



MACQUARIE CAPITAL
I-70 P3 BENEFITS SUMMARY

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STRICTLY CONFIDENTIAL



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BENEFITS OF P3: COST SAVINGS

- Construction cost savings of 17%
- OMR cost savings of 8%
- These savings allow the state to develop more project, potentially extending the redevelopment beyond I-270 to I-225, or, to divert these resources to other project



BENEFITS OF P3: LIFECYCLE PERSPECTIVE

- P3 projects consider the whole life cycle of the asset
 - Integration of design and construction with operations and maintenance achieves lifecycle cost savings and asset performance

- The concessionaire acts like an owner not a renter, putting asset performance first
 - Collaborative design effort, with focus on performance and outcomes, will achieve innovation and optimization by considering total lifecycle costs rather than specific technical specifications
 - Performance specifications are designed to incentivize the concessionaire to develop a project that is efficiently well-operated and maintained

- In a P3, the public sector interacts with bidders on a one-on-one basis, allowing for the bidders to optimize proposals. Additionally, bidders are encouraged to put forth Alternative Technical Concepts (ATC's), providing an opportunity for project innovation and cost savings not found in a traditional DB procurement.
 - The Denver FasTracks Eagle P3 incorporated 17 ATC's into the project's scope that saved the Regional Transit District ~\$300 million and further reduced overall operations and maintenance expenses.
 - The I-595 project in Broward County, Florida saved almost \$300 million by utilizing an Alternative Technical Concept that utilized more existing structures and shifted additional risks to the private sector

BENEFITS OF P3: RISK TRANSFER

- Risks properly allocated to those best able to manage them
- P3 holds concessionaire debt and equity holders responsible for performance and quality
 - Results in a mindset focused on protecting owners, not meeting specifications
- Operations, maintenance and rehabilitation are fully funded and performance built into the P3 agreement, preventing deterioration and poor performance
- In a P3, high quality service standards are established and performance is incentivized through performance deductions
- Achieve greater schedule and cost certainty without contingencies held by the state

Private Sector Risk	DB	P3
	Design-Build	Design-Build- Finance-Operate- Maintain
Design Risk	✓	✓
Construction Risk	✓	✓
Maintenance Risk	Public	✓
Operations Risk	Public	✓
Finance Risk	Public	✓
Demand Risk	Public	Public / Shared



APPENDIX SUPPORTING MATERIALS

HOW P3 ACHIEVES CONSTRUCTION COST SAVINGS



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A P3 will typically result in a lower construction cost, without the need for the additional risk contingency required in a DB

	DB	P3
Design Costs	High	Savings due to use of in-house resources
Innovation	Limited by 30% design	Increased due to design flexibility
Contractor Mobilization & Supervision (Indirects)	Higher based on less schedule incentive	Reduced due to faster schedule and closer design/ constructability integration
Materials	Higher due to payment constraints	Savings due to better hedging
Construction Oversight	Higher	Savings due to oversight from operator, equity and lenders
CDOT Indirects	No savings	Savings due to risk transfer to concessionaire
Risk Contingency	Greater than 10% cost overrun likely; expected contingency between \$50-100m	No contingency required

EXAMPLES OF CONSTRUCTION COSTS SAVINGS IN P3



Construction Cost Savings Achieved in North American PPP Market

Project	Savings Relative to PSC	Savings Relative to Competitor	Comments
I-595, Florida (Road)	14.3% lower than PSC (\$300m)	30% below next most competitive price	ATC's and risk transfer
A30, Quebec (Road + Bridge)	33% lower than PSC	~20% below competitor	Hybrid toll and availability
Denver Fastracks, Colorado (Transit)	13% lower than PSC	~20% below competitor (\$300m)	17 ATC's accepted
Southeast Stoney Trail, Alberta (Road)	NPV 63% below PSC	~40% below competitor	Innovation and market shift
Alberta Road Projects (Average of 5 Projects)	NPV 27% below PSC	-	2003 - 2012
Windsor Essex Parkway, Ontario (Road)	NPV 15% below PSC	~20% below competitor	
I-635 (LBJ Freeway), Texas (Road)	NPV 15% below PSC	~50% below competitor	
Port of Miami Tunnel, Florida (Road / Tunnel)	12.5% lower capital costs than PSC	~50% below competitor	Based on VfM analysis 2010
Goethels Bridge, New York (Road / Bridge)	13.7% lower than PSC	~7.2% below high bid	
Presidio Parkway, California (Road)	20% lower than PSC	-	Separate DBFOM and DB projects

Note: shaded rows represent availability payment projects

US AVAILABILITY PAYMENT PROJECTS

There have been six availability payment transportation P3 projects to reach financial close in the US

- Eagle P3 Project – Denver RTD
 - Saved approximately 13% or \$300 million

- I-595 Corridor Roadway Improvements – Florida DOT
 - Saved approximately 14% or \$300 million

- Ohio River Bridges East End Crossing – Indiana & Kentucky DOT
 - Saved approximately 20% or \$230 million

- Port of Miami Tunnel – Florida DOT
 - Saved approximately 12% or \$120 million

- Presidio Parkway (Phase 2) – Caltrans
 - Saved approximately 20% or \$120 million

- Goethals Bridge Replacement – Port Authority of NY & NJ
 - Saved approximately 14% or \$225 million