Innovative Finance for Planners:
How Planners Can Utilize Innovative Finance to Leverage Existing Resources

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CENTER FOR INNOVATIVE FINANCE SUPPORT

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INTRODUCTION

Transportation projects require funding, but where does this funding come from? While grants may traditionally be viewed as the primary answer, they are often only a part of the equation. With limited Federal grant-based funding available, transportation agencies and governments at all levels must increasingly think outside the box to explore other options for supplementing their budgets. *Innovative finance techniques* can help these entities act creatively and make the best use of the resources and financing and funding opportunities available to them.

This "briefing book," produced by the Federal Highway Administration (FHWA) Center for Innovative Finance Support (CIFS), provides information about these innovative finance techniques. This document 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.

WHAT ARE INNOVATIVE FINANCE TECHNIQUES?

Innovative finance techniques may involve techniques that are more on the "financing" side or those that are more related to "funding." Innovative financing includes borrowing funds, either through bonds, loans, or other financing mechanisms. Innovative funding is the revenue that is needed for the financing.

Figure 1: There are a variety of innovative finance techniques, including those shown above, which are further discussed in this briefing book.

Oftentimes, innovative finance techniques include elements of both financing and funding. Every transportation project will be different in how it is defined. The techniques will not necessarily apply to all projects, situations, or entities. The briefing book presents these innovative finance techniques and their application within the transportation planning process to help agencies and governments better understand how to use them (Figure 1).

WHO IS THE AUDIENCE FOR THIS BRIEFING BOOK?

This 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 (State 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 (Figure 2).

This briefing book is further geared to planning staff at MPOs, RTPOs, and Tribes, who are interested in starting conversations about innovative finance techniques or looking for new ways to enhance their existing budgets and resources. Planning staff at the MPO/RTPO and Tribal government levels are increasingly becoming more involved in financing discussions or strategies for transportation projects. By having planners more aware of the possibilities offered by innovative finance techniques, planners and finance managers within an agency can better identify opportunities earlier on in the planning process and strengthen their coordination in applying these techniques.

Figure 2: The transportation planning community is broad, representing many different entities.

For the purposes of this briefing book, the general term, "transportation agency," is used as a proxy for the many entities that may be involved in transportation planning, including MPOs, RTPOs, Tribal governments, State DOTs, municipalities, and other public authorities. When discussing authorities or requirements applicable only to certain types of entities, those entities are specifically identified (*e.g.*, State DOT, MPO).

WHAT ARE OTHER RESOURCES AVAILABLE?

This document complements *The Transportation Planning Process Briefing Book: Key Issues for Transportation Decisionmakers, Officials, and Staff,* a resource published by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) about the transportation planning process at metropolitan, statewide, and nonmetropolitan levels. To learn more and to access *The Transportation Planning Process Briefing Book*, please visit: www.planning.dot.gov.

Additional resources are also included in the Appendix of this briefing book.

PART I: OVERVIEW OF INNOVATIVE FINANCE AND TRANSPORTATION PLANNING

"Innovative finance" is a broad term for various techniques and mechanisms that supplement traditional, grant-based funding sources and methods for surface transportation projects.[1] By using innovative finance techniques, transportation agencies can better leverage resources, allowing for more flexibility and expanded options in managing and delivering transportation projects.

While transportation agencies may typically consider the use of innovative finance as primarily for larger transportation projects, innovative finance includes a range of "tools in the toolbox" to aid them in the planning, programming, and funding of projects. Having this knowledge of the options available can help these agencies and others think more strategically about how best to use the funding and resources available to them for implementing transportation projects.

WHY SHOULD AGENCIES CONSIDER INNOVATIVE FINANCE IN THE TRANSPORTATION PLANNING PROCESS?

Innovative finance techniques can provide flexibility to transportation agencies interested in supplementing traditional, grant-based financing methods. Benefits of using innovative finance techniques include:

- *Leveraging existing funding*. By using innovative finance techniques, transportation agencies can make sure that available funds are put to their best use. Agencies may find they can apply innovative finance techniques in particular settings and allocate their grant funding for situations requiring these funds.

- *Expediting project delivery.* Innovative finance techniques can aid in developing and constructing projects more quickly, while at the same time keeping costs down (Figure 3). Transportation agencies may deliver more projects in the same period of time by using innovative finance techniques in addition to traditional, pay-as-you-go methods. Delivering projects more cost-effectively and efficiently may also have positive impacts to the communities, such as receiving safety upgrades sooner and providing opportunities for economic growth.

[1] This briefing book focuses on highway and multimodal projects subject to the transportation planning requirements in title 23, United States Code (U.S.C.) 134-135.

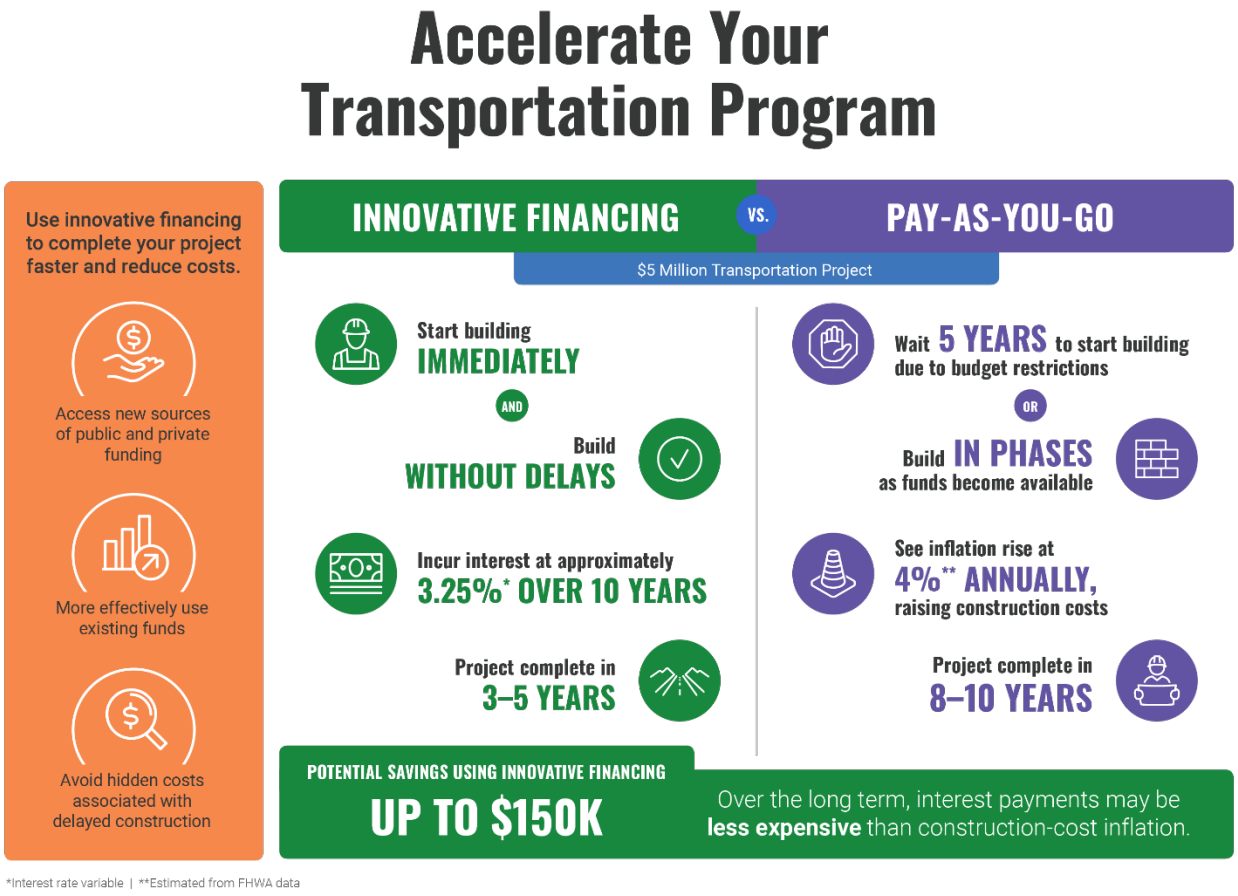

Figure 3: Innovative financing can help transportation agencies "accelerate" their transportation programs by incorporating efficiencies along the way.
Source: FHWA, available on the [FHWA Center for Innovative Finance Support website](#).

- *Increasing stakeholder and public awareness.* Innovative finance techniques may often be new concepts to the public and other stakeholders. By providing information about these methods early on in the planning process, particularly as part of existing outreach efforts for transportation plans and programs, transportation agencies can allow for greater understanding of these techniques and increase the likelihood for stronger buy-in and support. It is important to convey both the benefits and costs of utilizing innovative finance techniques to stakeholders.

- *Encouraging innovation.* By exploring innovative finance techniques, transportation agencies tap into a culture where "innovation" is inherently part of the process. Incorporating these techniques directly into the transportation planning process further formalizes this integration and encourages ways to maximize and leverage existing funding in new and different ways.

WHEN SHOULD INNOVATIVE FINANCE BE CONSIDERED IN THE TRANSPORTATION PLANNING PROCESS?

By considering innovative finance earlier in the planning process, transportation agencies may have more alternatives available to them to undertake and complete projects more quickly or more cost effectively, or both.

By considering innovative finance earlier in the planning process, transportation agencies may have more alternatives available to them.

For most agencies, considering the use of innovative finance for a transportation project does not occur until later on in the planning process. By this point, however, it may be too late for the agency to realize the full benefits and opportunities these methods can provide. At the start of the transportation planning process, it is important to think about alternative ways to fund transportation projects, including the potential use of innovative finance techniques.

HOW DOES INNOVATIVE FINANCE FIT INTO THE TRANSPORTATION PLANNING PROCESS?

Federal requirements applicable to FHWA and FTA programs stipulate the development of long-range plans and short-range programs in support of the transportation planning process.[2] These plans and programs, described further in this Part I, serve as a useful starting point to incorporate innovative finance techniques into planning processes.

This section presents considerations for transportation agencies in thinking through their approach to integrate innovative finance techniques into their planning activities. There are opportunities along each step of the transportation planning process where transportation agencies can incorporate innovative finance techniques. While this section focuses on the role of the MPO, RTPO and Tribal governments, other transportation agencies and stakeholders play important roles in providing information as part of the transportation planning process.

Additional background information about the plans and programs discussed in this section can be found in *The Transportation Planning Process Briefing Book*, available at: www.planning.dot.gov.

[2] See 23 U.S.C. 134-135.

Innovative Finance Techniques Within The MPO Planning Process

An MPO has authority and responsibility for transportation policy-making in metropolitan planning areas.[3] MPOs plan for existing and future expenditures for transportation projects and programs based on a continuing, cooperative, and comprehensive planning process, known as the 3-C planning process.[4] MPOs are responsible for preparing and maintaining long-range transportation plans, commonly known as Metropolitan Transportation Plans (MTPs), and shorter-term Transportation Improvement Programs (TIPs) to prioritize funding for transportation investments.[5] MPOs also prepare annual or biennial Unified Planning Work Programs (UPWPs, or Work Programs) to identify planning studies and tasks, all of which allow for an iterative planning cycle (Figure 4).[6]

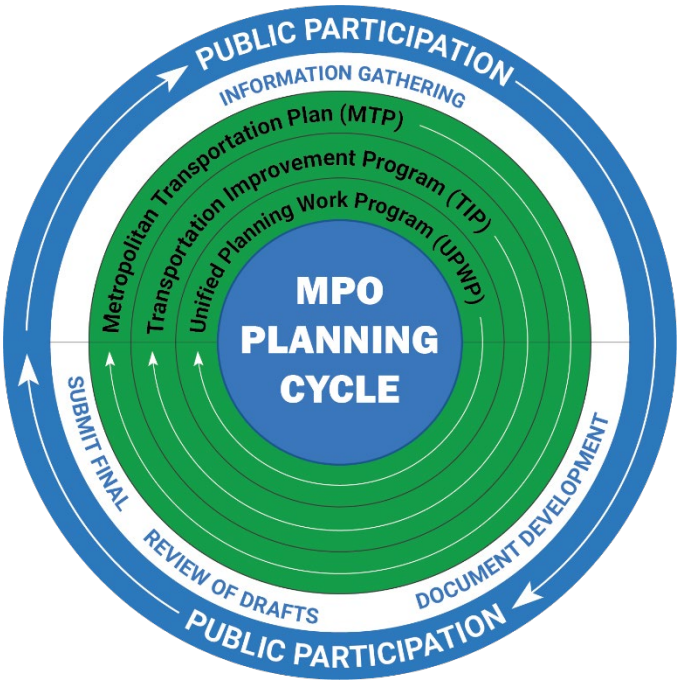

Figure 4: The MPO planning cycle is iterative in the development of the MTP, TIP, and UPWP.

MPOs looking to integrate innovative finance techniques into their planning processes may consider the following:

Include Possible Innovative Finance Techniques in the MTP's Financial Plan
The MTP presents an area's vision(s) and goals and the processes needed to achieve them. An MTP must also be fiscally constrained, as outlined in 23 CFR 450.324(f), a Federal requirement that MPOs meet by preparing financial plans in connection with the MTP.[7]

Financial plans identify an MPO's anticipated funding sources for transportation projects.[8] The MPO may also outline potential funding sources, such as innovative finance techniques, in the MTP. Including this information demonstrates the funding sources that an MPO considers in its long-range planning efforts as reasonably

[3] See 23 U.S.C. 134(c) and (e).
[4] See 23 CFR 450.300.
[5] See 23 U.S.C. 134.
[6] See 23 CFR 450.308.
[7] See 23 CFR 450.324(f).
[8] See 23 CFR 450.324(f).

expected to be available. For example, the MPO may consider financing certain portions of its transportation investment needs through innovative financing that is reasonably expected to be available and other portions through anticipated grant-based funding. Combining these options provides more flexibility to the MPO in determining how it can meet all of its investment needs. Above all, it is important to be transparent about the funding sources, both confirmed and reasonably expected to be available, which are included in the MTP. For example, an MPO may also include a narrative about its funding sources throughout the MTP rather than solely in the financial plan in order to help readers better understand how funding supports the plans and programs.

Use Unified Planning Work Programs to Explore the Benefits and Costs of Innovative Finance Techniques

The MPO's UPWP can also be a way to support transportation research activities. For an MPO that wants to include an assessment of the appropriateness of innovative financing techniques in its MTP, one way to advance these techniques may be to conduct a research planning study or other activity funded under the UPWP to see how innovative finance techniques could serve to enhance future funding for the transportation network in the region. Performing this research can provide the MPO with additional information that it can then present to its board, leadership, and stakeholders to further encourage understanding and potential buy-in. One example of this research is a corridor study. An MPO could conduct a corridor study to explore future assumptions for reasonably expected funding sources as tied to its list of projects.

Conducting UPWP-funded research does not mean the MPO has to pursue the innovative finance techniques it explores, particularly as not every action will be suitable for using innovative finance techniques. This research can be an incremental step to help the MPO obtain additional information to see what might be feasible for its area.

Not every action is suited for using innovative finance techniques. Understand the tradeoffs and risk before getting started.

Indicate Use of Innovative Finance Techniques in the TIP

MPOs use their TIPs to allocate funding for identified priority transportation investments. Fiscal constraint is an important element of TIPs, demonstrating dedicated funding sources. Like MTPs, TIPs must demonstrate fiscal constraint to show that the projects identified can be delivered using committed, available, or reasonably expected to be available revenue sources.[9]

The TIP is the place where the MPO will identify the short-term priorities for its use of innovative finance techniques. This may be informed by the MPO's research funded under the UPWP. From here, the MPO may select particular projects for the TIP based on its innovative finance approach. The MPO's project priority/selection

[9] See 23 CFR 450.326.

criteria will play an important role for determining the innovative finance techniques used for projects in the TIP.

Figure 5 further shows how an MPO might consider innovative financing options to expand its MTP. The adopted plan of the MTP must be fiscally constrained, but the MTP may contain an unconstrained vision element (as represented on the left in Figure 5).[10] Moving from the unconstrained vision to the fiscally constrained portion of the MTP is a transition from a higher-level, vision-based segment of the MTP that considers unconstrained resources to a more focused part of the MTP that identifies funding that is committed, available, or reasonably expected to be available. Using innovative finance techniques in this process can allow the MPO to consider other possible options for financing and funding and adopt them when appropriate.

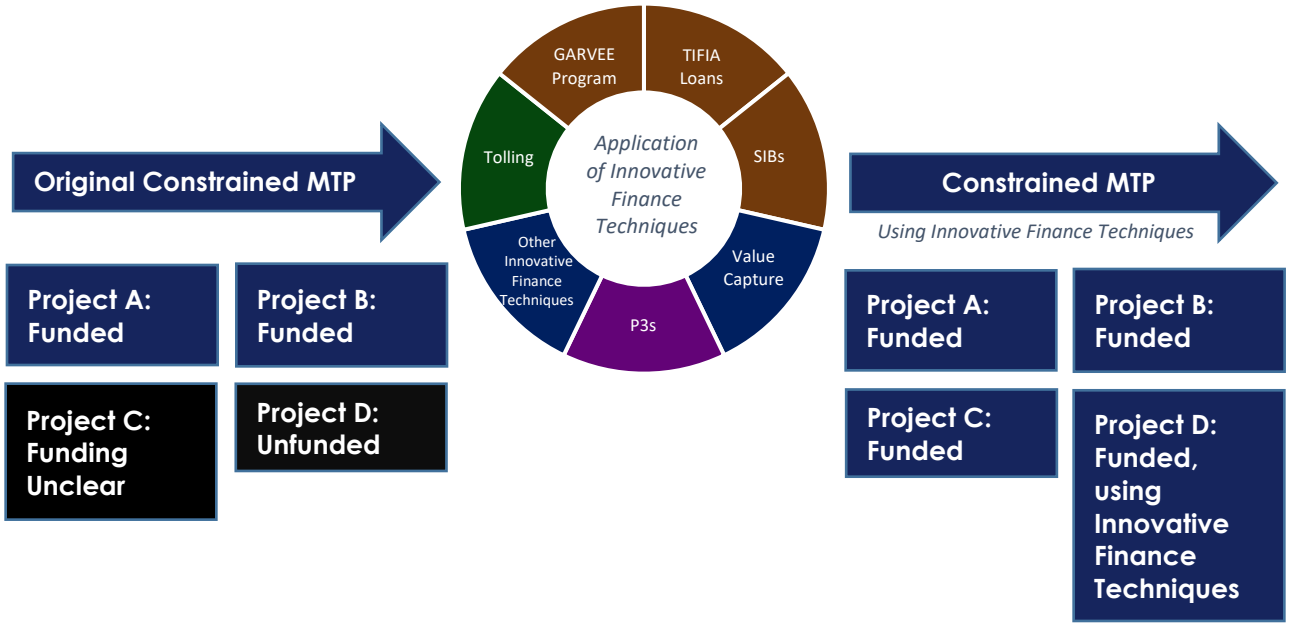

Figure 5: Innovative finance techniques can help an MPO think more broadly about possible funding options in its MTP. In the example above, traditional grant funding for Project C and Project D is not in place at the time of the preparation of the MTP. By applying innovative finance techniques where such funding meets fiscal constraint requirements, an MPO can constrain its MTP and demonstrate how each of the projects will be funded. Similarly, an RTPO can demonstrate options for project funding, even though its long-range plan does not have to meet fiscal constraint requirements. The techniques identified in this Figure 5 are further described in Part II of this document. Source: FHWA.

[10] See 23 CFR 450.324(f).

Innovative Finance Techniques Within The RTPO Planning Process

An RTPO supports the statewide transportation planning process in nonmetropolitan regions of a State, which are areas with a population size less than 50,000. A State may establish and designate RTPOs to enhance the planning, coordination, and implementation of statewide strategic long-range transportation plans and transportation improvement programs, with an emphasis on addressing the needs of nonmetropolitan areas of the State.[11] The designation of an RTPO assists the State to incorporate rural transportation needs into the statewide transportation planning process. If a State chooses not to establish or designate an RTPO, the State must consult with affected nonmetropolitan local officials to determine projects that may be of regional significance.[12]

An RTPO is required to develop a regional long-range multimodal transportation plan, often called a Regional Transportation Plan (RTP) and a regional TIP (RTIP).[13] The RTPO develops and maintains, in cooperation with the State, the RTP.[14] The RTPO also develops the RTIP for consideration by the State.[15] An RTPO looking to conduct transportation research activities could coordinate with the State DOT to include such activities in the State DOT's State Planning and Research (SP&R) Work Program.[16] Much like an MPO's UPWP, the SP&R Work Program outlines the activities to which a State DOT will dedicate its resources on an annual basis. To ensure that innovative finance techniques are optimally successful, an RTPO's integration of innovative finance techniques would need to be done in coordination with the State DOT.

Include Possible Innovative Finance Techniques in the RTP

Like MPOs, RTPOs must also prepare RTPs, which outline an area's vision(s) and goals and the processes needed to achieve them. However, unlike MTPs, there is no fiscal constraint requirement for RTPs developed by RTPOs. An RTPO can explore innovative finance techniques to demonstrate how projects outside the 4-year RTIP can be funded.

Use SP&R Work Programs to Explore the Benefits and Costs of Innovative Finance Techniques

As noted above, to coordinate transportation planning activities, such as exploring the use of innovative finance techniques, an RTPO would need to coordinate with the State DOT in order to propose including such activities in the SP&R Work Program.[17]

[11] See 23 U.S.C. 135(m)(1).
[12] See 23 U.S.C. 135(m)(5).
[13] See 23 U.S.C. 135(m)(4).
[14] See 23 U.S.C. 135(m)(4)(A).
[15] See 23 U.S.C. 135(m)(4)(B).
[16] See 23 U.S.C. 505 and 23 CFR 420.111.
[17] See 23 U.S.C. 505 and 23 CFR 420.111.

Indicate Use of Innovative Finance Techniques in the RTIP

There are many opportunities for incorporating innovative finance techniques into the nonmetropolitan planning process. As indicated above, an RTPO must develop a RTIP, which, in cooperation with the State DOT, may be incorporated into the State Transportation Improvement Program (STIP).[18] The STIP covers a four-year period and includes all projects to be funded by FHWA and FTA programs, as well as other regionally significant projects. RTPO projects may be listed in the STIP. The STIP must be fiscally constrained to agreed-upon estimates of reasonably available revenue.[19] Given the cooperation between the RTPO and the State DOT on the RTIP and STIP, any proposed use of innovative finance techniques may be identified through this process.

Innovative Finance Techniques Within The Tribal Government Planning Process

Tribal governments are sovereign Nations and are treated as such in the transportation planning processes carried out under title 23 and title 49. State DOTs are required to consider the concerns of Tribal governments with jurisdiction over land within the State[20], and consult with Tribal governments when preparing the statewide long-range transportation plan and STIP.[21] MPOs are required to appropriately involve Tribal governments in the development of the MTP and the TIP when the metropolitan planning area includes Tribal lands.[22] These MPO obligations are in addition to the requirements for public involvement of interested parties in the development of those documents.[23] Developing consultation protocols with Tribal governments is key to successful collaboration on projects that impact Tribal lands and/or communities. Building these connections allows State DOTs and MPOs to learn about their Tribal partners' approaches to transportation planning, as well as to understand their unique capacities. Potential partnerships to deliver projects with Tribes using innovative options become feasible when these long-term trust relationships are established.

> Apart from a few required points, Tribes overall have the authority to participate at their own discretion in the State/MPO transportation planning process.

[18] See 23 U.S.C. 135(m)(4).
[19] See 23 U.S.C. 135(g).
[20] 23 CFR 450.208(a)(5).
[21] 23 U.S.C. 135(f) and (g); 23 CFR 450.210(c), 450.216(i), and 450.218(d).
[22] 23 CFR 450.316(c).
[23] See 23 U.S.C. 134(i) and (j).

Tribal governments, similar to State DOTs and MPOs, are required to prepare a Tribal LRTP[24] and Tribal Transportation Improvement Program (TTIP)[25] for projects and activities funded by the Tribal Transportation Program (TTP) and those funded by other sources and carried out by the Tribe.[26,27] While Tribes must solicit public involvement in developing the Tribal LRTP and Tribal TTIP[28], these requirements do not require consultation with the State or MPO. Consulting and collaborating with stakeholders is a recognized best practice, but, ultimately, a Tribal government has the authority to decide whether or not its staff participates in State DOT, MPO, or RTPO planning efforts. With respect to transportation planning activities carried out by a Tribal government, the Tribal government has the authority to decide whether to consult or coordinate with States, MPOs, and local governments, except when the Tribe is developing regionally significant TTP projects, which must be developed in cooperation with the State DOT and MPOs.[29]

FHWA compiles approved TTIPs into a single Tribal Transportation Program Transportation Improvement Program (TTPTIP) and the design and construction activities from the TTPTIP are provided to State DOTs for inclusion in their STIPs without further action.[30]

Federal funding for Tribes' infrastructure activities is provided through the TTP. The funds a Tribe receives through the TTP are based on a formula and distributed annually.[31] In addition to TTP funds, Tribes may use flexible financing in the same manner as States to finance TTP transportation projects, unless otherwise prohibited by law.[32] For example, Tribes may use flexible financing in the following ways:

Issue Bonds or Enter into Other Debt-Financing Instruments
Tribes may issue bonds or enter into other debt-financing instruments under 23 U.S.C. 122 with the expectation of payment of TTP funds to satisfy the instruments. (25 CFR 170.227(a))

Enter into Agreements for Secured Loans or Lines of Credit
Under 23 U.S.C. 603, and 604, respectively, the U.S. Department of Transportation (USDOT) Secretary may enter into an agreement for secured loans or lines of credit

[24] 23 U.S.C. 202(c); 25 CFR 170.409-414.
[25] 23 U.S.C. 202(b)(4)(B) and (c). See also 25 CFR 170.402.
[26] 25 CFR 170.421.
[27] The Tribal government uses its Tribal LRTP to develop transportation projects as documented in a Tribal priority list or TTIP and to identify and justify the Tribe's updates to the National Tribal Transportation Facility Inventory (NTTFI). To be consistent with State, MPO, and RTPO planning practices, the Tribal LRTP must be reviewed annually and updated at least every five years. See 25 CFR 170.414. The TTIP is a multi-year list of proposed transportation projects developed by a Tribe from the Tribal priority list or the LRTP. See 25 CFR 170.5 and 25 CFR 170.421.
[28] 25 CFR 170.413, 170.421-170.422.
[29] 25 CFR 170.107.
[30] 25 CFR 170.424.
[31] See 23 U.S.C. 202(b); 25 CFR 170.200 through 170.202.
[32] 25 CFR 170.227.

for TTP projects meeting the requirements contained in 23 U.S.C. 602. The secured loans or lines of credit must be paid from tolls, user fees, or payments owing to the obligor under a public-private partnership (P3) or other dedicated revenue sources. (25 CFR 170.227(b))

Use TTP Funds as Collateral
Tribes may use TTP funds as collateral for loans or bonds to finance TTP projects. Upon the request of a Tribe, a Bureau of Indian Affairs (BIA) region or FHWA will provide necessary documentation to banks and other financial institutions. (25 CFR 170.227(c))

Use TTP Funds to Leverage Other Funds or Pay Back Loans
Tribes may use TTP funds to leverage other funds. A Tribe may also use TTP funds to pay back loans or other finance instruments (including those provided through an agreement with another Tribe) that were used for a project that: 1) the Tribe paid for in advance of the current year using non-TTP funds; 2) was included in the FHWA-approved TTPTIP; and 3) was included in the National Tribal Transportation Facility Inventory (NTTFI) at the time of construction.[33] (25 CFR 170.228)

Apply for Loans or Credit from a State Infrastructure Bank
Tribes may apply for loans or credit from a State Infrastructure Bank (SIB). Upon the request of the Tribe, the BIA region or FHWA will provide necessary documentation to the SIB to facilitate obtaining loans and other forms of credit for a TTP project. (25 CFR 170.229)

In addition to the flexible funding options presented above, Tribes can also consider innovative methods for the delivery of their transportation projects. For example, to attract Construction Manager/General Contractor firms to Tribal lands or more rural areas, Tribes have saved up their TTP funding to bundle transportation projects with other available funds (e.g., for housing, public health) and coordinate with these other branches of the Tribal government to deliver transportation and community improvements on a broad scale.

For transportation agencies working with Tribes or wishing to engage Tribes, it is important to encourage early coordination and relationship-building. If a transportation agency has not yet defined its consultation processes with the Tribes with which it works, consider putting these in place. Having awareness of Tribal consultation protocols and outreach can allow for new opportunities to arise for coordination and potentially allow for more formal innovative funding partnerships.

[33] For additional information about the NTTFI, see 25 CFR 170.442.

WHAT ARE EXAMPLES OF SUCCESSFUL PRACTICES OF INCORPORATING INNOVATIVE FINANCE INTO THE TRANSPORTATION PLANNING PROCESS?

Transportation agencies across the country have found success in applying innovative finance techniques and integrating these techniques into the planning process. For each of the examples below, the transportation agency used an approach appropriate to its context and needs.

- The **Chicago Metropolitan Agency for Planning** (CMAP) considers innovative finance techniques during each MTP update. The MTP's financial plan includes information about innovative finance techniques and calculates potential revenues. About 3.5 percent (approximately $17.5 billion, calculated over a 2019-2050 timeframe) of CMAP's funding identified in its most current fiscally constrained plan, ON TO 2050, is from innovative financing sources of value capture and toll revenues. The funding includes Transit Facility Improvement Areas, a type of value capture that supports the issuance of about $3 billion in bonds for transit infrastructure construction.

- The **City of Lake Oswego**, a suburb of Portland, Oregon, uses innovative finance techniques to supplement its budget for constructing and maintaining transportation infrastructure. In 2003, the Lake Oswego City Council approved a street maintenance fee, which treats the transportation system like a utility in which residents and businesses pay fees based on their use of the system. On average, the fees generated $1.5 to $3 million in revenue annually, allowing the city to maintain the transportation system properly (Figure 6).

Figure 6: The City of Lake Oswego uses street maintenance fees to maintain its transportation infrastructure, including repairs to a curb ramp as shown above. Source: Lake Oswego Department of Public Works.

- In Oklahoma, a partnership among the Oklahoma Turnpike Authority, City of Tulsa, Tulsa County, Indian Nations Council of Governments, Oklahoma Department of Transportation, USDOT, and private sector investors, is leading an expansion to the Gilcrease Expressway, which will include a new 5-mile, four-lane roadway with an adjacent multi-use trail and 22 bridges. Funding for the project involves a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan as well as Grant Anticipation Revenue Vehicle (GARVEE) bonds.

- Over the last decade, Miami-Dade County has seen the completion of several major transportation projects, including the Port of Miami Tunnel (Figure 7). The project used a P3 agreement between the **Florida Department of Transportation** (FDOT) and a private concessionaire to build the tunnel, which redirects port-bound traffic away from city streets. The **Miami-Dade Transportation Planning Organization** (TPO) supported FDOT in the project's delivery. The TPO identified the Port of Miami Tunnel as a priority in its Fiscal Years 2019/2020-2023/2024 TIP and set aside $17 million in District Dedicated Revenue through 2024 in support of the project.

Figure 7: The Miami-Dade TPO supported the P3 delivery of the Port of Miami Tunnel, which redirects port-bound traffic. Source: FDOT, as shared with FHWA.

- The **Greater Nashville Regional Council** (GNRC), which serves the middle-Tennessee region, does not currently use specific innovative finance techniques. However, the organization included information about various techniques in the financial plan for its 2040 Regional Transportation Plan (RTP). This discussion of the potential tools available for project financing was GNRC's first step in considering how these techniques might be useful for its planning activities. The region has used tax increment financing for encouraging economic development, but it has not yet used this approach to support transportation infrastructure.

PART II: INNOVATIVE FINANCE TECHNIQUES

Transportation agencies can use a variety of innovative finance techniques to advance transportation projects. There are several advantages to transportation agencies in using innovative finance techniques, but there are also risks and other considerations to keep in mind before moving forward. Innovative finance techniques can help expedite the construction of transportation projects, avoid costs of inflation, and allow for relatively low interest rates. They can also match the debt term with the life of an asset, which provides an opportunity for more efficient allocation of funding resources. Transportation agencies, however, should weigh these benefits against the potential need to set aside a portion of future years' funds for debt service payments to ensure they are making the right decision for their context.

This section discusses how innovative finance techniques differ from traditional Federal grant assistance and the difference between "innovative financing" and "innovative funding." This section also provides examples of innovative finance techniques. While multiple examples are presented here, they are not exhaustive of all techniques available.

HOW DOES INNOVATIVE FINANCE DIFFER FROM TRADITIONAL FEDERAL GRANT ASSISTANCE?

Transportation agencies traditionally have used grant-based funding from the Federal government and then matched it with their own funds to pay for transportation investments; however, today, agencies are increasingly expanding the types of funding sources they use. Innovative finance allows transportation agencies to deliver transportation projects in creative ways through financing and other "non-traditional" funding options. By using innovative finance techniques, transportation agencies may be able to expand their programs' reach and increase their buying power.

WHAT IS THE DIFFERENCE BETWEEN "INNOVATIVE FINANCING" AND "INNOVATIVE FUNDING"?

Innovative finance techniques may involve techniques that focus on project finance and those that are more related to funding. Innovative financing typically involves borrowing funds, through either bonds, loans, P3s or other financing mechanisms. Innovative funding is the supplemental revenue that may be raised through value capture or other techniques to add additional funding to the overall funding pot.

Oftentimes, innovative finance techniques include elements of both financing and funding (Figure 8). Every transportation project will be different in how it is defined. When thinking about the techniques to use, transportation agencies should be aware that there may be opportunities to use more than one technique at a given time to support their activities. Many of the techniques can be paired or used concurrently. No matter the approach used, transportation agencies should recognize both the benefits and risks in using innovative finance techniques to ensure they are using the approach

that works best for them.

Figure 8: Innovative finance techniques may involve those that are more financing- or funding-based. The techniques may also include elements of both.

WHAT ARE EXAMPLES OF INNOVATIVE FINANCE TECHNIQUES?

Grant Anticipation Revenue Vehicles

Grant Anticipation Revenue Vehicles (GARVEEs) are an innovative financing mechanism that allow for the borrowing against future Federal-aid funds, thereby providing upfront funding for transportation infrastructure needs.[34] Debt financing instruments—such as bonds, loans, or notes—become GARVEEs when future Federal-aid highway funding is pledged to repay the principal and interest.[35] A range of project sponsors can issue GARVEEs, including States, local governments, or public authorities, as long as any applicable State law requirements are satisfied. There is no Federal prohibition or restriction that would prevent a local government issuing a GARVEE, but local governments may face more legal and financial issues than State governments.[36] Tribal governments may also issue GARVEEs.[37]

GARVEEs enable project sponsors to accelerate construction timelines and spread the cost of constructing a transportation facility over its useful life, rather than pay for the

[34] See 23 U.S.C. 122.
[35] Under 23 U.S.C. 122(a), the term "eligible debt financing instrument" means a bond or other debt financing instrument, including a note, certificate, mortgage, or lease agreement, issued by a State or political subdivision of a State or a public authority, the proceeds of which are used for an eligible project under title 23, U.S.C.
[36] For additional information, see: https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_debt_financing/garvees/faqs.aspx. Refer specifically to the FAQ, "Can GARVEEs be issued by a local government?" under the section, "GARVEES Issued by Other Entities."
[37] See 23 CFR 170.227(a).

cost over the much shorter construction period. When considering the use of GARVEEs, this accelerated project delivery benefit should be evaluated against committing future Federal-aid funding to pay debt service on that project. The GARVEE approach is often considered by States for high cost transportation projects, or a program of projects, such as a group of bridges in need of rehabilitation.

Private Activity Bonds

Private activity bonds (PABs) are debt instruments authorized by the USDOT Secretary and issued by a conduit issuer, such as a State or local government, on behalf of a private entity to fund qualified highway or surface freight transfer projects.[38] With PABs, a private project sponsor can access tax-exempt municipal bonds, thereby lowering its financing costs.

Public-Private Partnerships

Public-private partnerships (P3s) are partnerships between the public and private sectors. Engaging the private sector in transportation projects can support State and local governments looking for innovative approaches and funding resources.

P3s can apply to both new build and existing facilities. P3s for new build facilities typically exist as design-build-finance-operate-maintain (DBFOM) concessions, which bundle responsibilities for design, construction, finance, operations, and maintenance activities to a concessionaire. P3s for existing facilities involve the leasing of publicly financed tolled facilities to private sector investor operators. The private partner collects tolls on the facility for a specified period of time in return for operating and maintaining, and sometimes upgrading, the facility.

[38] Section 142 of the Internal Revenue Code of 1986 (26 U.S.C. 142). Section 11143 of Title XI of the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users amended section 142 of the Internal Revenue Code to add highway and freight transfer facilities to the types of privately developed and operated projects for which PABs may be issued.

State Infrastructure Banks

Federal legislation allows States to establish State Infrastructure Banks, or SIBs.[39] SIBs are revolving funds that States can administer to fund surface transportation projects. Within a State, the State DOT often serves as the entity responsible for operating and managing the SIB. States can also work together to establish multi-State SIBs for transportation projects that cross State lines.[40] States use SIBs to offer loans, lines of credit, and loan guarantees for transportation projects. SIBs may be established with a combination of Federal and state capital.[41]

A State may need specific authority under State law to establish a SIB. Once established, SIBs require administrative and managerial oversight to market their services to potential loan applicants, determine lending policies, and track loan and repayment activity.

Using the Pennsylvania Infrastructure Bank (PIB) for the Loganville Bypass, Springfield Township, York County

This rural project, completed in 2009, leveraged private developer and local government funds to replace and relocate a narrow and winding section of PA 214 and improve access to Springfield Township's planned growth area. The developer, Springfield Township, and Loganville Borough paid for preliminary engineering, right-of-way acquisition, and utility relocation ($1.6 million). Funds for the project's construction came from the TIP budget ($3 million) and a PIB loan ($1.1 million).

[39] Originally, SIBs were created under two State pilot programs. The first pilot program was authorized by section 350 of the National Highway System Designation Act of 1995 (Public Law 104-59). The second pilot program was authorized by section 1511 of the Transportation Equity Act for the 21st Century (TEA-21) (Public Law 105-178). Congress in 2005 codified a SIB program in 23 U.S.C. 610 and authorized use of Federal-aid funds to capitalize SIBs. That authority was extended in the FAST Act.
[40] See 23 U.S.C. 610(c).
[41] See 23 U.S.C. 610(d).

Transportation Infrastructure Finance And Innovation Act

The Transportation Infrastructure Finance and Innovation Act (TIFIA) offers Federal credit assistance through direct loans, loan guarantees, and standby lines of credit. TIFIA can help move eligible projects forward, which might otherwise be delayed due to uncertainties resulting from their size or complexity.[42]

Figure 9 indicates eligible TIFIA sponsors and projects. Eligible sponsors include local and State governments and entities. Eligible projects cover a range of transportation modes, from highways and bridges to transit, freight, and rural infrastructure.

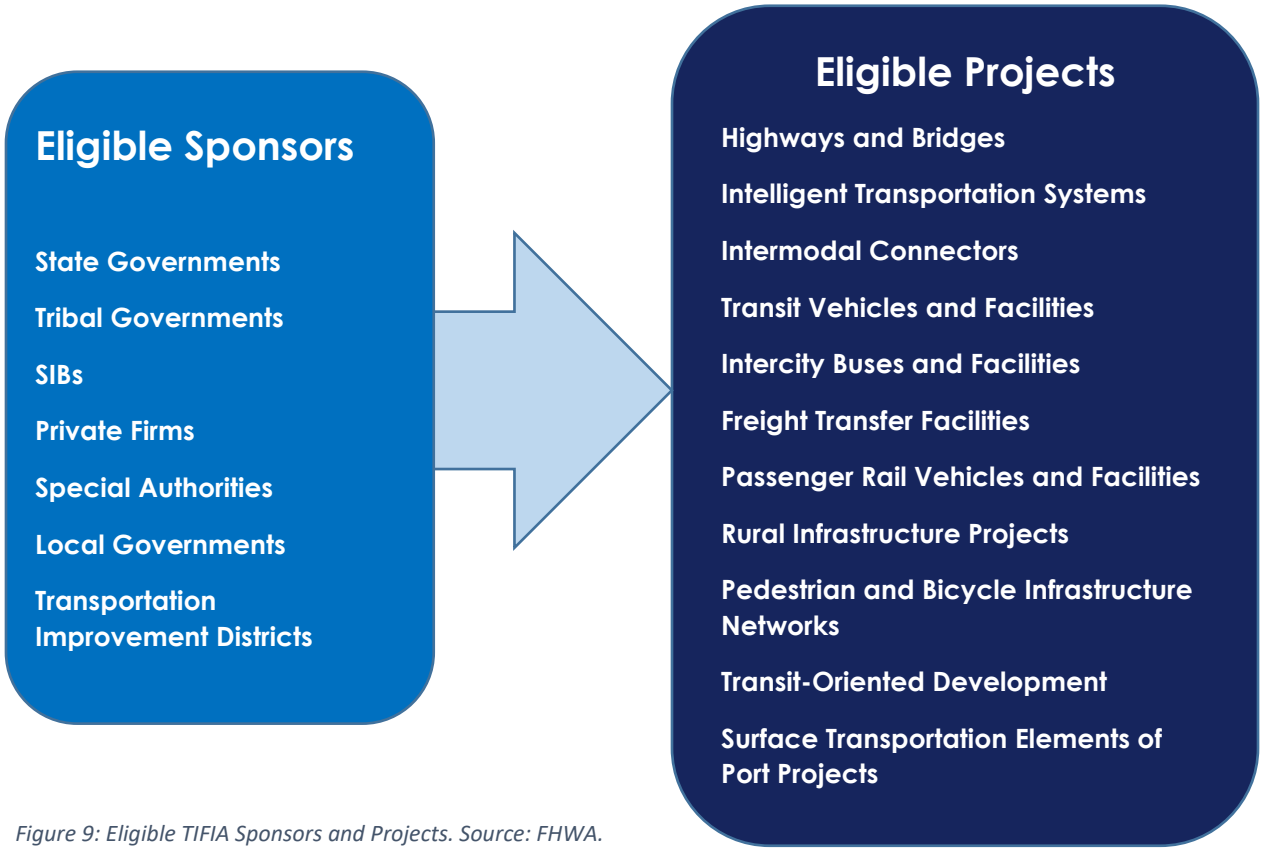

Figure 9: Eligible TIFIA Sponsors and Projects. Source: FHWA.

[42] 23 U.S.C. 601(a)(12) defines the term "project," and 23 U.S.C. 602(a) discusses eligibility.

Tolling

Tolling is the charging of fees for motorists' use of a roadway facility.[43] These fees may be per use, fixed, dynamic, or distance-based that vary by vehicle type. The primary purpose of tolling is to generate revenue.

The revenue generated from tolling typically pays for the roadway facility's operations and maintenance and capital improvements. This revenue may also go toward the repayment of debt associated with the financing of the facility.

Value Capture

Value capture techniques harness a portion of increased property values in order to pay for an improvement or for future transportation investment. Value capture is an overarching term for a variety of techniques that help capitalize on the value created by infrastructure investments, such as increases in property values and economic activity (Figure 10). Value capture techniques can accelerate project delivery by providing revenue for a project before or during its implementation, generate a sustained revenue source for future operations and maintenance, and allow for cost-sharing with developers and owners who stand to benefit from the transportation investment. To learn more about value capture, the FHWA value capture website contains definitions, examples, and resources on this technique. For more information, please visit: https://www.fhwa.dot.gov/ipd/value_capture/.

While value capture techniques are used more commonly with transit projects, they are also used to fund highway improvements. There are several different forms of value capture used in the United States. The most common include:

- Developer contributions;
- Special assessments;
- Fees;
- Joint development;
- Concessions; and
- Advertising, where permissible.

[43] Under Title 23, there is a general prohibition on the imposition of tolls on Federal-aid highways (23 U.S.C. 301). However, Title 23 and other statutes have also carved out certain exceptions to this general prohibition through special programs. These programs allow tolling to generate revenue to support highway construction activities and/or enable the use of road pricing for congestion management. Two of the Federal programs are codified in Title 23 and are sometimes referred to as the "mainstream" tolling programs: 1) Section 129 (General Toll Program); and 2) Section 166 (High-Occupancy Vehicle/High-Occupancy Toll Lanes).

Figure 10: Value capture techniques offer a variety of opportunities for many different settings. Source: FHWA.

Availability Payments

Availability payments are a type of a public-private partnership, which often may use Federal-aid funds, between a State DOT and a private developer (also known as a concessionaire). The State DOT signs a long-term contract with the private developer in which it grants exclusive rights (known as a "concession") to the concessionaire. Through this contract, the concessionaire becomes responsible for the facility's construction, operations, and maintenance. The concessionaire may collect tolls, but it does not necessarily need to do so if tolling is not appropriate. Instead, the concessionaire receives regularly scheduled payments, or "availability payments," from the State DOT. The State DOT provides these payments based upon the concessionaire meeting a prescribed level of service for the construction, operations, and maintenance activities it provides.

CONCLUSION

The FHWA CIFS produced this briefing book to serve as a resource for transportation agencies looking for information on innovative finance techniques and their application within the transportation planning process. Through this document, CIFS aims to increase transportation agencies' awareness of these techniques.
While transportation agencies may typically consider the use of innovative finance as mainly for larger transportation projects, this briefing book aims to demonstrate that there are a variety of ways to use these techniques in support of planning, programming, and funding of transportation projects no matter the size.

In addition to this briefing book, CIFS offers a variety of training, technical assistance, and other resources for interested agencies. Please visit the CIFS website (www.fhwa.dot.gov/ipd/) to learn more about these opportunities.

PART III: APPENDIX

APPENDIX I. ACRONYMS

BIA	Bureau of Indian Affairs
CFR	Code of Federal Regulations
CIFS	Center for Innovative Finance Support
CMAP	Chicago Metropolitan Agency for Planning
DBFOM	Design-Build-Finance-Operate-Maintain
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GARVEE	Grant Anticipation Revenue Vehicle
GNRC	Greater Nashville Regional Council
LRTP	Long-Range Transportation Plan
MPO	Metropolitan planning organization
MTP	Metropolitan Transportation Plan
NTTFI	National Tribal Transportation Facility Inventory
P3	Public-private partnership
PAB	Private Activity Bond
PIB	Pennsylvania Infrastructure Bank
RTP	Regional Transportation Plan
RTPO	Regional transportation planning organization
SIB	State Infrastructure Bank
SP&R	State Planning & Research
State DOT	State department of transportation
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIP	Transportation Improvement Program
TPO	Transportation Planning Organization
TTIP	Tribal Transportation Improvement Program
TTP	Tribal Transportation Program
TTPTIP	Tribal Transportation Program Transportation Improvement Program
UPWP	Unified Planning Work Program
U.S.C.	United States Code
USDOT	U.S. Department of Transportation

APPENDIX II. RESOURCES

FHWA CIFS website
https://www.fhwa.dot.gov/ipd/

The CIFS website provides a range of information on GARVEEs, PABs, P3s, SIBs, TIFIA, tolling, value capture, and availability payments, among other related topics.

U.S. DOT Build America Bureau website
https://www.transportation.gov/buildamerica/financing/

For additional information on TIFIA, PABs, and other innovative finance techniques, visit the U.S. DOT Build America Bureau website above.

FHWA-FTA The Transportation Planning Process Briefing Book
www.planning.dot.gov
https://www.fhwa.dot.gov/planning/publications/briefing_book/

The Transportation Planning Process Briefing Book provides an overview of the Federal transportation planning process. It also includes a glossary of common transportation planning terms, available at: https://www.fhwa.dot.gov/planning/publications/briefing_book/index.cfm#toc22294582.

FTA Funding and Financing Resources
https://www.transit.dot.gov/funding/funding-finance-resources/funding-finance-resources

The FTA website provides information on financing tools.