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OFFICE OF PERFORMANCE AND INNOVATIVE FINANCE SUPPORT

Opportunities for Incorporating Innovative Finance and Funds Leveraging Tools and Techniques throughout the Planning and Programming Process

2022-2023 Innovative Finance for Planners Roundtable Summary Report

Session 1:

September 27, 2022

Denver, Colorado

Session 2:

January 31, 2023

Washington, D.C.

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13. ABSTRACT (Maximum 200 words) This report summarizes the findings from two roundtables, sponsored by FHWA Office of Performance and Innovative Finance Support (OPIFS), focused on the introduction of Innovative Finance and Funds Leveraging strategies in the transportation planning process, particularly at the program development and project implementation phases. By bringing together agencies that currently use innovative finance and funding with agencies that are considering these tools to better meet their needs, we captured a sample of current successes and opportunities for expanded use. In reviewing the discussion themes, clear evidence of additional needs for capacity building and technical support to guide transportation agencies in the application of innovative finance and funding was revealed. While transportation agencies often handle both planning and finance for projects, these departments rarely coordinate. Additional efforts to support better coordination earlier in the planning process could expedite project delivery and create streamlined strategies for the construction and maintenance of transportation infrastructure.

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Contents

Executive Summary

This report summarizes the OPIFS Fall 2022 Roundtable events held in Denver, CO and in Washington, DC and provides key highlights from the discussions, capturing content from formal presentations and open forum discussions.

About the Roundtables

The purpose of these roundtables was to bring together stakeholders involved in the transportation planning process to provide training and technical assistance to communities that can benefit from innovative finance and Funds Leveraging tools to supplement funding from the Highway Trust Fund (HTF).

Overview

These two roundtables, sponsored by FHWA Office of Performance and Innovative Finance Support (OPIFS), focused on the introduction of Innovative Finance and Funds Leveraging strategies in the transportation planning process, particularly at the program development and project implementation phases. The intent was to support identification of the factors that indicate when financing is a more cost-effective option compared to 'pay-as-you-go' program delivery. By bringing together agencies that currently use innovative finance and funding with agencies that are considering these tools to better meet their needs, we captured a sample of current successes and opportunities for expanded use.

Attendees

Attendees were public transportation planning and finance professionals from MPOs and state DOTs with experience utilizing innovative finance at the regional or local level and/or those who were interested in learning more about this topic.

Format

Each roundtable included multiple interactive sessions, giving attendees opportunities to share notable practices and learn from others about how to incorporate innovative finance techniques into their planning and programming process.

Key Takeaways

Presentations focused on both successes and challenges in funding transportation infrastructure projects. Several participants shared innovative finance experiences through the lens of projects. Others presented the overall funding model for their agencies and how they incorporate innovative finance, funding, and project delivery as they work to meet the needs of the transportation system. Each state presented the unique parameters of their finance model, based on the state legislature and local support. Open-ended discussions focused on challenges for small or rural areas, overcoming regulatory hurdles, impacts of electrification on transportation systems, and how to support greater coordination between planning and finance. Various themes emerged from the roundtables but centered on needs for additional resource and partnership development.

Support Requests

Resources

During each Roundtable event, many questions, as well as requests for best practices and additional information centered on the need for resources. Several agencies highlighted issues they encountered

through innovative finance, funding, or project delivery processes. Additionally, during open discussion time, the team fielded questions and requests for additional information. Assistance and resource requests fell into three primary categories:

1. Requests for more information on existing innovative finance tools;
2. requests for best practices on a given topic; and
3. requests for new resources.

Requests for more information on existing innovative finance tools included transportation development credits, grant applications, rural financing tools, general risks in the financing process, challenges with Public-Private Partnerships (P3s), and debt financing pros and cons. For new resources, participants expressed interest in a tool or guide for prioritizing system preservation in the financing process, tools to determine project need and eligibility, financing fleet electrification, improving access to federal funds for disadvantaged communities, use of Federal vs. state funds for projects, navigating state credit ratings and legislative context, regional coordination on finance and planning, innovative finance at the local and regional scales, and communication with decision-makers. These insights could inform future case studies, event programming, one-pagers, or guides, as well as communication and information-sharing methods.

Partnerships

The roundtables brought together transportation professionals from both urban and rural areas, interested in sharing, and learning about innovative finance. While the intended topic was "Opportunities for Incorporating innovative finance and Funds Leveraging Tools and Techniques throughout the Planning and Programming Process", presenters struggled to connect planning processes and finance. Finance officers and planners agreed that greater coordination across disciplines within long, mid-, and short-term planning processes could increase the impact of projects implementation, but admitted that little, if any, of this sort of cooperative visioning occurs within their organizations. This disconnect presents an opportunity for further capacity building, through research, resource development, and technical assistance to support improved transportation planning processes and, ultimately, project delivery.

Participants expressed interest in the creation of a community of practice focused on innovative finance for planners. Several discussed the challenge of finding help and support. With other planning and finance topics, many have peer networks to reach out to, but nothing similar in the interdisciplinary space occupied by innovative finance.

Structure of this report

The following sections provide additional detail about the roundtable sessions, beginning with a summary of the opening discussions that framed the meetings. After this, summaries of the attendee presentations appear according to topic area, ending with examples of mixed methods for funding and financing transportation programs. The conclusion provides final insights and suggests next steps to address the gaps identified.

Opening Discussions

Both roundtables opened with introductions. Those in attendance for the Denver roundtable included representatives from the Denver Regional Council of Governments (DRCOG) – the host agency, Corpus Christi Metropolitan Planning Organization (CCMPO), the Chicago Metropolitan Association for Planning (CMAP), Washington State Department of Transportation (WSDOT), North Dakota Department of Transportation (NDDOT), Minnesota Department of Transportation (MnDOT), and Mid-America Regional Council (MARC).

Those in attendance for the Washington, D.C. Roundtable included representatives from the Delaware Department of Transportation (DelDOT), Pennsylvania Department of Transportation (PennDOT), West Virginia Department of Transportation (WVDOT), Morgantown Monongalia Metropolitan Planning Organization (MMMPO), Miami-Dade Transportation Planning Organization (Miami-Dade TPO), Indiana Finance Authority (IFA), Southwest Michigan Planning Commission (SWMPC), Des Moines Area Metropolitan Planning Organization (DMAMPO), KYOVA Interstate Planning Commission (KYOVAIPC), and Bangor Area Comprehensive Transportation System MPO (BACTSMPO).

Pete Mancauskas, Acting Director of the Office of Performance and Innovative Finance Support opened both discussions with an overview of the work of OPIFS and the goals for the Roundtable Discussions. The primary goal of the Roundtable was to discover successful practices for incorporating innovative finance into the planning process and to identify challenges that prevent this. Additionally, OPIFS was interested in identifying additional ways to support rural or small towns, public lands, and Tribal entities achieve greater success in funding transportation programs and projects by identifying innovative ways to fund the match requirements of discretionary grant programs. Over the course of the day, several agencies presented their work, and all engaged in discussion on the successes and challenges they experience in their organizations and communities.

Innovative Finance in the Planning Process

Considering innovative finance in the planning process can enable agencies to leverage existing funding, expedite project delivery, increase stakeholder and public awareness, and encourage innovation. By engaging innovative finance strategies, agencies can ensure that available funds are put to their best use. Expediting projects increases efficiency and can keep costs down. Providing information to partners, stakeholders, and the public early in the planning process supports an increase in understanding of project elements and greater buy-in.

Innovative finance enters the planning process with the development of major plans and products, varying a bit between agency types. The primary processes for Metropolitan Planning Organizations (MPOs) to incorporate innovative finance are Metropolitan Transportation Plans (MTPs), Transportation Improvement Plans (TIPs), and Unified Planning Work Programs (UPWPs). Similarly, Regional Transportation Planning Organization (RTPOs) processes include Regional Long-Range Transportation Plans, RTIPs, and UPWPs.

Office of Performance and Innovative Finance Support (OPIFS)

The Office of Performance and Innovative Finance Support (OPIFS) provides tools, expertise, and financing to help the transportation community explore and implement innovative strategies to deliver costly and complex infrastructure projects. OPIFS aims to expand public sector capacity to design and implement alternative financial strategies for delivering transportation infrastructure. OPIFS conducts

research, delivers training, distributes information, and provides technical assistance in support of these strategies, which are grouped into three program areas: public-private partnerships (P3s), project finance, and revenue. OPIFS also serves as FHWA's connection to the U.S. Department of Transportation's (USDOT) Build America Bureau (the "Bureau") and works in concert with them to identify and coordinate FHWA technical assistance for transportation projects receiving Bureau support. Examples include:

- Providing tools, expertise, and funding in three primary program areas:
    - Public-private partnerships
    - Project finance
    - Revenue
- Conducting research
- Delivering training
- Distributing information
- Providing technical assistance

OPIFS recently published the Innovative Finance for Planners Briefing Book. This resource provides information about innovative finance techniques and further presents how agencies and governments can use these techniques within the Federal transportation planning process and considerations to keep in mind when using such methods.

The briefing book is directed to the transportation planning community. This community is broad, representing metropolitan planning organization (MPO) staff, board members, and senior executive leadership; regional transportation planning organizations (RTPOs); regional councils of government; local governments, including municipalities and local planning agencies; State governments, including State departments of transportation (DOTs); Tribal governments; other transportation agencies, including public transit operators and turnpike authorities; and, importantly, the traveling public who have a stake in how transportation investments are made.

The roundtables build on previous work done by OPIFS to build capacity for transportation planning to engage innovative funding and financing techniques in the planning process leading to better leveraging of resources, allowing for more flexibility, and expanded options in managing and delivering transportation projects.

Topics

Debt Financing

Overview of Debt Financing

This section describes debt financing as an option for funding a project. This allows an agency to expedite project delivery then pay back the balance incrementally with interest, through project revenue such as tolls. WSDOT explained that this method may increase an agency's debt, but also potentially accelerates construction timelines. They spoke of the importance of forecasting revenues accurately to facilitate the revenue stream needed to repay the debt. Unforeseen circumstances can disrupt debt financing repayments, such as the pandemic and shifts in technology. Some found that smaller agencies are not as aware of debt financing and lack the capacity to create complex projections for future funding.

Washington State Department of Transportation (WSDOT)

Debt financing enables construction acceleration and spreads the costs of a project over its useful life. The people who benefit from the capital improvement also help finance its construction. This could occur through tolling facilities, for example. The debt financing funds the initial project, the project is built, drivers pay a toll, and this repays the debt. Instead of paying a large sum all at once before the project is started, it is paid through a consistent year-over-year expenditure. It may reduce overall project costs by avoiding inflationary impacts and overhead costs. Also, users of the facility benefit from the project earlier than if they waited for funding to be available.

Financing projects increases debt, obligating future revenue. It can expedite project delivery, but it obligates future funding. Overleveraging can affect credit ratings. Debt service payments must be paid first and are not available to fund ongoing maintenance and operations or new projects.

It is difficult to forecast a definitive revenue stream. Revenue projections may not materialize. Circumstances such as technology shifts, telecommuting, or global pandemics, all of which have recently impacted transportation, are risks in the financing process. Increases in fuel efficiency of alternative fuel vehicles could impact future motor vehicle fuel tax revenues. Telecommuting could also impact motor vehicle fuel tax revenues or other mileage-based revenues.

Debt Financing Discussion

Finance and funding intersecting with planning

- Metropolitan Planning Organizations (MPOs) may not be as familiar with debt and how financing could be used to support project delivery.
- WSDOT aims to communicate to leadership about funding and financing and the tradeoffs. Focusing on the long-range plan is difficult because people tend to concentrate on what can be achieved in the next few years.

Debt vs. Reserves

- Reserves – they have had to borrow from reserves to cover obligations during the pandemic, for example.
- FHWA FL staff asked if there is a relation between reserve and debt amounts? Or are reserves simply as much as can be spared?
    - There are targets for the reserve account, around 30% of net revenue.

    - High-Occupancy Toll (HOT) lanes are riskier, they are thinking of a 2.5 times coverage ratio, with a reserve at 50% to reduce risk.
- WSDOT is looking at the cheapest way to finance. You can save a lot of money getting creative. Sometimes planners just think about how to fund a project and miss a larger suite of tools.
- Balancing what is pay-as-you-go and what is financed can make projects more viable.
- When thinking about how transportation is changing, going to Electric Vehicles (EVs), pandemic changes to work, etc. can all impact funding sources.

Public-Private Partnerships (P3s)

Overview of P3s

Public-Private Partnerships (P3s) are long-term contractual agreements between a public agency and a private entity to design, build, finance, operate and maintain an infrastructure project. A P3 involves the private sector taking on additional project risks. Generally, the cost of a P3 for transportation projects ranges from a few hundred million dollars to more than a billion dollars.[1] PennDOT explained the legislation through which P3s are governed, conducted, and scheduled in the State, how they have been implemented in programs and projects.

Pennsylvania Department of Transportation (PennDOT)

Overview of PennDOT P3s

PennDOT engages in public-private partnerships (P3s), which are contractual agreements between public and private entities to design, build, finance, operate, and/or maintain transportation facilities. Under this arrangement, responsibility for engineering, construction, operation, financing, and/or maintenance (or any combination) of a transportation project transfers to the private sector for a defined period.

Figure 1: PennDOT's key elements for successful P3s.

P3s are governed by the Pennsylvania Public Private Transportation Partnerships (P3) Act 88 of 2012, which was amended in 2022 through Act 84 of 2022. Both acts make up the enabling legislation in PA that permits transportation P3s. The P3 Act requires a request for proposal (RFP) as the sole selection mechanism, provides for a variety of delivery methods ranging from pre-development agreements to concession agreements, ensures the private partner receives payments, and requires that projects are authorized by the P3 Board, for which PennDOT provides the resources and staffing. The P3 Act allows for solicited and unsolicited proposals that the P3 office collects twice per year and enables the procuring agency not to be required to accept the lowest price offer. The 2022 amendment provides for new measures prior to approval for new topics. P3 Board-

[1] *PUBLIC-PRIVATE PARTNERSHIPS (P3)*. (n.d.). U.S. Department of Transportation Federal Highway Administration: Center for Innovative Finance Support. Retrieved April 18, 2023, from https://www.fhwa.dot.gov/ipd/fact_sheets/p3.aspx

approved projects are subject to a legislative veto via a concurrent resolution within 20 calendar days or 9 session days, whichever is longer, and the term of a P3 agreement can extend for up to 99 years. Any net proceeds realized by PennDOT through P3 agreements are reserved for use in only transportation projects.

Partnership 81

Partnership 81 addresses needed safety and mobility improvements along a section of I-81 in Luzerne County and alleviates peak travel congestion through the corridor. The project will reconstruct and widen I-81 to three lanes in each direction, eliminate a left-hand exit on I-81, replace poor condition bridges, and redesign intersections immediately off I-81. This utilizes innovative P3 delivery, accelerating the schedule to realize cost savings and innovation in the design and construction phases. The project is currently in the preliminary engineering phase. PennDOT anticipates issuing an RFQ and shortlisting contractors in 2023. PennDOT anticipates obtaining environmental clearance in 2024 and selecting a development entity and contract closing in 2025.

Currently, the needs of the interstate system outpace available funding. Previously, PennDOT looked to advance several I-81 Bridge Projects, which were not programmed, but expanded the scope to address corridor needs. To develop the scope, there is an Interstate Steering Committee, which includes P3 Office staff in updates/discussions with ISC. It carries an estimated line item on Interstate Management (IM) within the TIP for the project until a detailed funding breakdown is confirmed.

Major Bridge

The goal of this project was to accelerate the replacement and rehabilitation of major bridges before incurring major maintenance costs, weight restrictions, or costly closures. PennDOT unsuccessfully tried to move forward an Interstate bridge tolling program. The State Supreme Court concluded that the DOT cannot mandate fees, so they cannot use traditional tolling as a funding mechanism. Innovative finance and funding strategies help offset gas tax revenue losses, ensuring that users contribute fairly to the replacement and rehabilitation based on usage, and create a sustainable funding model for the state's major bridges. PennDOT financed in today's dollars with deferred repayment. The development company is contracted to maintain bridges for 35 years, encouraging design and construction methods not possible in a traditional procurement process. Nine bridges were identified as candidates (Figure 17) but will be delivered as part of multiple packages. The bridges were selected based on:

- Location on an interstate/expressway
- Structures of significant size/location/cost
- Structure conditions which warrant timely attention
- Revenue potential based on traffic levels
- Geographic balance across the state
- Construction timing for near-term benefit

For the Major Bridge P3, PennDOT initially looked at tolls so it would pay for itself, but ultimately moved forward with P3 instead due to a State Supreme Court and new legislation passed in 2022. The "rural 6" package 1 = $2.2 billion in Private Activity Bonds. Originally, the project package included nine construction phases on the 2023 STIP for NEPA and Air Quality Conformity purposes. Not all bridges were in the program. Some phases started in the 12-year Program Cycle, some in the long-range plan, but a few were critical.

Package 1 includes the six yellow bridges (Figure 6). Package 1 is set up to pursue TIFIA, as they hope to refinance. Initially, they did not have time to go through the TIFIA process. PennDOT does not have legislation to bond. When they did RBR, it was a bigger flashier P3 that provided proof of concept. They are still interested in Grant Anticipation Revenue Vehicles (GARVEE) for future projects.

The direction changed and they could no longer toll. Instead, they utilized their capital program and existing planning and programming processes. Without toll revenue, upon approval of the 2023 Statewide Transportation Improvement Program (STIP), PennDOT adjusted the program to add the major bridge P3 as a single project for payments. The remaining 3 bridges can be advanced as additional packages under the existing P3 but will cause impacts to current and future programs without additional revenues. The motor license fund makes up much of the revenue. Currently, funding is not in place for the final three bridges, but it is in progress.

Figure 2: Map of Pennsylvania showing the locations of the nine bridges included in the Major Bridge P3.

Planning and Finance Cooperation

Overview

Agencies discussed how financing decisions are made and how funding is coordinated among different municipalities and levels of government. Miami-Dade Transportation Planning Organization (TPO) explained how its 25-member governing board operates and works with local and regional politicians to complete projects. MnDOT mentioned how its new 10-year plan includes a more straightforward allocation of projects and how the level of integration has improved over time. PennDOT discussed how it engages with its districts, MPOs, and municipalities to help develop its 12-year plan, which is updated every two years. PennDOT also leads two working groups to develop its two key programming guidance documents, made up of representatives from other agencies.

Miami-Dade Transportation Planning Organization (Miami-Dade TPO)

To direct and facilitate transportation planning decision-making, the Miami-Dade TPO includes a Governing Board comprised of twenty-five (25) voting members. Project approval can be difficult because each commissioner wants priority on the area they represent. Miami-Dade TPO shows the board the numbers and the costs. Thus far, Florida has experienced resistance to tolling. Developers want to build, since it is a growing and desirable area, but capturing the value for transportation remains challenging.

Minnesota Department of Transportation (MnDOT)

The level of integration has improved over time. The 20-year plan demonstrates the need, but the legislators still have trouble seeing what that means for them. The 10-year plan, fiscally constrained, clarifies allocation to projects and enables more creative means to fund projects.

Looking ahead, MnDOT would like to build out capacity to do more value capture. MN (and others, including IL) do not have authority to add chargers to rest stops. As a State they passed a clean vehicle act to encourage ownership but need additional funding or financing to build the needed infrastructure to support electric vehicle fleets.

Pennsylvania Department of Transportation (PennDOT)

PennDOT develops a 12-year transportation program (Figure 18), updated every two years, as required, divided into four-year segments focusing on the Transportation Improvement Program (TIP) and the Statewide Transportation Improvement Program (STIP) during the first phase. Within the State of Pennsylvania, there are 26 TIPs that go into the STIP. In developing its planning and programming, PennDOT engages with its 11 districts, 23 metropolitan and rural planning organizations, as well as 2,460 municipalities made up of 1,548 townships, 956 boroughs, and 56 cities. There is synergy between the finance and planning divisions within PennDOT, but not within typical planning processes.

PennDOT leads two working groups to develop its two key programming guidance documents. Working groups include representation from MPOs, Rural Planning Organizations (RPO), FHWA, FTA, and PennDOT Central Office and Districts. The Financial Guidance Work Group provides distribution formulas, procedures, and requirements related to the available funding for the program and regional allocations. The General and Procedural Guidance Work Group provides information on requirements for compliance with State and Federal planning regulations.

Figure 3: PennDOT Transportation Program Development Process map.

Planning and Finance Coordination Discussion

WSDOT

- For planning purposes, financial planning looks at how coordination across departments could work. Within the finance department, they evaluate how to finance a project and the long-range impact of financing projects. There is still some disconnect between developing and implementing a plan. When staff from WSDOT look at the plan, they look at the high level and the various revenue streams needed to bring projects to reality.
- State DOTs and MPOs must have fiscally constrained plans. With emerging requirements such as performance measures, new programs such as electric vehicle programs, and new funding grants, it is becoming increasingly more complicated to ensure fiscal constraint with the growing infrastructure needs.
- There is not a full picture for anyone. The coordination between finance and planning has been lacking.

Q: Is WSDOT more centralized in decision-making?

- A: Yes, the Legislature determines how projects are funded. Cities and counties can bond. In Bellevue, they did their own TIFIA Loan. A lot of projects they have done are financed differently. It's not one size fits all. Bonds can only be issued for projects on the Legislative project list.

CMAP and IDOT

- Q: Which agencies in IL are doing projects?
    - A: Public agencies. Even if a nonprofit is doing a project, it must be a city, county, or township-owned project. Some smaller communities in Chicago pursue these projects, but they are not big enough to conduct something like this. For example, for a $2million engineering study, some jurisdictions get to a limit of how much they will do. None of the communities in Chicago have that kind of threshold but are instead trying to get more private funding for rail through public-private partnerships. Railways have a representative and know how much they are willing to spend, then figure out what public partners can contribute. Rails are still hard to get ahold of, and they still have the most bargaining power.

Communications and Information Sharing

- WVDOT
    - WV - Roads to Prosperity, website and other communication are available for partners and the public.
- PennDOT
    - Penn creates a newsletter on funding that is sent to all the MPOs and a pathways newsletter.

State Infrastructure Banks

A State Infrastructure Bank (SIB) is a revolving loan fund program established and administered by a state to provide low-cost loan financing to surface transportation projects within the state. SIBs can be capitalized with Federal-aid surface transportation funds and matching state funds or capitalized with a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan to lend to rural infrastructure

projects.[2] MnDOT discussed how its state SIB is structured and funded, noting that it has been used sparingly in the last ten years. WVDOT explained that it is interested in establishing a SIB again.

Minnesota Department of Transportation (MnDOT)

The Transportation Revolving Loan Fund (TRLF) is Minnesota's State Infrastructure Bank (SIB). The SIB provides low interest loans to cities, counties, and other governmental entities for eligible transportation projects. As funds are repaid, they are returned to the TRLF and used to finance additional transportation projects. So far, this instrument has been used sparingly with only five loans for approximately $24 million in the last 10 years.

SIB Discussion

WVDOT

WVDOT is interested in looking at SIB again, but WV needs culture change. There is a widespread idea that all debt is bad, yet a desire for new roads. There are lots of opportunities in WV.

DelDOT

DelDOT regularly runs low on apportionment because they have used so much year after year (DE).

Surface Transportation Block Group (STBG) Program Funding

Overview of STBG Program Funding

The Surface Transportation Block Grant program (STBG) provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.[3] The Chicago Metropolitan Agency for Planning discussed how the programming authority for FHWA's STBG Program Funding is delegated, agreed-upon, as well as their focus on aiding disadvantaged communities.

Chicago Metropolitan Agency for Planning (CMAP)

Programming authority for the FHWA's STBG Program funding is delegated to the regional Councils of Mayors and City of Chicago by the MPO Policy Committee. The distribution of funding and programming procedures are outlined in an agreement between the Council of Mayors and City of Chicago. As part of the agreement for STP funding, the Council of Mayors Executive Committee and the City of Chicago agreed that aiding disadvantaged communities by providing greater access to Federal funds was a desired outcome. While not the only barrier to reinvesting in local infrastructure, supplying the required match can be challenging and may discourage local officials in disadvantaged communities from seeking funding for needed projects. Illinois DOT (IDOT) uses STIP funding for the northeast section of Illinois. They are hitting a fiscal cliff with transit. Transit fare must cover 50% of the cost, which became extremely challenging with the circumstances of the COVID-19 pandemic.

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[2] *State Infrastructure Banks*. (n.d.). Build America Bureau. Retrieved April 18, 2023, from https://www.transportation.gov/buildamerica/sibs

[3] *Surface Transportation Block Grant Program (STBG)*. (n.d.). U.S. Department of Transportation Federal Highway Administration. Retrieved April 18, 2023, from https://www.fhwa.dot.gov/specialfunding/stp/

Chicago's Transportation Development Credits for Highways (Toll Credits)

Overview of Toll Credits

Under Title 23 U.S.C., Section 120 (i) a State is permitted to use certain capital expenditures of toll revenues as a credit toward the non-Federal matching share of highway programs. The Chicago Metropolitan Agency for Planning (CMAP) discussed how toll credits funding determines need, eligibility, and funding, including when and how need is determined. CMAP also explained the jurisdictional requirements and technical assistance provided. IDOT went over how each State is permitted to use capital expenditures of toll revenues and how it is used to finance projects by the FHWA. Toll credits can be used to match Federal funds for federally eligible highway projects though local governments often have struggled with matching. IDOT also mentioned the Illinois Tollway has historically generated many toll credits, considerably more than are used each year.

Chicago Metropolitan Agency for Planning (CMAP)

CMAP Toll Credit Jurisdiction Eligibility

CMAP's policy prioritizes support to disadvantaged communities. Projects must be approved by IDOT and in the TIP. IDOT could say no, but they have not thus far. No more than 20% of eligible programs are awarded in any Federal fiscal year. This is dictated by an agreement between City of Chicago and CMAP Council of Mayors regarding the distribution of local STBG funds. CMAP has a community cohort evaluation tool, to determine need and eligibility. CMAP's Community Cohort Evaluation Tool (CCET), assigns Community Cohorts throughout the CMAP region based on four factors: population, income, tax base per capita, and percent of population located in an economically disconnected or disinvested area. Only jurisdictions, or Chicago Community Areas (CCAs), in the highest need group (Cohort 4) are considered eligible to utilize TDCHs as local match for local STBG-L, CMAQ, and Transportation Alternatives local funding. Eligibility is determined at the time of application. However, if it is determined through FHWA/IDOT coordination during Phase 1 or Phase 2 engineering that the logical termini of the project must be extended beyond the boundaries of the toll credit-eligible jurisdiction(s) to have a feasible project, the use of TDCHs may be requested for the entire project limits, provided the toll credit-eligible jurisdiction will be the lead agency for project implementation.

The project limits must be entirely within the toll credit-eligible jurisdiction(s) or Chicago Community Areas(s) to qualify to request toll credits to support disadvantaged communities. For multijurisdictional projects, all municipal partner agencies or CCAs must be TDCH-eligible.

Some challenges with this program include capacity, flexibility, and multijurisdictional projects. Even if there is a local match, the capacity may not be there for these disadvantaged communities. They need additional technical support to get a project funded and implemented.

Illinois Department of Transportation (IDOT)

IDOT Toll Credit Overview

The amount of toll credits, or transportation development credits (TDCs), to be earned by the State is based on revenue generated by toll authorities within the State that are used by the authorities to build, improve, or maintain public highway facilities that carry vehicles involved in interstate commerce. Use of TDC does not provide any additional funding, only a new way to finance a project. Any TDCs established and approved by FHWA do not lapse but remain available until used by the State. If the public, quasi-public, or private agency has built, improved, or maintained the facility using Federal funds, the credit

under this paragraph shall be reduced by a percentage equal to the percentage of the total cost of building, improving, or maintaining the facility that was derived from Federal funds.

To receive a credit under paragraph (1) for a fiscal year, a State shall enter into such agreement as the Secretary may require to ensure that the State will maintain its non-Federal transportation capital expenditures in such fiscal year at or above the average level of such expenditures for the preceding 3 fiscal years; except that if, for any one of the preceding three fiscal years, the non- Federal transportation capital expenditures of the State were at a level that was greater than 130 percent of the average level of such expenditures for the other two of the preceding three fiscal years, the agreement shall ensure that the State will maintain its non-Federal transportation capital expenditures in the fiscal year of the credit at or above the average level of such expenditures for the other two fiscal years.

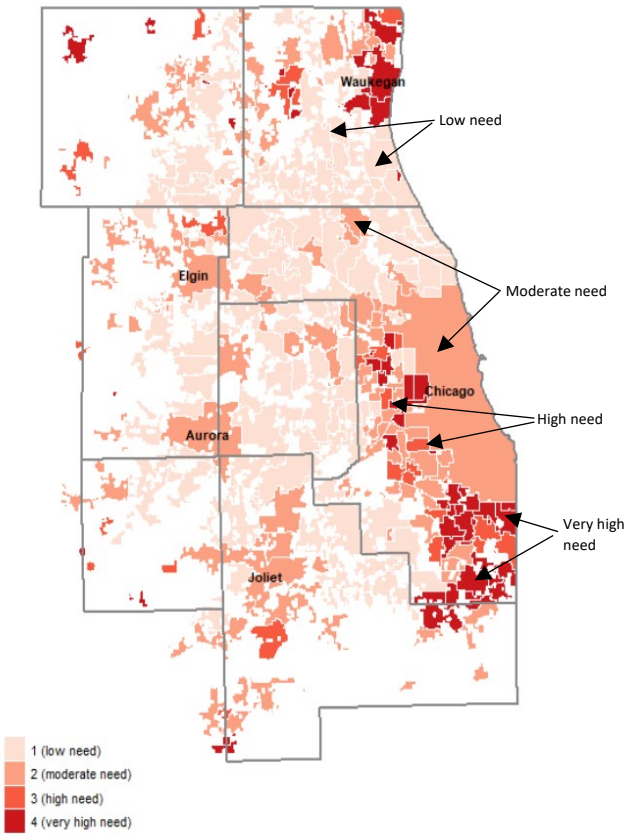

Figure 4: CMAP TDCH Jurisdiction Eligibility Map generated by the Community Cohort Evaluation Tool (CCET)

Local match has always been difficult for these communities. Transportation Development Credits may be used to help them access these funds. If there are toll revenues and investment back into the public sphere, these can be used as a match – instead of local jurisdiction coming up with the money. On February 29, 2012, IDOT was awarded additional TDCs in the amount of $1,144,143,585. The necessary Maintenance of Effort (MOE) calculations will be performed annually and if met IDOT will apply for additional TDCs.

The Illinois Tollway has historically generated many TDCs, considerably more than are used each year, and previously the IDOT policy allowed them to only be used on transit projects, not local roads projects. IDOT had a TDC program set up in 2004 specifically for Transit improvement projects. In 2018 IDOT approved a policy that includes local use on non-transit project types, referred to as Transportation Development Credits for Highways (TDCH).

TDCH can be used to match Federal funds for Federally eligible highway projects.

- TDCH will not be used on local projects without prior approval from the Office of Planning and Programming (OPP).
- TDCH will be used on a project-by-project basis without being confined to certain Federal fund types.
- TDCH cannot be used retroactively, i.e., after a project has been awarded by the department.
- TDCH cannot be used to increase the Federal share of any project phase previously awarded by the department.

TDCH may be used for any Federally eligible highway program project within the State of Illinois authorized by Title 23. However, use of TDCH may initially be limited to projects in IDOT Districts 1, 2, and 3 because those highway districts contain toll highways operated by ISTHA Chicago Metropolitan Agency for Planning (CMAP). MPOs that have approved policies and guidance governing the use of TDCH may formally request to use the TDCH from IDOT. Policies must be approved by IDOT before requesting the use of TDCH. The TDCHs can be used on any project type that is eligible under the Surface Transportation Block Grant (STBG) program, Congestion Mitigation and Air Quality Improvement program or the Transportation Alternatives (TA) Set-Aside Program. CMAP staff are responsible for tracking the use of the TDCHs for local match on all STBG-L (STBG local funds), CMAQ or Transportation Alternatives local funded programmed projects in the CMAP region. The TDCHs must be approved by IDOT and identified in the TIP. No more than 20 percent of the eligible programs in any Federal fiscal year may be composed of TDCHs. The TDCHs cannot be used retroactively on projects that were programmed prior to the establishment of this policy, and the use of TDCHs must be requested on the project application. TDCHs cannot be used as local match on the right-of-way acquisition phase of any project.

Project Example: Rail Crossing Grade Separation in Dolton, IL

This project created a grade separation at the intersection of Cottage Grove Avenue with both passenger and freight rail lines (namely, the IHB and CSX). The project improved safety and eliminated delays to approximately 5,100 vehicles daily and 128 Freight Trains, resulting in $332 million annually in wasted productivity prior to completion. Phase I Engineering cost $2 million, with a 20% local match requirement. The project used TDCHs for $400,000 local project costs. The Chicago Region Environmental and Transportation Efficiency (CREATE) Program - a public-private partnership that works to improve the regional passenger and freight rail network and its interaction with surface transportation, led with Cook County as a supporting partner. CREATE focuses on efficiency, safety, and communities. Additional partners in this Rail Crossing project include County, City, IDOT, 7 Class I Railroads, Amtrak, and Metra. Together they are coordinating with partners such as Railways, the County, City, Metra (commuter rail for Chicago metro), and the Chicago Transit Authority (CTA), which manages buses and L trains.

Minnesota Department of Transportation

Twin Cities Metro: E-ZPass Express Lane System

Toll lanes – as of 1-2 years EZ Pass, all revenue must go to the cost of the project before it can go to anything else. Then ½ goes to others.

- 92 miles of priced managed (high occupancy toll) lanes
- Purpose is congestion management, not revenue generation
- Generates ~$4M/year in toll revenue

MnDOT currently has a tolling system in the Twin Cities metro and an intent to expand. Tolls generate approximately $4 million, in a regular year, but this sum dropped 90% during the height of the COVID-19 pandemic.

Toll Credit Discussion

CMAP and IDOT

Q: How long has CMAP's TDCH policy been in place?

A: Toll credits have been in place since 2018, but 2021 was the first program year. The Director of CMAP previously worked for IDOT, which has strengthened the relationship between IDOT and CMAP. CMAP has an alternative funding and programing division. Recently, they have been allowed to do design build which is a new opportunity for Chicago.

Q: Did the TDHC policy require Illinois legislation action to allow it?

A: Yes. They have a Request for Proposals (RFP) and Request for a Quote (RFQ) out but those must be voted on to be released. So far, these have been sitting there for three years. CMAP is slightly different than others. STIP money goes directly to counties not just through CMAP as the MPO.

There is a limit to how they can fund or finance projects. Each project is awarded points to help prioritize it, some points for needs, some for benefits. If you need toll credits, it is a minus. Not only regarding eligibility, but obligation limits. You do not want to leverage all of them, but what if you did and made more of the State dollars are available, is that an advantage.

Toll Credits and Markets

- OPIFS is looking into who would buy toll credits and what the market is for toll credits.
- Several States have an intra-state marketplace for Federal aid, buying Federal back from locals.
- MnDOT keeps more at the State level. Only a handful of States engage in this sort of activity, but there is enough for a pilot initiative. They use State money to purchase the credits. Unless a state has full reliance on Federal funding, there is some State funding to move around or leverage to increase Federal money.

Project match with Toll Credits

FHWA Central Federal Lands Highway Division, provided an example of a project match with toll credits. The Cottonwood Pass project in Colorado was funded with Federal Lands Access Program (FLAP) funds. Prior to BIL, FLAP required a match, and in the case of Colorado, that match was 20%. On big projects, it was difficult for rural communities to come up with the match, and in this case, the County could not come up with the $4.6 million that was needed. The total project cost was $23 million, and the Colorado Department of Transportation (CDOT) had toll credits available. Because the match was more than the county could afford, they were deemed eligible to receive toll credits. While using credits helped the county meet its match obligation, it also created a 20% funding gap. The local funding gap was filled Federally by CDOT using Highway Safety Improvement Program (HSIP) funds. For Federal funds to be used in this way, the project is required to have an eligible expense under the program being used. In this case, the improvements to Cottonwood Pass included safety elements that were HSIP eligible.

Tolling - General

- In West Virginia, the tolls had not been increased since the 1980s. Recent increases occurred gradually. A toll subsidy account froze commuter tolls for 5 years to ease commuters in as the market adjusted to seeing the increases.
- Several states conducting tolling expressed challenges with transponder adoption. Some have tried marketing, DE gives them away. They cost $25 per unit. It is something states are trying to figure out to increase the consistency of toll revenue.

- DE had an amnesty program for toll fees, helping people resolve toll fees. They are hoping for greater uptake of the transponder. They had to do some negotiations to work with the other agencies receiving the fees.
- West Virginia reduced the fee for commuters (40 crossings) to a dollar a crossing.
- In IN and DE, you do not get to renew your registration unless you pay your tolls and associated fees.
- DE gets a lot of negative feedback about fees. One suggestion was to give people the option to sign up for EZ pass and pay tolls at the EZ pass rate. The tolling contractor was supposed to come with all the structure, back office, but is less than satisfactory.

Section 129

- Section 129 provides authority for tolling Federal-aid highways in conjunction with new construction or other improvements to those highways. The passage of MAP-21 made significant changes to the Federal Section 129 Tolling Program including tolling eligibilities and agreement requirements. This is a tolling statue, but there is an exception. More information can be found on the CIFS website about Section 129 General Tolling Program and legislation.

Tax Increment Financing (TIF)

Overview of TIF

Tax Increment Financing (TIF) is a value capture revenue tool that uses taxes on future gains in real estate values to pay for new infrastructure improvements. TIFs are authorized by state law in nearly all 50 states and begin with the designation of a geographic area as a Tax Increment Financing (TIF) district.[4] The Morgantown Monongalia Metropolitan Planning Organization (MMMPO) presented two project examples of how it utilizes TIF, including how they are funded.

Morgantown Monongalia Metropolitan Planning Organization (MMMPO)

Westridge

Westridge is a recent addition to the University Town Center development, a big box style development, with a substantial amount of frontage on the interstate. The TIF District is funded in two ways: through mining reclamation and capturing value from new development. This development captures both real estate tax and sales tax revenue within the TIF district. With the TIF proceeds, the district funded an additional exit, Exit 153 on I-79. The TIF district also applied for improvements to exit 155 to create a welcome entrance for the area and enhance development in Mylan Park. The development initially included multiuse housing, but legislators took that out.

Morgantown Industrial Park

The Morgantown Industrial Park district is a property tax only TIF District. With the construction of a new interchange, the location of the project will be truly multi-modal with rail, river, and highway access. This new interchange will cost approximately $40-50 million. A major new manufacturing facility motivated this project. The facility, a beverage company with the capacity to process the entire milk production of the state of WV, was projected to produce a significant increase in multimodal traffic, including rail, river, and highway. Additional growth in ancillary business is anticipated in the area.

[4] *Tax Increment Financing*. (n.d.). U.S. Department of Transportation Federal Highway Administration Center for Innovative Finance Support. Retrieved April 18, 2023, from https://www.fhwa.dot.gov/ipd/fact_sheets/value_cap_tax_increment_financing.aspx

Transportation Infrastructure Finance and Innovation Act (TIFIA)

Overview of TIFIA

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance.[5] TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments. MnDOT presented on the TIFIA approval process they are currently pursuing for a project, including the time and steps it has taken.

Rural TIFIA Loans are areas outside a metropolitan area and under 50,000 population. Rural TIFIA projects receive an interest rate of ½ of the treasury rate. These projects must be in at least 51% rural areas.

Minnesota Department of Transportation (MnDOT)

TIFIA Rural Project Initiative: Hwy 14 in MnDOT District 7, SW Minnesota

March 2020, rural TIFIA, they are trying to get this approved through the legislature. The project started but they are aiming for approval this fall. A lot of steps for a smaller project, like a larger project, but it was worth it here. They received 49% in loan proceeds, not super high on the priority list but there was political will.

The Office of Performance and Innovative Finance Support (OPIFS) pointed out that you can loan up to $100 million on rural projects from a SIB at the ½ interest rate. Minnesota had to get a special law passed, but this project had special interest because of connections to the area. In the State, this is most popular for the waterways.

TIFIA Discussion

- If a state has a State Infrastructure Bank (SIB), or is considering funding rural projects, a purpose can be to capitalize a TIFIA loan.
- Iowa has a project more industrial/freight, ongoing for 20 years, but needs to look at loans, etc. that they haven't traditionally done. They think there will need to be some conversations with the DOT to get things done. They see their role as more financing than it has been up to this point.
- Indiana: If you can show the economies of scale savings, you can get the DOT onboard. It's important to bring them in
- TIFIA and Project Schedule
    - TIFIA - When Pennsylvania was looking at a grant, they also considered TIFIA for a lower rate, but the time needed to close a TIFIA loan did not align with the project schedule.
        - In Pennsylvania, projects cannot be moved into final design without funding source(s) identified and final design programmed in the TIP, but it would not be required to have construction outlined. However, financing would need to be documented. This plays into the timing. Must be called out at the MPO level.

[5] *Transportation Infrastructure Finance and Innovation Act (TIFIA)*. (n.d.). U.S. Department of Transportation Federal Highway Administration Center for Innovative Finance Support. Retrieved April 18, 2023, from https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_credit_assistance/tifia/

Not sure that an MPO could get a TIFIA, but maybe a county in Penn. How do they get NEPA document approved? Build America Bureau won't underwrite a loan until NEPA is done. In the future, Pennsylvania will consider rural TIFIA refinance.

Mixed Innovative Finance Methods

Overview of Mixed-Innovative Finance Methods

Mixed innovative finance methods involve combining two or more financing methods to achieve a project goal. The roundtables highlighted several examples of how states combine innovative finance methods to fund specific projects. The Corpus Christie New Harbor Bridge Project combined Federal funds with local agency grants as well as a SIB loan. The states of Indiana and Kentucky coordinated on the Ohio River Bridges project, where the State of Indiana financed their portion of the project through P3s, and the State of Kentucky financed their portion through revenue bonds and an availability payment model. Both the Morgantown Mongolia MPO and the Miami-Dade TPO explained how they fund many of their projects through grants and TIF Districts. PennDOT presented their utilization of P3s, Private Activity Bonds, a 50-50 match, regional allocations, and the PennDOT Secretary's discretionary funds for their rapid bridge replacement. WSDOT explained how they used a combination of tolling bonds, debt service, TIFIA loans, and GARVEE bonds for both its Tacoma Bridge and RR 520 Corridor Program. WVDOT explained how it sold bonds and utilized turnpike revenue for a bridge bundle.

Agencies also discussed how a combination of innovative finance methods fund their general operations and existing infrastructure. The State of Delaware shared how its state transportation trust fund was established and credited from taxes, tolls, fees, charges, and revenues. MnDOT explained that much of its funding comes from gas and motor vehicle taxes, registration, and fees. It utilizes bonding as a pay as you go mechanism and Transportation Economic Development (TEDs), a competitive grant program where project selection is partially based on economic benefit. WSDOT mentioned that it is funded through a combination of tools, such as taxes and fees, Build America bonds, toll revenue, TIFIA loans, and GARVEE bonds.

Corpus Christie Metropolitan Planning Organization (CCMPO)

New Harbor Bridge Project: SIB Loans, State Funding, and Grants

The focus of this presentation is on a billion-dollar bridge; a mega project with lots of partners. Everything around the bridge ties to various interests. Partners include the City of Corpus Christi, TX, the State of Texas, Port Corpus Christi, the Chamber of Commerce, the Convention and Visitors Bureau, the Texas State Aquarium, a school district, Downtown management district, and the USS Lexington Museum.

The Port of Corpus Christi is one of the largest oil import/export ports in the nation. Future potential Port activities with the higher bridge and deeper channel are larger ships, possible cruise ships and shipping container ships. This bridge is a state marquis project. When completed, it will be the longest cable-stayed, concrete, segmental bridge in North America. The bridge completely spans the ship channel bank-to-bank. It has a concrete structure with a 170-year design life. Support cables are located down the middle. It features customizable LED lighting and a shared use path with mid-span Belvedere. The design allows for the largest oil tanker ships and possible future container and cruise ships to pass

underneath the bridge. Additionally, the Port is deepening and widening the channel of the port to allow for passage when the ships are fully loaded or empty.

TxDOT oversees the project and hosts a website to keep people up to date. Construction started in 2016. The current estimate for completion is 2024, although it has been extended due to some construction issues. There was a cease-and-desist order on the first design firm hired by the contractor. A second bridge design firm was hired by the contractor to continue the design work and construction. TxDOT even hired a third international bridge design firm to review the designs of the new bridge design. Because of delays, additional revenue is needed. And it may be a lot of new funding! As an example, he asked: "How much is 5% per year on a $1.0 billion when you are late?" Over $150 million in additional revenue is needed. It is important to consider how much money is being burned in the background while the delays persist. The center bridge span had safety issues, so they had to stop recently. A huge local government question is "Who is going to pay for this?" All the local partners funded parts of this project with FHWA providing 80% of the funds. The original project sentiment was that "We need to get this done, so we will put money on the table." And the locals did! The Port interest is high, not only for the oil and gas shipping, but also for becoming a possible container port in the future. This was planned with the future in mind, designing the bridge with enough clearance for the biggest ships to allow for growth. The bridge design aims for use to extend for 170 years. The Port is currently at capacity, so a deeper channel and higher bridge clearance for the port channel entrance assists in expanding the capacity of imports and exports.

No new tolls were allowed for this project. If doing such a long-term project, it is important to think about what could happen over time – inflation, availability of materials, or other circumstances could become obstacles. With a project of this magnitude, some flexibility is required. But the project is a Governor priority in Texas so it will receive the money needed, according to promises made by the State through a letter from the Chairman of the Texas Transportation Commission that allocates funds for the entire TxDOT.

The Corpus Christie Metropolitan Planning Organization (CCMPO) had a unique role in this. The Port put in $15 million in cash. Nueces County, the largest local county, secured a Texas SIB loan to pay off their contribution over time. Any remaining local funds were to be paid by the MPO, essentially writing a blank check for the project. Whatever number of years of MPO Federal funding allocation was needed to fund this New Bridge Project would be given. It turned out to be a 5-year commitment. At that point, the State governor said they will cover it from Statewide resources. CCMPO estimates that the new total project cost will be $1-$1.2 billion.

The State and local governments contributed to the local commitment, not just the Port. Locals wanted some of the aesthetic details, this went into the land that had to be purchased as part of the right of way. The city and county wanted to have these places built as part of their investment. You cannot bike and walk across the bridge in its current state. It is currently a bridge to nowhere. To give the public amenities prior to the structure's completion, they are going to put in more human scale amenities so that people can experience usable public space before the span is done. The community wanted to ensure that the useful area was not just for cars. Additional costs from materials, inflation, pandemic issues occurred and caused some local concern. As this project gets completed, no more local dollars are pledged. The rest of the schedule is being determined. The new date for completion is yet to be determined.

The old bridge will be deconstructed once the new one is done. The existing 1950's vintage bridge is so old; things have started falling apart. The maintenance plan supports it for another five years. It is rusting away after decades, and the lighting system was removed. Local governments are considering what to do with the land from the old bridge. In the BIL, there is a Reconnecting Communities grant being considered locally.

Future project funding

Now that they have $100 million available, a lot of projects are competing for the new funding through a future call for projects. They are reallocating the funds to regional priorities that have been on hold for the New Harbor Bridge. The TxDOT district is relearning the Federal project selection process that is performance-based. The MPO philosophy is – "tell us your priorities, we will figure out how to fund it". Regional cooperation is still being enhanced. Currently, two local governments submitted BIL RAISE grants in April 2022. FHWA typically does not come up with the local priority between two competing projects, it is expected to be prioritized locally. The MPO recently created a committee to help work through these priorities for applying for future BIL grant funding.

Delaware Department of Transportation (DelDOT)

Transportation Trust Funds: Taxes, Tolls, Fees, Charges, Revenues, TIFIA, and GARVEE

Title 2, chapter 14 of the State of Delaware's Administrative Code, or the "Transportation Trust Fund Act", establishes a special state fund credited from taxes, tolls, fees, charges, and revenues. The Fund provides the means to finance the maintenance and development of the State's transportation system to improve its welfare and safety.

The Transportation Trust Fund's Base Financial Plan includes both pledged and non-pledged revenue from FY2022 to FY2028. Existing pledged revenue sources include I-95 tolls and concessions, US301 toll revenues, motor fuel tax administration, DMV fees, and interest income. Non-pledged revenues for the Fund include SR 1 tolls, DE transit fare box revenues, Port of Wilmington – refinancing, US301 revenue sharing, other transportation revenue, and special fund transfers. The total projected funds for FY2022 equal $604 million and increase to $656 million by FY2028.

DelDOT's Base Financial Plan for uses of funds includes uses of funds both before capital and uses of funds with state capital expenditures. Uses of funds, before capital programs, include debt service and operations. Out of DelDOT's annual revenue, 10% goes to debt service, 30% to operations, and 60% to their capital programs. Debt service is made up of senior bonds, new debt service. Use of funds before capital totaled $329 million in FY2022 and is expected to increase to $438 million in FY2028. State resources available for capital include carry-over cash balance and bond proceeds, which totaled $274 million in FY2022 and are expected to be $218 million in FY2028. Total state capital expenditures for the Transportation Trust Fund came to $293 million in FY2022 and are projected to be $218 million in FY2028.

Capital Budget

From FY2017 to FY2022, total capital expenditures have come to $3.5 billion with $1.5 billion coming from federal capital expenditures and $1.8 billion from state capital expenditures. DelDOT uses specialized software to develop criteria to review, rank, and select projects. Types of projects funded by the Capital Transportation Group include core business and state of good repair projects, or system preservation. Capital Transportation Program (CTP) project funding is based on performance targets and

Transportation Asset Management Plans (TAMPs); dedicated funding projects from FHWA or FTA, which include specific types of projects like byways, recreation trails, aeronautics, Transportation Alternatives (TA), Safe Routes to School, State Planning and Research (SPR) funds, and on the job training (OJT); small projects and programs for safety, management, and operation of the transportation system; required projects by contract, legislative, or judicial action, including truck weight enforcement, ADA accessibility, Manual on Uniform Traffic Control Devices (MUTCD), and RDC; as well as other prioritized projects based on decision lens criteria.

The capital transportation project feedback loop (Figure 1) stems from ideas generated by MPOs, local

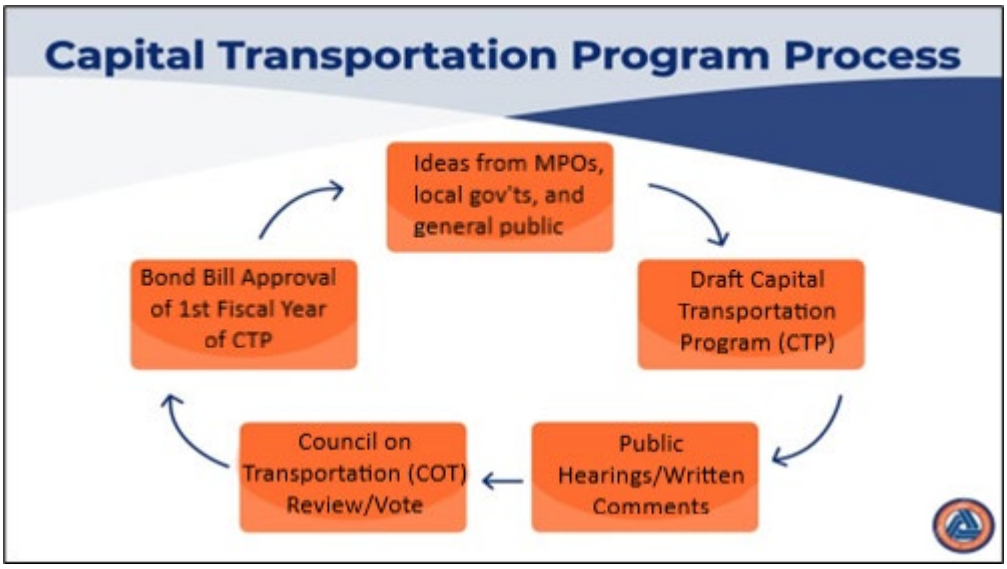

Figure 5: DelDOT Capital Transportation Program Process map.

governments, planning studies, internal sections, and the general public, which then go to draft with the CTP. After public hearings and written comments, the Council on Transportation (COP) takes it to a review or vote. Through the Bond Bill of Approval, project planning goes into its first fiscal year of the CTP. Projects are prioritized based on a project's technical score, which is derived from the approved prioritization process, including a decision lens that ranks projects according to seven criteria defined in the plan. This includes project readiness, meaning the project takes about 2-15 years from the initial concept to completion, the availability of resources, and the assessment of state or federal funding eligibility. Once the project prioritization process is applied, the finance department and innovative finance and funding opportunities come in. The financing and funding of projects is a particularly sensitive issue right now, with the state of the economy and inflation. DelDOT leverages advance construction and tolling and toll credits. It can establish P3s but does not currently have appetite for that in the state.

DelDOT has enacted innovative finance approaches for several transportation projects, including US301 and I-95. For the US301 project, Grant Anticipation Revenue Vehicle (GARVEE) bonds provided low interest rates as well as Federal-aid apportionments for loan repayments. The TIFIA program provided negotiable loan terms, 10-year principal interest, and debt service saving. DelDOT notes that the TIFIA loan process took about 2 years and a fair amount of negotiation. GARVEE bonds also provided a simplified process, low interest rate (1.79%), and Federal aid apportionments for loan repayment to help

finance the repair of 19 bridges, as well as pavement, and ramps along the I-95 corridor in Wilmington, DE with a total budget of $279 million.

Indiana Finance Authority

Ohio River Bridges Project: Availability Payment Model, P3, Design-Build, Revenue Bonds

Figure 6: Project map for a set of projects financed under an MOU between Indiana and Kentucky.

On March 5, 2012, the Governors of Indiana and Kentucky executed a memorandum of understanding between the states to reconstruct the Kennedy Interchange, the construction of two new Ohio River bridges, as well as reconstruction of ramps on Interstate 65 in the Louisville Metropolitan Area (identified in Figure 10). The State of Indiana led the east end of the project with availability payment (AP) and public-private partnership (P3) funding mechanisms, and the State of Kentucky led the downtown portion of the project with design-build and revenue bonds. Given the nature of this interstate project, there was significant appetite for risk-sharing, and an availability payment model was pursued. An availability payment structure is fixed, subject to indexation, and creates budget certainty for public authorities. With availability payment models, the developer requires a lower return rate to guarantee payment stream, it encourages the developer to keep the facility open and perform to standards, and it grants the developer the ability to access the most efficient financing structure. In this case, a competitive draft and final RFPs were issued in May and June of 2012, facilitating an innovative design process.

State appropriations were pledged, should the toll revenue fall short. This project gave developers the opportunity to have the most efficient structure. Modeling showed that after five years, tolling would cover the costs. Indiana Finance Authority thinks it will happen in the next couple years, but the pandemic disrupted the timing. At some point, the tolling revenue will be sufficient, and it will not need the appropriations. No tolls were collected during construction. The modeling showed returns based on an 80% transponder penetration, meaning that 80% of the toll road users would be using a car mounted unit to pay tolls, but only 65% of drivers have adopted the transponder thus far. Locals must pay their tolls or cannot renew their state vehicle registration.

The project was phased in to ensure at least one of the two bridges was available for travel. INDOT was responsible for delivering the East End crossing. There are stringent requirements that must be adhered to. The project made it to financial close in 2013 and was open and operational in 2016. In December of 2016, tolling began on the bridges. Each year the rate increases in line with inflation. Last year's CPI was 8.2%, some board members wanted to waive the increase, however the rate increase remained without waiver.

Ohio River Bridges Project: Technical and Financial Evaluation Scores

Evaluations of the technical and financial proposals were conducted separately by separate teams made up of IFA and INDOT personnel, supported by staff and consultants. No communication occurred between technical and financial teams until both teams had fully completed their evaluations. The financial score represented 75 of the total 100 points available, where the proposer's MAP score determined 72.5 out of the 75 points according to the following formula:

$$\text{MAP Score} = \frac{\text{Lowest Value of Base MAP}}{\text{Proposer's Value of Base MAP}} \times 72.5 \text{ Points}$$

The remaining 2.5 points were awarded based on feasibility of financial proposal as determined by the evaluation committee. Total financial score = MAP score + feasibility score.

The technical score represented 25 of the total proposal points available and was comprised of the sum of the technical proposal score, which was up to 22.5 points, and the schedule score, which was up to 2.5 points. The technical score was comprised the preliminary project management plan (40%), the preliminary design-build plan (30%), and the preliminary operations and maintenance plan (30%). The following formula determined the schedule score:

$$\text{Schedule Score} = \frac{\text{Difference (in calendar days) between (i) Proposer's scheduled date to achieve Substantial Completion and (ii) the Base MAP Date}}{\text{Difference (in calendar days) between (i) the earliest scheduled date to achieve Substantial Completion shown in any conforming Proposal, and (ii) the Base MAP Date}} \times 2.5 \text{ Points}$$

The Final step of the evaluation process involved combining the technical and financial scores resulting in a total score out of a maximum of 100 points available. The following formula determined the combination of scores:

Total proposal score (out of 100) = Financial score (up to 75 points) + technical score (out of 25 points)

The chosen concessionaire for the Ohio River Bridges Project was responsible for delivering sections 4, 5, and 6, where the State of Kentucky maintains section 4, and the concessionaire maintains section 5 and 6. A separately procured toll operator is responsible for all tolling operations. Indiana had to procure a toll service provider through an RFP. All tolling revenue goes into a single bucket, split 50-50 between the two states. Since the tolling agency is a quasi-government organization, it was an easier procurement. However, they had some issues with the toll service provider and disagreements between the two states on how to resolve the issues. IN wanted to act but KY had toll revenue bonds and wanted to leave the situation as is. The total construction costs came to $763 million and took 3.6 years.

Miami-Dade Transportation Planning Organization (Miami-Dade TPO)

Grants, TIF, and Joint Development Revenue

Most of Miami-Dade TPO's transportation planning programs and studies are grant-funded through a Consolidated Planning Grant and others. MDTPO's primary planning products include the 20-year long-range Metropolitan Transportation Plan, the 5-year TIP, and the 2-year UPWP. Apart from grants, it also has local funding for projects.

Through its Smart program, which includes six corridors, MDTPO helps residents of Miami move in all six directions. In 2002, Miami-Dade County voters approved a one-half percent local surtax with the purpose of improving transportation, which assists with funding projects. It also uses local revenue sources. Recently, it began working with the north corridor using a joint development revenue from leasing the land by the metro stations to developers. A certain percentage of revenue is put back into the transportation system.

Morgantown Monongalia Metropolitan Planning Organization (MMMPO)

Richwood Neighborhood: TIF, P3s, Safe Streets for All Grant (SS4A), Value Capture

The Richwood neighborhood is situated near the West Virginia University (WVU) Campus in a small town with significant commuter traffic. WVU is interested in transportation improvements, including developing a new gateway for its campus and the downtown area. The university is in the process of creating a new master plan.

Currently, the Richwood District is a rundown area with a substantial amount of substandard student housing. Stakeholders and a private developer have purchased a large portion of the property in this area. The City of Morgantown and Monongalia County established a TIF district here to capture value from the intended improvements.

Richwood Avenue, an arterial in poor condition running through the district, needs to be reconstructed to be fully operational and meet modern urban standards. The MPO is working with WVU and the County to reconstruct and relocate parts of the street. The project team applied for a Safe Streets for All (SS4A) grant intending for the value captured through the TIF District to provide the match. This area also has a housing issue, with insufficient dwellings to fully house students, employees, and faculty of the university, which is also a major consideration in the master plan.

Minnesota Department of Transportation (MnDOT)

MnDOT Finances

The overview is as follows:

- Four programs, 13 budget activities
- 37 offices
- 25 products and services
- 5,188.8 full-time equivalent (FTE) employees in FY 2021
- Spending breakdown over past four years:
- 21 different funds
- 457 different appropriations
- Average of ~$3.8 billion / year

They have a lot of constraints, hands on legislature – very prescriptive about what money can be spent on so they are in 457 different appropriations to track. They are big and it's complicated. There is dedicated transportation funding and a state gas tax, but registration and fees have overtaken it in the amount gained.

Revenues: Taxes, Fees, and Transfers

The dedicated State transportation funding comes from a combination of a State gas tax, registration, fees, motor vehicle tax, and general fund transfers. Registration and fees have overtaken the gas taxes in the amount gained. Funding and financing are interrelated. Of the money that is deposited in the

Highway User Tax Distribution Fund (HUTD) Fund, about 60% flows to MnDOT in the Trunk Highway Fund. About 40% flows to counties and cities (County State Aid Highway Fund, or "CSAH", and Municipal State Aid Streets Fund, or "MSAS").

MnDOT receives transportation revenues through a variety of sources. However, the largest share comes from HUTD. Others include the Federal and State Trunk Highway Funds, Federal funding, Transit, CSAH, airports, bridges, and MSAS.

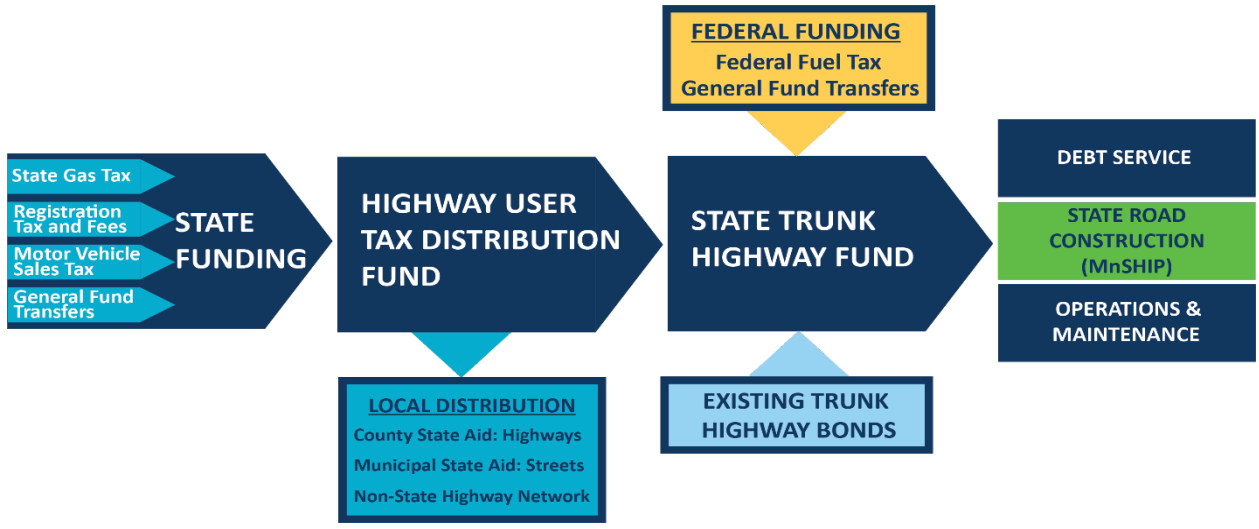

Figure 7: Diagram of MnDOT revenue distribution

In Minnesota, State permission is required to spend all Federal funds. If it runs through the trunk highway – they need legislative approval. For the most recent round of IIJA, it was denied. This coming session they must pass a bill, they cannot deny forever. Gas tax has been declining over time.

In some ways Minnesota is very similar to Washington. Bonding is still the biggest non-pay as you go mechanism. General simple rule is that if the bond rate is lower than inflation, than it's a good

Trunk Highway Debt Service Policy: Debt Service and Bonding

Fund	Amount ($millions)	% of Total
HUTD	2,474	62%
Trunk Highway – Federal	529	13%
Federal	429	11%
Transit – Met Council	353	9%
Transit – MnDOT	69	2%
Partnerships/Special Revenue	51	1%
Trunk Highway	34	1%
CSAH	33	1%
Airports	28	1%
Local Bridges	10	0%
MSAS	1	0%
Grand Total	$4,011	100%

Figure 8: Table showing the amount of transportation funding coming from various sources.

MnDOT is bonding between 10-20%. Their policy limits debt service repayment to 20% of State revenues in Trunk Highway Fund. Current annual debt service: $213M in FY 22, increasing to $307M in FY 25. MnDOT policy is self-imposed but seems average from what else he sees. Weird bonding amounts have to do with this balance. The State legislature is more restrictive than many other agencies (even FHWA). Example of 7-month review with a panel of legislators and experts.

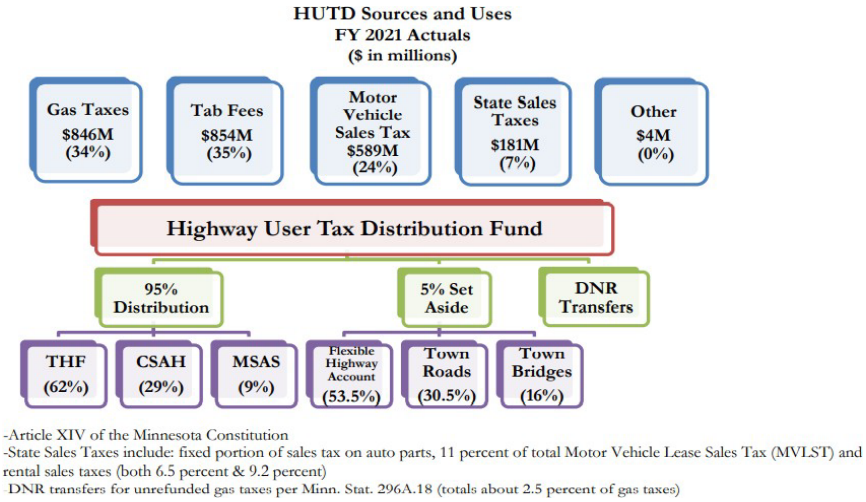

Figure 9: Highway User Tax Distribution (HUTD) Fund - Flow of Funds in FY 2021

MnDOT Innovative Finance Tools and Strategies: Bonding, TIFIA Rural Project Initiative, Transportation Revolving Loan Fund (TRF)

MnDOT fosters innovation through the development process of transportation projects. This ranges from planning policies and products to project selection, project scoping, design, right-of-way, construction, and maintenance, identifying creative ways to deliver better transportation solutions across the system.

1. Bonding – State Trunk Highway Bonds (~$2.9B since 2012)
2. Innovative Federal TIFIA Rural Project Initiative – Highway 14 Expansion Project ($48M)
3. State Special Programs / Initiatives
    - Transportation Revolving Loan Fund (~$50M available)
    - Transportation Economic Development (TED) (typically ~$10M/year)
    - Corridors of Commerce (periodically funded with bonds - ~$1.2B since 2013)
4. EZ Pass Express Lanes
5. MnDOT Policies and Practices

Trunk Highway Bonding

Since 2000, MnDOT has had approximately $5 billion in Trunk Highway Bonds authorized. Of those authorized, $1.2 billion in bonds remain to be sold. The following are the most recent State bonding authorizations:

- 2021: $413M ($200M for Corridors of Commerce program, $100M for State Road Construction, $113M for specific projects)
- 2020: $300M for a variety of programs/projects

- 2018: $416M ($400M for Corridors of Commerce program)

Transportation Economic Development (TED)

This program has the goal of preserving current assets, but the leaders do not get to do ribbon cuttings on existing infrastructure so there is still some expansion of "Corridors of Commerce". This is a competitive grant program with project selection based in part on economic benefit. A wide range of State Highway projects are eligible, from turn lanes to interchanges. The number of projects is split between urban and rural, but the dollars are more heavily weighted to urban areas. Since inception, fifty-four projects have been funded. TED has leveraged $150 million in State funds and $336 million in local/private investments. One outcome of the TED program is the creation or retention of an estimated 27,000 jobs, since 2010. They get bonding every year. Operating budget and then bonding. Last 10 years – a bonding project every year.

MnDOT has done some mileage-based fee studies over the last twenty-five years. Their recommendation is to implement this over time with some subset to pilot the fees and then expand. The gap at the time of the plan was $18 billion and now, even with BIL, is $24 billion. Coming up with incremental plans of what $2, $4, and $6 billion more would allow them to do and some options to leverage.

- 1997: Mileage-Based User Fee Research
- 2002: New Approach to Road User Charges, led 13 State pooled fund
- 2006: Pay-as-you-Drive Demonstration, Value Pricing Pilot Program
- 2009: Mileage-Based User Fee Public Opinion Study
- 2011: Mileage-Based User Fee Policy Task Force
- 2013: Minnesota Road Fee Test Demonstration
- 2021: Minnesota Distance-Based Fee Research and Demonstration

Spotlight on MnDOT Innovative Activities: Analysis of the NextGen Highways

NextGen Highways are highways with the strategic co-location of:

- Electric transmission lines
- Fiber, 5G, and other communications infrastructure
- EV charging infrastructure

White Paper on NextGen Highways Concept

Feasibility Study Report Buried HVDC transmission can be cost effective, and it can potentially be sited in Inter State and highway right of way (ROW) after making appropriate consideration of existing and future transportation system needs.

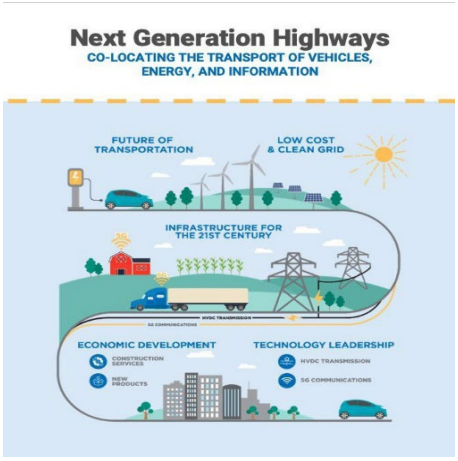

Figure 10: Next Generation Highways graphic

Benefits: use of right of way for transmission will support grid decarbonization and the increased transmission needed to support the electrification of transportation, support shorter timelines for transmission build out, cost savings for rate payers and preserving other greenfield land uses.

Innovation Spotlight: Policy Shift to Support Alternative Uses of Right of Way for Community Benefit

New provisions in ROW Manual allowing limited Commercial Activities in the Public Interest:

- Use of land for public spaces such as plazas, green space, and gathering spaces with activities, community programming and events
- Use of land for public activities supporting public health or economic development goals such as skate parks, markets, festivals, and pop-ups events
- Highway Caps and land bridges including commercial real estate developments.
- Sales of food and alcohol, including food trucks (hazardous materials prohibition still applies – such as propane tanks under bridges)
- Vendors holding fee-based programming on MnDOT land for community benefit.
- Public or private parking
- Use of land for activities supporting sustainability goals such as solar panels
- Commercial activities supporting multimodal transportation options, including shared mobility other transportation providers (e.g., carsharing, intercity bus services, and ride hailing)

Pennsylvania Department of Transportation

PennDOT Pathways: Tolling, Mileage-Based Fees, Taxes & Fees, P3s, and Congestion Pricing

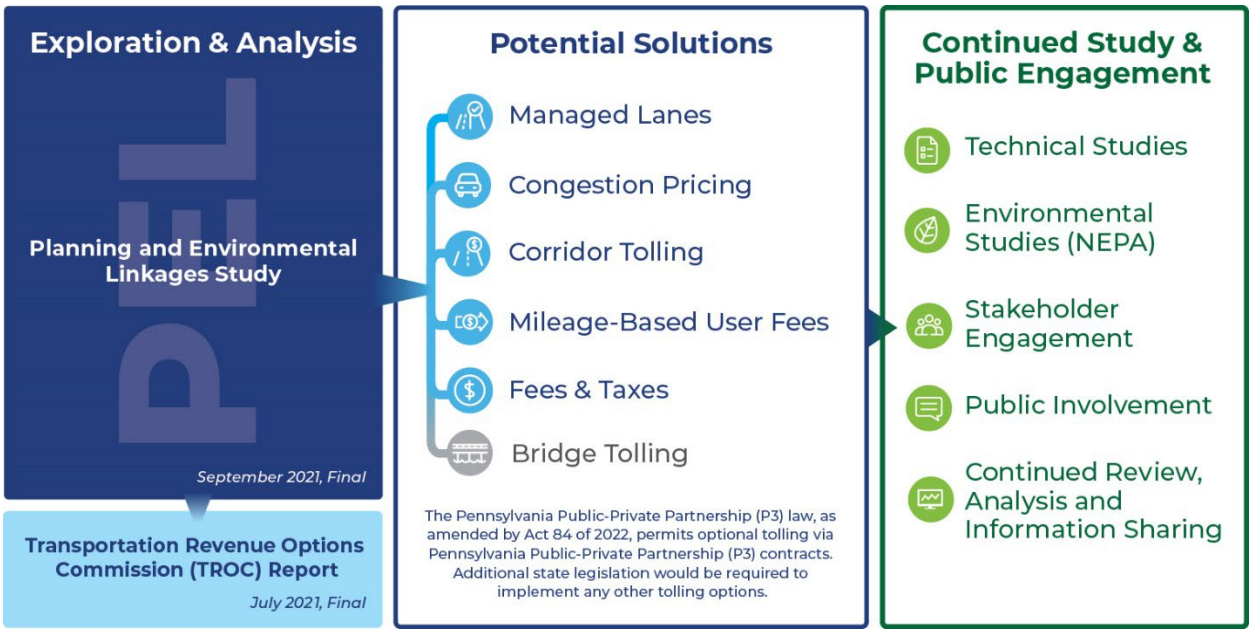

Figure 11: PennDOT Pathways summary graphic. Pathways, a Planning and Environmental Linkages (PEL) Study, provided potential solutions for transportation problems and continued study and public engagement needed to move forward.

PennDOT, similar to other agencies, faces the challenge that funding does not keep pace with needs to provide essential infrastructure investment now and for the future.

In 2021, PennDOT conducted the Pathways Planning and Environmental Linkages (PEL) study (Figure 6) as a mechanism for identifying and implementing near-term funding solutions as well as identifying and

preparing for long-term funding solutions. Congestion pricing was another option that surfaced through the PEL study, but new Pennsylvania legislation passed in 2022 requires that user fees must be optional. Future proposals could include a high-occupancy travel lane, priced for congestion pricing during peak hours.

Rapid Bridge Replacement (RBR) Project: P3s and Private Activity Bonds

The Rapid Bridge Replacement (RBR) project accelerated the replacement of 558 poor condition bridges throughout Pennsylvania. To finance these, PennDOT, supported by planning and programming, entered a P3 agreement, showcasing P3s as a viable delivery method that allocates risk to the parties best able to manage them. It is a 28-year contract with a 25-year maintenance term.

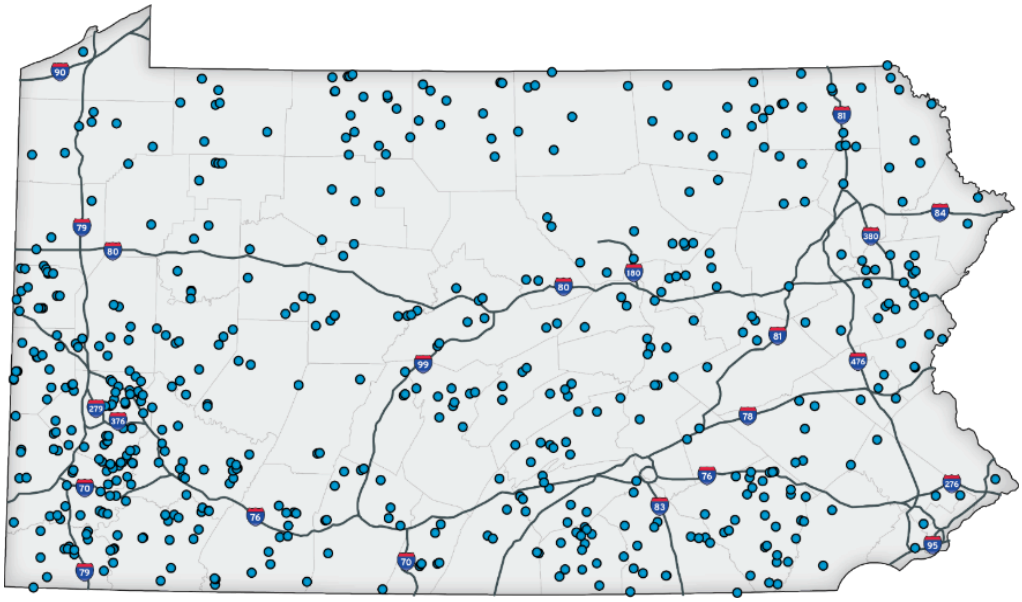

Figure 12: Map of Pennsylvania showing the locations of the 558 bridges repaired or replaced since 2015.

The P3 was funded by $1.2 billion in Private Activity Bonds, a 50-50 match, regional allocations, and the PennDOT Secretary's discretionary funds. Drawing on these various mechanisms, the overall project is funded with 100% State Funds. However, PennDOT followed all federal requirements, including obtaining a SEP-15 approval, and thus the project is eligible for federal participation. Bundled this way, it produced a single project payment – P3 RBR Payments (MPMS #106136), included on the Statewide items TIP/TYP for payments. Initial funding came from Statewide Discretionary Funding. Funding for Payments is 50% Statewide Discretionary and 50% from the Planning Regions based on percentage share.

Through the RBR P3, PennDOT replaced poor condition bridges more quickly with standardized design techniques and construction methods. This provided better value to taxpayers, high construction quality, economy of scale savings, and lower projected maintenance costs. Additionally, work was completed by PA-based contractors and designers.

Project Status – All 558 bridges are built and open to traffic (distribution across the state shown in Figure 7). The breakdown of construction by year is as follows:

- 2015 – 44
- 2016 – 127
- 2017 – 217
- 2018 – 143
- 2019 – 25
- 2020 – 2

Recently, a Private Activity Bond was issued for $2.2 billion. PennDOT has an annual cyclical need of $1.2 billion, with no modernization. They are looking at developing a larger P3 but are still scoping.

Washington State Department of Transportation (WSDOT)

Overall Strategy: Debt Service, Pay-as-you-Go, Build America Bonds (BAB), TIFIA Loans, GARVEE, Tolling, Transportation Revenue Packages (TRPs)

Right now, WSDOT's debt service is around 20% of DOT's budget. Transportation debt is limited by Legislative Authorization and revenue to support debt service. In the past, the Treasurer's Office raised concerns about the transportation debt service coverage ratio. General Fund financing cannot be more than 7%. Many States have a policy limit. MnDOT is 20%, for example. Major project funding sources include Pay-Go Funds, Deferred Sales Tax, Federal funds, local funds, and bonds. Washington State DOT uses a variety financing tools, including the following:

- General Obligation (GO) – Motor Vehicle Fuel Tax (MVFT) or MVFT/Vehicle Related Fees (VRF), then full faith and credit of State
- Build America Bonds (BABs) – GO with a Federal subsidy on interest payment
- Triple Pledge – Toll Revenue, then MVFT, then full faith and credit of State
- Reimbursable – GO pledge, reimbursed by a revenue source
- GARVEE Bonds – Federal Funds
- TIFIA Loan – Toll Revenue

WSDOT also used deferred sales tax to help fund toll projects.

In 2012, Washington started issuing toll debt and GARVEEs for the SR 520 project. GARVEEs are more expensive than MVFT bonds but you must evaluate what funding sources are available (State and Federal funds). During the 2003-2015 period, there was an increase to MVFT GO Bonds due to financing Nickel and TPP projects from revenue packages. Construction of most of the projects from these revenue packages is complete. Some of the bonds for the TPA Nickel will start to mature, and it will be up to the legislature to determine what to do with these funds. There will always be needs. One of the agency's priorities is preservation – which is not always thought of when funding a project. Current outstanding transportation debt amounts to just over $8 billion, primarily in MVFT GO bonds with additional diversification of financing instruments in the last decade (see Figure 16).

Transportation Revenue Packages include:

- *Nickel Package* (2003) – $0.05 increase in the MVFT; includes bond authorization
- *Transportation Partnership Package* (2005) – phased $0.095 increase in MVFT; includes bond authorization

- *Connecting Washington Package* (2015) – phased $0.119 increase in MVFT; MVFT and motor vehicle license fee revenues pledged to bond repayment and includes bond authorization
- *Move Ahead Washington* (2022) – no MVFT increase, funding from various other sources and no bond authorization

Sources *	**Amount ($ millions)**	**% of Total**
State Revenues	$5,062.4	55%
Federal Funding	2,556.3	28%
Bond Sales	548.2	6%
Ferry Fares	449.0	5%
Toll Fares	433.3	5%
Local Funding	80.9	1%
Total Sources	9,130.0	100%
Net Transfers **	1,910.9	
Less Debt Service	(1,715.4)	
Add: Beginning Account Balances	1,145.2	
Total WSDOT Funding	$10,470.8	
* Ferries, tolls, and state revenues are estimated based on the February 2022 Transportation Revenue Forecast. Bond, Federal, and Local figures are estimated based on the enacted 2022 supplemental budget.		
** Includes $2 billion General Fund-State transfer from Move Ahead WA package.		

Figure 13: WSDOT Revenue

Debt Service Coverage Ratio represents debt as a percent of pledged revenue. As part of the Connecting Washington Package, certain vehicle related fees were pledged to help the debt service coverage ratio. Connecting Washington projects are just starting. Bonds will be issued for these projects increasing debt service. Washington has a pilot program of road user charges but is still assessing its efficacy. Because gas tax is pledged to bond repayment, it cannot be reduced until those bonds are paid. It will be up to the Legislature to determine the fee structure and could be part of the vehicle related fees pledged. Currently, there are registration fees for an electric vehicle or hybrid vehicle.

A portion of gas tax is allocated to cities and counties and is part of the revenue pledge. If Washington is required to use the cities and counties portion of gas tax to pay debt service, Washington would have to pay the cities and counties back later. It is up to the Legislature, but mega projects or capital projects would likely always have a portion be financed. They do not want to get too enamored with it. But they will not go all the way to zero. If not for the American Rescue Plan Act of 2021 (ARPA) and general funds, the transportation budget would have been hard to balance. The challenge now is projecting what the new normal is. These are some of the risks with financing. When your projections are wrong, funds must come from somewhere (Increase revenues or decrease expenditures).

Tacoma Narrows Bridge: Tolling, Bonds, and Debt Service

The Tacoma Narrows Bridge Bonds were structured with tolling over time to cover the costs. However, when you start with a low toll it's hard to significantly increase it.

Tolls are collected in one direction on the second span of the Tacoma Narrows Bridge; tolling on the second span opened in 2007. Ten series of bonds were sold between FY 2003 and FY 2008 to finance

construction, for a total par of approximately $681 million. Eight series were sold as zero-coupon bonds with no call option. Both series of callable bonds have been refunded. The total par of both callable series was $67 million.

They did not start collecting tolls until 2007 (no pre-completion tolling), so they had an escalating debt service structure. From a planning perspective, they assume tolls would get to $6.00. Tolls started at $1.75 and are currently $4.50. This is one of the forecasting risks: you do not actually know the traffic impact once you start tolling (what percent drop in traffic will occur when tolling begins on a facility). Loans are not codified but have been used to help balance the toll account so the Commission can maintain the current toll rates. Without these projected loans this facility would have a long-term negative balance, requiring a toll rate increase, reduction in expenditures, or additional funds from the Legislature. Because this facility did not have pre-completion tolling, a TIFIA Loan would probably have been a better option.

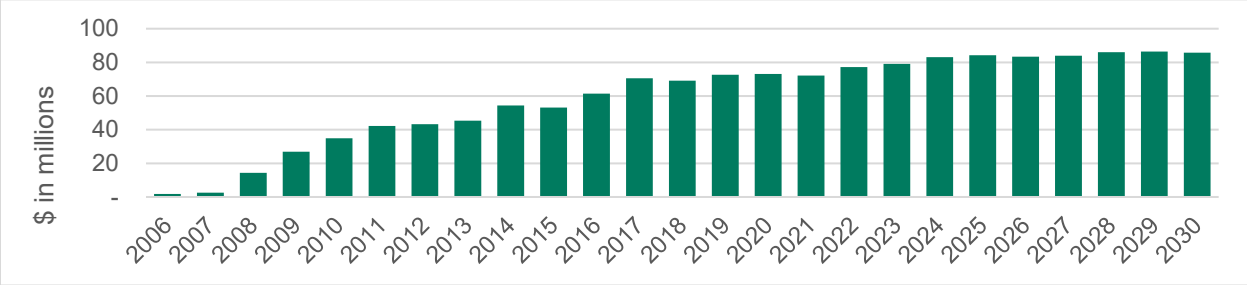

Figure 14: Tacoma Narrows Bridge Debt Service, FY 2006-2030

Tacoma Narrow Bridge bonds were issued as GO bonds but are reimbursed with toll revenues generated on the facility. These were primarily sold as capital appreciation bonds with escalating debt service. Most of these bonds are not callable.

SR 520 Corridor Program: Triple Pledge Bonds, TIFIA Loan, GARVEE Bonds

The SR 520 Corridor is 12.8 miles long from I-5 in Seattle to the west and crossing Lake Washington to SR 202 in Redmond. The SR 520 Corridor Program includes two major projects: The SR 520 Floating Bridge and Eastside plus West Approach Bridge North Project and the Westside Project, also known as the "Rest of the West". As illustrated in Figure 4, bridge components were completed 2015-2017. Now, the focus on the rest of the West side. Special financing so far for the SR 520 include:

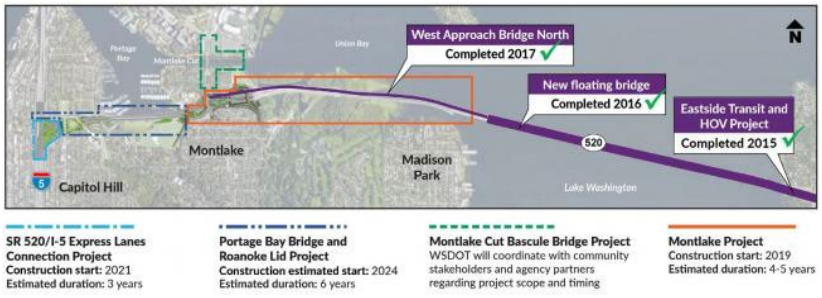

Figure 15: SR 520 Corridor Program phases

- Triple Pledge Bonds: $518.8 million (Series 2012C) and $90.4 million (Series 2017C) of bonds first payable from toll revenue, then excise taxes on motor vehicle and special fuels, and finally by the full faith and credit of the State. (A portion of Series 2012C and Series 2012F have been refunded.)

- TIFIA Loan: $300 million loan closed in October 2012
- GARVEE Bonds: $500.4 million (Series 2012F) and $285.9 million (Series 2014C) payable from and backed solely by pledged Federal aid.

Washington just completed refunding GARVEE bonds (Series 2012F), which saved approximately $3-4 million.

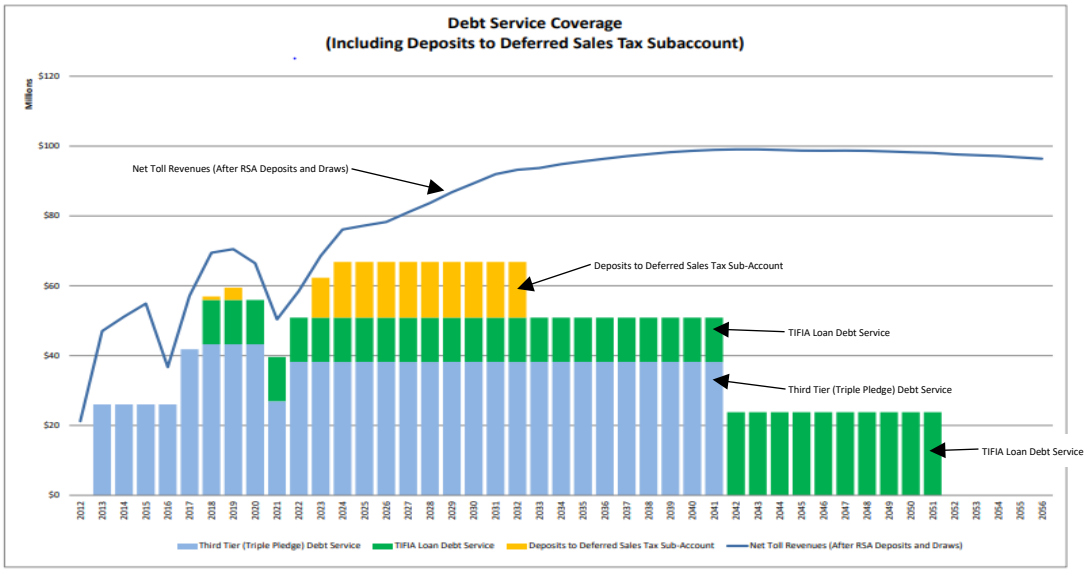

Figure 16: WSDOT Debt Service Coverage 2021-2056

For 520, the facility was not completed until 2017. This facility had pre-completion tolling with the last rate increase 2018. In 2021, they experienced a revenue dip because of the pandemic. To meet the financial obligations, the Legislature appropriated other funds to pay for operations and maintenance costs. This facility has level debt service. TIFIA has a 2-tier debt service structure, with the first tier being lower when Washington has triple pledge debt service and the second tier after triple pledge debt service is paid off.

520 Reserve accounts

WSDOT aims for approximately 30% of net revenue in the reserves. There is more to look at than just if you can pay the debt service, but also buffering the risk.

- Operating & Maintenance Reserve – Used to pay operations and maintenance expenses in the event that toll revenue is insufficient to pay all of them when due.
- Repair & Replacement (R&R) Reserve – Used for repair and replacement expenses.
- Deferred Sales Tax Reserve – Used to pay for deferred sales tax as provided by State statute.
- Revenue Stabilization Account – Can be used to fund costs relating to the system, provide for debt service, or for any other system purpose.

The advantage of Pre-completion tolling is that you get revenues sooner and better traffic and revenue forecasts since you'll likely have experience before bonding.

West Virginia Department of Transportation

Roads to Prosperity Program: GARVEE, Bonds, and Turnpike Sales

A recent program, the Governor's Roads to Prosperity program, is intended to spur economic activity through increased access and improved travel efficiency. This program aims to finance larger, regionally significant projects. Recently, this program moved three projects forward, including a bridge bundle totaling over $600 million. In addition, this provided additional jobs for contractors. WVDOT is not normally able to complete projects of this magnitude.

Figure 17: One of the West Virginia bridges recently constructed, connecting Ohio and West Virginia. It weighs 4800 tons without concrete and rebar. To place the structure, it was floated down the river and erected in place.

The Roads to Prosperity program created a bond referendum in 2017, allowing WV to sell $1.6 billion in general bonds. It is best to sell bonds when there are better interest rates. They had a general obligation bond sale and sold these in three batches, including GARVEE sales and turnpike sales. In the last several years, WV has conducted seven bond sales. GARVEE notes are being paid for with Federal funds and funded regionally significant projects.

Figure 18:The second project widened the bridge pictured here, with contra flow while constructing.

WVDOT moved to data-driven decisions to better manage assets and implement emerging technologies. The state went to an enterprise system, everyone in the state had to be on board. The Planning Division works with MPOs and other stakeholder groups. Transportation had some control, with a maintenance system custom designed for them.

Mixed Innovative Finance Discussion

Bonds

- A general rule of thumb in Washington is that every new penny of gas tax can generate approximately $400 to $450 million of bond financing for projects.

GARVEE Tapered Match

- GARVEE allows for a tapered match. The match requirement remains in place, but instead of paying according to the 80-20 standard process, the match may be paid later in the process. To figure out an arrangement such as this, agencies can reach out to the FHWA division office and FHWA OPIFS.

GARVEE Payments in the STIP

- Q: How does West Virginia show the GARVEE in the STIP?
    - A: There is a line in the STIP for the GARVEE. It does not detail every project, but instead shows the payments as a lump sum. Also, GARVEE is shown in the TIPs.

- Additionally, GARVEE went to referendum in WV, and it passed. DMV fees fund debt service and the fees have increased. This paid for some paving projects and some bridges. With this influx of revenue, they did some pay as you go projects. WV has tried to ensure every district received a part of the benefit.

Leveraging

- MnDOT commented that they look at the balance of funding and financing impacts.
- WSDOT tries to leverage Federal money on larger projects to free up State funds as they come with greater flexibility. Federal funds are suited for the mega projects. It allows the DOT to fulfill the requirements for the few, and then retain flexibility for the smaller, more local projects.

PennDOT Study: P3s, Interstate Bridge Toll Revenues, Private Activity Bonds

PennDOT found from a study that they need an additional $8B per year to adequality operate and maintain the existing State-owned transportation systems and facilities. PennDOT pursued a progressive public-private partnership (P3) contractual arrangement that would allow PennDOT, under existing State law, to replace nine major interstate bridges and charge a toll to finance the P3 contract using toll revenues generated under 23 USC 129 provisions. However, PennDOT went through a Planning and Environment Linkages (PEL) process that examined, many potential revenue and financing options, for example, managed lanes, bridge tolling, etc., but ultimately decided to go through with Inter State bridge tolling.

Through the State's existing P3 law, PennDOT thought they were able to initiate tolling on PennDOT owned Inter State bridges. Through an open and transparent project development process, the public voiced their opposition to PennDOT's Inter State bridge tolling program. Several local communities filed lawsuits against PennDOT to stop the Inter State bridge tolling program. Eventually, the State legislature passed a law to prevent PennDOT from tolling existing toll-free Inter State bridges. PennDOT is continuing with the replacement of the nine Inter State bridges but are pursuing other revenue and financing sources, including Private Activity Bonds issues by the US DOT Build America Bureau. Throughout this 2+ year process, PennDOT has had open communication with the FHWA PA Division and FHWA HQ. Inter State Bridge Tolling is off the table, as legislature took it away. Questions remain, such as is PennDOT's progressive P3 model still the best model for replacing the nine Inter State bridges? PennDOT also needs to address the $8B annual revenue gap and are they interested in managed lanes in the future?

PennDOT websites:

- PennDOT Pathways
- PennDOT Alternative Funding PEL Study
- Transportation Revenue Options Commissions
- Major Bridge Public-Private Partnership

Open Forum Discussions

Rationale for Roundtables

- This is how we build. OPIF loves to train and work with folks. They are especially interested in how to fund rural projects.
- Instead of our typical top-down, we are trying to reach out to the MPOs.
- Some State DOTs are going to become partners but there will also be a lot coming through the Build America Center (BAC).

This session allowed participants to ask questions of one other and representatives from the FHWA OPIFS. Several questions were presented to the group to direct the conversations and gain an understanding of how the Office of Performance and Innovative Finance (OPIF) could help agencies. The key ideas for each of these topics are summarized below. The conversation centered on several topics of interest, including opportunities for agencies to share information and collaborate with one another, TIFIA, translating plans for smaller agencies, challenges to incorporating innovative finance into the planning process, training, and rural finance.

Support from the Office of Performance and Innovative Finance (OPIF)

How can the Office of Performance and Innovative Finance Support help?

- CCMPO – when RAISE grants were announced, there is a fact sheet for every winning grant so that the local folks could see what is successful, linking back to the examples.
- Contacts for those who were successful.
- Creating cohorts for support
- If there is already something that works, planning processes for example, share the examples.
- A lot of the discretionary grant programs require projects to be further along. Where are there opportunities to partner?
- Value capture – public money, private sector has benefit – how do we capture it?
    a. We are building a big library on the OPIFS website, project profiles, video series

Innovative Finance in the Planning Process

How does Innovative Finance currently fit into your planning processes? OR how could it be incorporated into your planning processes?

- Want to know what to expect ahead of time.
    a. TIFIA
        i. What is the administrative burden? If they know they can plan for it.
        ii. What is the average timeline for a TIFIA to be approved?
            1. Approximately, 18 mos. Once the application is received, it is 60-day approval. But some of the admin is at the beginning.
        iii. How many of those who put in a letter of interest are approved?
            1. OPIF has not seen any specific TIFIA related expulsions. In the timeline, the project is built after the NEPA process.
    b. Schedules: MnDOT was provided with a generic schedule that was not clear and not specific to them.
- It would help to educate partners.

- Translate plans, processes, and techniques for the smaller entities/agencies.
- Challenges to incorporating innovative finance into the planning process include a lack of awareness about funding and financing options in various communities and constraints of various funding sources, including legislative approval and involvement, program rigidity, and challenges of reconciling the short term needs of financing a project versus the long-term view of planning.
- Using taper to free money up is an opportunity for greater flexibility in some instances.

Would it be helpful to create a hypothetical example? Or work with an MPO to develop the plan with innovative finance?

- The ideal would be to work with one of these States/MPOs.

How do we break down silos, but then give the experts deeper knowledge?

- What we often see is that the financing comes way further down the line than the planning.
- CCMPO – at the MPO level, they get local officials, others just want a project funded. They are talking to people who do not understand the timeline and requirements. They use diagrams available to help demonstrate the project timelines and processes. When you have local money, you can do local projects.
- OPIF asked the Build America Center to construct something to show the grant rollouts and what people should have ready to go when the notice of funding opportunities (NOFOs) are released.
    a. Funding Opportunities – Build America Center (umd.edu)
- CCMPO tries to educate locals about what they need to do to be ready. They point to projects that have invested the time and resources to be ready for a grant. Regional grants committee to talk about what is needed and plan for money to apply for.
- Training division planners on some of these techniques could help build capacity. Who else is doing this? How do we get the best examples to share with States?
    a. We want to support planners to make the best decisions for project delivery.
- Discussion about the DOD as a partner, example of Corpus Christi partnership of ($10+ million – confirm amount), Texas much of the Federal lands, Tx uses the resources from OPIFS to work with Fed lands.
- Example – Federal aid swap, toll credit swap, Federal funds swap

Rural Projects

Are there rural projects or plans in your state that have benefited from Innovate Finance? If not, are there opportunities for rural innovative finance?

- Whole different beast when you look at doing projects in a smaller area.
    a. Bonding is not really feasible or tolling.
- The smaller agencies need some simplicity.
- The Build America Bureau will hire a financial consultant. There is authority to waive fees for the smaller entities.
- USDA rural development loans can be used for transportation projects.
    a. Communities may be familiar with USDA rural development; it is for infrastructure and can be used for transportation. It is better than going completely private funding. They

have a guaranteed program which opens some markets they did not have access to. USDA program is different, can do 100% finance. OPIFS has been working to figure out how to layer financing with them. Can be used as a match because it is being repaid with non-Federal sources.

- A lot of small communities have trouble covering the match for a discretionary grant. They can come up with project costs.
    a. SIB is a great option. In Missouri, it does not have to go through all the requirements, just needs to be 23 CFR eligible. The State loves it. If that's something you are looking at for the communities, OPIFS can help.
- ND State program shares Federal allocation with the local entities. They were going to use special assessments, but it was booted by local opposition. They also have neighboring cities, one with development assessment and one without, but the developer moved all projects to the place without the fees and there were no revenues. Two examples of value capture have gone wrong.
- Once freight starts going electric, it will be going through rural communities. Their populations will not be buying them, but they do not want to get left behind.
- Looking at towns under 50k, more than 30 miles from a charger – thinking of how Route 66 impacted small communities, how could EV be that kind of tool.

Innovative Finance in MTP/LRTP/TIP/STIP

- LRTP - when CIFS looked at plans, they said 10% would go to financing, long-range plan, first step toward the TIP/STIP
- Penn - did a road show to explain what a P3 is and how/where it might be useful. It is difficult in a conservative state to accept the debt, instead of pay-as-you-go.
- Maine – They have no interaction on the TIP between planning and finance. Now, she can go back to DOT and MPOs and talk to finance to begin conversations.

Conclusion

Outcomes

Each Roundtable prepared attendees to identify noteworthy practices and opportunities for the expanded use of innovative finance and funding strategies in the State and local transportation planning and programming processes.

These Roundtable sessions enabled participants to present on innovative finance work their state or MPO has undertaken, explain their processes, highlight their successes and challenges, as well as connect with other agencies. Ultimately, the conversation centered on several Innovative Financing topics including bonds, debt financing, mileage-based fees, public-private partnerships (P3s), state infrastructure banks (SIBs), block group funds, transportation development credits (TDCs), tax increment financing (TIF), and Transportation Infrastructure Finance and Innovation Act (TIFIA). Agencies also discussed projects involving mixed innovative finance methods, their own revenue structures, experiences with regional financing cooperation, and economic development.

Next Steps

The key innovative finance topics that arose for participants may be prime topics for future case studies, event programming, one-pagers and guides. The highlighted topics may also lend themselves to communication and information-sharing methods, such as the creation of communities of practice focused on innovative finance for planners.

The Office of Performance and Innovative Finance Support has extensive existing resources on many of these topics. The topics for which it has existing resources include transportation development credits; project need and eligibility; debt financing; navigating credit ratings and legislative context; risks in the financing process; financing of EVs; improving funding access to disadvantaged communities; sources of funding; grant applications; innovative finance and local agencies; communicating the benefits of innovative finance with decision-makers; rural finance; and P3s. However, the Office may want to consider improving the marketing of these existing resources, creating short one-pagers or guides to preface more in-depth materials, publishing case studies on these topics, as well as utilizing these topics for future programming for agency planners.

Highlighted topics without existing resources include prioritizing infrastructure preservation in the funding process, as well as coordination on finance and planning, do not yet have existing resources and may lend themselves to case studies, future programming, and guides. Additionally, many topics may lend themselves to the creation of an available contacts lists of agencies or communities of practices that have pursued a certain topic to facilitate information sharing.

Appendix

List of Acronyms

ARPA	American Rescue Plan Act of 2021
AP	Availability Payment
BIL	Bipartisan Infrastructure Law
CTP	Capital Transportation Program
CSAH	County State Aid Highway Fund
FLAP	Federal Lands Access Program
GO	General Obligation
GARVEE	Grant Anticipation Revenue Vehicles
HOT	High-Occupancy Toll
HSIP	Highway Safety Improvement Program
HUTD	Highway User Tax Distribution Fund
MVFT	Motor Vehicle Fuel Tax
MSAS	Municipal State Aid Streets Fund
NOFOs	Notice of Funding Opportunities
OPIFS	Office of Performance and Innovative Finance Support
PEL	Planning and Environmental Linkages Study
PABs	Private Activity Bonds
P3s	Public-Private Partnerships
RBR	Rapid Bridge Replacement
SS4A	Safe Streets for All Grant Program
SIB	State Infrastructure Bank
SPR	State Planning and Research funds
STIP	Statewide Transportation Improvement Program
STBG	Surface Transportation Block Grant program
TIF	Tax Increment Financing
TA	Transportation Alternatives
TA-L	Transportation Alternatives Local funds
TAMPs	Transportation Asset Management Plans
TDC	Transportation Development Credits
TDCH	Transportation Development Credits for Highway
TED	Transportation Economic Development
TIP	Transportation Improvement Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TRPs	*Transportation Revenue Packages*
TRLF	Transportation Revolving Loan Fund
VRF	Vehicle Related Fees

Agency Profiles

Chicago Metropolitan Agency for Planning (CMAP)

Presenter: Phoebe Downey, Principal, Transportation Research, Analysis, and Programming at CMAP

The metropolitan planning organization (MPO) covering the Chicago urbanized area is the Chicago Metropolitan Agency for Planning (CMAP). The CMAP region includes over 8.5 million people, 284 municipalities, and over 5,600 square miles. It is the third largest metropolitan region in the United States. The region encompasses the seven counties in northeastern Illinois and includes the City of Chicago.

As required by Illinois statute, CMAP is responsible for developing and adopting a funding and implementation strategy for an integrated land use and transportation planning process for the northeastern Illinois region including the development of an integrated comprehensive regional plan. CMAP studies factors related to strategic investment, roads, transit, freight, and walking and bicycling. CMAP's work plan addresses diverse factors that shape the region's economy, including industry clusters, economic innovation, workforce, and tax policy. They develop regional economic indicators, which provide data on the region's broad economic trends. CMAP also studies various topics that influence livability of communities and the region: accessibility, land use and zoning, housing, water, sustainability, and community development. Additional ongoing studies of regional travel patterns help to identify strategies that address regional challenges.

The CMAP technical assistance program provides planning assistance to municipalities, counties, nonprofits, and intergovernmental organizations to plan across jurisdictions

The Chicago MPO Policy Committee is housed at CMAP and designated by the governor of Illinois and northeastern Illinois local officials as the Chicago region's Metropolitan Planning Organization (MPO). It is the decision-making body for all regional transportation plans and programs for this area and responsible for the portion of the Illinois Department of Transportation's (IDOT) STP funding is designated for northeast Illinois.

Corpus Christi Metropolitan Planning Organization (CCMPO)

Presenter: Robert MacDonald, MPA, PE, Transportation Planning Director, CCMPO

Corpus Christi MPO's planning area extends beyond the borders of the central city to capture activity in communities surrounding the Corpus Christi Bay and a portion of the inland county areas. They provide transportation planning for about area of two counties with a population of approximately 400,000. Mr. MacDonald pointed to the CCMPO's website as the go-to location for the public and partner agencies to find out what is happening in the area. The main page rotates various important plans and opportunities for engagement as well as providing connections to additional information on projects and planning efforts such as the Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP), Unified Planning Work Program (UPWP), and the Congestion Management Plan (CMP). The New Harbor Bridge Project is in the 25-year MTP. The current TIP document features a construction picture of the new bridge.

Delaware Department of Transportation (DelDOT)

Presenter: Lanie Clymer, Director of Finance

The Delaware Department of Transportation endeavors to make every trip taken in Delaware safe, reliable, and convenient for people and commerce; provide safe choices for travelers in Delaware to access roads, rails, buses, airways, waterways, bike trails, and walking paths; seek the best value for every dollar spent for the benefit of all; and engage their customers and employees with respect and courtesy as they deliver DelDOT services. With a mission of excellence in transportation, DelDOT's goals include:

- Minimize the number of fatalities and injuries on their system.
- Build and maintain a nationally recognized system benefiting travelers and commerce.
- Provide every traveler with access and choices to their transportation system.
- Provide every customer with the best service possible
- Minimize the environmental impact of the state's transportation system.
- Achieve financial sustainability through accuracy, transparency, and accountability.
- Develop and maintain a place where talented and motivated employees love to work and can be national leaders in transportation.

DelDOT divisions include the Office of the Secretary, the Delaware Transit Corporation, Finance, Human Resources, Maintenance and Operations, Motor Vehicles, Planning, Community Relations, Technology and Innovation Services, and Transportation Solutions.

Indiana Finance Authority

Presenter: Dan Huge, Public Finance Director, Indiana Finance Authority

The mission of the Indiana Finance Authority is to oversee State-related debt issuance and provide efficient and effective financing solutions to facilitate state, local government, and business investment in Indiana.

In order to provide economic efficiencies, management synergies, and enable the State of Indiana to communicate as one voice with the various participants in the financial markets, the Indiana Development Finance Authority, the State Office Building Commission, the Indiana Transportation Finance Authority, the Recreational Development Commission, the State Revolving Fund Programs and the Indiana Brownfields Program were consolidated into a new and separate entity called the Indiana Finance Authority ("IFA") on May 15, 2005. The Indiana Health and Educational Facilities Finance Authority was also merged into the IFA, effective July 1, 2007.

As the successor entity to these formerly separate debt-issuing entities, the IFA is authorized to issue revenue bonds payable from lease rentals under lease agreements with various state agencies and to finance or refinance the cost of acquiring, building and equipping structures for state use including state office buildings, garages, highways, bridges, airport facilities, correctional facilities, state hospitals and recreational facilities related to State parks. The IFA also manages the Wastewater and Drinking Water State Revolving Fund Loan Programs and the Indiana Brownfields Program.

Miami-Dade TPO

The Miami-Dade Transportation Planning Organization (TPO), formerly called the Metropolitan Planning Organization for the Miami Urbanized Area, in southeast Florida, guides the transportation planning process in Miami -Dade County, working closely with FDOT, the Port of Miami, Broward, and West Palm to move commuters across the region. The TPO was created on March 2, 1977, as required under

Section 163.01, Chapter 163, Florida Statutes, and established by Interlocal Agreement between Miami-Dade County and the Florida Department of Transportation (FDOT).

A major role of the TPO is to ensure conformance with Federal regulations requiring that highways, mass transit and other transportation facilities and services are properly developed and deployed in relation to the overall plan of urban development, and to approve plans for regional and state transportation network accessibility. In addition, Federal guidelines require that the use of Federal Aid for transportation be consistent with TPO-endorsed plans and programs. Federal, state, and local transportation planning funds are utilized on an ongoing basis to ensure the effectiveness of the TPO process.

The FDOT adopts the TPO's Long Range Transportation Plan (LRTP) as the plan for implementing transportation system improvements in Miami-Dade County. The LRTP is focused on providing mobility options and is guided by a comprehensive vision to "achieve world-class mobility that promotes equity, accessibility, and economic competitiveness, with emphasis on resiliency and innovation, for the advancement of Miami-Dade County's transportation network and quality of life, for current and future generations." The TPO Governing Board meets monthly in the TPO Governing Board Chambers with all meetings open to the public.

Morgantown Monongalia Metropolitan Planning Organization (MMMPO)

Presenter: Bill Austin, AICP, Executive Director MMMPO

Established in 2003, the MMMPO is the Federally designated transportation planning agency for Morgantown and Monongalia County, serving as a regional partnership among the West Virginia DOT, the local transit agency, local elected leadership, local government, the business community, and citizens. The MMMPO has the authority to plan, prioritize, and recommend transportation projects for Federal and state funding. It is responsible for ensuring the region complies with Federal and state planning requirements. The MMMPO is committed to providing leadership to regional transportation planning, promoting personal and social economic prosperity, while encouraging sustainable growth.

The Morgantown Monongalia MPO is comprised of a policy board, a Citizen Advisory Committee (CAC), a Transportation Technical Advisory Committee (TTAC), a Policy Advisory Committee (PAC), a Freight Advisory Committee, a Ped/Bike Data Collection Committee, and staff. The MMMPO staff provide professional transportation planning services and ongoing administration of planning projects. Staff is managed by the Executive Director who reports to the Policy Board/Bike Data Collection Committee, and staff.

The MMMPO is funded by Federal grant programs authorized by the U.S. Congress and by contributions from local government and the West Virginia DOT. Currently, the MMMPO is 80% funded by Federal grant programs, 10% by WV DOT, 5% by the City of Morgantown, and 5% by the Monongalia County.

Pennsylvania Department of Transportation (PennDOT)

Presenter: Kristin Mulkerin, Acting Alternative Funding Program Director, PennDOT

PennDOT oversees programs and policies affecting highways, urban and rural public transportation, airports, railroads, ports, and waterways. More than three-quarters of PennDOT's annual budget of $11.5 billion is invested in Pennsylvania's approximately 121,000 miles of state and local highways and

32,000 state and local bridges. PennDOT is directly responsible for nearly 40,000 miles of highway and roughly 25,400 bridges, a system first established in 1911.

Roughly 7,095 of PennDOT's over 11,500 employees are engaged in the maintenance, restoration, and expansion of the state highway system. They work in central headquarters in Harrisburg and 11 engineering districts, with facilities in all 67 counties. PennDOT also administers the state's 12.1 million vehicle registrations, and 10.1 million driver's licenses and IDs, and oversees safety and emission inspection programs.

Washington State Department of Transportation (WSDOT)

Presenter: Nguyen Dang, Assistant Director, Financial Planning, Budget, and Financial Analysis, WSDOT

WSDOT plans, constructs, maintains, and regulates transportation infrastructure for the State of Washington. WSDOT is responsible for more than 20,000 lane-miles of roadway, nearly 3,000 vehicular bridges and 524 other structures. This infrastructure includes rail lines, state highways and bridges state ferries, and state airports. The agency also focuses on environmental protection and justice, complete streets initiatives, and emergency management. It is led by a secretary and overseen by the governor.

WSDOT's key partners in the project financing process include the Legislature, State Finance Committee and the Office of the State Treasurer, the Department of Transportation, and Federal Highway Administration (FHWA) and the Build America Bureau (BAB). The State Legislature provides authorization and appropriation, determining what type of bonds can be issued. Each bond has a different setup. The State Finance Committee/Office of Treasurer sets the financial requirement and issues the debt. They determine coverage ratios and bond resolution. Nguyen's office works with them a fair amount. FHWA and the Bureau provide the requirements and approval for Federal financings as well as technical assistance.

West Virginia Department of Transportation (WVDOT)

Presenter: Carla Rotsch, Transportation Business Manager

WVDOT has 4 divisions, the division of highways is the largest, then DMV, parkways, and multimodal. Counties are grouped into 10 districts for 34,000 miles of roadway. Over 90% of the roads are taken care of by WVDOT. West Virginia is a rural state with little tax base. It relies heavily on the Federal program which provides approximately $1.5 billion per year in transportation funding. To this, the state adds a dedicated revenue from DMV fees, revenues, etc. Funds are allocated to pay debt service first, then match Federal aid, perform road maintenance, and make progress on corridors.

A significant challenge for West Virginia is that needs are outdoing revenues. Pairing this situation with aging infrastructure and rising costs creates a situation where innovation and creativity are needed.
As gas taxes decrease due to electrification of the fleet, they are looking at other options.
The process to determine potential projects focuses on developing strategies, enhancing safety, and better products and materials. The two main planning products that show the results of their planning are the STIP (6-year plan) and the State Long Range Transportation Plan (LRTP), a 50-year plan.