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Using Refinancing of Federal Loans to Support Transportation Infrastructure Asset Management and Delivery: Lessons from the Covid-19 Pandemic

Jonathan Gifford (jgifford@gmu.edu), Carter B. Casady
(cbcasady@stanford.edu) & **M.Mustafa Sever** (msever@gmu.edu)

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Agenda

- Background – Build America Bureau - TIFIA
- Project Motivation
- Research Objectives
- Methodology
- Database Findings
- Case Studies
- Database Analysis
- Conclusion
- Recommendations

Background- Financing

Traditional funding sources for surface infrastructure include taxes, tolls, and fares.

Financing options typically involve public borrowing, private borrowing, or private (equity) investment.

Less than one-fifth of surface infrastructure projects secure financing.

Refinancing is the process of revising and replacing the terms of an existing credit agreement to get better terms.



Background- Build America Bureau



Source: DOT



ESTABLISHED IN 2016 UNDER
THE OBAMA ADMINISTRATION.



BAB AIMED TO FOSTER
COLLABORATION AND BROADEN
THE LANDSCAPE FOR PUBLIC-
PRIVATE PARTNERSHIPS (P3S).

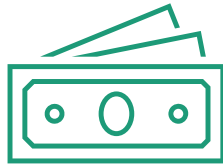


THE GOAL IS TO LEVERAGE
PRIVATE SECTOR INVESTMENTS
TO SUPPORT INFRASTRUCTURE
PROJECTS.



NOTABLE INITIATIVES:
TRANSPORTATION
INFRASTRUCTURE FINANCE AND
INNOVATION (TIFIA) AND
RAILROAD REHABILITATION &
IMPROVEMENT FINANCING
(RRIF)

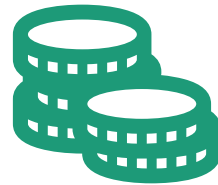
Background- TIFIA



TIFIA Program provides long-term, low-interest loans and other types of credit assistance for the construction of surface transportation projects.

Administered by the Build America Bureau

First enacted in 1998



Advantage of a TIFIA loan:

Low-interest rates

No accouterment until the proceeds are drawn

Flexible payment periods

No penalties for pre-paying



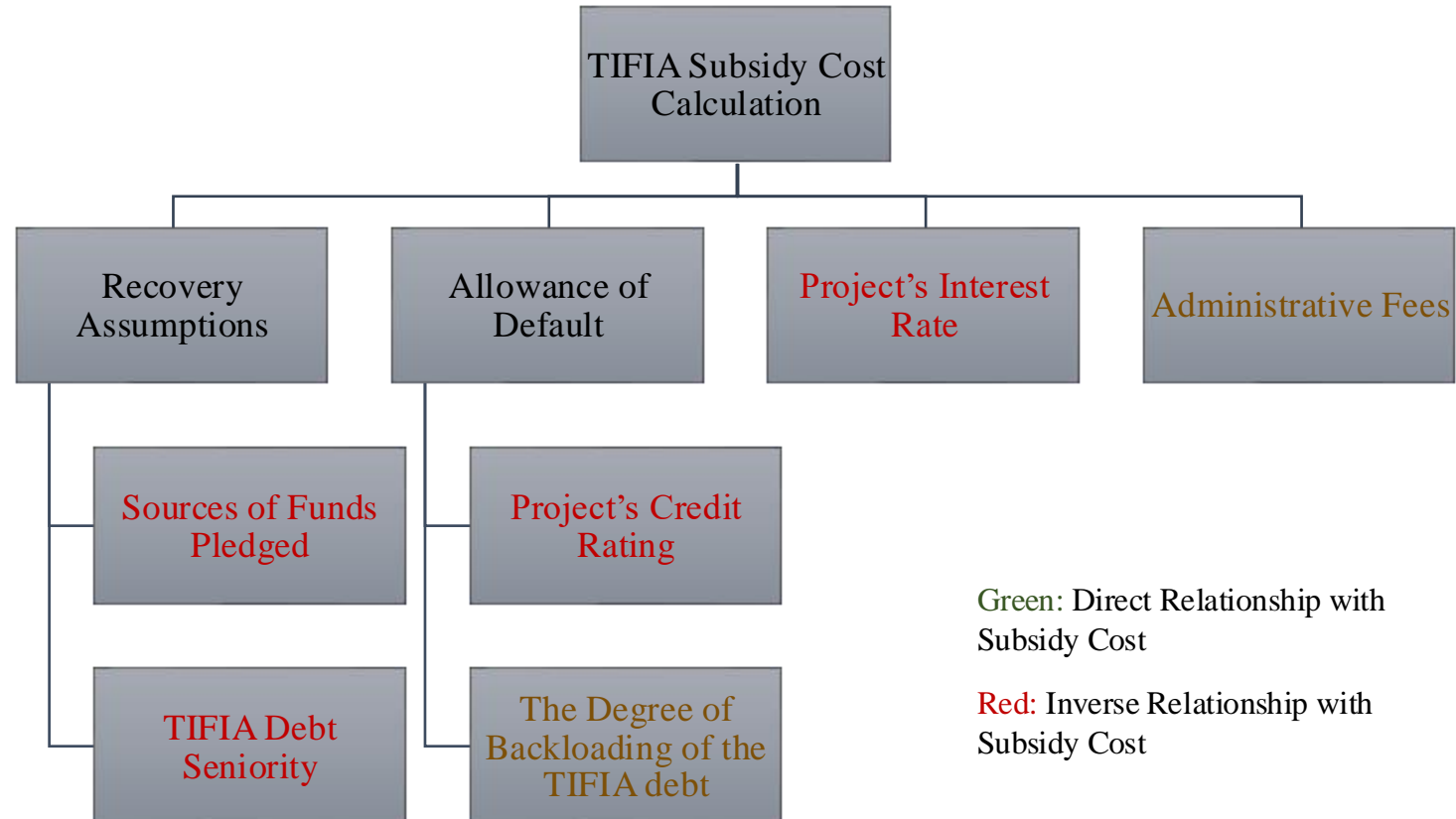
\$38.4 billion in TIFIA financings*

Sources:

Mallett, W. J. (2019). The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program. Congressional Research Service.
TIFIA Credit Program Overview | Build America. <https://www.transportation.gov/buildamerica/financing/tifia/tifia-credit-program-overview>

*: as of August 2022

Background- TIFIA Subsidy Cost



Evaluations of the TIFIA Credit Program

Evaluation Tools

- Qualitative interviews, descriptive analyses, and evaluative assessments

Risk Aversion

- High credit support directed to A-rated projects

Conservative Subsidy Cost Calculation

- Limits lending potential

Performance Gaps

- Lack of clear metrics and implementation plans for sustained progress.

Motivation - Refinancing



USDOT has experienced an increase in the number of requests from existing borrowers to refinance their loans to help mitigate pandemic-related revenue loss and take advantage of low-interest rates in 2021.



This refinancing activity leads to questions about how refinancing is used as a means of addressing pandemic-related budgetary problems in transportation projects.



There is extensive literature on the financing of infrastructure projects. However, the literature including the COVID-19 pandemic and refinancing is still developing due to the time period.

Research Objectives



Document the extent of pandemic-related, refinancing activity undertaken by the USDOT's Build America Bureau (i.e., number of loans affected and estimated savings)



Compare the motivations for and effects of this refinancing activity across different project cases from both the borrower's and lender's perspective



Develop theoretical as well as practical recommendations about use of refinancing as a fiscal stimulus measure in transportation projects

Methodology



The project team conducted case studies and interviews to examine TIFIA refinancing motivations and outcomes.



Selection based on chronological criteria, focusing on cases during and post-COVID-19.



Identification via USDOT and Build America Bureau websites, TIFIA Credit Assistance Letters, and Electronic Municipal Market Access (EMMA) pages.

Database Findings

The research team has identified 20 projects had a TIFIA loan refinancing between 2020 and 2022:

- ❑ Breakdown by delivery model: 5 Public-Private Partnerships (P3s) and 15 traditionally delivered transportation projects.
- ❑ Project modes span various types, including Highway Bridge, Light Rail Transit, Managed Lanes, Toll Highways, and more.
- ❑ Geographically diverse, with projects from Washington (6), California (4), Texas (3), and several other states.

Database Analysis

Refinancing Activity 2020-2022

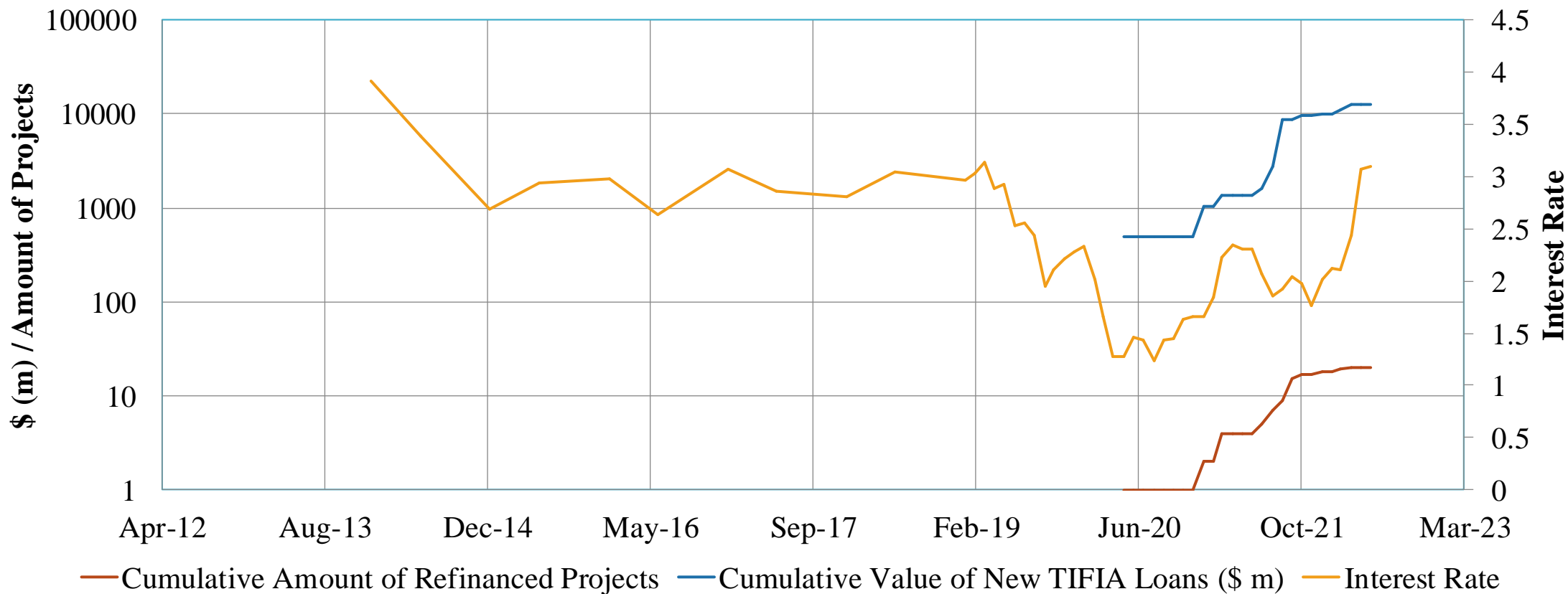
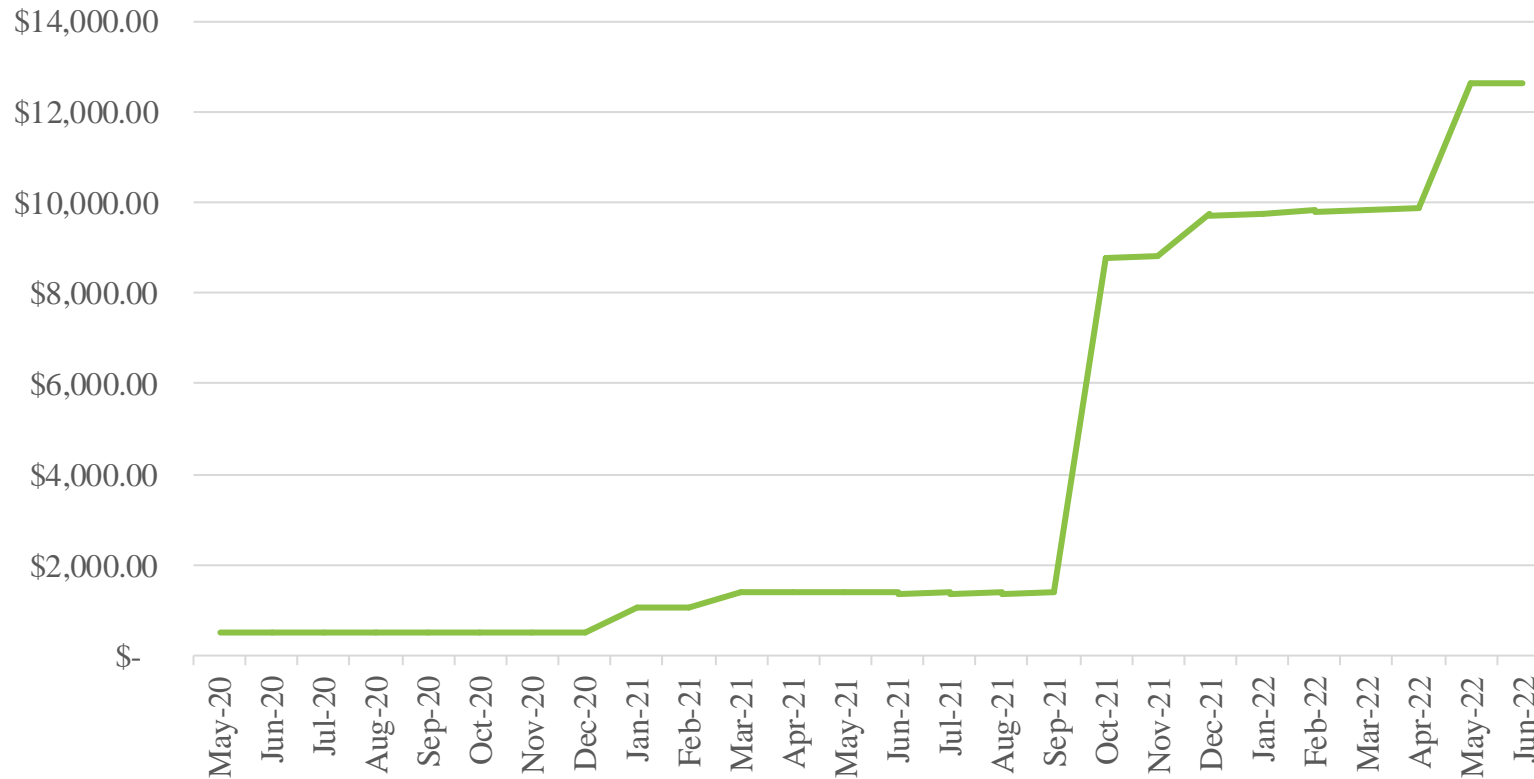


FIGURE 1 - REFINANCING ACTIVITY BETWEEN 2020 AND 2022

Database Analysis



- ❑ Build America Bureau refinanced TIFIA loans totaling \$12.64 billion during this period.
- ❑ DOT completed over \$36.8 billion in TIFIA financings before 2023.
- ❑ Nearly 34% of TIFIA loans were refinanced, indicating a significant proportion.

FIGURE 2 - CUMULATIVE DOLLAR VALUE OF REFINANCED TIFIA LOANS IN MILLIONS

Database Analysis

Project Name	Stage of project	LOI Received by the Bureau
Central 70 Project	Construction	10/26/2020
Hampton Roads Regional Priority Projects	Construction	4/9/2020
I-405 Improvement Project	Construction	8/31/2020
Grand Parkway Segments H & I	Construction	4/16/2021
Complete 540 Phase 1	Construction	10/22/2020
I-10 Corridor Express Lanes	Construction	11/4/2020
Mid-Coast Corridor Transit Project	Construction	9/4/2020
Parallel Thimble Shoal Tunnel project	Construction	2/3/2021
BelRed Street Network	Construction	2/3/2021
Capital Beltway Express Lanes	Construction	1/30/2020
Purple Line Project	Construction	5/4/2021
Gerald Desmond Bridge	Construction	4/10/2019
CTRMA 183-S	Construction	2/27/2020
CTRMA 290E Phase III	Construction	2/27/2020
Northgate Link Extension	Construction	11/6/2020
East Link Extension	Construction	11/6/2020
Lynnwood Link Extension	Construction	11/6/2020
Sound Transit Operations and Maintenance Facility East	Construction	11/6/2020
Federal Way Link Extension	Construction	11/6/2020
Moynihan Hall Project	Construction	2/19/2021

TABLE 1 - LOI DATES OF IDENTIFIED PROJECTS

Database Analysis

Utilization of Additional Funding Capacity	Frequency	Project Name
Completion of the project	12/20	Central 70 Project, I-405 Improvement Project, Northgate Link Extension, East Link Extension, Lynnwood Link Extension, Sound Transit Operations and Maintenance Facility East, Federal Way Link Extension, I-10 Corridor Express Lanes, BelRed Street Network, CTRMA 183-S, CTRMA 290E Phase III, Moynihan Train Hall
Enhancement of the project	2/20	Gerald Desmond Bridge & BelRed Street Network
Expansion of the project	11/20	Northgate Link Extension, East Link Extension, Lynnwood Link Extension, Sound Transit Operations and Maintenance Facility East, Federal Way Link Extension, Complete 540 Phase 1, Mid-Coast Corridor Transit Project, Capital Beltway Express Lanes, CTRMA 183-S, CTRMA 290E Phase III, Hampton Roads Regional Priority Projects
Mitigation of COVID-19's impact	2/20	I-10 Corridor Express Lanes & Parallel Thimble Shoal Tunnel project
No savings	1/20	Purple Line Project
Unstated	1/20	Grand Parkway Segments H & I

TABLE 2 - FREQUENCY OF ADDITIONAL FUNDING CAPACITY UTILIZATION FROM TIFIA REFINANCINGS

Case Study: Purple Line Project



PICTURE 1 – Purple Line (Source: MDOT)

Purple Line Project	
State	Maryland
Project Type	Light Rail Transit
Delivery Model	DBFOM - P3
Original Loan (\$ m)	\$874.60
Original Loan Rate (%)	2.41%
Original Loan Date	2016
New Loan (millions)	\$1,760.23
New Loan Rate (%)	2.79%
Refinance Date	Apr-22

TABLE 3 – Refinancing Data for the Purple Line Project

Case Study: Sound Transit Projects

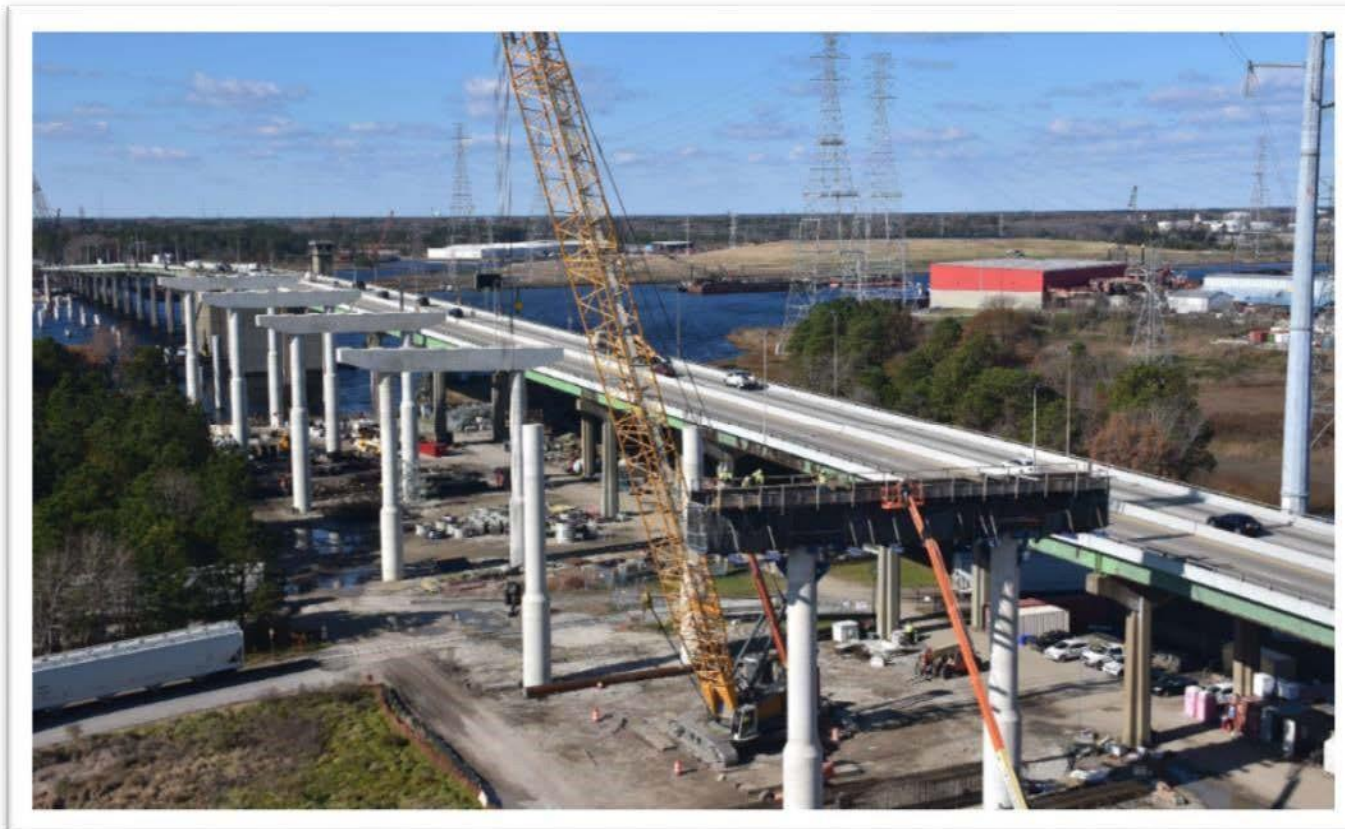


PICTURE 2 – Sound Transit in Operation (Source: Soundtransit.org)

Project Name	Original Loan (\$ M)	Original Interest Rate	New Loan (\$ M)	New Interest Rate
Northgate Link Extension	\$615.27	3.13%	\$615.27	1.91%
East Link Extension	\$1,330.00	2.38%	\$1,330.00	1.91%
Lynnwood Link Extension	\$657.86	3.06%	\$657.86	1.91%
Sound Transit Operations and Maintenance Facility East	\$87.66	2.73%	\$87.66	1.91%
Federal Way Link Extension	\$629.47	2.36%	\$629.47	1.91%

TABLE 4 – Refinancing Data for the Sound Transit Projects

Case Study: Hampton Roads Regional Priority Projects



PICTURE 3 – Construction of the High-Rise Bridge for the HRBT Projects.
(Source: VDOT)

Hampton Roads Regional Priority Projects	
State	Virginia
Project Type	Bridge
Delivery Model	Design-Build
Original Loan (\$ m)	\$501.00
Original Loan Rate (%)	2.25%
Original Loan Date	2019
New Loan (millions)	\$1,660.00
New Loan Rate (%)	1.86%
Refinancing Date	Sep-21
Savings (m)	\$50
Refinanced on	Construction Stage

TABLE 5 – Refinancing Data for the HRBT Projects

Case Study: Hampton Roads Regional Priority Projects



The Hampton Roads Regional Priority Projects demonstrate the significant impact of potential capital programs on TIFIA loan refinancing.



Bundling roadway and bridge projects along the I-64 corridor allowed for the expansion of the original scope using refinancing savings.



The success of this project underscores the importance of leveraging refinancing opportunities to enhance transportation infrastructure development.

Conclusion



While pandemic-related interventions initially drove increased refinancing activity, factors such as low-interest rates and ongoing construction activities was the key requirement.



Regulatory flexibility is essential to enhance the effectiveness of credit assistance programs like TIFIA, ensuring optimal allocation of resources.

Recommendations



Our investigation highlights the need for a modification to FAST ACT Sec. 603 to expand eligibility criteria for TIFIA loan refinancing.



Analysis indicates that projects successfully refinanced TIFIA loans primarily for construction completion, enhancement, or expansion purposes.



Allowing operational transportation projects to qualify for refinancing could unlock additional benefits and enhance the Bureau's flexibility in leveraging TIFIA loans.



Modifying the limitation on refinancing eligibility aligns with objectives of filling market gaps and stimulating private co-investment in infrastructure projects.

Thank you!



QUESTIONS



COMMENTS



FEEDBACK