P3 Study – Financial Results

Washington Joint Transportation Committee

DRAFT – FOR DISCUSSION PURPOSES ONLY

December 6-7, 2011

Overview – Process

1. **Determine projects and scenarios to be analyzed (WA JTC and Consultant Team)**
2. **Develop and receive revenue and cost inputs (WSDOT and Consultant Team)**
3. **Develop risk allocation and quantify risk reserve (WSDOT and Consultant Team)**
4. **Develop public finance assumptions (WSDOT, Treasury, Consultant Team)**
5. **Develop P3 finance assumptions (Consultant Team)**
6. **Develop sensitivities to explore range of outcomes (Consultant Team)**
7. **Perform Value for Money analysis using financial model tool (Consultant Team)**

Limitations:

- **Each project analysis uses preliminary revenue, cost, and financing inputs; therefore, the analysis should be updated as inputs change**
- **Each project analysis does not consider affordability as a constraint (i.e., assumes public funds are available)**

Overview – Results

I-405	**Project is fully funded under all delivery models** ■ P3 delivery model offers approximately $403M - $440M in additional Value for Money compared to GO and Toll Revenue bond financing, respectively ■ Key generators of VfM are accelerated project delivery schedule, cost savings, and risk transfer
SR 509	**Construction is fully funded under P3 model and may not require any public funds for all-in delivery** ■ P3 delivery model may generate a concession payment of $76M - $189M and has the potential to cover all project delivery costs including retained State risks and pre-development costs ■ Toll revenue bond generates $165M - $190M in excess cash flow to State over project term; however, up-front funding gap of $200M - $225M exists
SR 167	**Project economics are weak and require a public contribution under all delivery models** ■ While the P3 delivery model delivers $350M in additional Value for Money and leverages greater amount of financing, it requires a $74M availability payment beginning in FY 2018 ■ Annual toll revenue does not cover availability payments until FY 2033
CRC	**Significant construction costs are main contributor to funding gap under all delivery models** ■ Project still has negative $1,243M - $1,479M net project value ■ Availability payment P3 model offers marginal Value for Money when compared to traditional delivery model using GO bond financing and requires a $243M availability payment beginning in FY 2016. Annual toll revenue is unable to cover availability payments until FY 2044.

All figures in Present Value (rounded)

General Assumptions – All Projects

General Assumptions	
Term	• Availability payment: 35 years + construction period • Toll concession: 50 years
Taxation	• Federal: 35% corporate tax • State: .05% state gross receipts tax
Discount rate	• Project and debt cash flow: 7% • Excess cash flow / equity: 11%
Development costs	Publicly funded under all scenarios, not included in project financing
Inflation	• Inputs include inflation (2.5% per annum) • Availability payments: 20% inflated at 2.5%
Sensitivities	• Traditional delivery model: - 10% decrease to T&R • P3 delivery model: + 25% increase to T&R

- **Sensitivities seek to reflect equity view of T&R for P3 delivery model and more conservative lender/rating agency view for traditional delivery model**
- **Availability payment models normally include an escalation factor that is applied to a portion of the availability payment to account for inflation-indexed costs (e.g., routine operations and maintenance)**

Traditional Delivery Model – GO Bonds

General Obligation Bonds	
Debtor	Public agency
Pledge	Full faith and credit of the State
Type	Bonds (maturity of 30 years)
Coverage Ratios	Not applied in model, source of repayment outside of project cash flows
Cost of Capital	5.0%*
Capital Structure	100% debt
Repayment Profile	Level principal and interest

** State of Washington Motor Vehicle Fuel Tax GO Bonds Issuance, Official Statement dated July 1, 2011*

- **Debt sizing not constrained by project cash flows**
- **Assumes 100% of project cash be financed using GO bonds**
- **State bears risk/benefit of project cash flow shortfall/surplus**
- **Potential impact to State credit rating**

Traditional Delivery Model – Toll Revenue Bonds

Toll Revenue Bonds	
Debtor	Public agency
Pledge	Net project revenue (revenue less routine O&M)
Type	Bonds (maturity of 35 years)
Coverage Ratios	2.0x
Cost of Capital	6.0%
Capital Structure	100% debt subject to ability to meet debt covenants
Repayment Profile	Principal repayment over last 15 years of term

- **Assumes stand-alone toll revenue bonds**
- **Debt sizing constrained by project cash flows**
- **Assumes State covers any shortfall in upfront funding**
- **State bears risk/benefit of project cash flow shortfall/surplus**

P3 Delivery Model – Commercial Bank Debt

Commercial Bank Debt		
Debtor	Private partner	
Pledge	Net project revenue (revenue less all O&M)	
Repayment Profile	Interest only with bullet repayment (via refinancing facility)	
Payment Mechanism	**Toll Concession**	**Availability Payment**
Term*	Construction + 5 years	Construction + 1year
Coverage Ratios	1.75x	1.50x
Cost of Capital	7.5%	7.5%
Capital Structure	70% debt / 30% equity	80% debt / 20% equity

**Refers to the refinance date of the commercial bank debt*

- **Debt sizing constrained by project cash flows**
- **Private partner bears risk/benefit of project cash flow shortfall/surplus**
- **Assumes any up front funding shortfall as highlighted is available from State**
- **Lower cover ratio allows greater leverage of project cash flow**
- **Cost of capital is relatively conservative in current market**

P3 Delivery Model – Refinance Facility

Refinance Facility (Bonds)		
Debtor	Private partner	
Pledge	Net project revenue (revenue less all O&M)	
Repayment Profile	Level principal and interest	
Payment Mechanism	**Toll Concession**	**Availability Payment**
Term	35 years	23 years
Coverage Ratios	1.75x	1.50x
Cost of Capital	6.5%	6.0%
Capital Structure	No re-gearing	No re-gearing

- **Lower interest rate (compared to bank debt) due to more mature cash flows, allows for release of more cash flow to equity**
- **Assumes 100% take-out of bank debt but no re-gearing, just re-financing**

P3 Delivery Model – TIFIA

TIFIA (Government Loan)		
Debtor	Private partner	
Pledge	Net project revenue after debt service	
Repayment Profile	Repayment of principal last 25 years, level principal and interest	
Payment Mechanism	**Toll Concession**	**Availability Payment**
Term	Construction + 35 years	Entire term less 2 year tail
Coverage Ratios	1.20x	1.20x
Cost of Capital	~3.0%*	~3.0%*
Capital Structure	33% of eligible project costs	33% of eligible project costs

** State and Local Government Series Rate, 30+ Years, November 2011*

- **Very low cost of capital**
- **Flexible repayment terms allow more dividends to be paid earlier thus reducing all-in cost of capital**
- **Debt sizing constrained by project cash flows**
- **Private partner bears risk/benefit of project cash flow shortfall/surplus**

P3 Delivery Model – Equity

Equity		
Debtor	Private partner	
Pledge	Excess cash flow	
Repayment Profile	If excess cash flow available subject to debt covenants	
Payment Mechanism	**Toll Concession**	**Availability Payment**
Term	Entire term	Entire term
Cost of Capital	15.0% (after tax)	13.0% (after tax)
Capital Structure	30% equity	20% equity

- **Very flexible financing at higher cost reflecting the risk it bears**
- **Normally equity dividends are not paid out until a few years into operations**
- **Equity dividends and capital repayment lowest on cash flow waterfall**
- **Gearing levels relatively conservative**

Scenarios

Project	Public Sector			Private Sector	
	Public Sector Comparator (PSC)			Shadow Bid Model	
	Delivery Model	GO Bond	Toll Revenue Bond	Toll Concession	Availability Payment Model
I-405	DB	X	X	X	
SR 509	DB		X	X	
SR 167	DBB		X		X
CRC	DB	X	X	X	X
Monroe Bypass	NA	NA	NA	NA	NA

Type of Financing / Delivery Model	PSC GO Bond	PSC Toll Revenue Bond	Shadow Bid Model Toll Concession**
Concession Payment / (Public Contribution)	-	-	1,045,000
Excess Cash Flow	783,000	607,000 - 745,000	-
Retained Risks	(168,000)	(168,000)	(27,000)
Pre-Development Costs	(102,000)	(102,000)	(102,000)
Net Project Value	**513,000**	**337,000 - 475,000**	**916,000**
Value for Money	**—**	**—**	**579,000 (highest)**

$ '000s in Present Value (rounded)
** Represents debt service payments during construction, during operations paid from toll revenue*
*** Upside T&R revenue scenario not analyzed*

- **P3 toll concession has potential to generate better Value for Money to the State**
- **Under all delivery models, there is low/no funding gap and low/no requirement for additional public funds for delivery**
- **Accelerated delivery, cost savings, and risk transfer are key generators of VfM**

Type of Financing / Delivery Model	PSC Toll Revenue Bond	Shadow Bid Model Toll Concession
Concession Payment / (Public Contribution)	(200,000) - (225,000)	76,000 - 189,000
Excess Cash Flow	165,000 - 190,000*	-
Retained Risks	(67,000)	(18,000)
Pre-Development Costs	(127,000)	(127,000)
Net Project Value	**(204,000) - (253,000)**	**(69,000) - 44,000**
Value for Money	**—**	**297,000 (highest)**

$ '000s in Present Value (rounded)
** Assumes funding gap can be filled to access these cash flows*

- **P3 toll concession has potential to generate better Value for Money for the State**
- **P3 toll concession is estimated to have low/no funding gap and may not require additional public funds for delivery**
- **Toll revenue bond has potential to generate $165M - $190M in excess cash flow to State; however, there is an estimated up-front funding gap of $200M - $225M**

Results
SR 167

Type of Financing / Delivery Model	PSC Toll Revenue Bond	Shadow Bid Model Availability Payment
Concession Payment / (Public Contribution)	(478,000) - (491,000)	-
Excess Cash Flow	90,000 - 104,000 **	-
Availability Payments	-	(630,000)
Toll Revenue	-	518,000
Retained Risks	(116,000)	(41,000)
Pre-Development Costs	(244,000)	(224,000)*
Net Project Value	**(734,000) - (761,000)**	**(377,000)**
Value for Money	**—**	**384,000 (highest)**

$ '000s in Present Value (rounded)
** $20M in 'non-bid cost item' savings generated under P3 delivery model, **Assumes funding gap can be filled to access these cash flows*

- **P3 availability payment model has potential to generate greater Value for Money for the State**
- **P3 is estimated to require $74M AP beginning in FY 2018. Toll revenue does not cover APs until FY 2033.**

Type of Financing / Delivery Model	PSC Toll Revenue Bond	Shadow Bid Model Toll Concession
Concession Payment / (Public Contribution)	(1,722,000) - (1,746,000)	(865,000) - (1,101,000)
Excess Cash Flow	200,000 - 235,000*	-
Retained Risks	(124,000)	(47,000)
Pre-Development Costs	(331,000)	(331,000)
Net Project Value	**(1,942,000) - (2,001,000)**	**(1,243,000) - (1,479,000)**
Value for Money	**—**	**758,000 (highest)**

$ '000s in Present Value (rounded)
** Assumes funding gap can be filled to access these cash flows*

- **P3 toll concession has potential to generate better Value for Money for the State; however, both delivery models are estimated to require a large upfront public contribution**
- **Toll revenue bond model has potential to generate $200M - $235M in excess cash flow to State; however, it is estimated that a large upfront funding gap exists**

Type of Financing / Delivery Model	PSC GO Bond	Shadow Bid Model Availability Payment
Concession Payment (Public Contribution)	(1,120,000)	-
Excess Cash Flow	-	-
Availability Payments	-	(2,368,000)
Toll Revenue Offset (AP Only)	-	1,192,000
Retained Risks	(124,000)	(47,000)
Pre-Development Costs	(331,000)	(331,000)
Net Project Value	**(1,575,000)**	**(1,554,000)**
Value for Money	**—**	**21,000 (highest)**

$ '000s in Present Value (rounded)

- **P3 availability payment model has potential to deliver marginal Value for Money for the State**
- **It is estimated that P3 requires $243M AP beginning in FY 2016. Leverages greater amount of financing; however, toll revenue does not cover APs until FY 2044.**