



Preliminary Value for Money Analysis

Comparison of Project Delivery Methods and Financing Options

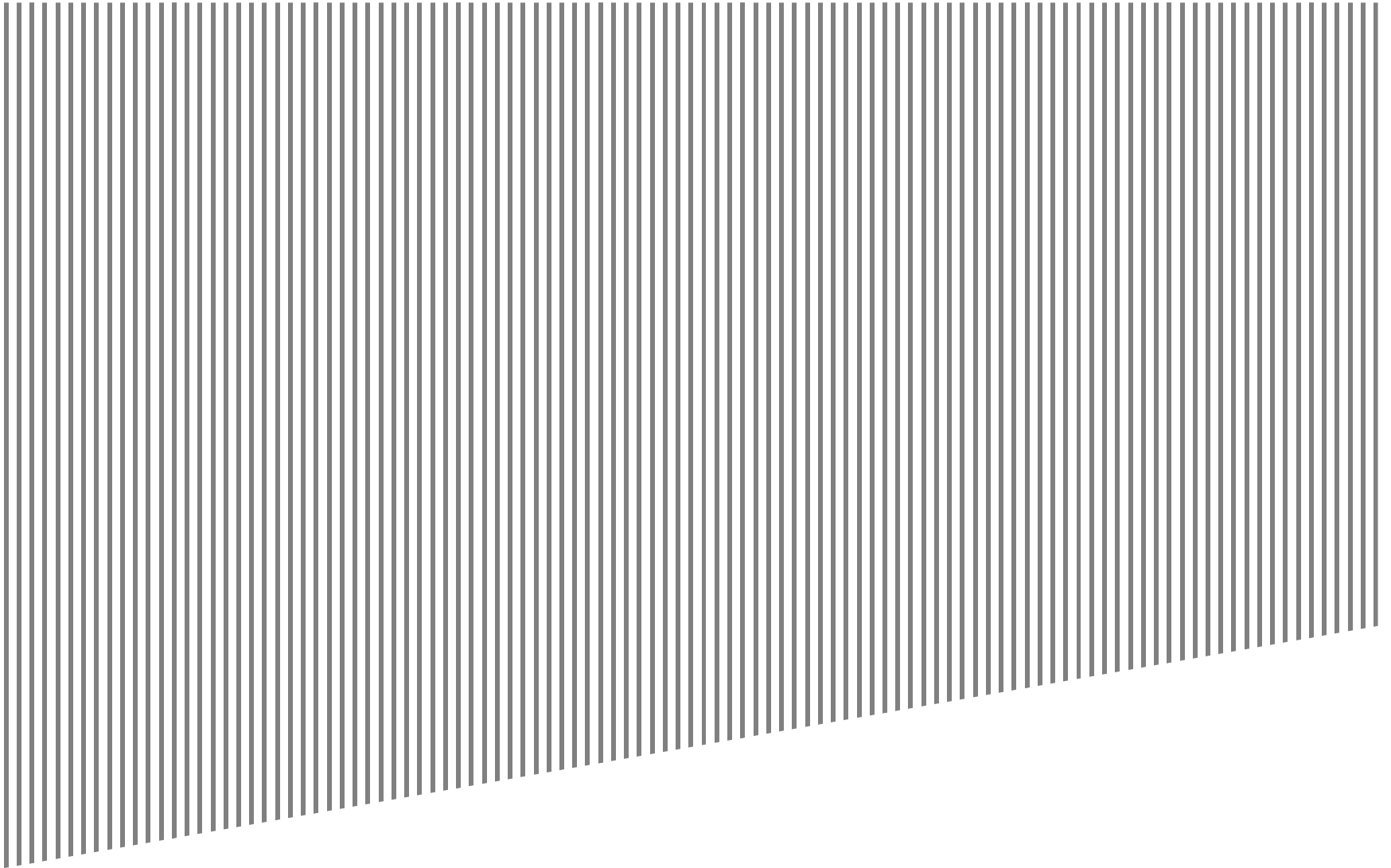
C-470 ExpressLanes

November 2014

Outline

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- ▶ **Comparison of Delivery Options**
- ▶ **Base Case Plan of Finance**

Executive Summary



Executive Summary

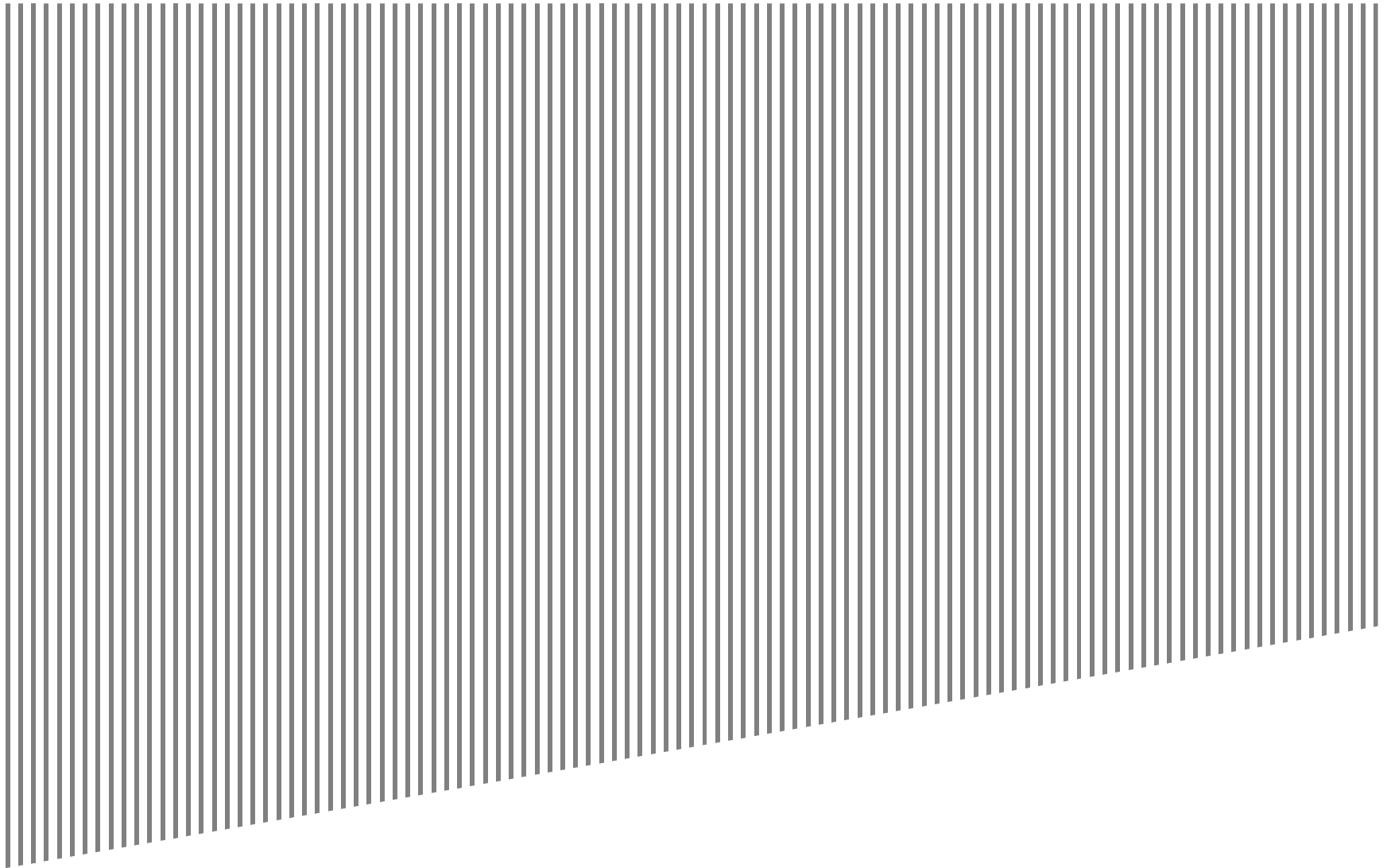
- ▶ A preliminary value for money analysis has been completed to compare two delivery methods for the C-470 ExpressLanes (the “Project”).
 - ▶ Design-Build (DB) with toll revenue-backed public financing (tax-exempt bonds)
 - ▶ Design-Build-Finance-Operate-Maintain (DBFOM) concession backed by toll revenues

 - ▶ In support of this analysis, an initial financial model has been developed to:
 - ▶ Define the base case plan of finance for each delivery method
 - ▶ Calculate the long-term CDOT/HPTE cash flow profile under each scenario
 - ▶ Perform sensitivity analysis related to revenues, costs, interest rates, etc.

 - ▶ In addition to the quantitative analysis, qualitative factors were also considered:
 - ▶ Implications for the build out of the ultimate C-470 corridor configuration
 - ▶ Ability to attract robust competition based on project and investment size
 - ▶ Value of potential excess toll revenues to the corridor

 - ▶ The quantitative and qualitative results were combined into the preliminary value for money results with the DB method preferred to the DBFOM method:
 - ▶ Estimated additional public funds of up to \$40 million would be required under the DBFOM method, compared with \$0-29 million under the DB method, where potential excess toll revenues are retained in the corridor to support future expansion.
 - ▶ Project characteristics, such as revenue projections and size of equity investment, likely make the Project less attractive to DBFOM bidders, thereby limiting potential competition.
 - ▶ Greater competition is expected from a DB procurement, and it has a better chance of fully eliminating the funding gap through public financing.
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Comparison of Delivery Options



Baseline Delivery Options Summary

	DBFOM Toll Concession	DB with Public Finance Net Pledge*	DB with Public Finance Gross Pledge*
Project Scope	One westbound managed lane from I-25 (with direct connect) to Wadsworth Additional westbound managed lane from I-25 (with direct connect) to University One eastbound managed lane from Wadsworth to Yosemite		
Development Schedule	Development, design and construction over 2 years		
Contract Term	2 + 40 years	2 years	2 years
Design & Construction	Concessionaire	Design-Builder	Design-Builder
O&M / Lifecycle	Concessionaire	Project (Cost) CDOT (Performance)	Project (Cost) CDOT (Performance) CDOT (Contingent Cost Support)
Financing	Concessionaire	HPTE (Net Pledge)	HPTE (Gross Pledge)
Long-Term Excess Cash Flows	Concessionaire	HPTE	HPTE

*Under the net pledge approach, revenues are pledged to bondholders after the payment of O&M. Under the gross pledge approach, debt service would be paid before O&M with a contingent loan made available by CDOT in the event toll revenues after debt service are insufficient to cover O&M. The latter approach allows for more debt to be raised, but would require contingent O&M support .

Financial Model Assumptions

Project Item	Value (DBFOM/DB)
Schedule	
Financial Close	2016
Revenue Operations	2018
Term/Analysis Period	Construction + 40 years
Construction	
Construction Cost	\$230 million
Base Year Costs	FY 2014
Spend Curve	50%, 50%
Construction Period	2 years
Development Costs	\$20 million / \$3 million
Cost Inflation	3.0%
Operations	
T&R Scenario	Fixed III (Cambridge Systematics)
Leakage	10 % of Gross Revenues
Ramp-Up (Yrs 1-4)	50%, 50%, 75%, 75%
Inflation	2.0-3.0%
Other	
Road O&M Costs	\$1.5 million / year
Toll Processing	\$0.18/Transponder, \$0.60/LPT
Lifecycle Costs	\$10 million (10-yr cycle)

Financing Item	Value (DBFOM/DB)
Senior Debt	
Rating	BBB-
Term	35 years
Interest Rate	5.68% / 5.93%
CAB Margin	1.00%
DSCR	1.40x vs. IG Curve
DSRF	Next 12 months
TIFIA	
Rating	BBB-
Term	35 years
Interest Rate	3.56%
DSCR	1.40x vs. IG Curve
DSRF	Next 6 months
Equity	
Min IRR (Pre-Tax)	18%
Minimum Equity (% of total fin.)	25%
Reserves	
O&M	Next 6 months
Lifecycle	100% / 66% / 33%
Ramp-Up	\$1.5 million

Note: Preliminary engineering and monitoring costs are excluded from this analysis and assumed to be paid by HPTE/CDOT. The \$230 million cost is quoted in \$2014, and includes \$5 million for procurement and traffic and revenue advisory costs. Financing assumptions take into account greenfield nature of the revenue projections and project size.

Estimated Sources & Uses of Funds During Construction

SOURCES OF FUNDS (\$000s)	DB	DBFOM	DB w/TIFIA	DBFOM w/TIFIA
Tax-Exempt CIBs	74,000	71,000	38,000	--
Tax-Exempt CABs ¹	25,000	--	--	--
TIFIA Loan	--	--	88,000	91,000
Private Equity	--	25,000	--	33,000
FASTER + Local Funding	12,000	12,000	12,000	12,000
RAMP Funding	100,000	100,000	100,000	100,000
Additional Public Funding	61,000	79,000	29,000	40,000
Total Sources	\$272,000	\$287,000	\$267,000	\$276,000

USES OF FUNDS (\$000s)	DB	DBFOM	DB w/TIFIA	DBFOM w/TIFIA
Design & Construction	249,000	249,000	249,000	249,000
Financing Fees ²	3,000	20,000	3,000	20,000
Interest During Construction	8,000	8,000	4,000	--
Debt Service Reserve(s)	8,000	6,000	7,000	3,000
Operating Reserves ³	4,000	4,000	4,000	4,000
Total Uses	\$272,000	\$287,000	\$267,000	\$276,000

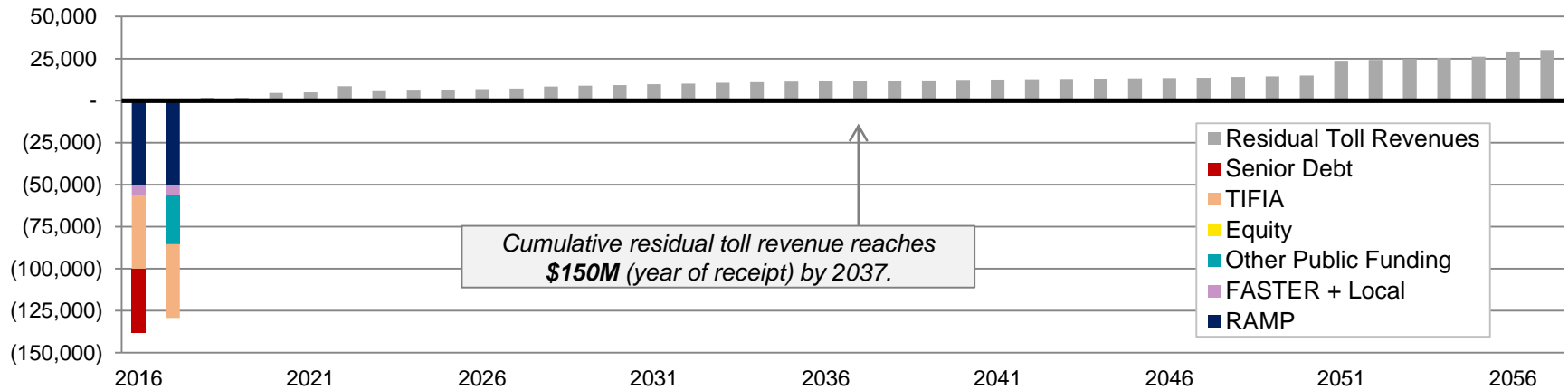
¹ Capital appreciation bonds (CABs) issuance limited to 25% of total debt.

² Includes legal and other advisory fees, debt issuance costs, and equity letter of credit fees, if applicable.

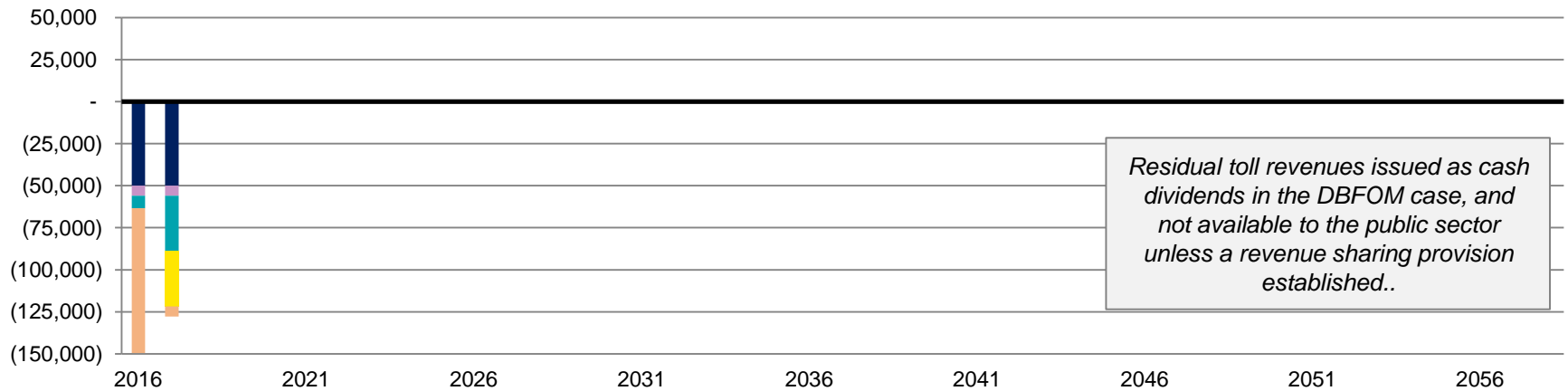
³ Reflects amounts for initial O&M, lifecycle, and ramp-up reserve account deposits.

Projected Public Sector Cash Flows (w/ TIFIA)

DB w/TIFIA (\$000s)

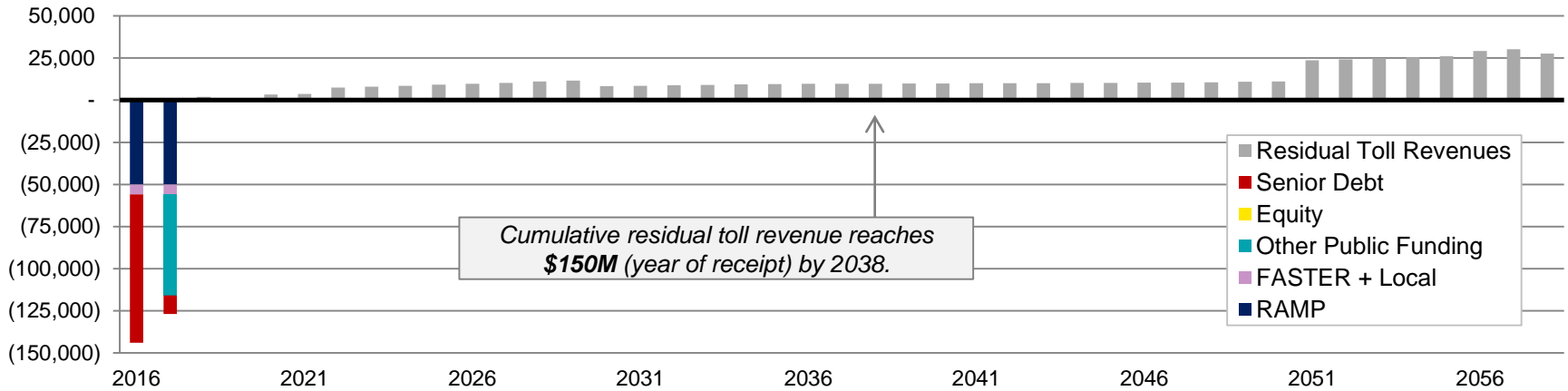


DBFOM w/TIFIA (\$000s)

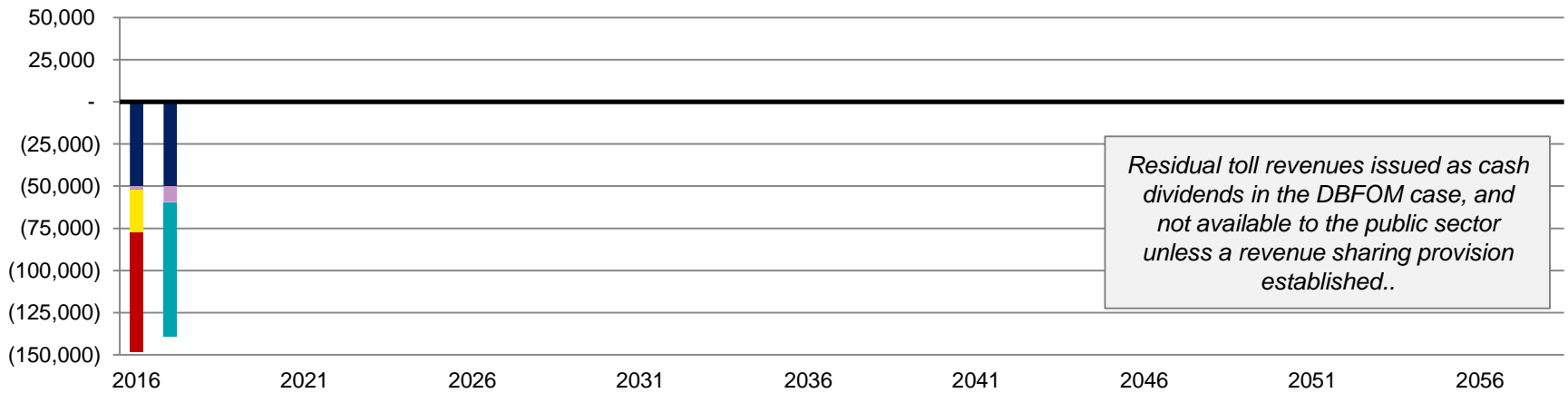


Projected Public Sector Cash Flows (w/o TIFIA)

DB w/o TIFIA (\$000s)



DBFOM w/o TIFIA (\$000s)

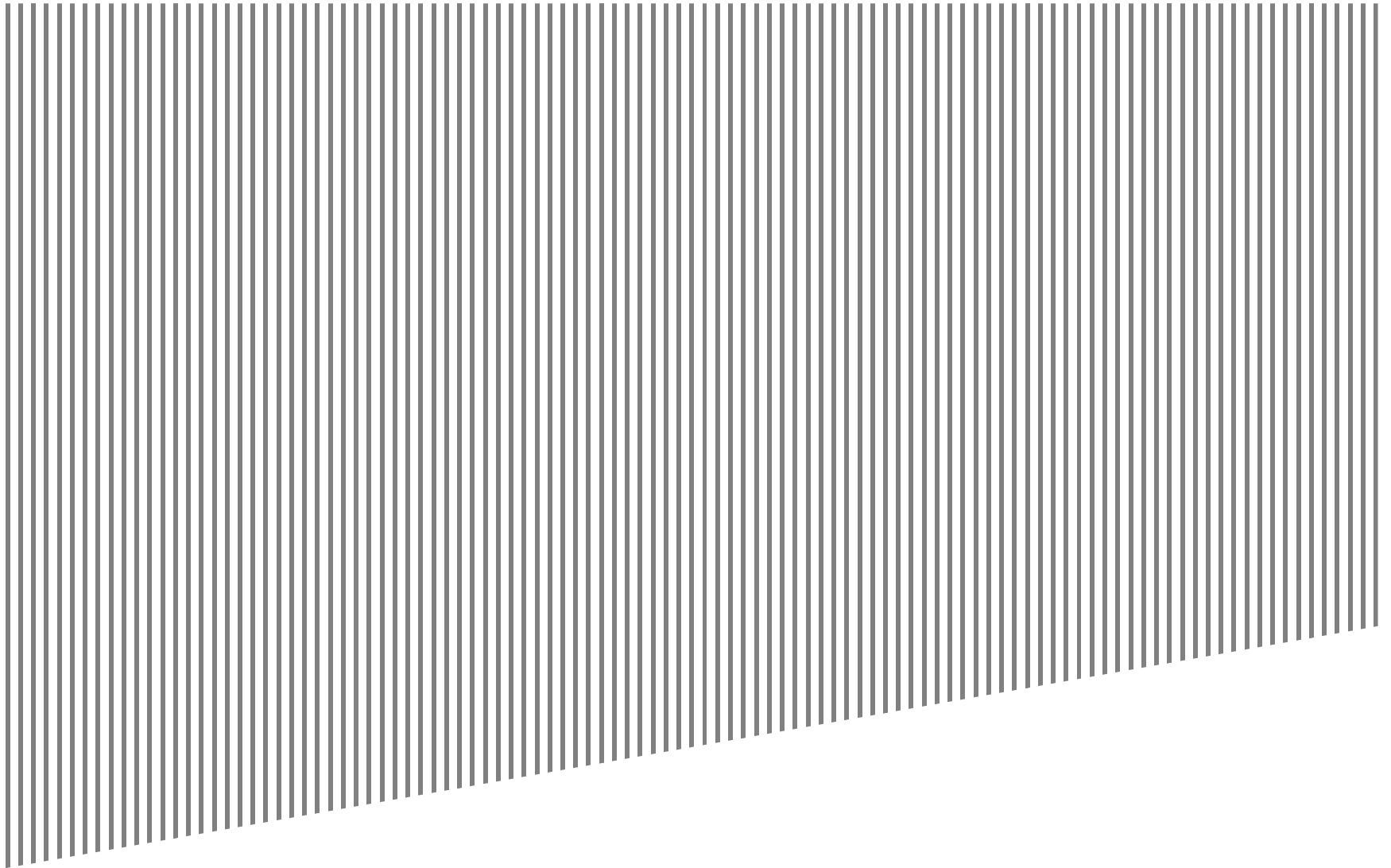


Other Considerations

The quantitative comparison of the delivery approaches should be supplemented with a comparison of qualitative issues related to the Project.

	DB	DBFOM
Future Project Phases	<ul style="list-style-type: none"> - Provides more flexibility with respect to development of future Project phases, allowing for DB or DBFOM delivery at a later stage 	<ul style="list-style-type: none"> - Concession agreement would need to include provisions for future corridor expansion - Could be difficult to develop any extension separately from original concession agreement
Project Revenues	<ul style="list-style-type: none"> - Excess project revenues would accrue in full to HPTE for future phases - If revenue is lower than expected, HPTE will receive less excess cash flow, and may need to fund O&M 	<ul style="list-style-type: none"> - Excess project revenues would accrue to concessionaire, but revenue sharing can allow for cash flow to HPTE if project performs well - Downside revenue risks transferred to concessionaire
Procurement	<ul style="list-style-type: none"> - Procurement may be shorter than DBFOM - Number of bidders and competition may be greater than DBFOM - Limits selection to construction price 	<ul style="list-style-type: none"> - Procurement may be longer than DB - Number of bidders and competition may be limited due to limited revenue potential and greenfield nature of project
Other Items	<ul style="list-style-type: none"> - HPTE will be responsible for setting tolls - Preservation of options to derive synergies with other regional projects - Provides flexibility for DB+OM delivery 	<ul style="list-style-type: none"> - Concessionaire tolling setting ability governed by concession agreement - Limited ability to drive costs down relative to DB - Provisions for unforeseen competing facilities - Project would be on smaller side for a DBFOM

Base Case Plan of Finance



Base Case Plan of Finance (DB – Net Pledge w/TIFIA)

This base case plan of finance assumes design-build construction with a net pledge financing and a TIFIA loan of approximately \$90 million. Design and construction costs have been escalated to YOE dollars.

Sources & Uses

Values in \$000

Sources	
Tax-Exempt CIBs	38,000
Tax-Exempt CABs	--
TIFIA	88,000
CDOT - RAMP	100,000
FASTER + Local	12,000
Other Public Funding	29,000
TOTAL	\$267,000

Uses	
Design & Construction	249,000
Financing Fees ¹	3,000
Interest During Construction	4,000
Debt Service Reserves	7,000
Operating Reserves ²	4,000
TOTAL	\$267,000

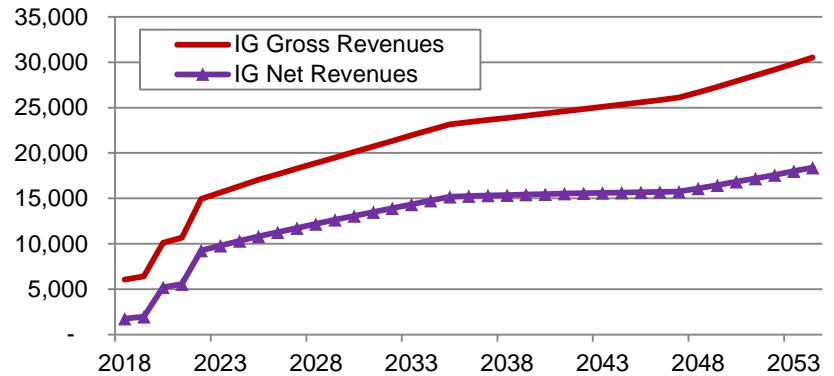
¹ Includes debt issuance and related costs.

² Includes O&M, lifecycle, and ramp-up reserves.

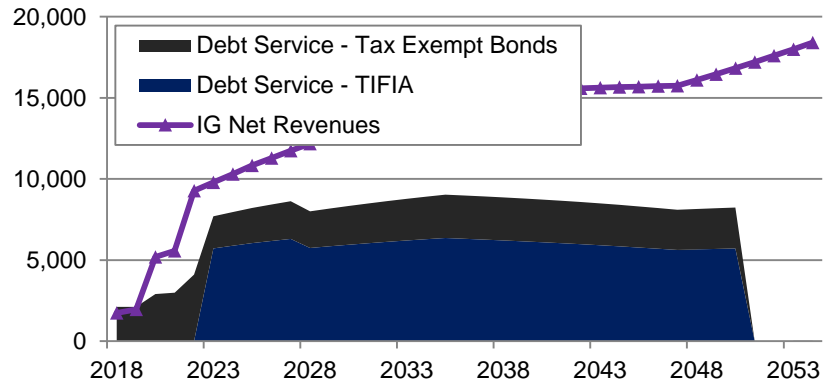
Financial Summary

Values in \$000

Revenue & Cash Flow



Debt Profile



Plan of Finance Variation (DB – Gross Pledge w/TIFIA)

A gross revenue pledge could be used to eliminate the additional upfront funding requirement (support would be provided in the form of a CDOT contingent O&M loan).

Sources & Uses

Values in \$000

Sources	
Tax-Exempt CIBs	81,000
TIFIA	88,000
CDOT - RAMP	100,000
FASTER + Local	12,000
Other Public Funding	--
TOTAL	\$281,000

Uses	
Design & Construction	249,000
Financing Fees ¹	3,000
Interest During Construction	8,000
Debt Service Reserves	9,000
Operating Reserves ²	11,000
TOTAL	\$281,000

¹ Includes debt issuance and related costs.

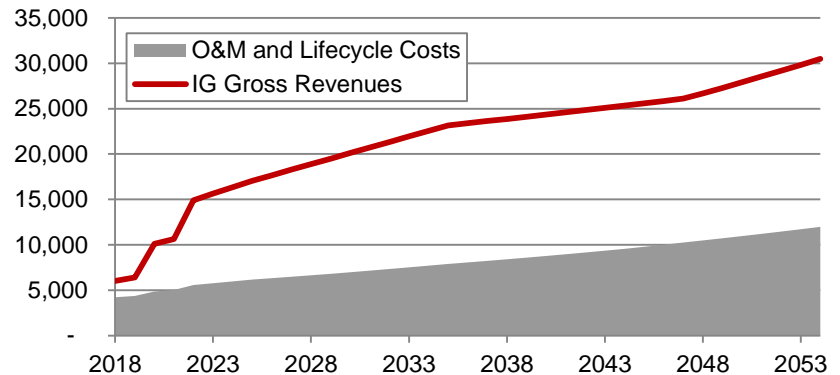
² Includes O&M, lifecycle, and ramp-up reserves.

³ Min DSCR of 1.91x relative to gross revenue forecast.

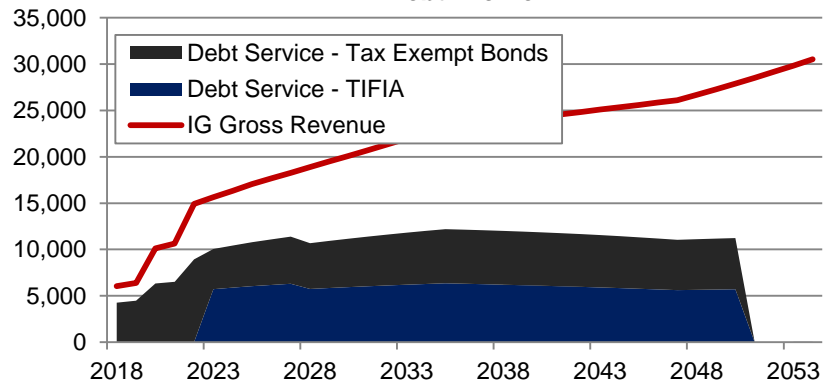
Financial Summary

Values in \$000

Revenue and O&M/Lifecycle Costs



Debt Profile³



Gap Closure Strategies

The net and gross pledge design-build financing cases will be change as final costs, interest rates and revenue forecasts are refined over time. The Project may be able to utilize one or more of the below tools to help close any funding gaps.

▶ **Amend Project scope**

- ▶ Remove discrete sections that may be able to be completed as part of a future phase or sections that contribute minimal revenue and/or operate at a loss
- ▶ Extension of the express lanes to Kipling has been discussed as a potential gap closure measure; however, preliminary indications suggest that an extension beyond the current scope would not net additional project funding for the Project
- ▶ Additional analysis of project scope changes should be evaluated as part of the in process Level III traffic and revenue study

▶ **Alter timing of public contributions**

- ▶ CDOT and HPTE could consider frontloading RAMP and any other upfront contributions
- ▶ Depending on the final Project structure, the above may allow HPTE to defer any private financing until year two of construction, reducing total construction period interest costs

▶ **Utilize additional CABs and/or longer maturity debt**

- ▶ The Project may be able to utilize a higher amount of CABs and/or sell longer maturity bonds to increase the amount of debt that can be raised for construction