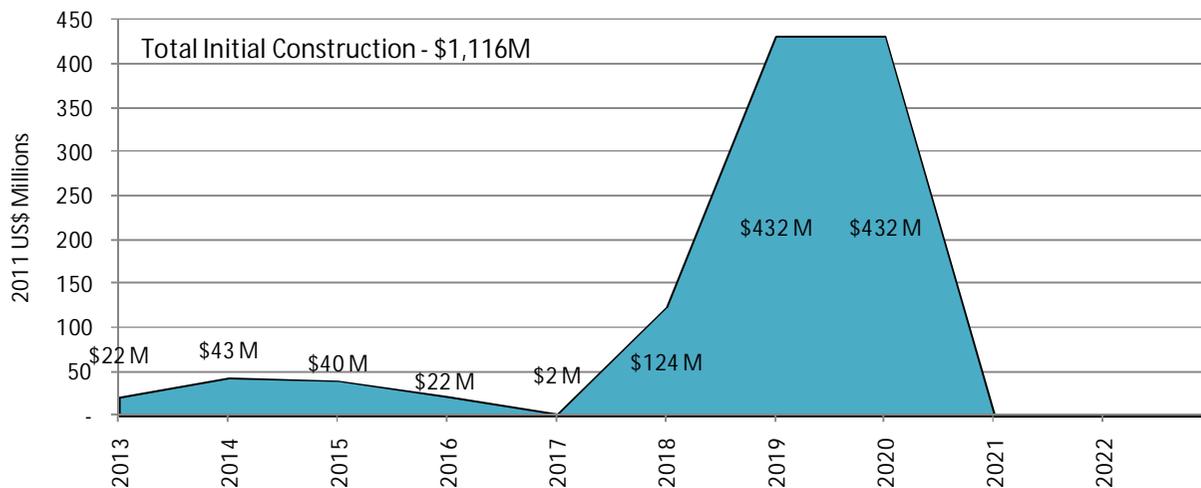
# Construction Costs

Traditional Delivery Initial Construction Costs



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

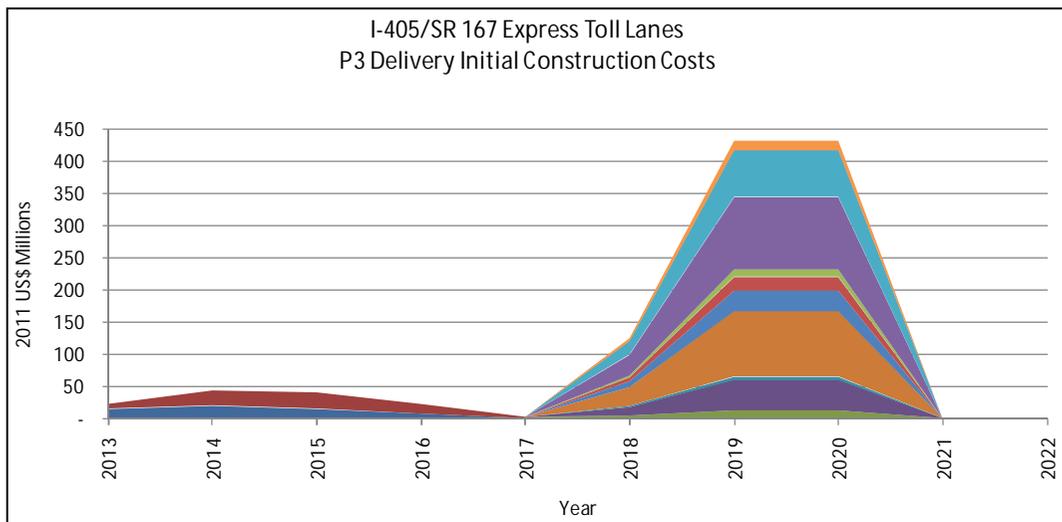
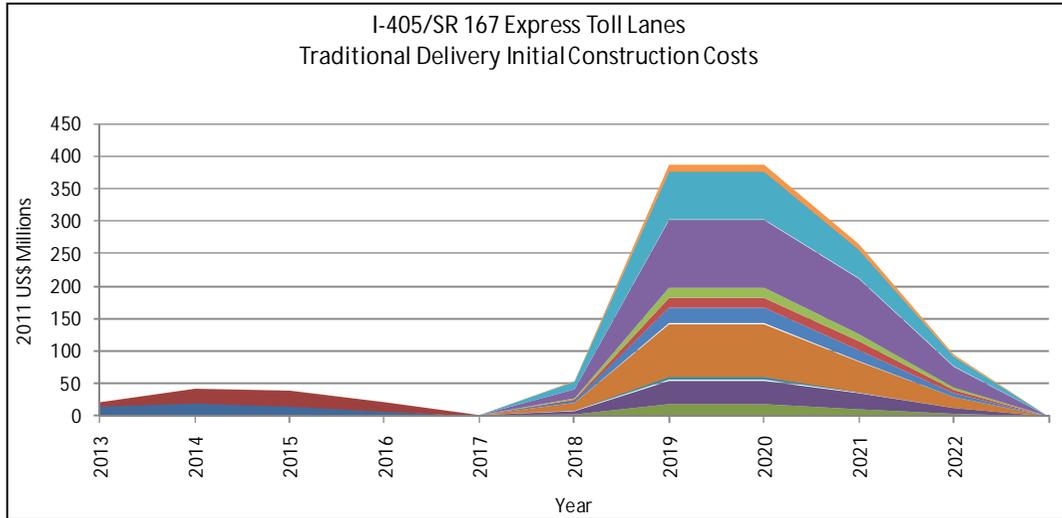
P3 Delivery Initial Construction Costs



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

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

# Construction Costs



I-405/SR 167 Express Toll Lanes Initial Construction Costs (Millions)	Traditional Delivery	P3 Delivery
DESIGN	\$57	\$57
RIGHT of WAY	\$72	\$72
MOBILIZATION AND PREPARATION	\$54	\$27
GRADING, DRAINAGE AND STOCKPILING	\$112	\$108
WATERLINES, STORM AND SANITARY SEWERS	\$14	\$13
STRUCTURES	\$239	\$234
ASPHALT AND SURFACING	\$74	\$73
CEMENT CONCRETE PAVEMENT	\$50	\$49
TRAFFIC CONTROL	\$51	\$26
OTHER ITEMS*	\$340	\$257
NON - BID COSTS 700 Level Items**	\$220	\$166
TOLLING & ITS	\$35	\$35
<b>Total Construction Cost</b>	<b>\$1,317</b>	<b>\$1,116</b>

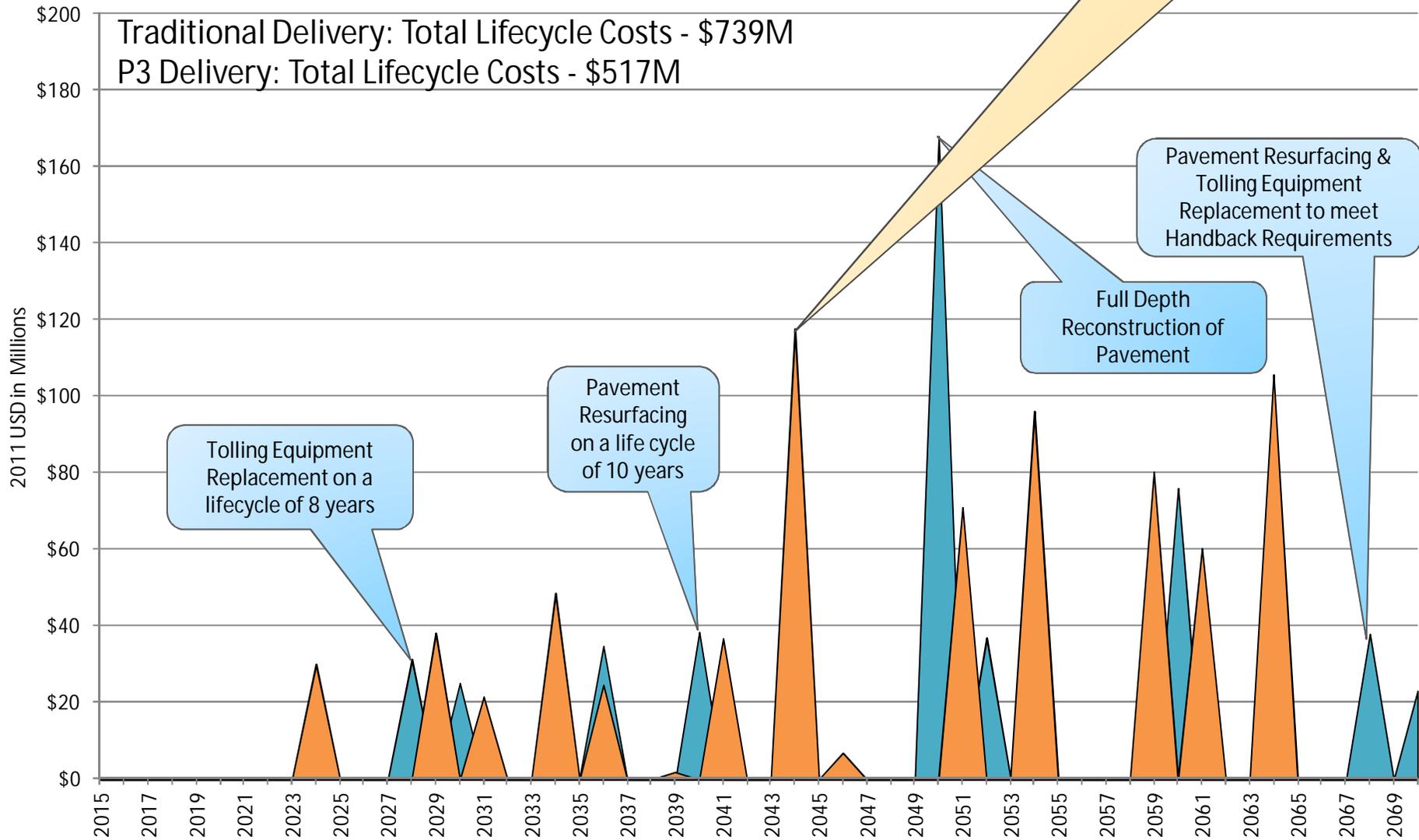
\* Other Items include Design, QAQC (15%), Guardrail, Signage other minor items, Environmental mitigation like recon of wetlands, stream restoration etc, differing site conditions

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

- DESIGN
- RIGHT of WAY
- MOBILIZATION AND PREPARATION
- GRADING, DRAINAGE AND STOCKPILING
- WATERLINES, STORM AND SANITARY SEWERS
- STRUCTURES
- ASPHALT AND SURFACING
- CEMENT CONCRETE PAVEMENT
- TRAFFIC CONTROL
- OTHER ITEMS
- NON - BID COSTS 700 Level Items
- TOLLING & ITS

# Lifecycle Costs

## Lifecycle Cost Comparison



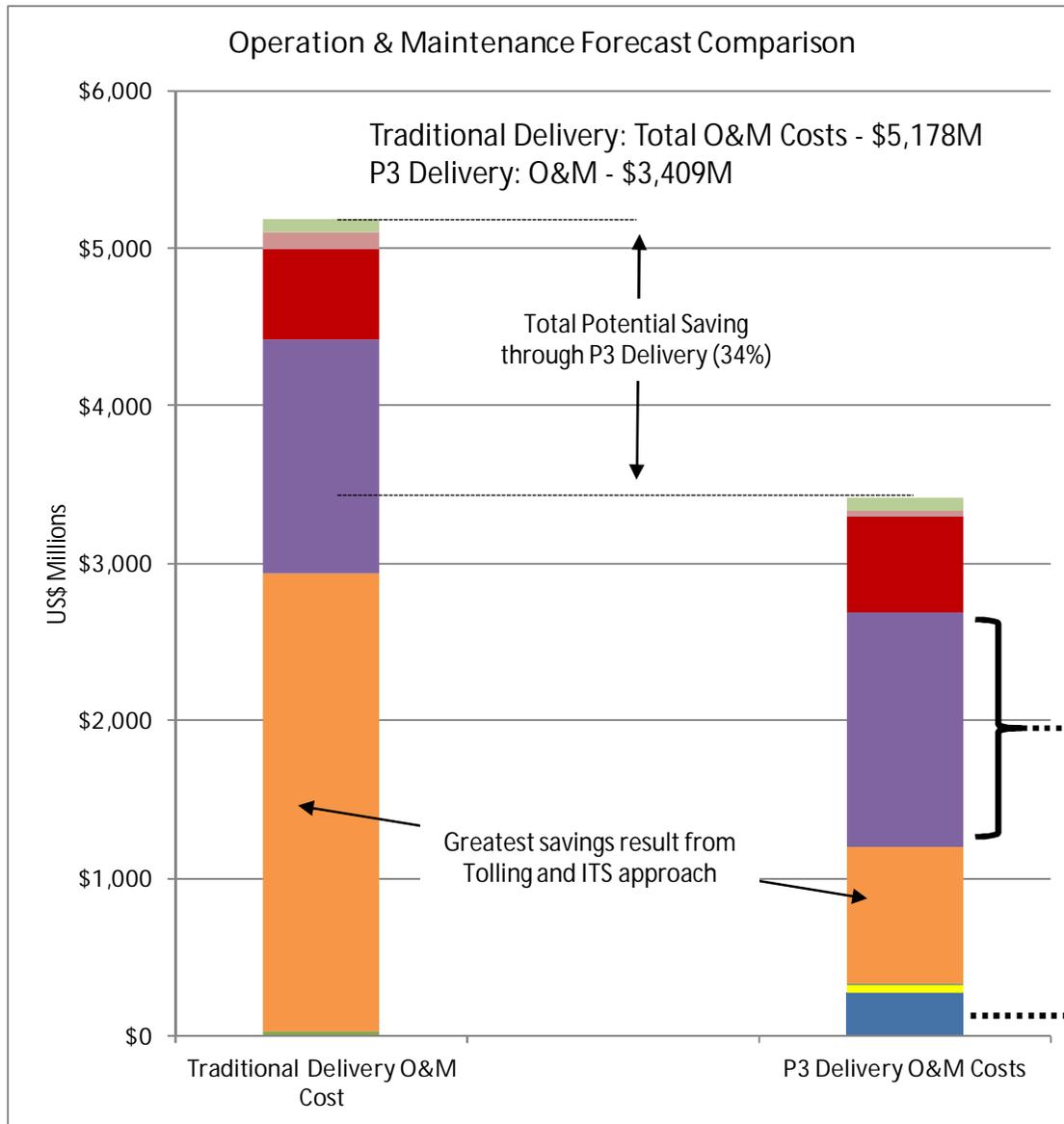
# Lifecycle Costs

I-405/SR 167 Express Toll Lanes Lifecycle Costs (Millions)	Traditional Delivery	P3 Delivery
Roadway Maintenance	\$67.43	\$4.93
Pavement Maintenance	\$85.22	\$232.10
Structures	\$0.00	\$0.83
Other Misc. Items	\$153.83	\$0.00
Tolling & ITS Maintenance	\$336.22	\$265.49
Design	\$54.79	\$25.17
Mobilization and Preparation	\$42.14	\$30.20
Engineering, Construction Mgmt. and Testing Fees	\$0.00	\$39.21
General Contingencies	\$0.00	\$55.37
<b>Total Over Concession</b>	<b>\$739.63</b>	<b>\$664.43</b>

\$152.65 (bracketed next to Roadway and Pavement Maintenance)
 \$237.03 (bracketed next to P3 Delivery for Roadway and Pavement Maintenance)

- Overall, P3 costs are 10% lower in nominal (2011) dollars
- P3 case actually spends significantly more on pavement repairs
- Majority of savings are on Tolling and ITS (\$71M or 10% of the total savings)

# O&M Costs



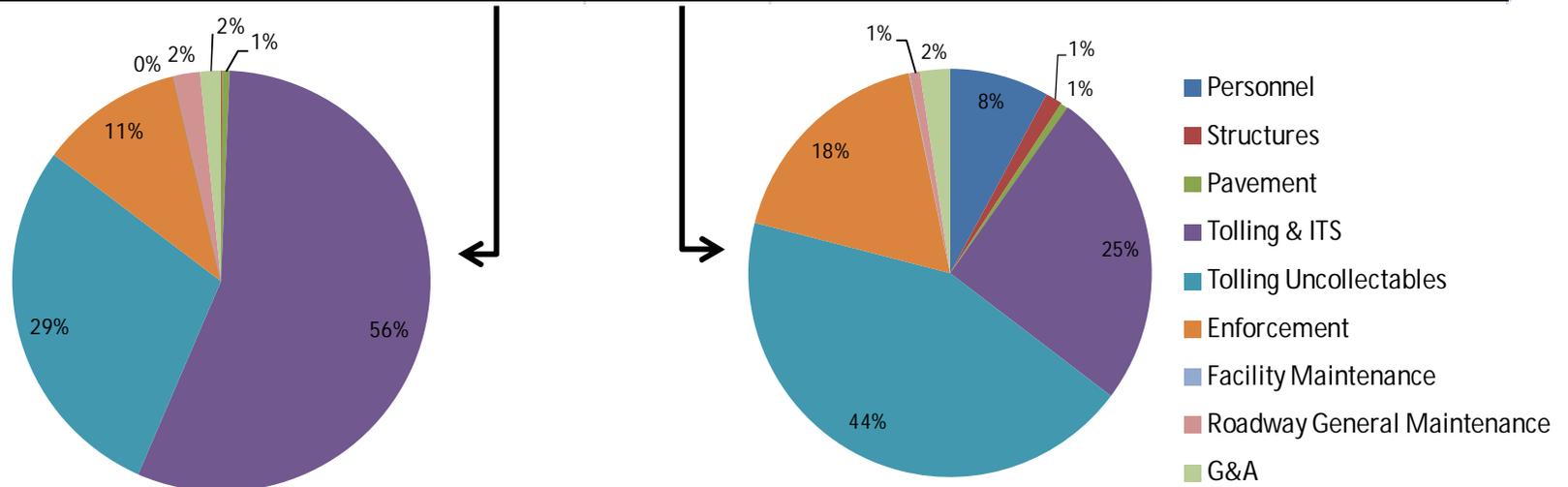
- Structures
- Tolling & ITS
- Enforcement
- Roadway General Maintenance
- Personnel
- Pavement
- Tolling Uncollectables
- Facility Maintenance
- G&A

Uncollectible tolls and enforcement are typically overseen by Government, but pass-through of associated costs to the Concessionaire is common

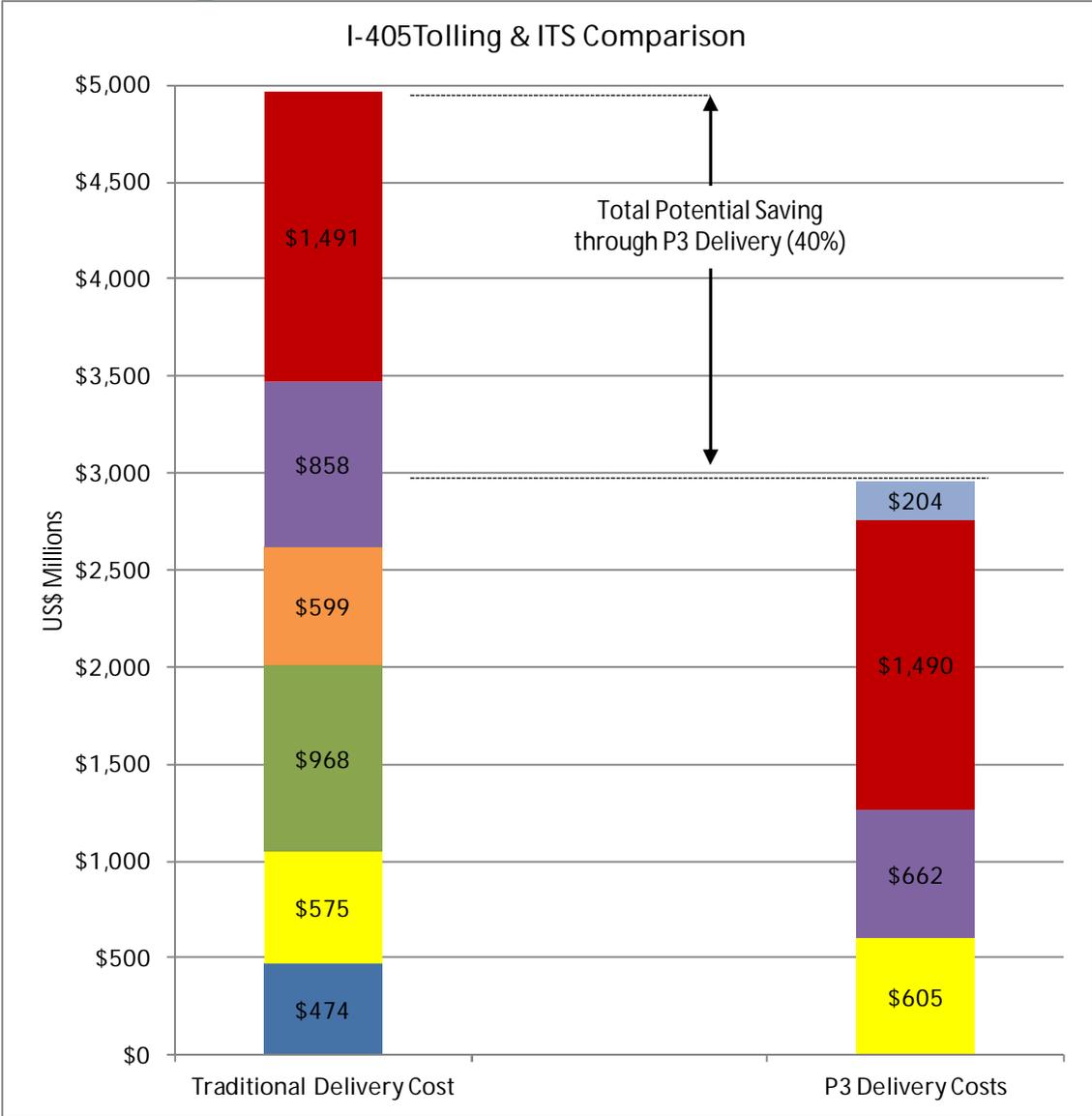
Personnel costs are not captured under a single entry for the Traditional Delivery approach, but incorporated in each line

# O&M Costs

I-405/SR 167 Express Toll Lanes O&M Costs (Millions)	Traditional Delivery	P3 Delivery	Comment
Personnel	\$0.00	\$270.72	WashDot personnel costs are incorporated within each of the line items such as structures, pavements etc.
Structures	\$4.41	\$45.82	Includes bridges, safety barriers and retaining walls
Pavement	\$28.53	\$20.95	Includes asphalt & concrete pavement
Tolling & ITS	\$2,897.57	\$865.86	Includes annual maintenance, fixed back office costs, transaction based cost & credit card fees
Tolling Uncollectables	\$1,490.64	\$1,489.52	For both delivery methods assumed 4.5% of Revenue
Enforcement	\$574.68	\$604.65	Assumed the same for both delivery methods
Facility Maintenance	\$0.00	\$1.29	
Roadway General Maintenance	\$108.22	\$29.46	Includes drainage, landscaping etc.
G&A	\$83.12	\$80.25	General & Administrative costs
<b>Total Over 55 Years</b>	<b>\$5,187</b>	<b>\$3,409</b>	



# Tolling & ITS Costs



Traditional Delivery: Total O&M Costs - \$4,963M  
 P3 Delivery: O&M - \$2,960M

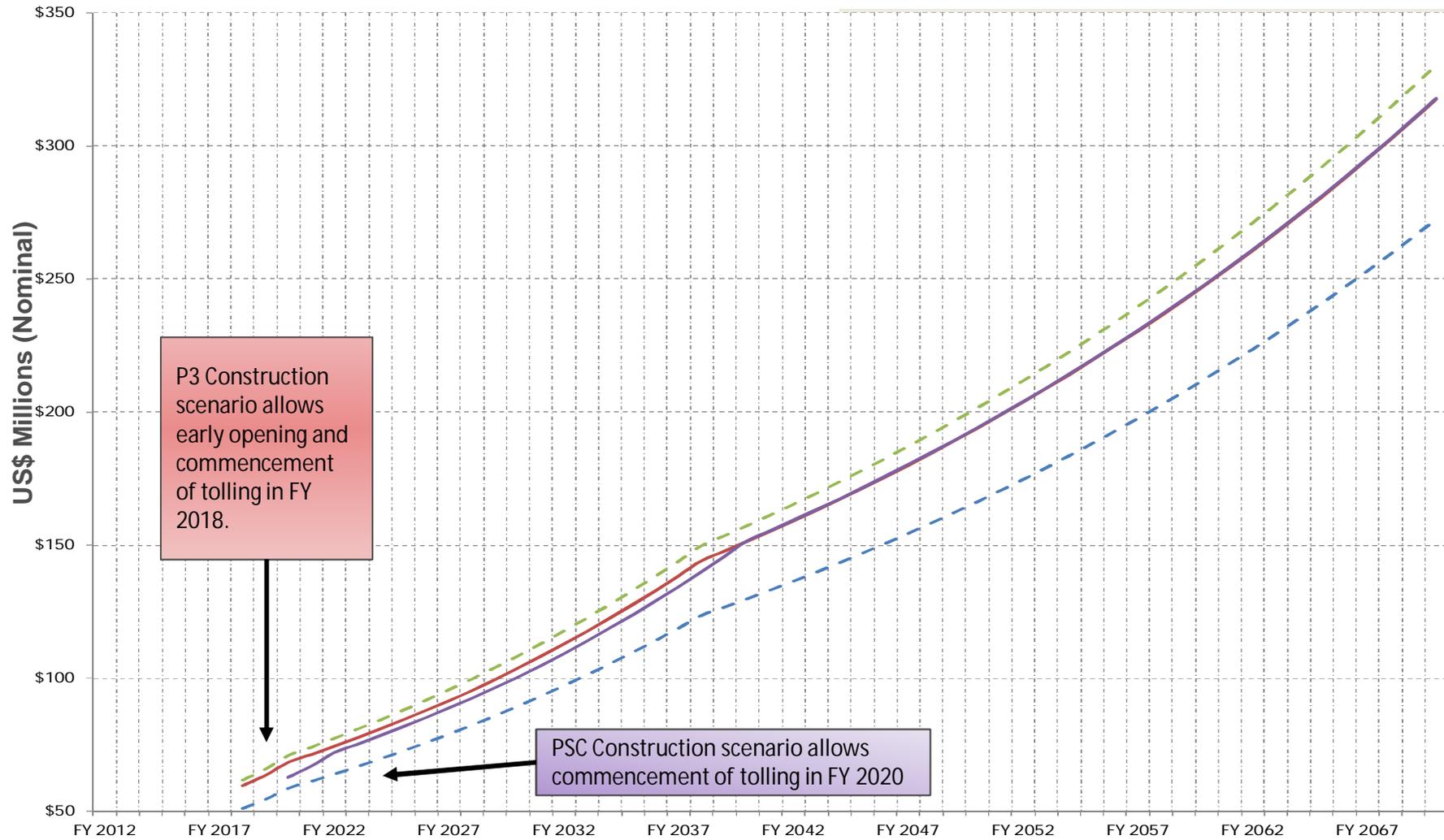
- Equipment O&M
- WSP Enforcement
- Transaction Based CSC Costs
- Fixed Back Office Costs
- Credit Card Fees
- Uncollectible Accounts
- Tolling & ITS - Transaction based costs\*

\* Tolling & ITS – Transaction based costs incorporate equipment maintenance, customer service center (CSC) and Fixed Back Office Costs.

# Financial Model Inputs (SR 509 Toll Lanes)

# Revenue Assumptions

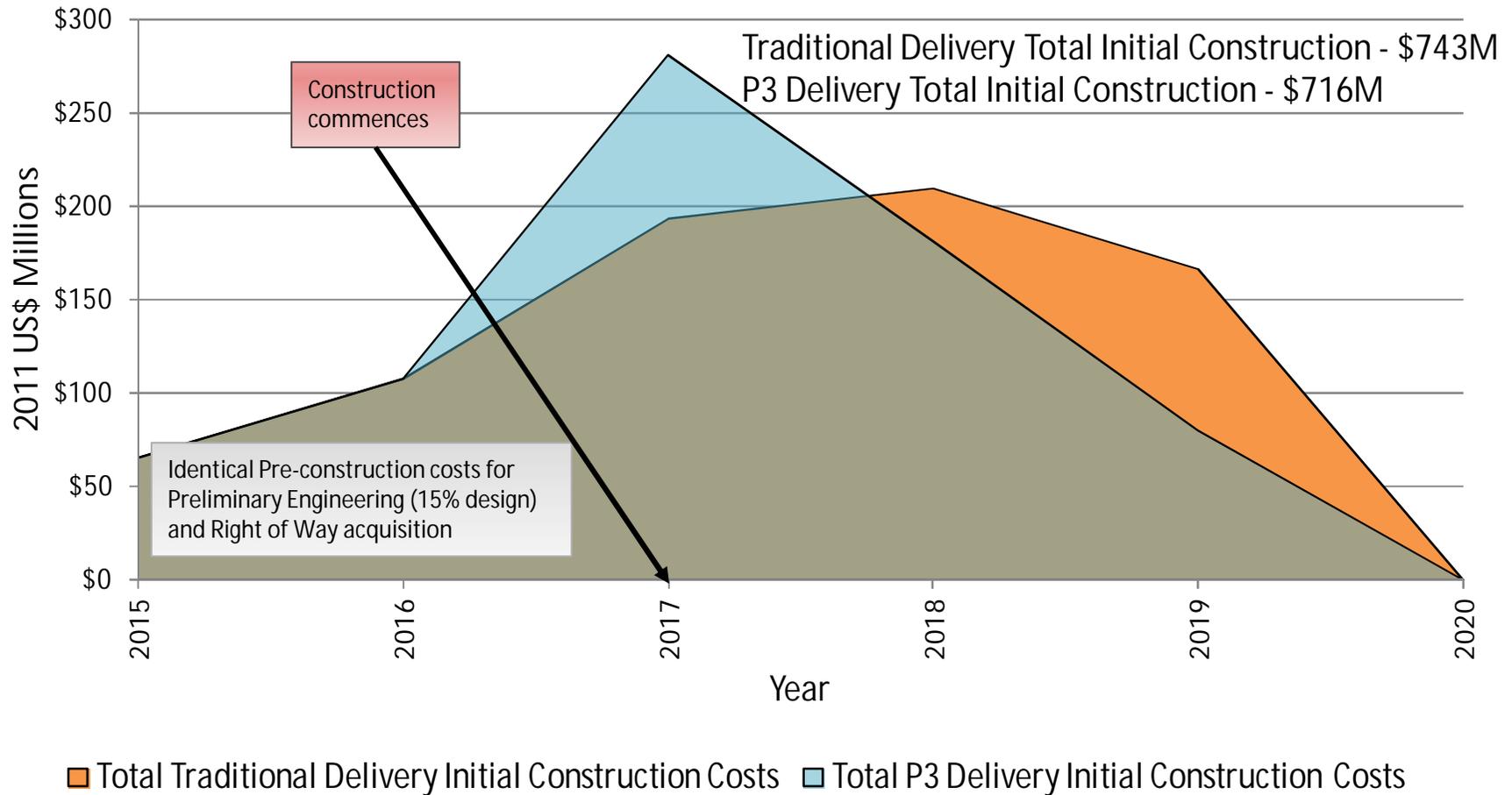
PSC Revenue Assumptions		P3 Revenue Assumptions	
Base Case		Base Case	
		High Case	
		Low Case	



# Construction Costs

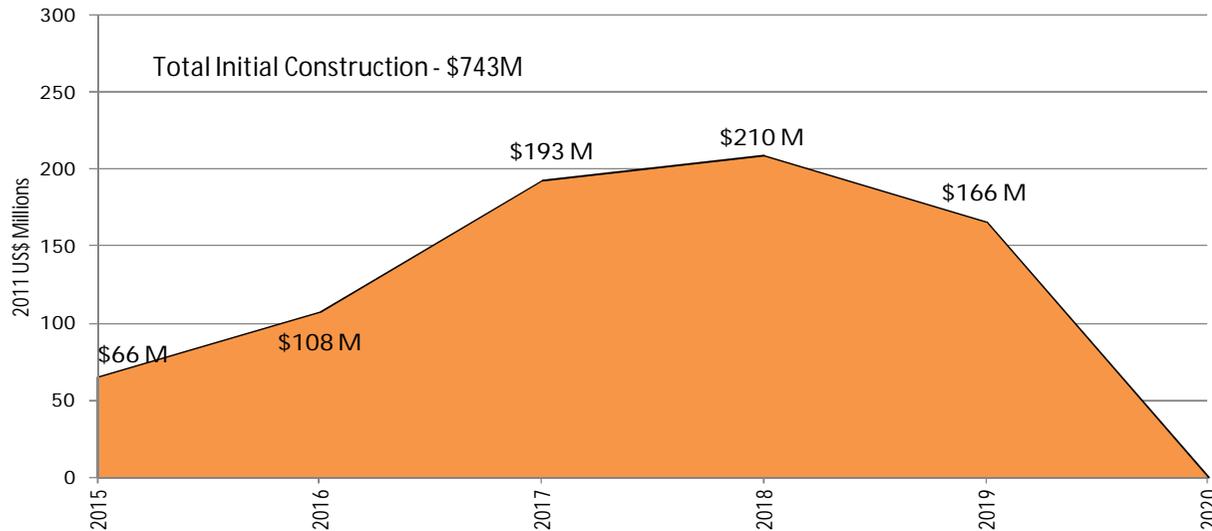
P3 Case assumes accelerated construction schedule

## Initial Construction Costs Comparison



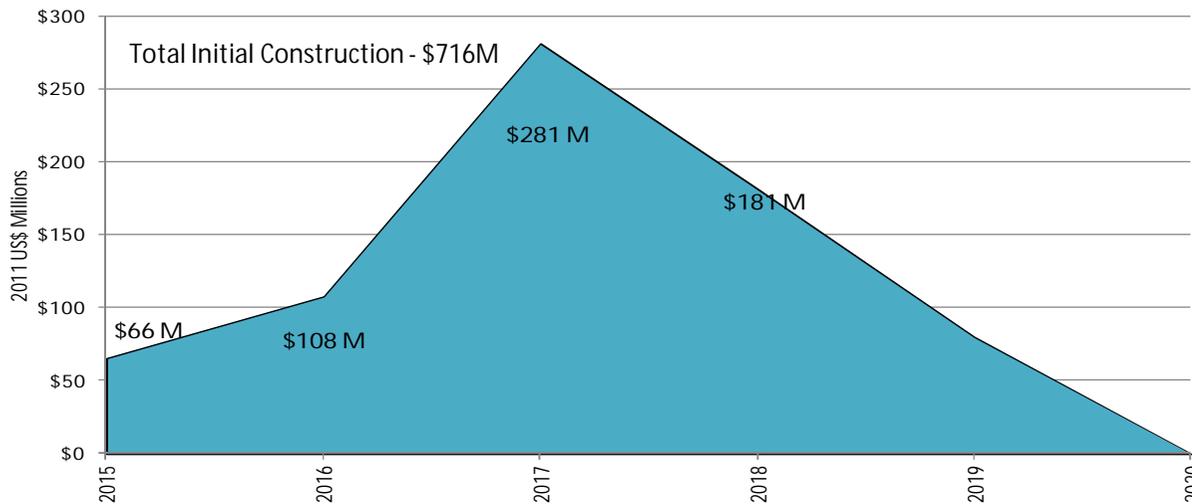
# Construction Costs

## 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

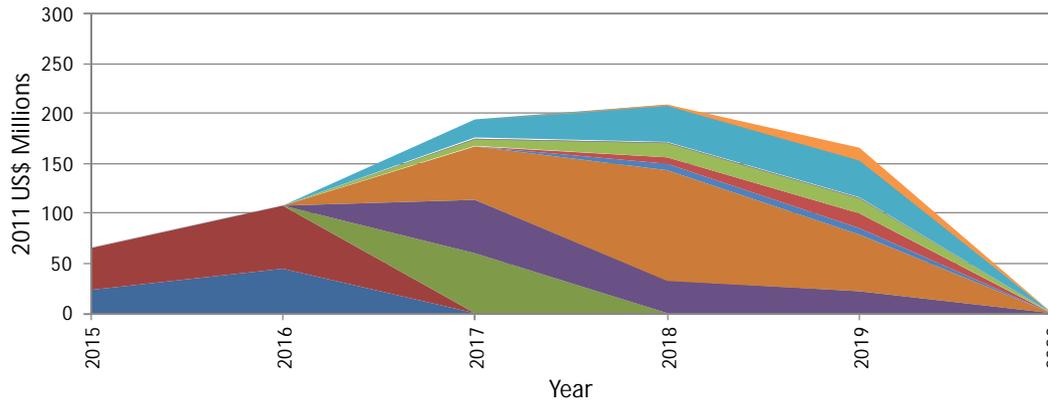


Initial Construction Costs Savings for the P3 Delivery method are based on the ability of the private sector to complete construction within 2.5 years instead of 3, reducing all time dependant costs such as Mobilization & Preparation and Traffic Control, and to a lesser extent other costs such as Design

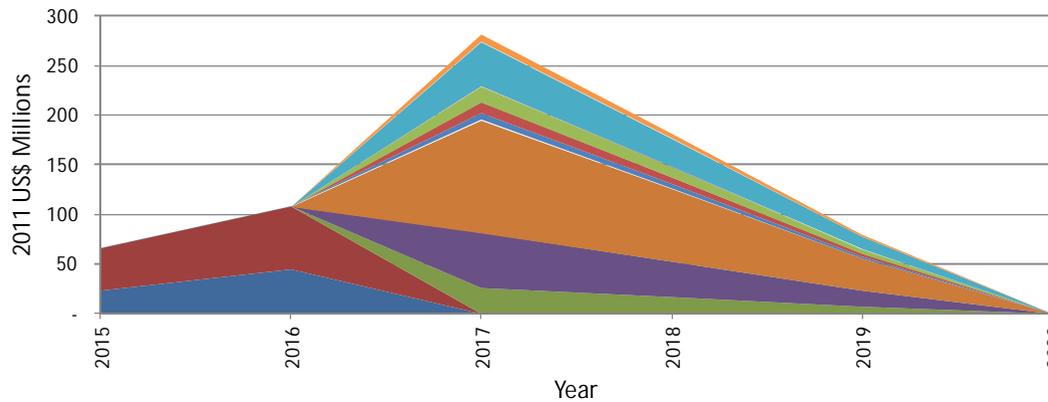
The private sector would have the ability to bulk purchase materials such as steel which could potentially provide significant savings . This has been assumed for this project.

# Construction Costs

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	\$50
GRADING, DRAINAGE AND STOCKPILING	\$108	\$107
WATERLINES, STORM AND SANITARY SEWERS	\$0	\$0
STRUCTURES	\$221	\$219
ASPHALT AND SURFACING	\$13	\$13
CEMENT CONCRETE PAVEMENT	\$21	\$21
TRAFFIC CONTROL	\$37	\$31
OTHER ITEMS	\$2	\$2
NON - BID COSTS 700 Level Items	\$93	\$85
TOLLING & ITS	\$14	\$14
<b>Total Construction Cost</b>	<b>\$743</b>	<b>\$716</b>

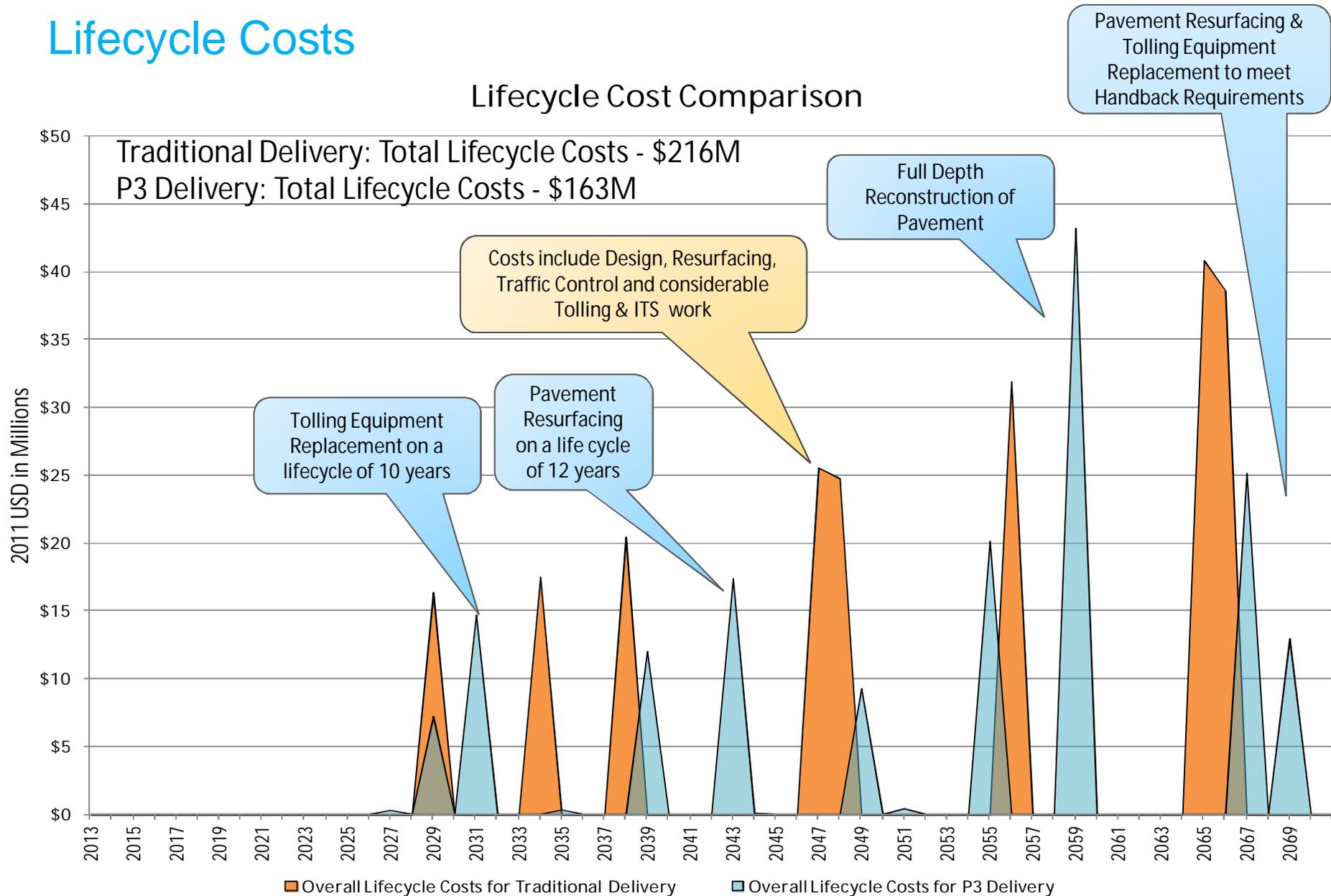
\* Other Items include Design, QAQC (15%), Guardrail, Signage other minor items, Environmental mitigation like recon of wetlands, stream restoration etc, differing site conditions

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

- DESIGN
- RIGHT of WAY
- MOBILIZATION AND PREPARATION
- GRADING, DRAINAGE AND STOCKPILING
- WATERLINES, STORM AND SANITARY SEWERS
- STRUCTURES
- ASPHALT AND SURFACING
- CEMENT CONCRETE PAVEMENT
- TRAFFIC CONTROL
- OTHER ITEMS
- NON - BID COSTS 700 Level Items
- TOLLING & ITS

# Lifecycle Costs

## Lifecycle Cost Comparison



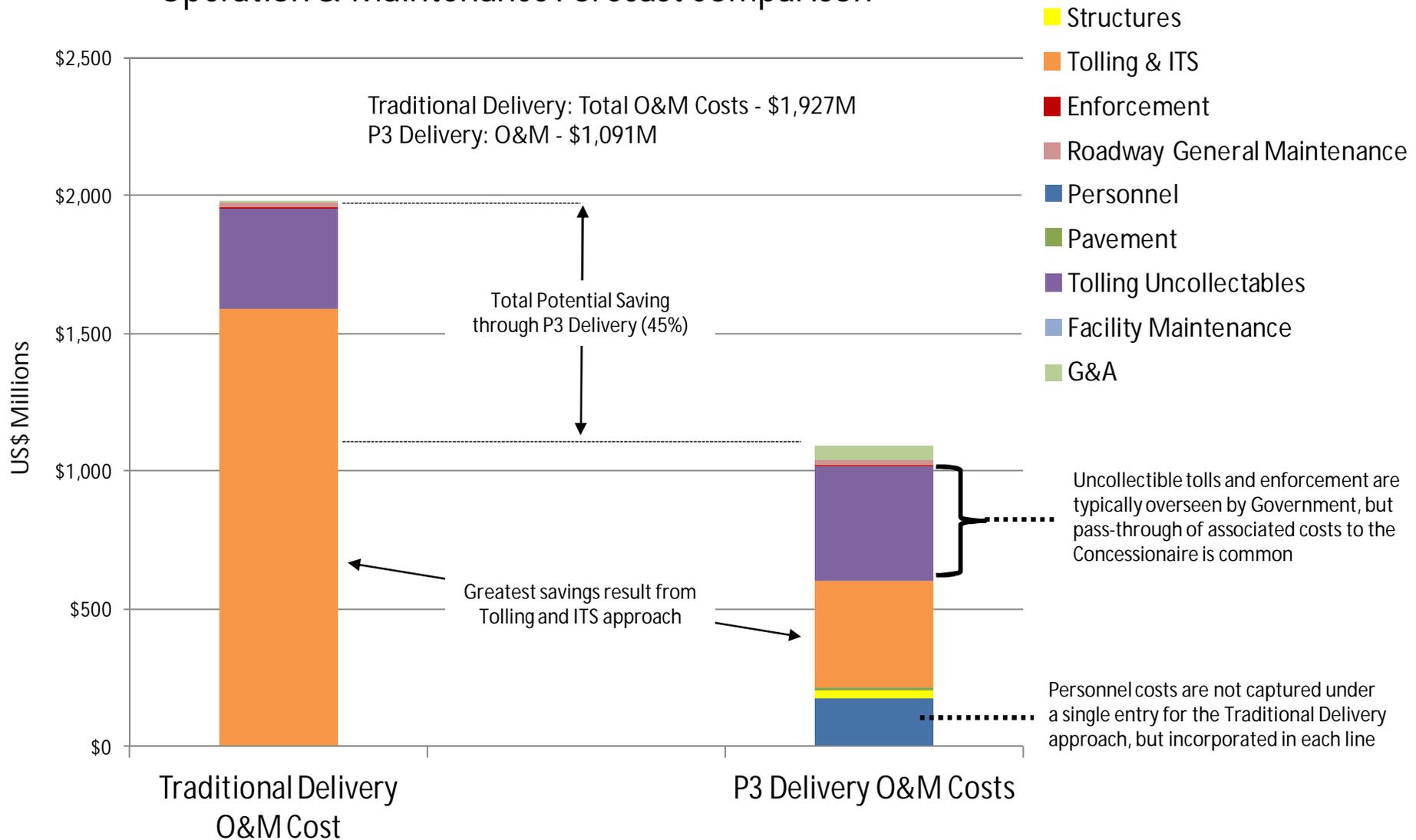
## Lifecycle Costs

<b>SR 509 Express Toll Lanes Lifecycle Costs (Millions)</b>	<b>Traditional Delivery</b>	<b>P3 Delivery</b>
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 Test	\$14.96	\$0.00
Design	\$0.00	\$0.00
Mobilization and Preparation	\$11.50	\$0.00
General Contingencies	\$0.00	\$35.34
<b>Total Over Concession</b>	<b>\$216.21</b>	<b>\$163.19</b>

- 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)

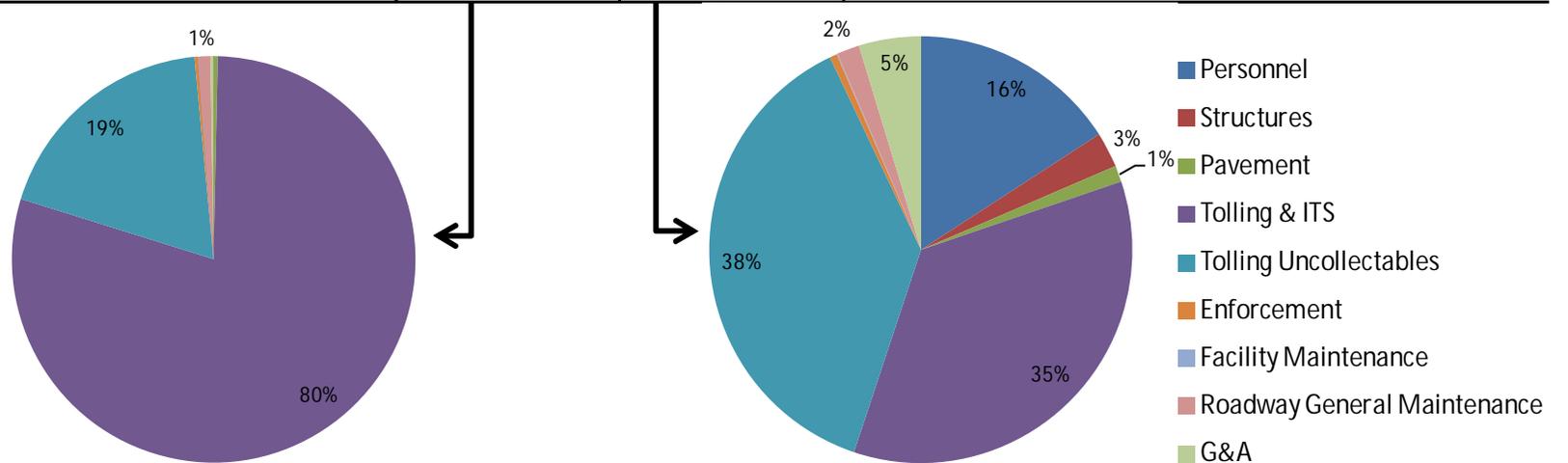
# O&M Costs

## Operation & Maintenance Forecast Comparison



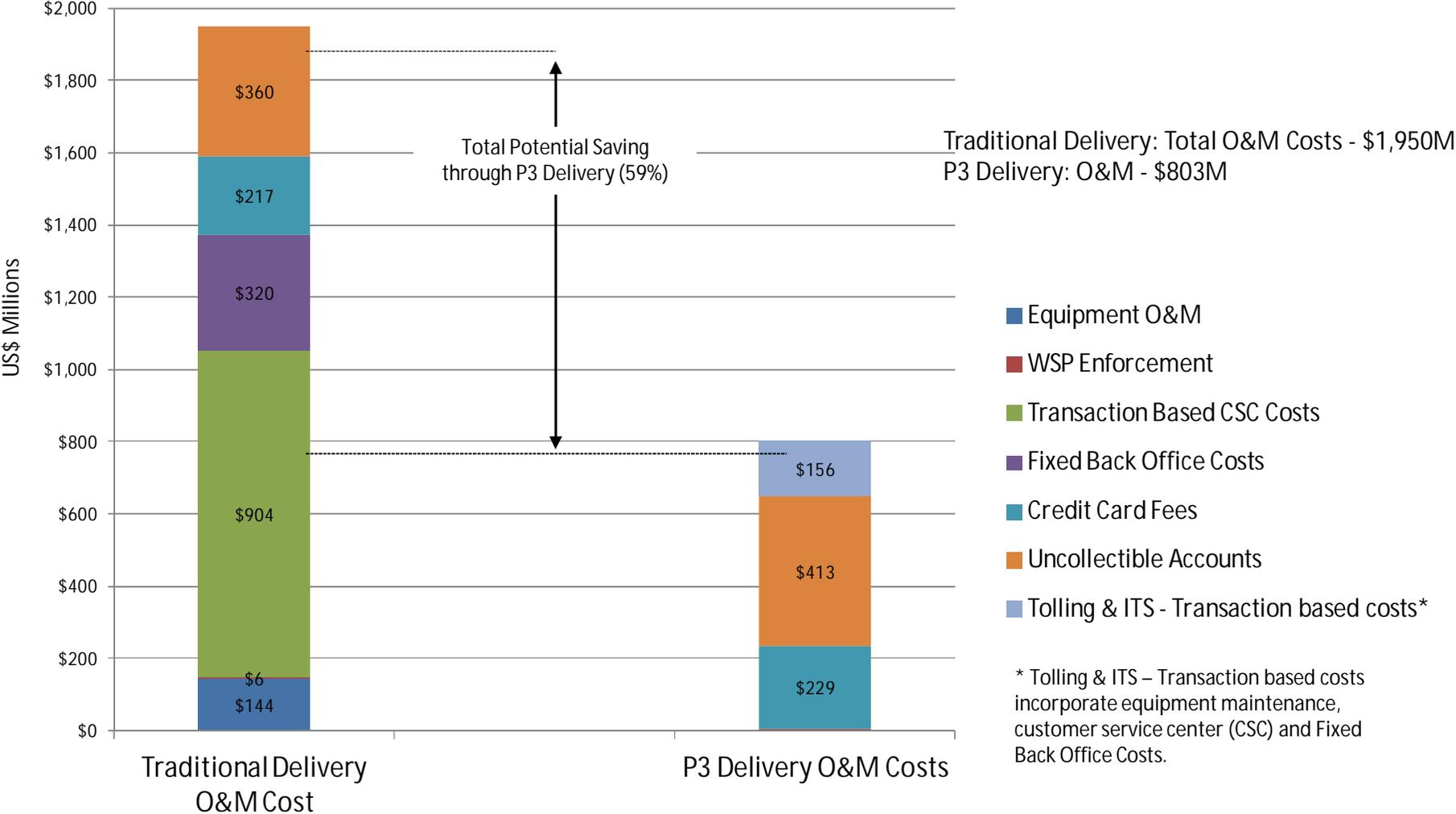
# O&M Costs

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	\$0.21	\$29.39	Includes bridges, safety barriers and retaining walls
Pavement	\$6.25	\$13.43	Includes asphalt & concrete pavement
Tolling & ITS	\$1,584.54	\$384.89	Includes annual maintenance, fixed back office costs, transaction based cost & credit card fees
Tolling Uncollectables	\$359.97	\$412.88	For both delivery methods assumed 4.5% of Revenue
Enforcement	\$5.84	\$5.81	Assumed the same for both delivery methods
Facility Maintenance	\$0.00	\$0.83	
Roadway General Maintenance	\$20.05	\$18.89	Includes drainage, landscaping etc.
G&A	\$4.74	\$51.46	General & Administrative costs
<b>Total Over Concession Years</b>	<b>\$1,982</b>	<b>\$1,091</b>	



# Tolling & ITS Costs

SR 509 Tolling & ITS Comparison

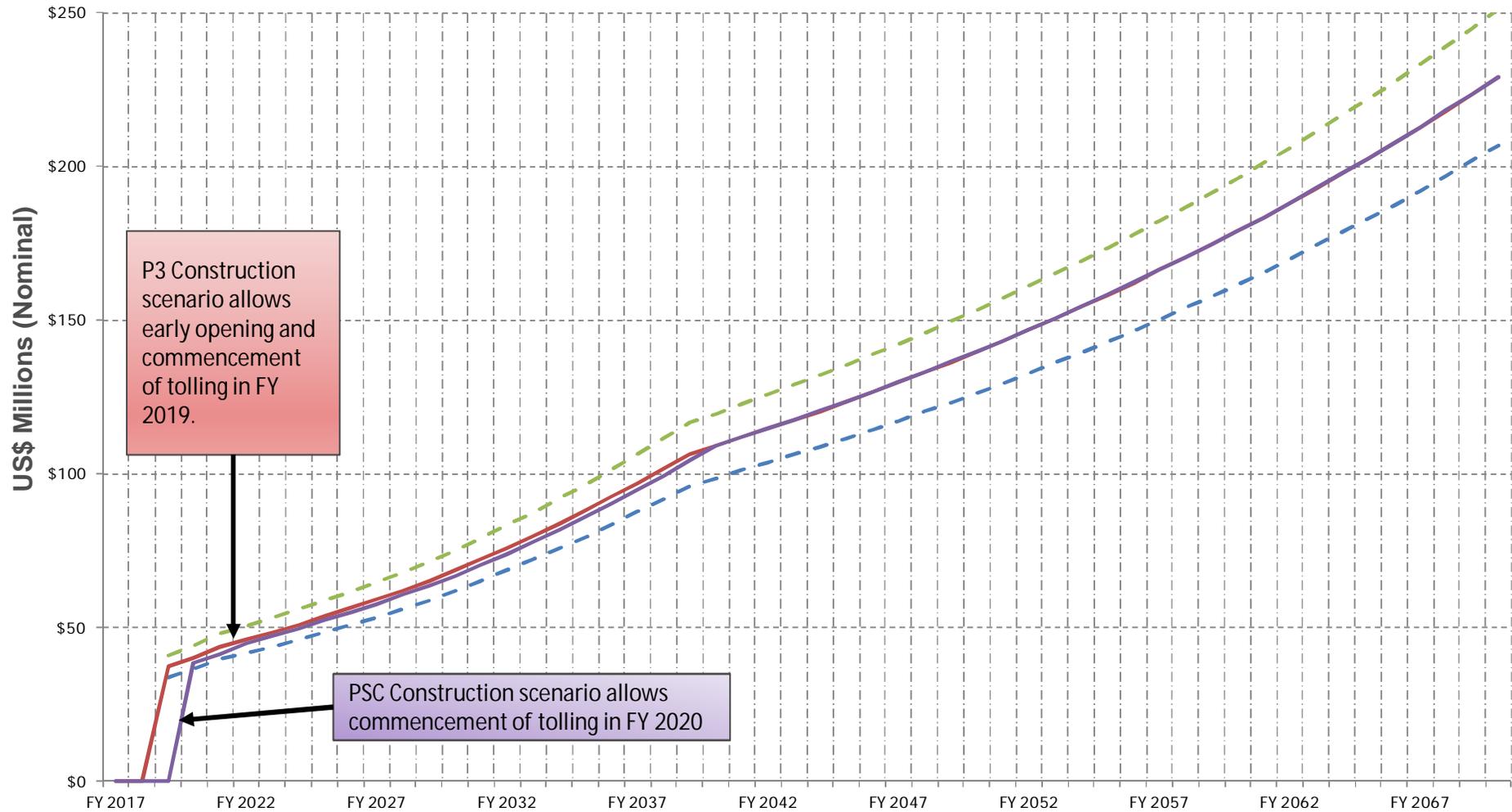


# Financial Model Inputs

## (SR 167 Toll Lanes)

# Revenue Assumptions

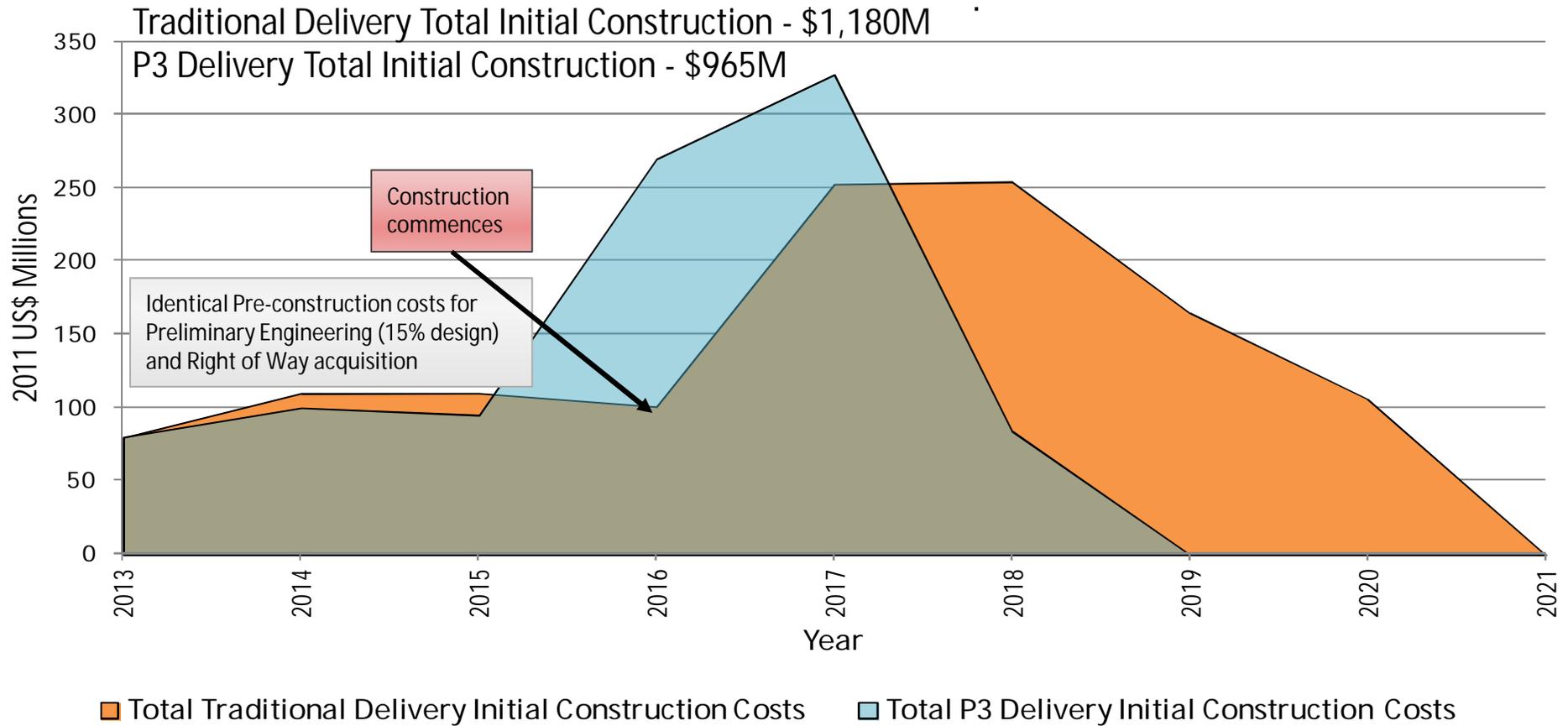
PSC Revenue Assumptions		P3 Revenue Assumptions	
Base Case		Base Case	
		High Case	
		Low Case	



# Construction Costs

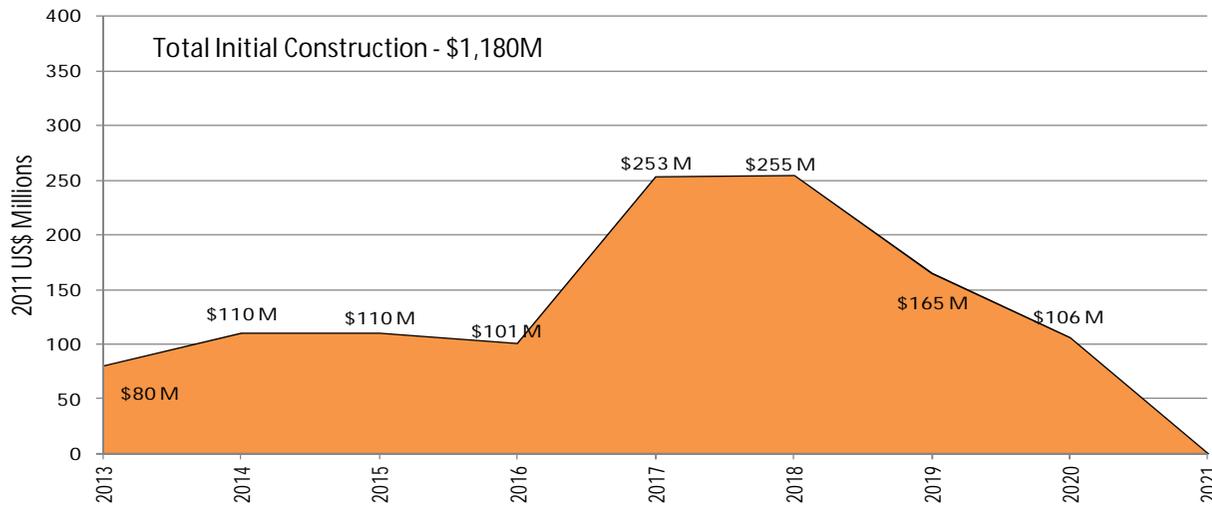
P3 Case assumes accelerated construction schedule

### Initial Construction Costs Comparison



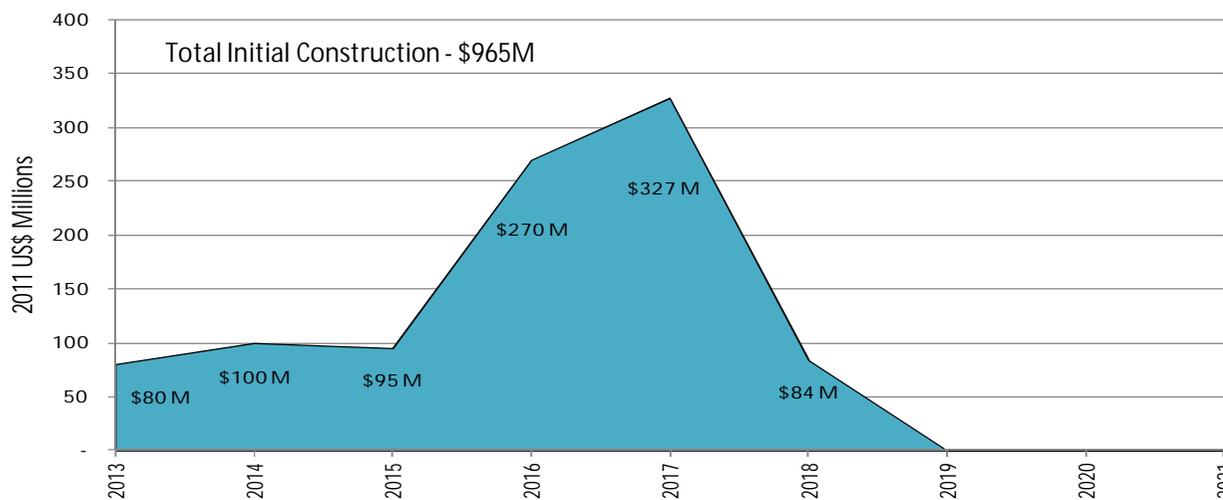
# Construction Costs

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

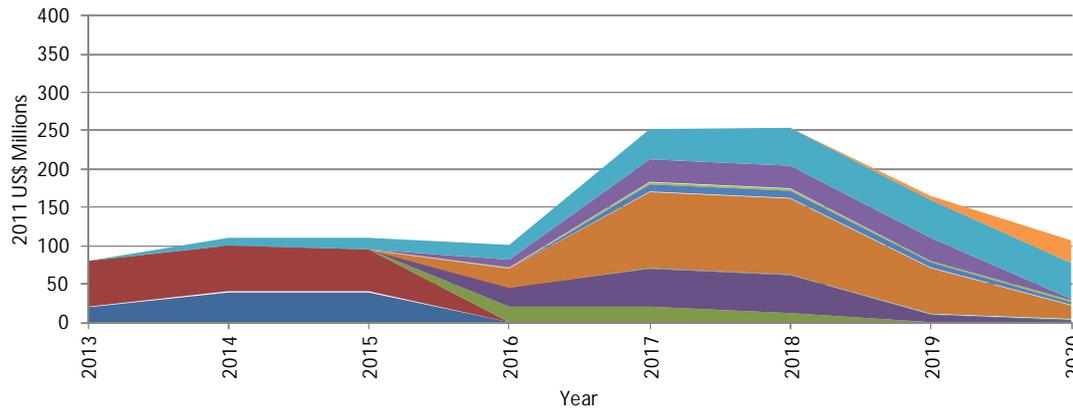


Initial Construction Costs Savings for the P3 Delivery method are based on the ability of the private sector to complete construction within 2.5 years instead of 5, reducing all time dependant costs such as Mobilization & Preparation and Traffic Control, and to a lesser extent other costs such as Design

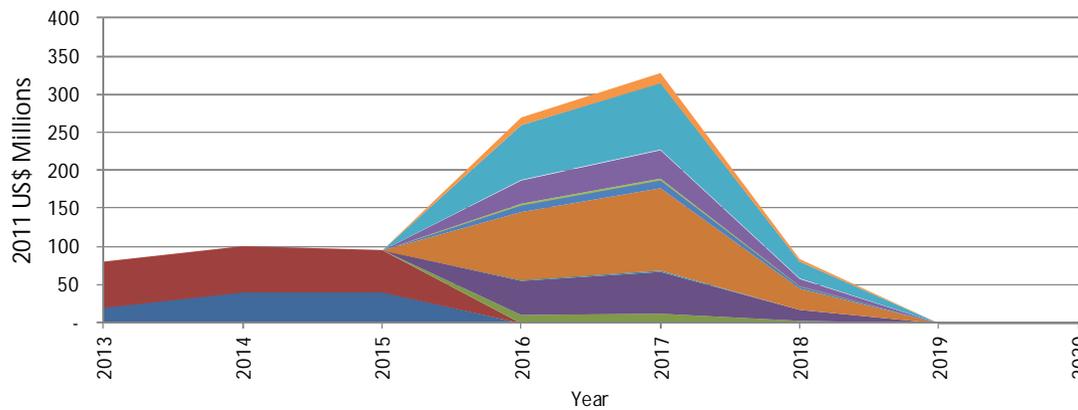
The private sector would have the ability to bulk purchase materials such as steel which could potentially provide significant savings . However, this has not been assumed for this project.

# Construction Costs

SR 167 Express Toll Lanes  
Traditional Delivery Initial Construction Costs



SR 167 Express Toll Lanes  
P3 Delivery Initial Construction Costs



SR 167 Express Toll Lanes Initial Construction Costs (Millions)	Traditional Delivery	P3 Delivery
DESIGN	\$100	\$100
RIGHT of WAY	\$175	\$175
MOBILIZATION AND PREPARATION	\$52	\$26
GRADING, DRAINAGE AND STOCKPILING	\$138	\$113
WATERLINES, STORM AND SANITARY SEWERS	\$5	\$4
STRUCTURES	\$303	\$226
ASPHALT AND SURFACING	\$31	\$23
CEMENT CONCRETE PAVEMENT	\$0	\$0
TRAFFIC CONTROL	\$9	\$5
OTHER ITEMS*	\$102	\$77
NON - BID COSTS 700 Level Items**	\$232	\$181
TOLLING & ITS	\$34	\$27
<b>Total Construction Cost</b>	<b>\$1,180</b>	<b>\$956</b>

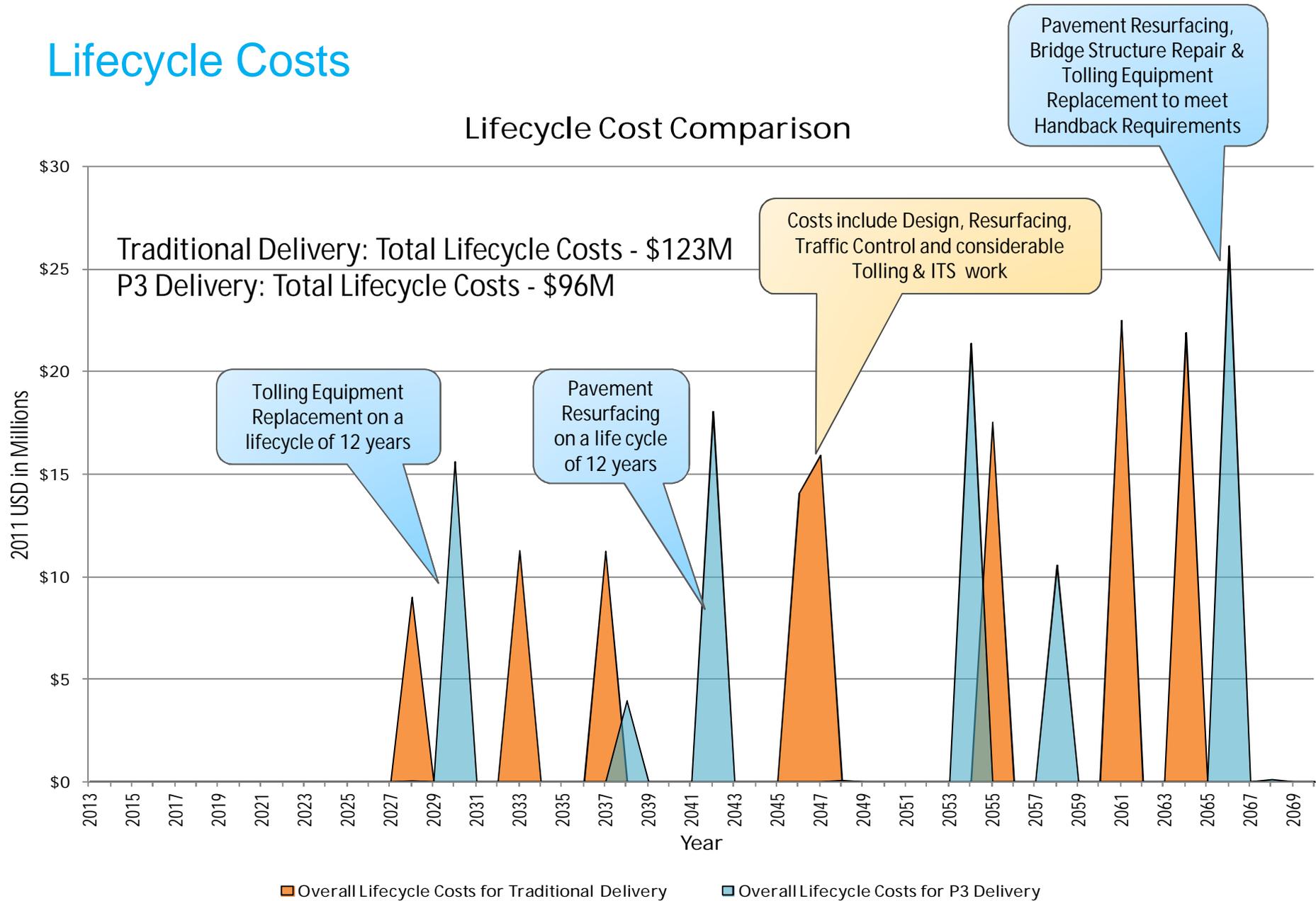
\* Other Items include Design, QAQC (15%), Guardrail, Signage other minor items, Environmental mitigation like recon of wetlands, stream restoration etc, differing site conditions

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

- DESIGN
- MOBILIZATION AND PREPARATION
- WATERLINES, STORM AND SANITARY SEWERS
- ASPHALT AND SURFACING
- TRAFFIC CONTROL
- NON - BID COSTS 700 Level Items
- RIGHT of WAY
- GRADING, DRAINAGE AND STOCKPILING
- STRUCTURES
- CEMENT CONCRETE PAVEMENT
- OTHER ITEMS
- TOLLING & ITS

# Lifecycle Costs

## Lifecycle Cost Comparison



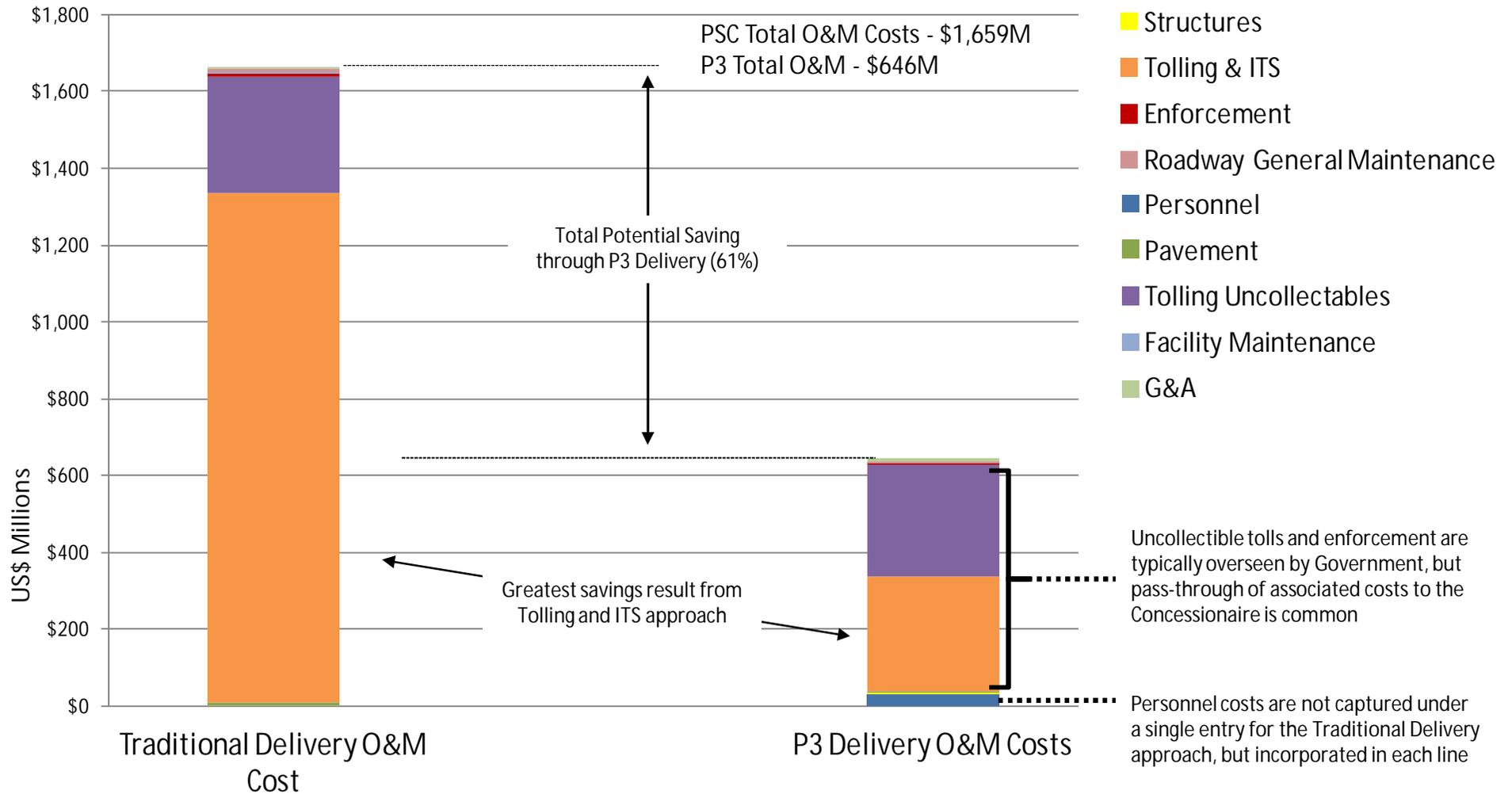
# Lifecycle Costs

SR 167 Express Toll Lanes Lifecycle Costs (Millions)	Traditional Delivery	P3 Delivery	
Roadway Maintenance	\$12.93	\$0.28	}
Structures <span style="float: right;">\$51.83</span>			
Pavement Maintenance	\$28.34	\$16.10	
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	<b>\$123.51</b>	<b>\$96.12</b>	
* 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)

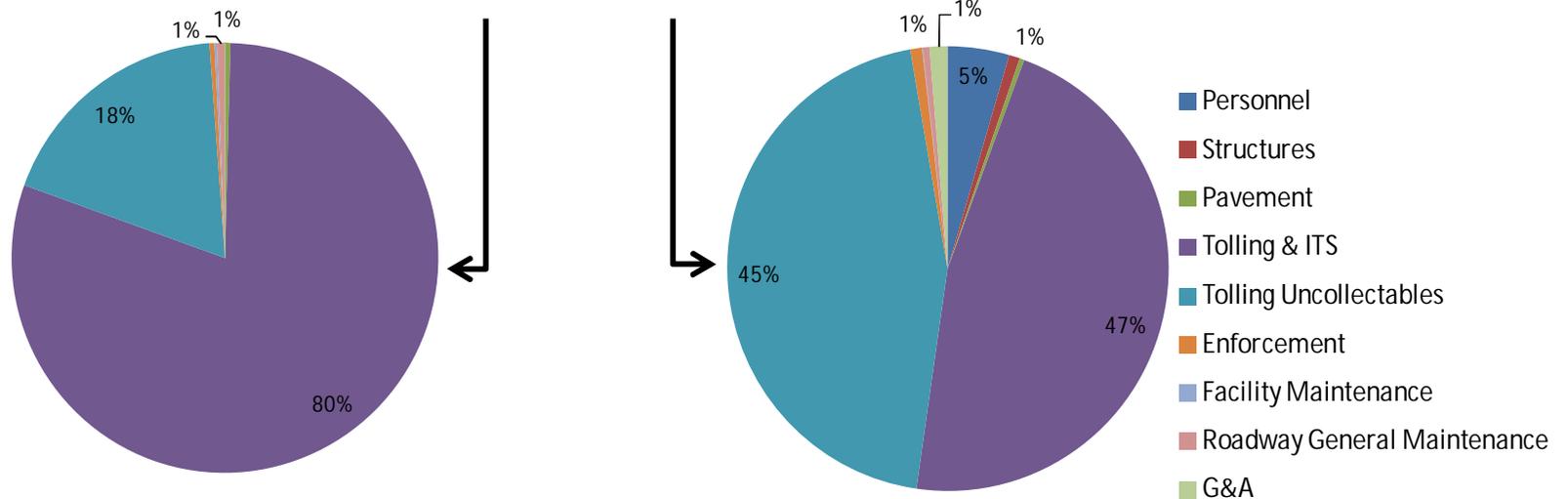
# O&M Costs

## Operation & Maintenance Forecast Comparison



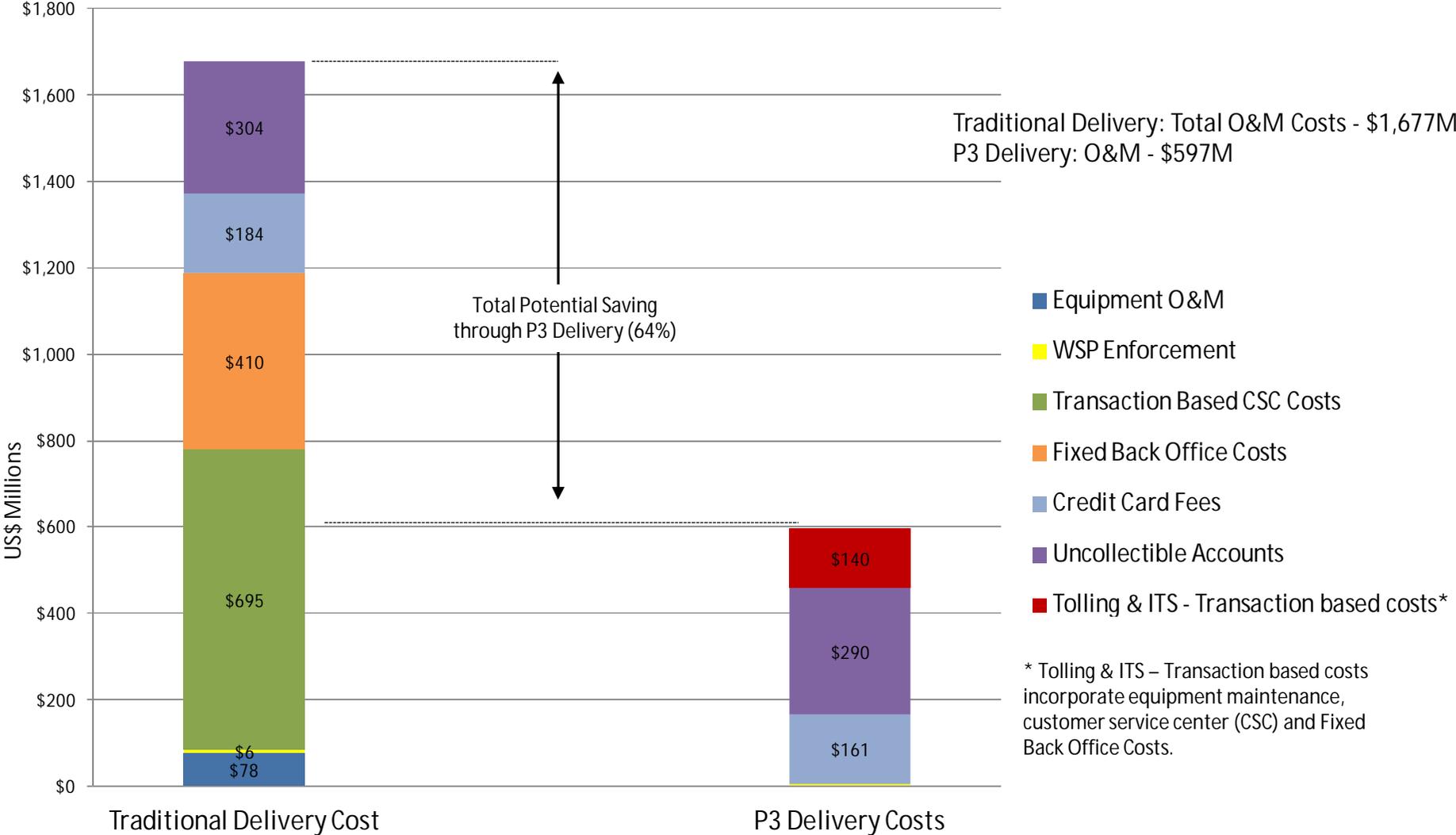
# O&M Costs

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	\$0.00	\$4.93	Includes bridges, safety barriers and retaining walls
Pavement	\$6.46	\$2.25	Includes asphalt & concrete pavement
Tolling & ITS	\$1,367.15	\$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	\$5.84	\$5.89	Assumed the same for both delivery methods
Facility Maintenance	\$0.00	\$0.14	
Roadway General Maintenance	\$12.88	\$3.17	Includes drainage, landscaping etc.
G&A	\$2.18	\$8.63	General & Administrative costs
<b>Total Over Concession</b>	<b>\$1,699</b>	<b>\$646</b>	



# Tolling & ITS Costs

## SR 167 Tolling & ITS Comparison



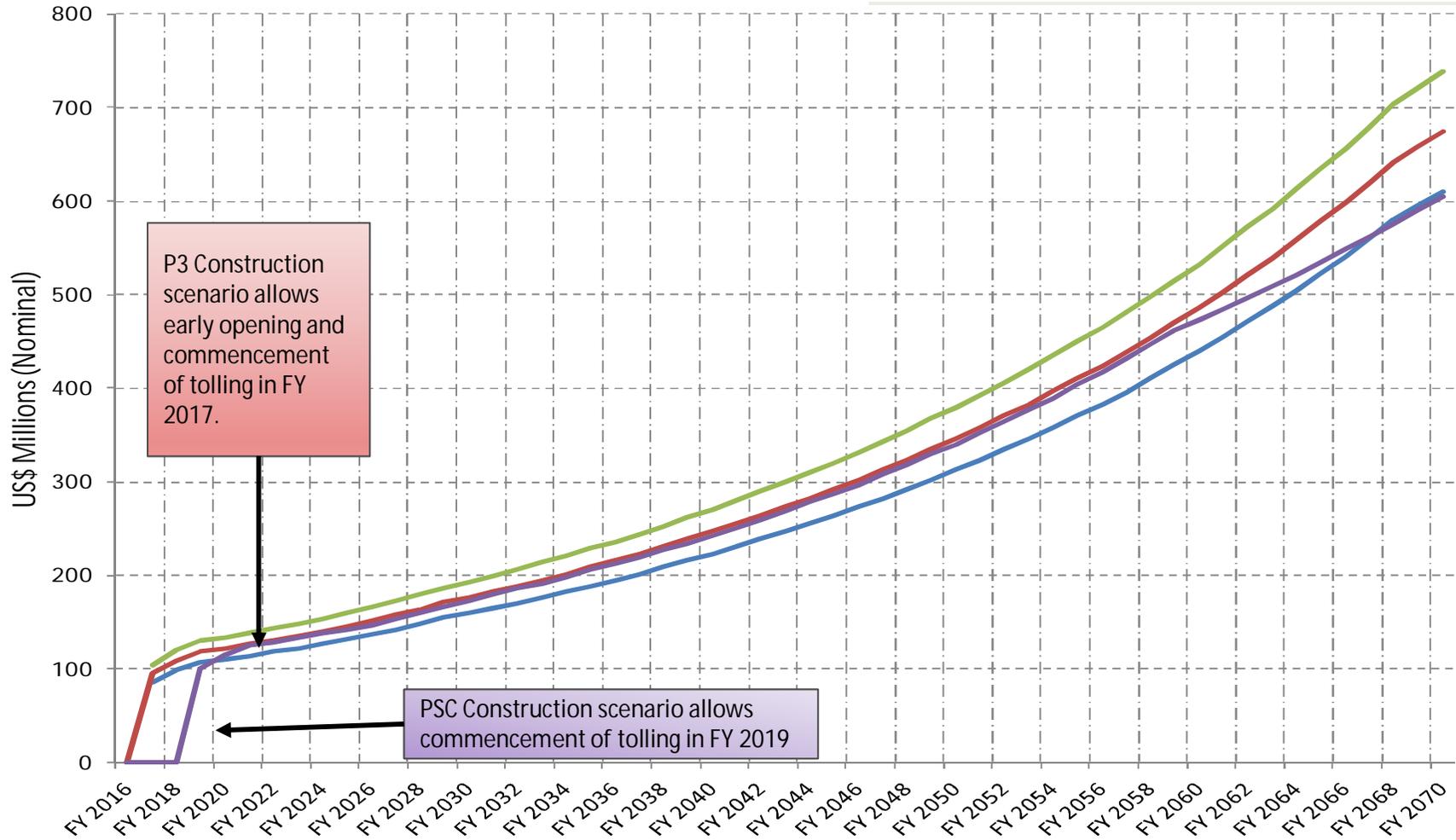
- Equipment O&M
- WSP Enforcement
- Transaction Based CSC Costs
- Fixed Back Office Costs
- Credit Card Fees
- Uncollectible Accounts
- Tolling & ITS - Transaction based costs\*

\* Tolling & ITS – Transaction based costs incorporate equipment maintenance, customer service center (CSC) and Fixed Back Office Costs.

# Financial Model Inputs (Columbia River Crossing)

# Revenue Assumptions

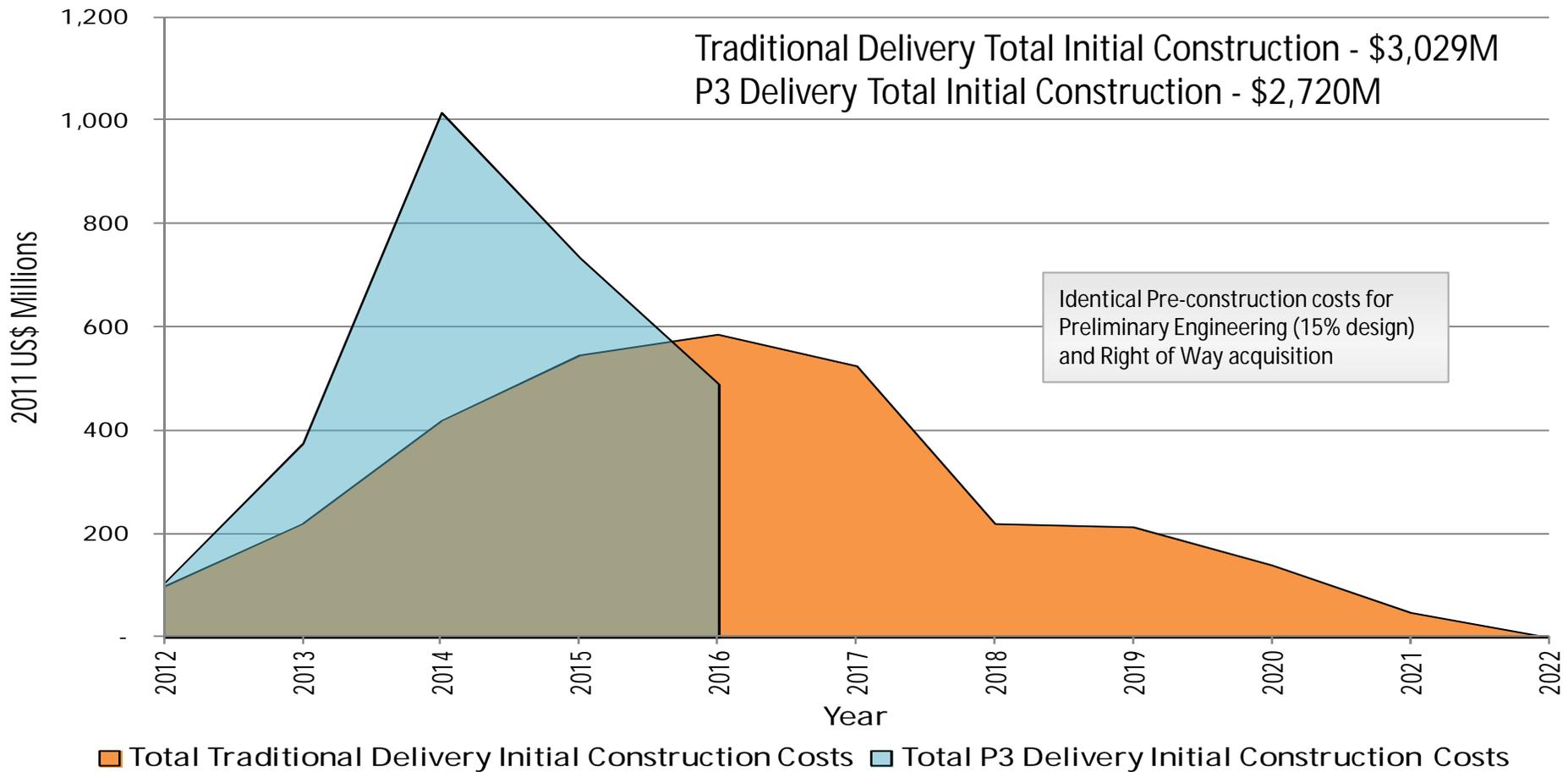
PSC Revenue Assumptions		P3 Revenue Assumptions	
Base Case		Base Case	
		High Case	
		Low Case	



# Construction Costs

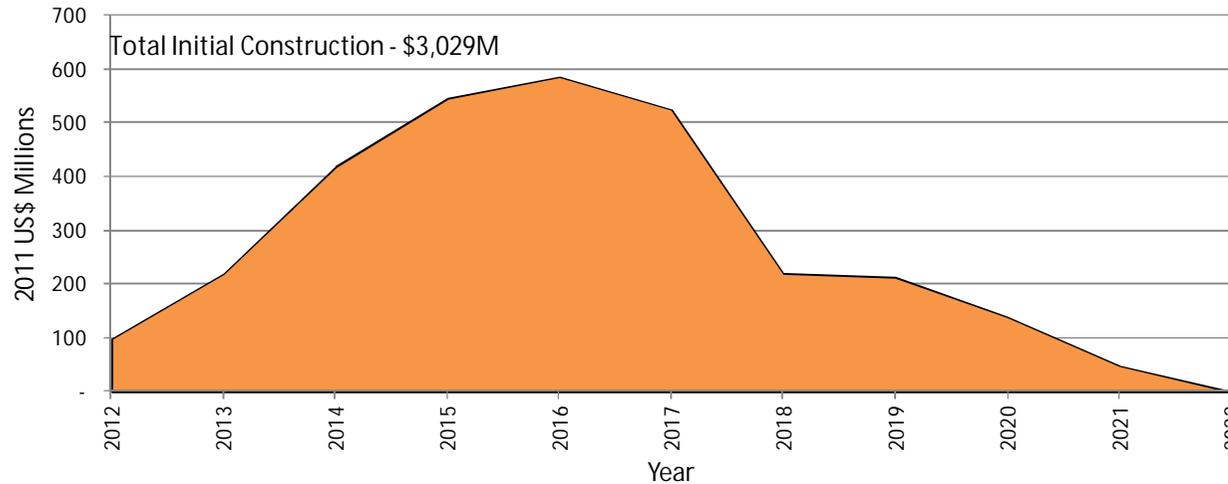
P3 Case assumes accelerated construction schedule

Initial Construction Comparison



# Construction Costs

CRC P3 Delivery Initial Construction Costs



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

CRC P3 Delivery Initial Construction Costs

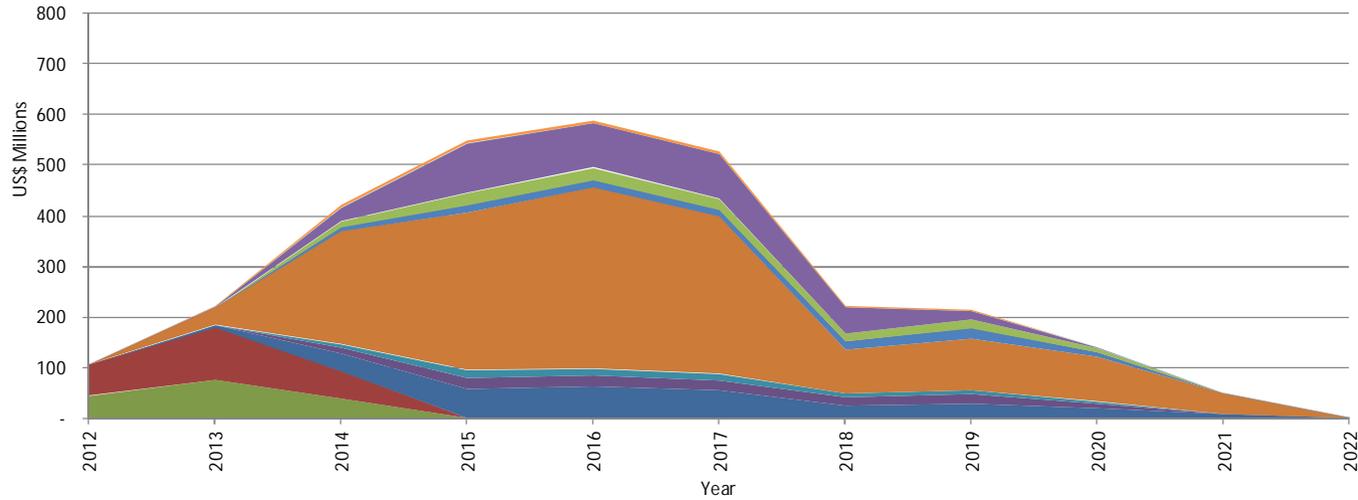


Initial Construction Costs Savings for the P3 Delivery method are based on the ability of the private sector to complete construction within 5 years instead of 9, reducing all time dependant costs such as Mobilization & Preparation and Traffic Control, and to a lesser extent other costs such as Design

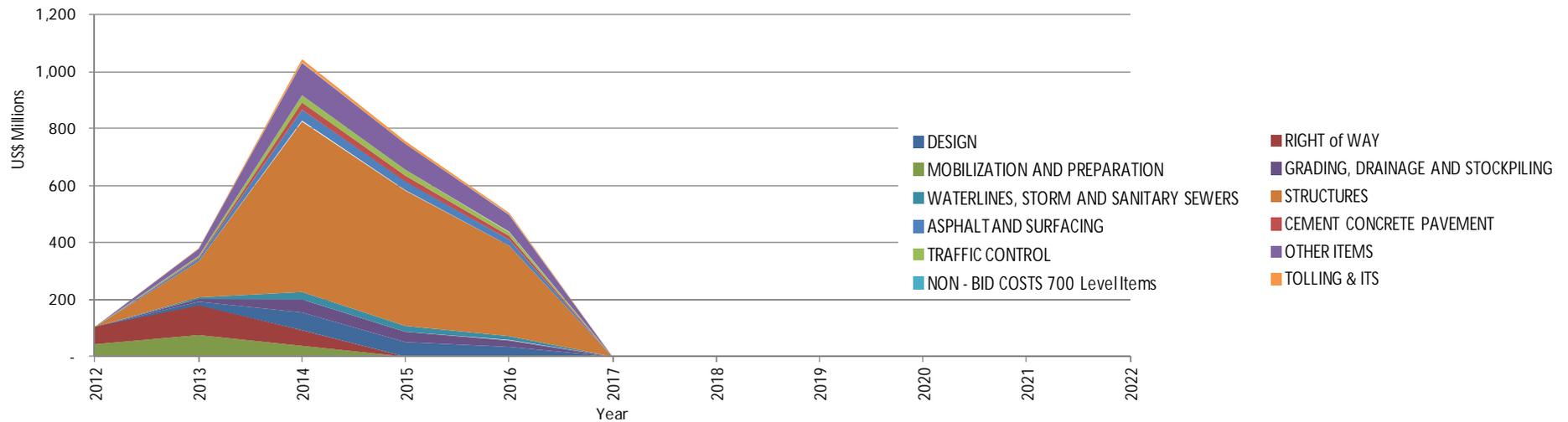
The private sector would have the ability to bulk purchase materials such as steel which could potentially provide significant savings. However, this has not been assumed for this project.

# Construction Costs

CRC Traditional Delivery Initial Construction Costs



CRC P3 Delivery Initial Construction Costs



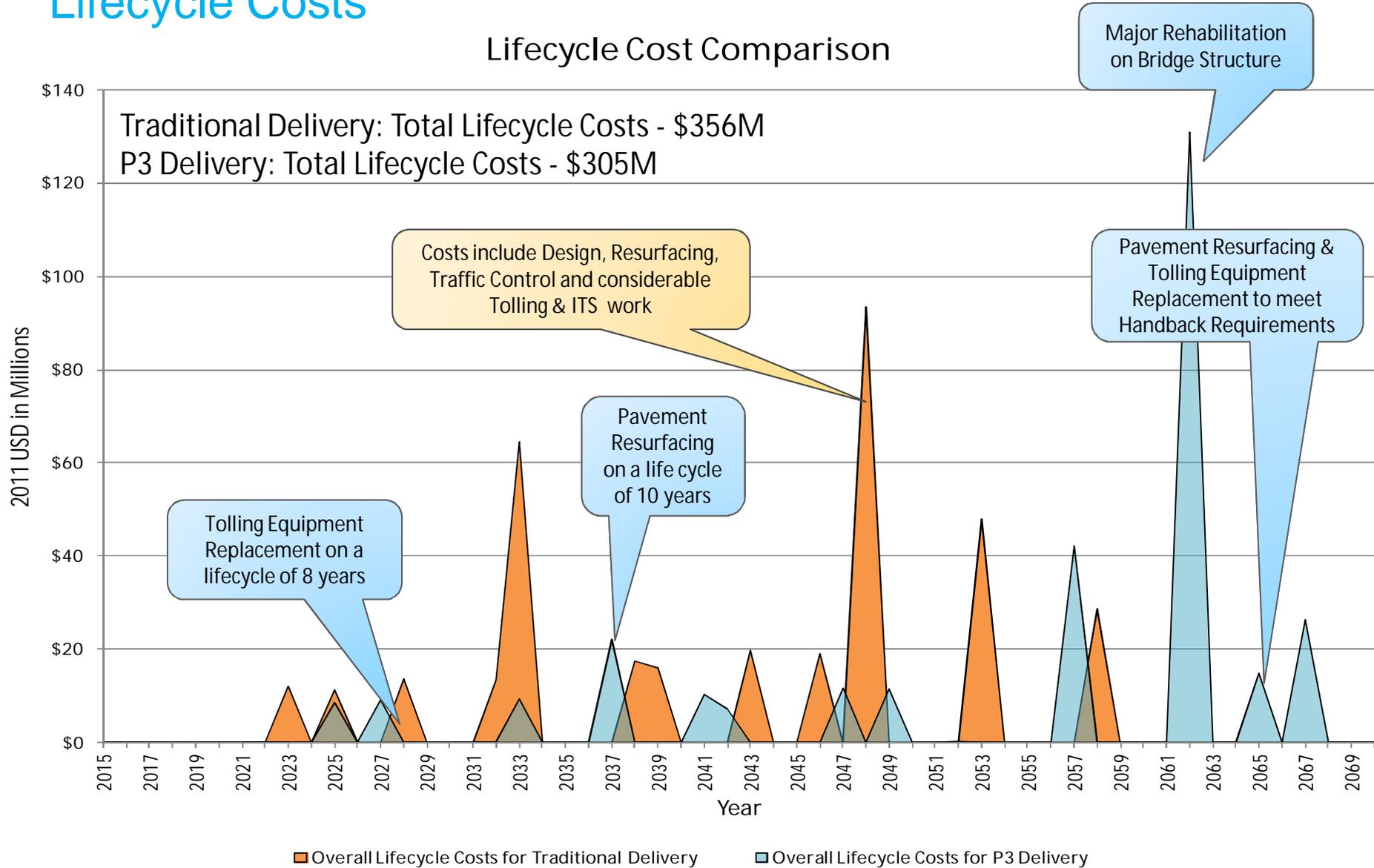
# Initial Construction Costs

CRC Toll Lanes Initial Construction Costs (Millions)	Traditional Delivery	P3 Delivery
DESIGN	\$157	\$157
RIGHT of WAY	\$220	\$220
MOBILIZATION AND PREPARATION	\$293	\$162
GRADING, DRAINAGE AND STOCKPILING	\$120	\$116
WATERLINES, STORM AND SANITARY SEWERS	\$68	\$66
STRUCTURES	\$1,553	\$1,519
ASPHALT AND SURFACING	\$101	\$99
CEMENT CONCRETE PAVEMENT	\$0	\$0
TRAFFIC CONTROL	\$122	\$68
OTHER ITEMS*	\$368	\$287
NON - BID COSTS 700 Level Items**	\$0	\$0
TOLLING & ITS	\$27	\$27
<b>Total Construction Cost</b>	<b>\$3,029</b>	<b>\$2,720</b>
* 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		

- Overall, P3 costs are 10% 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

# Lifecycle Costs

## Lifecycle Cost Comparison

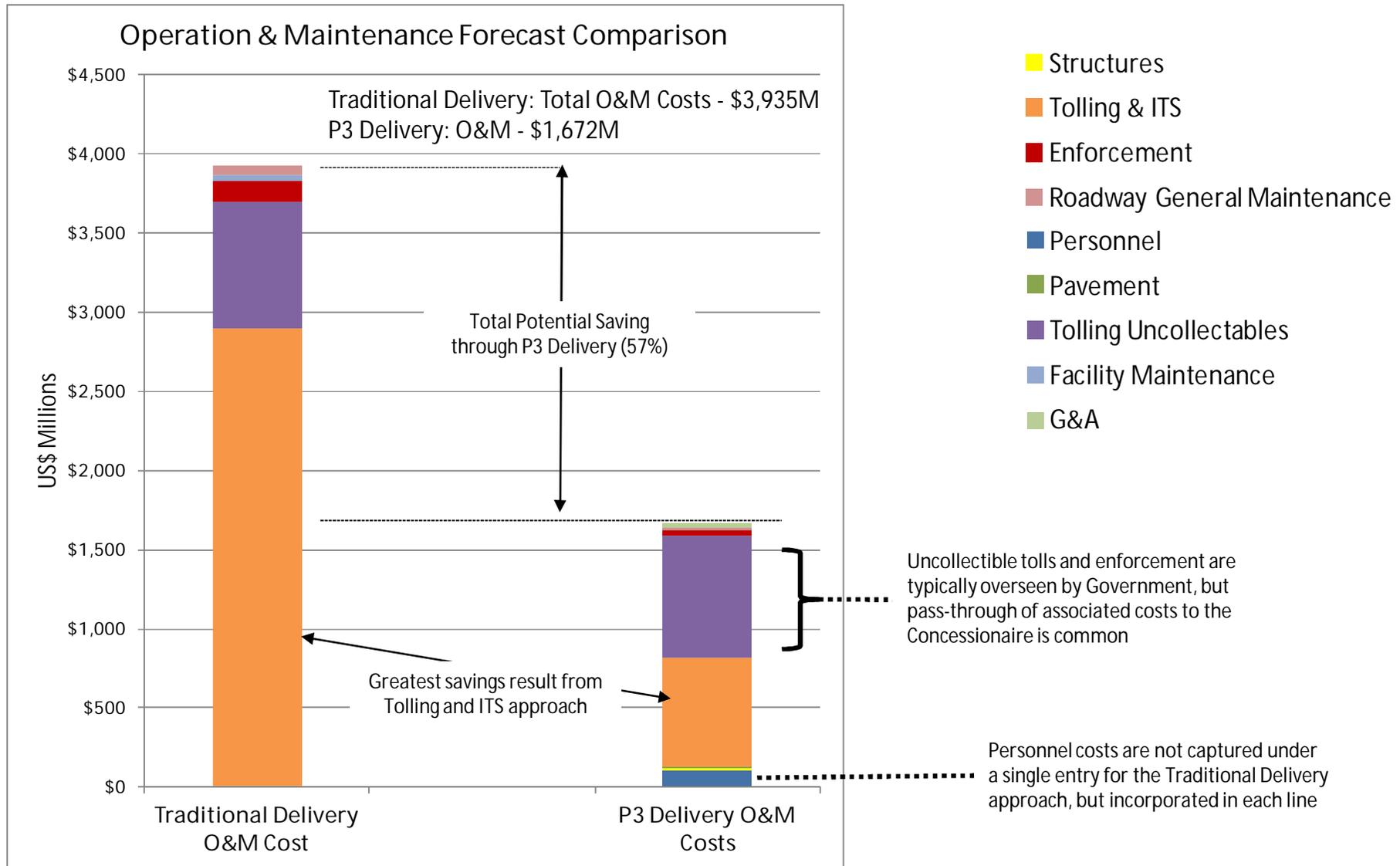


## Lifecycle Costs

CRC Toll Lanes Lifecycle Costs (Millions)	Traditional Delivery	P3 Delivery
Roadway Maintenance	\$42.41	\$1.62
Pavement Maintenance	\$105.33	\$21.87
Structures	\$0.00	\$150.39
Tolling & ITS Maintenance	\$109.91	\$57.20
Other Misc. Items	\$50.58	\$0.00
Engineering, Construction Mgmt. and Testing Fees	\$27.98	\$23.11
Design	\$0.00	\$11.55
Mobilization and Preparation	\$21.52	\$13.86
General Contingencies	\$0.00	\$25.42
<b>Total Over Concession</b>	<b>\$357.73</b>	<b>\$305.03</b>

- Overall, P3 costs are 15% lower in nominal (2011) dollars
- P3 case actually spends significantly more on Structure repairs

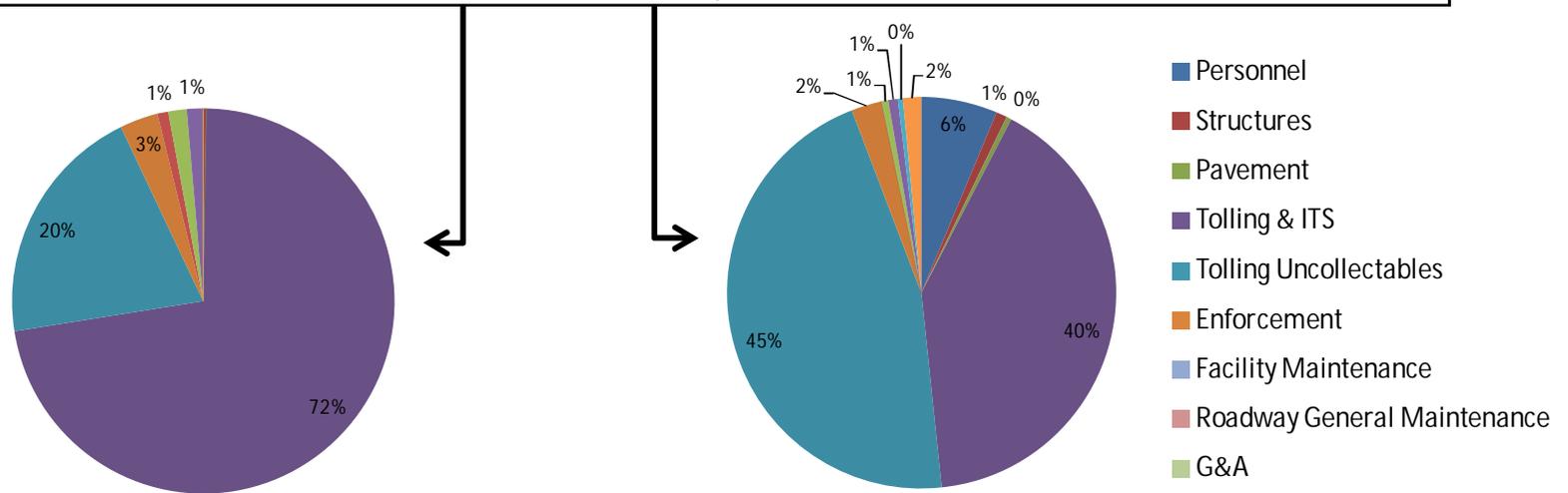
# O&M Costs



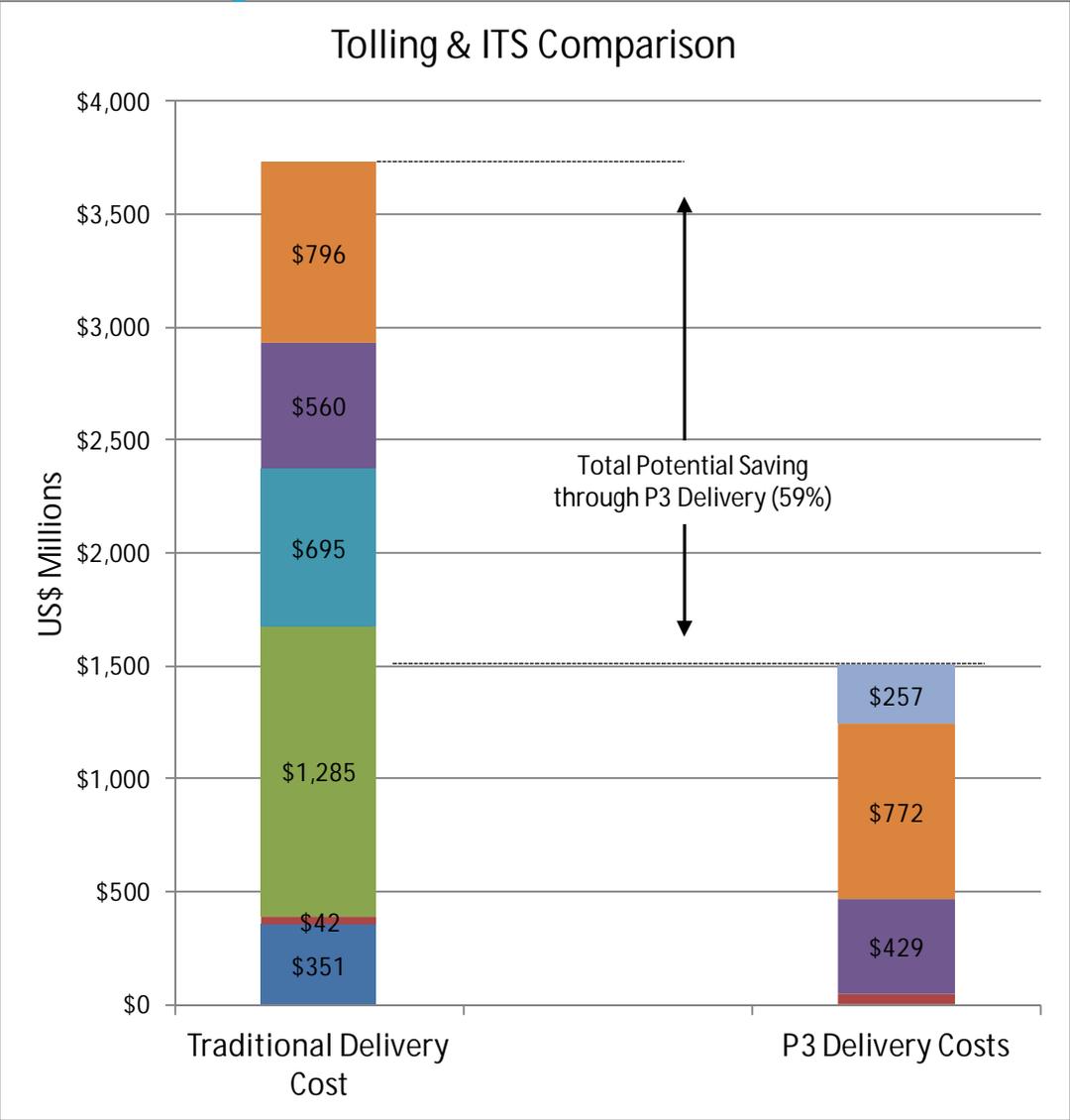
# O&M Costs

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	\$9.46	\$15.00	Includes bridges, safety barriers and retaining walls
Pavement	\$0.00	\$6.86	Includes asphalt & concrete pavement
Tolling & ITS	\$2,891.04	\$685.95	Includes annual maintenance, fixed back office costs, transaction based cost & credit card fees
Tolling Uncollectables	\$796.24	\$771.58	For both delivery methods assumed 4.5% of Revenue
Enforcement	\$130.48	\$41.92	Assumed the same for both delivery methods
Facility Maintenance	\$8.76	\$34.63	Assumed the same for both delivery methods
Roadway General Maintenance	\$36.22	\$0.42	
G&A	\$62.88	\$9.64	
<b>Total Over Concession</b>	<b>\$3,935</b>	<b>\$1,672</b>	

\*Costs associated with Insurance Preimums not included within this analyses.



# Tolling & ITS Costs



Traditional Delivery: Total O&M Costs - \$3,729M  
 P3 Delivery: O&M - \$1,499M

- Equipment O&M
- WSP Enforcement
- Transaction Based CSC Costs
- Fixed Back Office Costs
- Credit Card Fees
- Uncollectible Accounts
- Tolling & ITS - Transaction based costs\*

\* Tolling & ITS – Transaction based costs incorporate equipment maintenance, customer service center (CSC) and Fixed Back Office Costs.