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Active Transportation Funding and Finance Toolkit

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List of Acronyms and Abbreviations

BID	Business Improvement Districts
CDC	Centers for Disease Control and Prevention
CDOT	Colorado Department of Transportation
CE	Categorical Exclusion
CMAQ	Congestion Mitigation and Air Quality Improvement
COMPASS	Community Planning Association of Southwest Idaho
DOT	Department of Transportation
EDA	Economic Development Administration
EO	Executive Order
EPA	Environmental Protection Agency
FAST	Act Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
GARVEE	Grant Anticipation Revenue Vehicle
H-GAC	Houston-Galveston Area Council
HSIP	Highway Safety Improvement Program
HUD	Department of Housing and Urban Development
MPO	Metropolitan Planning Organization
NCDOT	North Carolina Department of Transportation
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NHPP	National Highway Performance Program
NHS	National Highway System
ODOT	Oregon Department of Transportation
P3	Public-Private Partnerships
PPACG	Pikes Peak Area Council of Governments
RAISE	Rebuilding American Infrastructure with Sustainability and Equity
RTP	Recreational Trails Program
SAD	Special Assessment District
SIB	State Infrastructure Banks
STBG	Surface Transportation Block Grant
STIP	Statewide Transportation Improvement Program
TA	Transportation Alternatives
TIF	Tax Increment Financing
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery

TIP	Transportation Improvement Program
TSDC	Transportation System Development Charge
TUF	Transportation Utility Fee
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
WSDOT	Washington State Department of Transportation

Introduction

Background

Across the country, interest in and demand for better pedestrian and bicycle infrastructure has increased the interest of State and local agencies in using innovative funding and financing strategies to deliver active transportation projects. Many traditional funding programs reserve limited sums for active transportation projects or require competition for funding with other project types that may fare better when applying established prioritization criteria. The need to leverage funds for matching, or the need for financing to bring projects online more rapidly, can compound this issue. While bicycle and pedestrian projects tend to be lower cost than most road projects, transportation agencies throughout the country face unique challenges in securing timely, adequate funding for them. Strategies that agencies have not typically used for active transportation projects, such as value capture and bond financing, are increasingly gaining attention as effective methods for delivery of bicycle and pedestrian projects.

As interest in active transportation has increased among the general public and public officials alike, tools for accelerating delivery of bike and pedestrian projects are more important than ever (Pedestrian and Bicycle Information Center, 2020a). In particular, there is interest in projects that can significantly expand networks by filling gaps between existing networks. This toolkit highlights notable, innovative practices for paying for such projects.

Toolkit Use

This toolkit is for anyone interested in expanding bicycle and pedestrian infrastructure. While transportation agencies typically spearhead this type of project, this toolkit also covers projects from a variety of other entities, including community improvement districts, universities, nonprofit organizations, and even a hospital. Public officials and community leaders can also use this toolkit to build support for active transportation and to point to success stories from other communities.

This toolkit can serve as a starting point and conversation-starter. When planning an active transportation project, it can be difficult to understand the full range of funding and financing options available. This toolkit provides a broad overview and tangible examples of a wide range of strategies. Many successful projects utilize a combination of strategies. For instance, projects may use separate sources of funding for capital improvements, operations, and maintenance on a given project. Funding strategies may help leverage financing options and vice versa. Many sections in the toolkit include links to other resources that can provide further context.

The success stories in this toolkit can build support for active transportation projects. The innovative strategies and success stories highlighted in this toolkit can help garner support from leadership and demonstrate the potential of available opportunities. Leaders, planners, and community members can see tangible examples of how funding and financing methods turned active transportation plans into reality.

Toolkit Contents

The contents of the toolkit include:

- **Funding Strategies**: Funding refers to the source of cash flow for a project, such as tax revenues or user fees. This section summarizes some of the funding sources that can help pay for active transportation projects. Additionally, it includes strategies for accessing those sources. Toolkit users can read this section to understand the range of sources available and the innovative ways agencies and other entities have accessed funding.
- **Financing Strategies**: This section describes financing strategies that can help pay for active transportation projects. Financing strategies are the mechanisms that activate and manage cash flow. Debt instruments, such as loans and private equity capital, can help finance projects. Financing is less common for active transportation projects, so this section can help those looking to understand how financing could advance projects and accelerate project delivery.
- **Public Private Partnerships**: In public-private partnerships (P3), private entities provide some of the services that are typically the responsibility of the public sector. P3s can help manage project costs by providing access to new streams of capital and enhancing cost efficiency. This section summarizes the advantages P3s can provide to accelerate project delivery and provides examples of active transportation projects developed using P3s.
- **Emerging and Supporting Strategies to Deliver Active Transportation Project**: This section covers other strategies that agencies have employed to accelerate, fund, and/or finance active transportation projects. Agencies can often use combinations of funding and financing strategies from multiple sources; the toolkit explains how leveraging from multiple sources can help agencies accelerate and deliver successful projects. This section explores green funding and financing strategies, which are emerging as potentially significant resources for active transportation projects. This section also describes demonstration projects, a strategy for building public support and accelerating project delivery.
- **Case Studies**: After reading how funding and financing strategies can support active transportation project delivery, it can be helpful to see how these strategies play out in the real world. This section highlights six case studies from a variety of organizations, project types, and locations. These case studies can serve as a reference point for understanding how agencies plan active transportation projects, select funding and financing strategies, build support, and overcome challenges. In many of the examples, agencies use a combination of funding strategies; this section shows how financing and funding tools can complement each other to successfully implement projects.
- **Peer Exchange**: To provide additional context on the experiences of implementing agencies and organizations, FHWA hosted a peer exchange in May 2021. During this exchange, six agency/organization representatives presented examples of successful active transportation projects. This section provides additional lessons learned and effective practices for using innovative financing and funding strategies.

- **Considerations for Implementation**: After assessing the wide range of options available, the question becomes: which practices will actually work in the context of any given project? This section includes several questions that agencies and other organizations can consider when planning and mapping out funding and financing options.

Table 1 summarizes the funding and financing strategies for active transportation projects. This toolkit discusses each of these strategies in greater depth; the hyperlinked text in the Strategy column links directly to the corresponding toolkit sections.

Table 1. Summary of Funding and Financing Strategies for Active Transportation Projects

Category	Strategy	Sub-Strategies	Scale	Timeframe/Time Considerations	Legislative Considerations	Other Considerations	Resources
Funding	*Value capture*	Land value tax/split rate taxSpecial assessment districts (SADs)Joint development feesDevelopment impact feesTransportation utility fees (TUFs)Negotiated exactionsSales tax districtTax increment financing (TIF)	There is not a one-size-fits-all approach to value capture.Many value capture methods are better suited for larger projects; agencies can incorporate active transportation projects into larger multimodal projects that use value capture methods.Special assessment districts, development impact fees, and transportation utility fees can work well for a variety of project types and sizes, including smaller-scale active transportation projects.	For methods that capture the value created by projects over time, such as land value taxes or tax increment financing, unless used to underwrite loan programs, it often takes years to accumulate funds sufficient to support major construction.Fees, such as development impact fees and transportation utility fees, can generate revenue more immediately but it may be necessary to periodically adjust the fees or tie them to inflation to avoid erosion in value.	For each value capture method, there may be requirements for authorizing legislation. Thirty states have legislation that enable development impact fees (FHWA, 2021a)To impose development impact fees, local governments may need to demonstrate that private development places an additional burden on the public sector..States may have statutory requirements that dictate which levels of government can implement land value taxes or other taxes. Nearly every state has legislation authorizing tax increment financing, and all states have legislation for special assessment districts (FHWA, 2020d).	Value capture may help promote equity because it follows the "beneficiary pays" principle. With value capture methods, private entities that benefit from transportation investments also contribute – rather than funding projects entirely with tax dollars. Value capture methods can be modified to promote equity by exempting certain entities, such as affordable housing units (FHWA, 2019a).Land value tax/split rate tax and joint development fees are focused on larger, multimodal projects which may have an active transportation component. These are discussed in the Guidebook to Funding Transportation Through Land Value Return and Recycling (NCHRP, 2018)	*Guidebook to Fundi Transportation Thro Land Value Return a Recycling* (2018)FHWA's Cent for Innovative Finar Support: *Value Cap Resources* (2021)
Funding	*Federal funding options*	Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grantsSurface Transportation Block Grant Program (STBG)Transportation Alternatives (TA) Set-Aside from STBGRecreational Trails Program (RTP)Congestion Mitigation and Air Quality Improvement Program (CMAQ)Highway Safety Improvement Program (HSIP)Federal Transit ProgramsNational Highway Performance Program (NHPP)Federal Lands and Tribal Transportation Programs	Federal funding can support a wide variety of project types and sizes, ranging from funding for bicycle helmets to tunnels for pedestrians and bicyclists. Many funding sources specify the type and/or scale of eligible projects (see the referenced link).	Timing can depend on the application processes required to secure the funding source. Compliance requirements can add time to the process.	Accessing Federal funding typically involves review and approval processes, such as National Environmental Policy Act (NEPA) environmental reviews.	Federally funded projects often must achieve certain program objectives, such as providing access to or within Federal or tribal lands (Federal lands funds); addressing a highway safety problem (HSIP); or reducing emissions (CMAQ). Additionally, agencies must identify non-Federal funding sources to meet matching requirements. Strategies to access Federal funding include using flexible matching, incorporating active transportation elements into larger multimodal projects, and revising project selection criteria to prioritize active transportation.	FHWA continues to update discretionary funding programs to meet active transportation need *FHWA Pedestrian ar Bicycle Funding Opportunities* (2021) lists updatec funding sources.In some cases, Federa funding programs a expanded by additio legislative action. Fo example, the Department of Transportation Appropriations Act (2019) and the Coronavirus Respon and Relief Supplemental Appropriations Act (2021) increased th funding for the STB and other programs
Funding	*Ballot measures*	N/A	Ballot measures can leverage significant funding. Through local sales taxes, property taxes, gas taxes, or vehicle fees, some cities have secured tens of millions of dollars specifically for bicycle and pedestrian projects.	Time considerations include how long it will take to campaign for the ballot initiative (often 6-9 months), the frequency of elections, how long the sales tax would be in place, and whether there are obligations to use revenues within a given timeframe.	To add measures to a ballot, some States require enabling legislation or petitions.	A ballot measure can focus on one specific project, a broader category of projects (e.g., active transportation improvements), or a variety of targeted outcomes.	League of American Bicyclists' *Success a the Ballot Box: Win Bicycle-Pedestrian Ballot Measures* (2014) and Los Angeles Metro's *Hov Pass a Mega Transportation Measure* (2018)
Funding	*Local planning assistanc e grants*	N/A	Local planning assistance grants can support projects of a variety of types and sizes.	Many agencies award grants on an annual basis. Agencies may also specify the award period. For example, Oregon's Transportation and Growth Management Program grants are awarded on an annual basis and typically have a two-year period from award to completion (ODOT, 2021a).	None.	Grants may require that projects demonstrate certain benefits, such as environmental benefits.	League of American Bicyclists' *State Revenue Sources th Fund Bicycling and Walking Projects* (2014)
Funding	*Sales taxes and other fees*	Property taxesVehicle registration feesTraffic violation finesReal estate recordation taxes	These taxes/fees can generate revenue for general funds or funding pools for specific objectives, such as safety. The amount can vary widely.Property taxes typically go to local, rather than State, governments. Voters can decide to increase property taxes in order to make more general funding available, which can support active transportation projects. Voters can also approve taxes for specific projects	Timeframes vary. Property taxes and vehicle registration fees are typically paid on an annual or biannual basis.Traffic violation fines and real estate recordation taxes are one-time fees paid at the time of the violation or property transfer.	To enact sales taxes, many States require a referendum.	The feasibility of taxes and fees depends on the policy context and level of public support.	League of American Bicyclists' *State Revenue Sources th Fund Bicycling and Walking Projects* (2014)

			through special assessments (see *Value Capture* section)All states levy vehicle registration fees. A portion of these fees can be dedicated to active transportation projects (League of American Bicyclists, 2014c).States and municipalities can levy other fines and taxes, such as traffic violation fines and real estate recordation taxes, to fund transportation projects.				
Funding	*Advertising and sponsorships*	N/A	Dependent on the visibility or location of the advertisement or sponsorship.	Timeframes in advertising and sponsorship agreements may range from weeks to years.	In some States, statutes give agencies the authority to sell sponsorship agreements and naming rights on specific asset types.	Agencies should consider if advertising or sponsorships will affect image or credibility.	FHWA's Center for Innovative Finance Support resources o *advertising, naming rights, and sponsorships*
Funding	*Other private funding options*	Local partnershipsPrivate grants and philanthropyIn-kind donationsIndividual donations and crowdfunding	In-kind donations, individual donations, and crowdfunding are often well-suited for smaller projects or smaller components of larger projects (e.g., in-kind and individual donations could help build a gazebo alongside a bike path).Local partnerships and philanthropy can vary in scale depending on the resources of the partnering organizations.	Private funding can help accelerate project delivery. These methods are sometimes faster than other funding sources because they may be more flexible and may not require application or review and approval processes.	None.	If communities routinely rely on local donations to build active transportation facilities, neighborhoods with access to more resources may end up with higher quality facilities. Agencies should consider equity implications when evaluating private funding options.	The Association of Pedestrian and Bicy Professionals keeps *list of bicycle and pedestrian organizations*, many which provide fundi and support for projects.The *Pedest and Bicycle Informa Center* website lists additional organizations.
Financing	*Bonds*	Municipal bonds: General obligation bonds and revenue bonds	Bonds may not be feasible for small standalone projects but can fund sets of smaller projects, such as a prioritized list of facilities in a city's Bicycle Plan. They can also fund a single large-scale project.	Bonds can help fund short-term or long-term projects. The funding may be accessible for a specified timeframe.	State laws and regulations dictate voting processes for bonds.	To use revenue bonds, agencies must designate some form of dedicated revenues to underwrite bonds, such as tax revenues.	FHWA's Center for Innovative Finance Support: *Bonds*
Financing	*Grant Anticipation Revenue Vehicles (GARVEEs)*	Bonds, notes, certificates, mortgages, and leases are all types of GARVEEs when backed by future Federal-aid funding.	GARVEEs are best suited for larger-scale, non-revenue generating assets with costs ranging from tens of millions to hundreds of millions of dollars, so they may not always be relevant for standalone bicycle and pedestrian projects. GARVEEs have helped finance large-scale multimodal projects that include bike lanes.	Agencies can use GARVEEs to help accelerate construction timelines by making financing more accessible. GARVEEs allow States to claim reimbursement for debt service costs as these costs become due until the debt is retired.	There are Federal-aid highway program requirements.	If using this method, agencies will need to use a portion of future years' revenues to repay the debt service.	FHWA's Center for Innovative Finance Support: *GARVEEs*
Financing	*Transportation Infrastructure Finance and Innovation Act (TIFIA) loans*	N/A	To be eligible for a TIFIA loan, anticipated project costs must be at least $10 million. Agencies can incorporate active transportation elements into larger-scale projects that use TIFIA loans. TIFIA loans typically provide credit assistance for up to 33 percent of anticipated project costs, and up to 50% for rural projects.	In general, repayment of TIFIA loans is deferrable for five years after substantial project completion, and the maximum term of repayment is 35 years. The timeframe of TIFIA loans may vary based on the project and type of financial assistance. The TIFIA credit program offers secured loans, loan guarantees, and standby lines of credit, which all operate on different timelines. Standby lines of credit, for example, are available up to 10 years after substantial completion.	There are Federal-aid highway program requirements.	There are program fees for TIFIA loans, including loan servicing fees, transaction fees for the costs of outside advisors, and sometimes monitoring fees. The agency must list the project in the State's transportation plan and must support the project with user charges or other non-Federal dedicated funding sources.	U.S. Department of Transportation (USDOT) *TIFIA Cred Program Overview*
Financing	*State Infrastructure Banks (SIBs)*	SIBs are revolving infrastructure investment funds. These state-administered programs may offer loans, capital reserves for bond/debt instrument financing, letters of credit, lines of credit, bond insurance, and loan guarantees.	SIB loans can range from thousands to millions of dollars. SIB loans can be an effective tool for active transportation projects because many SIBs provide loans for small-scale projects.	SIBs can help accelerate project delivery; project sponsors can borrow rather than wait for grant funding.	The legal requirements and conditions vary based on whether the SIB is a Federal or State-capitalized program. A majority of States have established SIBs through Federal SIB pilot programs. These States entered into cooperative agreements with FHWA and/or the Federal Transit Administration, which outline SIB policies and structures (FHWA, 2020d). Some States, such as California and Georgia, have opted out of the Federal program and created State-capitalized SIBs (Mallet and Driessen, 2016).	Agencies may need to demonstrate credit worthiness.	FHWA's Center for Innovative Finance Support: *State Infrastructure Banks*
Financing/Project Delivery	*Public-private partnerships (P3)*	Private entities may be involved in designing, building, financing, maintaining, and/or operating a facility. The three most common types are: design-build, design-build-finance, and design-build-finance-operate-maintain.	P3s can help deliver projects of many different types and sizes.	P3s can sometimes help accelerate project delivery by providing access to more capital and through efficiency gains.	Statutory and policy frameworks that enable P3s vary from State to State in terms of the types of P3 agreements allowed; authority to enter into, approve, and review agreements; and types of facilities allowed.	In setting up P3s agreements, agencies must decide how to allocate and manage risk.	FHWA's Center for Innovative Finance Support offers additional context o *P3 considerations* and *State P3 legislation*.

Funding/Financing	*Leveraging Multiple Funding/Financing Sources*	Agencies can use funding sources and financing methods synergistically. (e.g., use tax increment financing as leverage for accessing a grant, use Federal aid funding to repay loans, etc.). Many special assessment districts, for example, leverage their funding to bring in State or Federal funding for active transportation projects.	This strategy can work for a variety of project types and sizes.	Using funding sources and financing methods together often reduces the timeframe to complete projects.	When using one source to leverage another, there may be multiple documentation requirements to fulfill.	Consider cross-agency funding from diverse non-transportation sources such as USDA, EDA, and HUD as a way to "blend" funding mechanisms such as GARVEE or TIFIA to accelerate projects that might otherwise depend entirely on traditional transportation funding sources.	FHWA's *Strategies f Accelerating Multimodal Project Delivery* includes information for both design and funding stages of multimoda projects that sugges leveraging strategies.FHWA's Center for Innovativ Finance Support offe *value capture guida* and case studies of leveraging opportunities that involve both federal transportation and non-transportation funding potential.
Funding/ Financing	*Green Funding and Finance*	Cap-and-Trade and Green Financing	Cap-and-trade typically generates streams of funding that could help fund a variety of project types and sizes.Green financing can also support a variety of project types and sizes.	Cap-and-trade policies may take years to pass and implement. After implementation, however, they could serve as a steady stream of revenue.	Cap-and-trade policies may be Statewide, regional (multi-state), or national. Policymakers may decide to designate a portion of the revenues derived from cap-and-trade policies towards active transportation. As such, the extent to which cap-and-trade revenues fund active transportation depends on the priorities set by States.	NA	See the California A Resources Board website for an exam of a *cap-and-trade program*.
Project Delivery Methods	*Demonstration Projects*	Quick Build and Build a Better Block	Best for small, temporary installations	These installations can take as little time to install as one day but may also take weeks or months.	Zoning and ordinance laws.	Use to build success for other projects	The *Better Block website* has resourc for implementing th method. The Califor Bicycle Coalition an Alta Planning + Des have developed a *Quick-Build Guide*

Funding Strategies

Overview

Funding refers to the source of the cash flow for a project, such as tax revenues or user fees. Funding sources tend to be more liquid than financing sources. Whether or not agencies use financing methods, they secure funding sources to pay for projects. Traditionally, tax-based sources such as Federal aid dollars have been the most common source of transportation funding, but agencies throughout the country have also used innovative funding strategies such as value capture, crowdsourcing, and sponsorships. Funding strategies for active transportation projects include:

- Value Capture
- Federal Funding
- State and Local Funding
- Local Partnerships
- Private Grants and Philanthropy
- In-Kind Donations
- Individual Donations and Crowdfunding

Value Capture Methods

Bicycle and pedestrian projects can add value to communities and nearby businesses by reducing congestion, lowering emissions, improving public health, enhancing multimodal connectivity, attracting employees and home buyers, and increasing foot traffic to nearby businesses (Pedestrian and Bicycle Information Center, 2020a). When transportation infrastructure projects increase land value, communities can capture a portion of that value through a variety of innovative funding mechanisms. FHWA defines value capture as "a set of techniques that generally take advantage of increases in property values, economic activity, and growth linked to infrastructure investments to help fund current or future improvements" (FHWA, 2019a).

Many value capture techniques are "land value return and recycling" methods that recover a portion of the increased land value associated with and attributable to well-performing transportation investments. "Recycling" means that the agency will reinvest all or a portion of revenues derived from these increased land values back into infrastructure investments. These methods follow the "beneficiary-pay" principle by having the developers and property owners, whose investments benefit most from public infrastructure, pay a portion of the costs of providing these infrastructure investments (FHWA, 2019a). Examples include land value taxes and betterment levies. These taxes and fees capture some of the increase in land value that occurs as a result of improvements to transportation infrastructure.

Other value capture methods are "land value return-like." These methods target cost recovery rather than value return. An example of land value return-like value capture method is development impact fees which are a one-time charge that developers must pay to obtain development permits. This method does not capture value generated by infrastructure, but rather charges developers for a portion of the expected infrastructure costs associated with the development (NCHRP, 2018).

Distinguishing between land value return and land value return-like methods can be helpful because these methods incentivize different behaviors. Land value return methods can incentivize development and discourage speculation and disinvestment. Certain land value return-like methods, on the other hand, may discourage development depending on their implementation (NCHRP, 2018).

The following section includes several value capture methods and examples illustrating how these methods have supported active transportation projects. See NCHRP's *Guidebook to Funding Transportation Through Land Value Return*

and Recycling (2018) for an extensive review of land value return and return-like strategies, as well as examples, legal and legislative considerations, and benefits and drawbacks of these strategies.

Special Assessment Districts

In special assessment districts (SADs), **property owners whose properties will benefit from infrastructure improvements** must pay a fee (FHWA, 2019a). Assessment charges are typically annual fees based on the expected reductions in travel time and costs resulting from the improvement. SADs are considered a true value capture method if the contributing property owners directly benefit from the infrastructure improvements through enhanced access to the asset, such as a bike path, and/or through increased revenues.

SADs support a broad range of project types and sizes, including smaller scale bicycle and pedestrian facilities (FHWA, 2019a). The governance models and objectives of SADs vary widely throughout the U.S. Businesses may operate SADs nearly independently. Property owners may form nonprofit organizations to manage SADs. In other cases, local governments may play a larger role in collecting taxes, coordinating projects, and managing the SAD. SADs can include business revitalization zones, community improvement districts, business improvement districts, benefit assessment districts, local improvement districts, special service areas, and downtown improvement districts. In Atlanta, the *Midtown Improvement District* has contributed millions of dollars to bicycle and pedestrian infrastructure projects.

Development Impact Fees

Many State and local governments charge developers a **one-time fee for new projects**. This fee covers all or a portion of the costs associated with the increased infrastructure needs imposed by the development. In Portland, Oregon, development impact fees are known as Transportation System Development Charges (TSDCs). TSDCs, described in the Cully Boulevard Green Street Project case study, have funded over $130 million in multimodal improvements since 1997 (Portland Bureau of Transportation, 2020). In Pasco County, Florida, "mobility fees" help fund transportation infrastructure. Fees are lower in urban areas and higher in suburban and rural areas to reflect varying trip lengths and promote smart growth. Planners based the fees off cost assumptions; bicycle and pedestrian facility costs represent four percent of the fee (FHWA, 2021a). Impact fees are also known as mitigation fees, facility fees, excise taxes, and system development charges (FHWA, 2019a).

Transportation Utility Fees

Transportation utility fees (TUFs) are **ongoing fees based on the estimated transportation infrastructure use of real estate occupants**. These are also known as transportation maintenance fees, road use fees, street utility fees, and street maintenance fees (FHWA, 2019a). In Hillsboro, Oregon, a TUF helps fund sidewalk, bike lane, and enhanced crossing projects. Residents, businesses, nonprofit organizations, schools, and government agencies pay a monthly fee, which varies based on business type and square footage (FHWA, n.d. b).

Negotiated Exactions

As part of negotiations for a development permit, local governments may ask developers to give a **one-time, in-kind contribution to public infrastructure**, which could include a segment of a bike lane or a pedestrian plaza. These are also known as developer contributions or cash proffers (NCHRP, 2014b). For example, when JBG Smith Properties planned a mixed-use development in Arlington, Virginia, the County Transportation Commission asked the developer to provide community benefits (Miles, 2020). These developer contributions will include protected bike lanes along 18th Street in Crystal City (DeVoe, 2021).

Sales Tax District

Voters may approve an **incremental sales tax that supports a specific type of improvement**, such as bicycle and pedestrian infrastructure (FHWA, 2019a). In Athens-Clarke County, Georgia, voters approved a sales tax program that is anticipated to generate $100+ million for transportation-related improvements, including approximately $6 million for the county's Bicycle and Pedestrian Master Plan (Athens-Clarke County, 2020).

Tax Increment Financing

Tax increment financing (also called transportation reinvestment zones or tax allocation districts) **allocates a portion of increases in tax revenues above a certain threshold** to a given project (NCHRP, 2014b). The Atlanta BeltLine has a tax allocation district. Increased property tax revenues associated with the BeltLine improvements generate funds to pay back bonds issued for those improvements (Atlanta BeltLine, 2015).

Other Considerations for Value Capture Methods

Early in the project development process, agencies should consider value capture opportunities (FHWA, 2019a). There is no one-size-fits-all approach to the use of value capture. Agencies continue to find innovative ways to implement value capture for a variety of project types and contexts. Value capture methods, implemented alongside other funding and financing strategies, can accelerate project delivery. Considerations for value capture methods include:

Accommodating zoning and land use regulations and statutory authority (NCHRP, 2018; FHWA, 2019a). Regulations may vary at the local or State level. An important first step is understanding the regulatory process to use value capture methods. For example, in order to impose exactions, local governments must have statutory authority to do so, which can be granted through enabling legislation or statutes. For land value taxes, some States prohibit taxing land and buildings at different rates. In most States, local governments need enabling legislation in order to charge transportation utility fees (FHWA, 2019a). Nearly every State has legislation authorizing tax increment financing, and all States have legislation for special assessment districts (FHWA, 2020d).

Having a supportive real estate market. Because many value capture methods rely on quickly rising property values, they may be better suited for densely populated urban areas (FHWA, 2019a). However, this is not always the case. Montana, for example, has enabling legislation for citizen-initiated Rural Improvement Districts. Negotiated exactions are another type of value capture that does not rely on quickly rising property values (FHWA, 2019a).

Risk factors for value capture methods. Risk is an important consideration for methods that rely on future revenues, such as sales taxes and property taxes. Revenues may be lower than expected, and agencies considering using this method to repay bonds should assess the risk involved.

Scale of projected value. For value capture methods to be effective, they must create economic value for the surrounding community. Some bicycle and pedestrian projects are large enough that they generate substantial economic benefits. The Atlanta BeltLine's primary source of funding is a tax allocation district, also known as tax increment financing (TIF). TIFs channel property tax revenues above a certain threshold to a specific project. TIFs are location-specific and typically continue for a set period. Between 2005 and 2017, the Atlanta BeltLine TIF brought in $325 million, which reflects the significant increases in property value created by the BeltLine. Between 2012 and 2030, the TIF will generate an anticipated $1.4 billion (FHWA, n.d. b). Many bicycle and pedestrian projects do not generate enough economic value to use value capture methods. In these situations, agencies can combine smaller bicycle and pedestrian projects with larger multimodal projects that use value capture methods. Value capture methods, such as special assessment districts (including community improvement districts and business improvement districts); transportation utility fees; and fees such as development impact fees can work well for both smaller and larger-scale projects.

Equity impacts. In evaluating the equity implications of these strategies, it is important to look at who pays and who benefits. Value capture can help promote equity because it follows the "beneficiary pays" principle. With value capture methods, private entities that benefit from transportation investments also contribute – rather than funding projects entirely with tax dollars. However, there are still equity risks associated with value capture and infrastructure investments, as the value of land rises, lower-income households and small businesses may face displacement (Wolf-Powers, 2019). Some cities have passed legislation that helps ensure that increases in property value help rather than displace low-income households. In New York City, for instance, a Mandatory Inclusionary Housing policy requires residential developers to build below-market units when re-zonings allow them to realize greater returns (Wolf-Powers, 2019). The Atlanta BeltLine Partnership and Atlanta BeltLine, Inc., are also working to address equity challenges through a Legacy Retention Program, which focuses on helping homeowners earning less than area median income stay in their homes (Brey, 2021). Displacement avoidance plans can help agencies prepare for and mitigate potential negative impacts of infrastructure projects. Value capture policies can also promote equity by exempting certain entities, such as affordable housing units, from value capture taxes (FHWA, 2019a).

FHWA's *Value Capture: Capitalizing on the Value Created by Transportation* Implementation Manual (2019) lists many more considerations for value capture methods

Federal Funding Options

The information provided under this section is based on Federal funding programs authorized under the FAST Act. The bipartisan infrastructure bill authorized new and updated formula based and discretionary programs that provide additional Federal funding options. For more information, see FHWA's Legislative Affairs and Policy Communications website.

Many traditional Federal funding sources help fund bicycle and pedestrian facilities. For instance, the Surface Transportation Block Grant (STBG) Program generally can cover up to 80 percent of the costs of bike and pedestrian infrastructure projects (higher in States with large amounts of Federal lands). The Congestion Mitigation and Air Quality Improvement Program (CMAQ) also allows for bicycle and pedestrian projects that help reduce emissions in nonattainment or maintenance areas (FHWA, 2020a).

In general, projects must conform with transportation planning documents, and agencies must list them in metropolitan Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Programs (STIPs). Additionally, to access Federal funding, agencies must identify non-Federal matching sources. Funding requirements and sources will continue to evolve in response to changing needs and policy directives. In 2021, President Joseph Biden signed several executive orders (EOs) that emphasize priorities such as climate action, environmental justice, infrastructure expansion, and job creation. EO 14008: Tackling the Climate Crisis at Home and Abroad includes a provision to "secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and under-investment in housing, transportation, water and wastewater infrastructure, and health care" (White House, 2021a). EO 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government states that the "…Federal Government should pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality" (White House, 2021b). President Biden also established the Justice40 initiative, which is a "whole-of-government effort to ensure that Federal agencies work with states and local communities to make good on President Biden's promise to deliver at least 40 percent of the overall benefits from Federal investments in climate and clean energy to disadvantaged communities" (Executive Office of the President, 2021). These EOs and policies will ultimately create shifts in how Federal agencies distribute funding.

This section summarizes current Federal funding sources for bicycle and pedestrian projects.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grants, formerly known as Better Utilizing Investments to Leverage Development (BUILD) or Transportation Investment Generating Economic Recovery (TIGER) grants, fund innovative capital projects and can flexibly fund multimodal projects. A key step to winning these grants for active transportation projects is a benefit-cost analysis, which often involves nonstandard approaches to the quantification of benefits. Agencies can incorporate bicycle and pedestrian improvements into larger projects in applications for RAISE funding. In 2019, the program awarded $14.4 million to the Waterway Village Multimodal Access Project in Baldwin, Alabama. This project will include a new pedestrian bridge over a waterway and approximately three miles of complete streets (USDOT, 2019).

- The **Surface Transportation Block Grant** (STBG) program provides flexible funding to States for use on a variety of modes. In Missoula, Montana, STBG funds are helping replace the Russell Street bridge over the Clark Fork River. The project includes 5.5-foot-wide raised bicycle lanes, as well as bicycle and pedestrian crossings, which will provide connections to the riverfront and the Milwaukee Trail (Montana DOT, 2018).
- The **Transportation Alternatives (TA) Set-Aside** from the STBG program provides funds for smaller-scale transportation projects, such as pedestrian and bicycle facilities, historic preservation, vegetation management, environmental mitigation, recreational trails, and Safe Routes Partnership projects. Projects eligible under the TA Set-Aside also are eligible under STBG (FHWA, 2021b).
- The **Recreational Trails Program** (RTP), a set-aside from the TA Set-Aside (but typically administered through a State resource agency), funds projects for recreational trails and trailside facilities. Projects eligible under the RTP also are eligible under the TA Set-Aside and STBG (FHWA, 2021b).
- **Congestion Mitigation and Air Quality Improvement Program** (CMAQ) funds surface transportation projects that improve air quality and reduce congestion. Bicycle and pedestrian projects are eligible for CMAQ funds (FHWA, 2021b). All States receive CMAQ funds, which must be spent in areas that do not meet National Ambient

Air Quality Standards or have recently become compliant. CMAQ funds helped pay for construction for the Hampline bikeway in Memphis, a featured case study in this toolkit.

- **Highway Safety Improvement Program** (HSIP) funds can be used for bicycle and pedestrian safety projects, including on and off-road projects, that focus on bicycle and pedestrian safety. The Oregon Department of Transportation (ODOT) developed the All Roads Transportation Program to allocate HSIP funding through a data-driven process that considers all roads, regardless of roadway ownership (ODOT, 2018). Through this program, HSIP funds helped deliver the Commercial-Vista Corridor Project, a set of aesthetic and infrastructure improvements along the Commercial Street SE corridor. These improvements included bicycle lanes and protections for pedestrian crossings (ODOT, 2021b).
- Many **Federal transit programs** can fund active transportation improvements. FTA encourages transit agencies to improve active transportation access when making transit improvements. Under the Urbanized Area Formula Program, for instance, recipients can fund bicycle routes to transit facilities and bicycle racks and shelters at transit facilities. For example, the Utah Transit Authority received funding through the Grants for Buses and Bus Facilities Program (49 U.S.C. 5339) to improve bus stops in the Salt Lake City area. These improvements include bike racks (Federal Transit Administration, 2019).
- The **National Highway Performance Program** (NHPP) focuses on the performance of the National Highway System (NHS). Pedestrian and bicycle transportation projects associated with NHS facilities are eligible (FHWA, 2021b). Washington State DOT (WSDOT) allocated NHPP funds for a set of pedestrian mobility and safety improvements on Columbia Center Boulevard (WSDOT, 2018).
- There are several **Federal Lands and Tribal Transportation Programs** that provide financial resources to projects that provide access to or within Federal or tribal lands. These include the Federal Lands Access Program, the Federal Lands Transportation Program, and the Tribal Transportation Program (FHWA, 2021b). For instance, the Federal Lands Access Program is providing $11.7 million to construct a 5.5-mile pedestrian and bicycle trail in the Red Rock Canyon National Conservation Area in Nevada (Akers, 2020).

In 2019, the **Department of Transportation Appropriations** Act appropriated $3.25 billion for Highway Infrastructure Programs. The act sets aside the majority of this funding for projects eligible under the Surface Transportation Block Program as well as the Puerto Rico Highway Program, the Territorial Highway Program, and the Nationally Significant Federal Lands and Tribal Projects program.

In January 2021, the **Coronavirus Response and Relief Supplemental Appropriations Act** appropriated an additiona $10 billion for Highway Infrastructure Programs. This act aims to address some of the impacts of the COVID-19 pandemic on Highway Infrastructure Programs. This funding can support activities eligible under the Surface Transportation Block Grant Program, the Tribal Transportation Program, the Puerto Rico Highway Program, and the Territorial Highway Program

Beyond the key Federal programs that fund active transportation, other government programs focused on issues such as health or environmental sustainability may offer funding for active transportation related projects. For instance, the Centers for Disease Control and Prevention (CDC) awarded $1.3 million to the Cherokee Nation to increase active living as a means to address obesity. The Cherokee Nation used these funds to develop a Safe Routes to School Program and partnered with the Oklahoma Department of Transportation to apply for grants for infrastructure improvements (Safe Routes Partnership, 2015). More information about this project and other Safe Routes Partnership efforts in tribal communities can be found *here* .

The Federal Highway Administration maintains a list of potential active transportation funding sources under USDOT surface transportation funding programs.

Strategies to Access Federal Funding

The following sections summarize innovative strategies to access Federal funding sources for bicycle and pedestrian projects.

Incorporation and Bundling

Many bicycle and pedestrian improvements are not standalone projects, but rather are part of larger, multimodal investments. The practice of incorporating bicycle facilities into larger projects is also known as inclusion or completing the street. A study of best practices identified incorporation of bicycle-pedestrian facilities into larger projects as a strategic way to secure funding (Mid-America Regional Council [MARC], 2014). For example, the Eleventh Street Bridge Project in Washington, D.C., a major bridge construction project, includes a bicycle and pedestrian path. This project used a variety of funding and financing sources, including GARVEE bonds, general obligation bonds, parking tax revenues, right-of-way fees, Federal program funds, and private funds (FHWA, n.d. b). Agencies have incorporated active transportation facilities into Complete Streets projects, including on BelRed Street in Bellevue, Washington; Piedmont Avenue in Atlanta, Georgia; and State Street in West Lafayette, Indiana (FHWA, n.d. b).

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Transportation Improvement Program Strategies

Agencies can also strategically engage with the project selection process in a way that helps include more bicycle and pedestrian projects in TIPs. In addition to allowing for bundling and grouped listings, States and Metropolitan Planning Organizations (MPOs) can revise project selection criteria to favor bicycle and pedestrian projects. For example, Maryland DOT has a scoring system that awards points for projects that encourage nonmotorized transportation (FHWA, 2018) and Colorado DOT (CDOT) developed project-level and system-wide performance measures for active transportation to suppor investment system criteria. CDOT's bicycle and pedestrian plan includes recommended methodologies for evaluating projects (CDOT, 2015).

Many agencies use performance measures and targets for active transportation, which can also help advance progress. Fo example, Pikes Peak Area Council of Governments (PPACG), sets mode share targets for walking and biking (PPACG, 2020). PPACG develops targets to clarify the definition of goals, track progress, and create a basis for supporting investment decisions. Metrics allow PPACG to compare the effects of alternative investments on bicycle and pedestrian objectives. The Community Planning Association of Southwest Idaho (COMPASS) sets targets for "bikeways per roadway miles," "miles of trails and pathways," and "bicycle level of service completion" (COMPASS, 2018). These targets help COMPASS make informed decisions about transportation investments.

Agencies can also support bicycle-pedestrian infrastructure development by designating a portion of the budget specifically for bicycle-pedestrian projects. Madison, Wisconsin sets aside $650,000 annually for bicycle projects (often with an overal budget of over $6 million when combined with Federal funds) (City of Madison, 2021). Larger cities such as Seattle and Minneapolis dedicate millions annually for bicycle and pedestrian projects (MARC, 2014).

Many agencies have advanced active transportation infrastructure through Complete Streets policies focused on improving mobility for a variety of modes. The Space Coast Transportation Planning Organization in Florida requires local governments to adopt a Complete Streets policy before applying for funding. Their Complete Streets criteria includes the number of pedestrian crossing opportunities and multimodal safety improvements (FHWA, 2018).

Federal-aid Matching Strategies

To receive Federal funding, agencies must meet matching requirements. Typically, agencies must provide 20 percent of project funding (FHWA, n.d. a). Several options can help make this requirement more manageable for agencies, including flexible match, tapered match, and toll credits. Agencies can use these strategies for standalone active transportation projects or for larger multimodal projects that include active transportation components.

Flexible Match

Multiple policies have expanded the types of funding sources that agencies can use to match Federal funds. In some circumstances, agencies can use Federal funds to help pay for the local portion of a Federal-aid project. The *Center for Innovative Finance Support* lists Federal funding sources that agencies can use as a local match, including funding from the Recreational Trails Program funding and Federal Land Management Agencies. Additionally, agencies can use third-party donations to match Federal funds. Donations may include cash donations or in-kind donations such as materials, services, and equipment (FHWA, n.d. a). The *Center for Innovative Finance Support* also explains how to calculate donations in project costs and matching.

Tapered Match

Typically, agencies must contribute a specific percentage of funding to Federal-aid projects every year. Tapered match gives agencies more flexibility in the timing of non-Federal contributions. Rather than requiring the same share of local match every year, tapered match agreements allow agencies to vary the share of contributions year to year, ultimately fulfilling the match over the life of a project. Tapered matching can be useful when agencies have not yet secured all of the funds needed to meet the contribution requirements but expect to do so over the course of the project. Agencies can initially use 100 percent Federal funds and gradually taper the Federal share as revenue streams increase. Agencies can qualify for tapered match if qualifying would help accelerate project completion, reduce project costs, and/or leverage additional non-Federal funds (FHWA, n.d. a). The *Center for Innovative Finance Support* explains the process for using a tapered match.

Toll Credits

When a tolling authority uses toll revenues to build, improve, or highways, bridges, or tunnels, that serve the public purpose of interstate commerce or a ferry that serves as a link on a highway, a State or MPO can earn toll credits. A tolling authority can be a public, private, or quasi-public agency, including a State DOT or chartered multi-state agency. USDOT designed toll credits to encourage investment in infrastructure. Agencies can use toll credits as a "soft match" for Federal-aid projects (FHWA, n.d. a). The Houston-Galveston Area Council (H-GAC), for example, has created specific policies for awarding toll credits. Bicycle and pedestrian improvements that are part of larger roadway improvements can qualify for these credits (H-GAC, 2020). The *Center for Innovative Finance Support* has additional resources that explain how toll credits work, and in September 2021, FHWA issued *Updated Toll Credit Guidance* that outlines the procedures for earning toll credits and tracking toll credit balances.

State and Local Funding Options

Many State DOTs and MPOs have helped expand active transportation networks through policies and documents such as bicycle and pedestrian safety action plans and Complete Streets guidance. These documents can help signal that active transportation is a priority, help local agencies get started, and show how to incorporate bicycle and pedestrian elements into standard projects. Many agencies have made active transportation a priority and a part of the general budget, taking steps to make sure that bicycle and pedestrian facilities are considered in every project. When lacking sufficient funding, however, State and local agencies have found many other innovative sources of funding.

Ballot Measures

Many States allow voters to use ballot measures to approve tax expenditures (League of American Bicyclists, 2014a). Citizens can create petitions related to issues they care about, such as bicycle-pedestrian safety. If the petition gets enough signatures, the local ballot includes the measure for voters to approve or vote against in elections. Previous ballot initiatives have increased State or local sales taxes, property taxes, gas taxes, and vehicle fees to create new or expanded funding for bicycle-pedestrian projects. For example, ballot initiatives have funded active transportation projects in cities such as Tucson, Arizona (a half-cent sales tax passed in 2006). Ballot initiatives can also propose reallocating Federal transportation funding. Additionally, cities can use ballot initiatives to approve bonds.

Key steps to passing a ballot measure include establishing a campaign timeline (the League of American Bicyclists suggests 6-9 months), considering the election year (general elections can be best for voter turnout), finding a champion, and crafting effective messaging (League of American Bicyclists, 2014a). The League of American Bicyclists' *Success at the Ballot Box: Winning Bicycle-Pedestrian Ballot Measures* and Los Angeles Metro's *How to Pass a Mega Transportation Measure* provide additional tips, considerations, and examples.

Local Planning Assistance Grants and State Funding Sources

States often offer funding to help local agencies with planning. State departments of health or transportation may offer funding to create bicycle-pedestrian plans, update existing plans, or update Safe Routes Partnership programs. In some States, there are opportunities to leverage funding by demonstrating the environmental benefits of active transportation projects. For example, the California Air Resources Board has a *Clean Mobility Options Program* that provides voucher-based funding for low-emissions projects, including bikeshare programs, in under-resourced communities.

WSDOT is an example of a State DOT that provides funding to support local active transportation projects. Through WSDOT's Pedestrian Bike Program, Jamestown S'Klallam Tribe received over $100,000. The Tribe used these funds to design a half-mile trail section on an existing railroad grade (Jamestown S'Klallam Tribe, 2020).

In Eugene, ODOT's Oregon Bicycle and Pedestrian Grant provided most of the funding for the city's first separated bikeway (League of American Bicyclists, 2014b). Currently, ODOT helps fund local active transportation projects through several programs, including the Safe Routes Partnership, which can fund infrastructure improvements; a Sidewalk Improvement Program, which allocates State Highway Fund dollars for bicycle and pedestrian improvements on or along State highways; and Oregon Community Paths, which combines funds from Oregon's Multimodal Active Transportation Fund, Oregon Bicycle Excise Tax, and Federal Transportation Alternatives Program to fund primarily off-street pedestrian and bicycle facilities (ODOT, 2020). North Carolina DOT's (NCDOT) Division of Bicycle and Pedestrian Transportation administers an annual matching grant program. Since 2004, NCDOT has awarded 217 planning grants and allocated $6.5 million to 211 municipalities (NCDOT, 2020).

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State and local governments also have a general fund that serves as a flexible funding source. General funds can often help pay for active transportation projects. For example, in 2013, the Delaware General Assembly authorized $3 million fo statewide trails and pathways (League of American Bicyclists, 2014c).

Sales Taxes and Other Fees

States and local governments can use local taxes and fees to fund bicycle-pedestrian infrastructure. Property taxes and sales taxes can serve as a major funding source for transportation. Vehicle registration fees, traffic violation fines, real estate recordation taxes, and other fees can also help fund active transportation, often in the vein of improving road safety. States such as Georgia, Tennessee, and Texas sell special license plates to raise money for bicycle safety efforts (League of American Bicyclists, 2018).

Some States dedicate school zone speeding fines to improve school zone safety. In Washington State, 50 percent of the increased fines for failing to yield the right of way to bicyclists and pedestrians in school zones goes to an account that funds school zone safety improvements.

Other Private Funding Options

Agencies can use a variety of other private funding options to fund active transportation projects.

Advertising and Sponsorships

Advertising and sponsorships can provide public agencies an additional source of revenue for projects. Sponsorships may involve directly funding projects or providing services. Companies and institutions may be interested in sponsoring bicycle and pedestrian improvements for a variety of reasons, including brand recognition and/or a motivation to improve the area where their business is located (FHWA, 2020b). Smaller businesses may be motivated to contribute to bicycle and pedestrian infrastructure to increase foot traffic to their business and make the area a more attractive place to live and work.

In Florida, Statute 260.0144, adopted in 2012, gives the Florida Department of Environmental Protection the authority to sell sponsorship agreements and naming rights on selected State trails. About 85 percent of profits fund State trails and 15 percent of profits go to the Florida Transportation Fund for the Florida Traffic and Bicycle Safety Education Program and the Florida Safe Routes Partnership Program (League of American Bicyclists, 2014c).

Sponsorships can also help brands build their image. Several bikeshare programs sell naming rights to corporate sponsors In New York City, for instance, Citi paid $41 million to be the City's Alta Bicycle Share program's primary sponsor (H-GAC, 2015).

Agencies considering advertising and sponsorships may need to consider regulations and whether these advertisements will impact the image and credibility of the agency (FHWA, 2020b).

Local Partnerships

Businesses, hospitals, universities, and other community institutions can serve as potential partners and funding sources. These institutions have a vested interest in community improvements. The University of Montana, featured as a case study, built a two-way cycle track near its campus using a Special Improvement District. The Seattle Children's Hospital, also featured as a case study, committed $4 million to bicycle, pedestrian, and other transportation improvements in the neighborhoods surrounding the hospital.

The Louisville Loop, a network of shared-use paths that will ultimately include approximately 100 miles of trails in and around Louisville, Kentucky, has leveraged several partnerships to move the project forward. Private partners, local development corporations, the U.S. Army Corps of Engineers, government agencies, and citizen groups have all played key roles in the project (Louisville Metro Council, 2013).

Utilities and other companies, that already build and maintain corridors may also be willing to help construct bike paths. Partnerships with utilities led to the construction or reconstruction of 10 miles of bike paths in Madison, Wisconsin (MARC, 2014).

Private Grants and Philanthropy

Several local and national foundations and nonprofit organizations provide funding for bicycle and pedestrian facilities. H-GAC's *Funding Guide for Pedestrian and Bicycle Improvements* points to sources such as the American Hiking Society's National Trails Fund and the PeopleForBikes' Community Grant Program. Membership organizations such as the National Association of City Transportation Officials and the Urban Sustainability Directors Network may also offer funding opportunities (Shared-Use Mobility Center, 2020). See the Additional Support for Bicycle and Pedestrian Projects Section for additional advocacy and philanthropy resources.

The Indianapolis Cultural Trail is a large-scale example of using private funds for bicycle and pedestrian facilities. Two prominent Indiana philanthropists, Eugene and Marilyn Glick, donated $15 million for naming rights of the eight-mile separated facility. In total, private donations covered $27.5 million of the $63 million total cost (Pedestrian and Bicycle Information Center, 2014).

In Northwest Arkansas, the Walton Family Foundation, led by the Walmart founders' grandchildren, has given over $70 million to build bike and pedestrian paths and trails. The Walmart headquarters is located in Northwest Arkansas, which motivated the Walton Family Foundation to invest in the community (Sweeney, 2018).

Philanthropy is also playing a key role in Bayou Greenways 2020, a project along Houston's waterways that will add over 80 miles of walking and biking trails. This project has received extensive private support, including a $50 million donation from the Kinder Foundation (Kinder Foundation, 2020). The Houston Parks and Recreation Department and Houston Parks Board, a nonprofit organization, are partnering on this project (High Line Network, 2020). Houston Parks Board raised $120 million for the project. Additionally, $100 million of 2012-voter-approved bond money from the City of Houston has supported the project (Kinder Foundation, 2020).

Agencies can work strategically to compete for grants. Boulder B-Cycle, a nonprofit bikeshare program in Colorado, has a staff member dedicated to applying for grants from organizations such as Patagonia and the Gates Foundation (Shared-Use Mobility Center, 2020).

In-Kind Donations

In-kind donations can be an effective way to reduce project costs and engage local organizations. The Tweetsie Trail, a 10-mile trail featured as a case study, dramatically reduced project costs through in-kind donations. Local construction companies donated labor to build bridges for the trail; a local quarry provided the rock for the surface of the trail; and signage companies donated the trail signs. An initial construction bid estimated the trail would cost $8 million; in-kind donations and other cost-saving strategies cut that cost to $800,000 (Stark, 2020). Volunteers and adopt-a-path programs can also help reduce beautification and maintenance costs (H-GAC, 2015).

Individual Donations and Crowdfunding

When traditional funding sources are insufficient, community members can help close the gap. For the 10-mile Tweetsie Trail in Johnson City, Tennessee, monetary donations from the community covered over half of the construction costs (in addition to significant in-kind donations). A crowdfunding platform called ioby ("In Our Backyards"), which focuses on neighborhood projects, has helped secure funding for multiple active transportation projects. In Memphis, the Hampline bicycle corridor was $70,000 short of funding. Instead of waiting until the next funding cycle, the project team used ioby to work towards the target. Ultimately, 700 individuals donated to meet the $70,000 goal (ioby, 2014). Following Memphis' example, Denver used crowdfunding to raise $36,000 for a protected lane on Arapahoe Street (BikeLife, 2015).

Financing Strategies

Overview

Financing methods are particularly important for projects with high upfront costs. States and municipalities often do not have sufficient cash to immediately pay the full costs of large-scale infrastructure projects. Financing tools allow State and local governments to secure initial funding and find a source of revenue to repay it.

Local governments can sell bonds to help pay for infrastructure projects. Additionally, the Federal government provides options for innovative finance support, including Grant Anticipation Revenue Vehicles (GARVEEs), Transportation Infrastructure Finance and Innovation Act (TIFIA) loans. Several States have State Infrastructure Banks that offer grants and loans for infrastructure projects.

Many financing tools are best suited for large-scale projects. TIFIA loans, for example, are for highway and freight rail projects that cost at least $50 million or one third of a State's annual apportionment of Federal funds. Agencies can access Federal financing tools for bicycle-pedestrian infrastructure by incorporating these improvements into larger projects. For example, a TIFIA loan helped finance the Governor Mario M. Cuomo Bridge in New York. The bridge included a bicycle and pedestrian path (FHWA, 2019a).

Bonds

Bonds are a form of debt that can finance transportation projects. For active transportation projects, the most common type of bonds used are municipal bonds, which are debt securities issued by State, city, and other government entities. Municipal bonds include general obligation bonds and revenue bonds. Governments, rather than assets, back general obligation bonds; the government can repay the bonds by taxing residents.

To use revenue bonds, agencies must designate some form of dedicated revenues to underwrite bonds, such as tax revenues. Identifying a source of dedicated revenues can be a challenge for some active transportation projects. In recent years, some cities have looked to bond measures as a mechanism for expanding active transportation. These cities often use tax revenue to repay bonds. The Austin Mobility Bonds, featured in a case study, have played a pivotal role in expanding the bicycle network in Austin, Texas. The 2016 Mobility Bond was a $720 million general obligation bond that specifically allocated $20 million for bikeways. It also included funding for other relevant programs such as the Safe Routes Partnership, urban trails, and sidewalks (City of Austin, 2017). Denver and Chicago have also used general obligation bonds to pay for active transportation projects (League of American Bicyclists, 2014b).

The Transportation Trust Fund Authority, an independent agency of the State of New Jersey, issues appropriation credit bonds to help finance transportation projects. Appropriation credit bonds are a type of obligation bond that can be issued

without taxpayer approval (MunicipalBonds.com, 2016). Bonds support New Jersey's Bikeways Program, which issues grants to municipalities for bike paths (League of American Bicyclists, 2014c).

Grant Anticipation Revenue Vehicles

Under the National Highway System Designation Act of 1995, State and local governments can use Federal funds to pay the principal or interest of debt financing instruments. Grant Anticipation Revenue Vehicles (GARVEEs) can be any debt financing instrument, such as bonds, notes, certificates, mortgages, or leases (FHWA, 2020d).

GARVEEs are best suited for larger-scale projects ranging from tens of millions to hundreds of millions of dollars, so they may not always be relevant for standalone bicycle and pedestrian projects. GARVEEs have helped finance large-scale multimodal projects that include bike lanes. For example, $165 million GARVEE bonds helped finance the Lake Barkley Bridge in Canton, Kentucky. This bridge has a 10-foot wide, protected multiuse path that connects Canton to the Lakes National Recreation Area (FHWA, n.d. b).

Transportation Infrastructure Finance and Innovation Act Loans

The Transportation Infrastructure Finance and Innovation Act (TIFIA) created a Federal program that provides credit assistance for surface transportation projects in the form of loans, loan guarantees, and standby lines of credit. TIFIA is most useful for large-scale projects. Agencies can incorporate active transportation elements into larger-scale projects that use TIFIA loans.

The City of Chicago and Chicago Department of Transportation (DOT) used a TIFIA loan for expansion of the Riverwalk, a 0.7-mile public walkway connecting the lakefront to downtown Chicago, and reconstruction of Wacker Drive. A $98.7 million TIFIA loan financed the walkway and road reconstruction in conjunction with Federal, State, and local funds. A pledge of the City's share of State Motor Fuel Tax Revenue and Project Revenue served as a security for the TIFIA loan (FHWA, n.d. b).

State Infrastructure Banks

State Infrastructure Banks (SIBs) are revolving infrastructure investment funds. These State-administered programs may offer loans, capital reserves for bond/debt instrument financing, letters of credit, lines of credit, bond insurance, and/or loan guarantees for surface transportation projects. SIBs provide more flexibility for public and private sponsors of surface transportation projects – specifically for Federally funded Title 23 highway construction projects, Title 49 transit capital projects, and Title 49 (subtitle V) railroad projects. By providing borrowing options, SIBs can help accelerate project delivery; projects do not have to wait for grant money. SIBs are also able to provide lower borrowing costs by offering loan guarantees, pay bond insurance premiums, and below-market loan interest rates. States capitalize SIBs with State and Federal funds and can use SIBs to attract investments from other public and private sources (FHWA, 2020d). SIB loans can serve as an effective tool for active transportation projects because many SIBs provide loans for small-scale projects. For instance, in Ohio, the SIB provided loans of amounts as small as $1,600 in 2020 (ODOT, 2020).

A SIB loan helped finance the Orchard Pond Parkway, a 5.2-mile toll-road with five-foot wide bike lanes in Florida. The primary source of funding for this road was actually one person named Jeff Phipps, who anticipated that a road would eventually be constructed in the area and wanted to ensure that it was completed in a way that preserved the natural environment. Phipps spent $3.5 million and acquired a $13.5 million loan from the Florida DOT Infrastructure Bank. Toll fees will help repay the loan over the course of 30 years (FHWA, n.d. b).

Public-Private Partnerships

In public-private partnerships (P3), private entities provide some of the services that are typically the responsibility of the public sector. For surface transportation projects, P3s can involve paying a private entity to design, build, maintain, or operate a facility. The private sector partner may receive compensation through availability payments over the life of the contract or through fares or tolls paid by facility users. P3s can help manage project costs by providing access to new streams of capital and enhancing cost efficiency.

Through partnerships with private sector entities, agencies can:

- Access more capital
- Allow for shared risk and often more efficient management and/or faster project delivery (FHWA, 2020d)
- Gain lifecycle efficiencies when a single contractor is responsible for the lifecycle of the project (League of American Bicyclists, 2014d)
- Improve project quality because private entities have greater design flexibility (League of American Bicyclists, 2014d)
- Realize cost savings from efficiency gains (League of American Bicyclists, 2014d)

Colorado DOT (CDOT) entered into a P3 for a highway expansion featuring a 12-foot, multipurpose bikeway. CDOT and the High-Performance Transportation Enterprise (a government-owned business within CDOT) partnered with Plenary Roads Denver, a consortium of firms that delivers highway improvements. The first phase of the project was a design-build contract. The second phase was a P3, contracting Plenary Roads Denver to finance, design, build, operate and maintain the Phase 2 construction work. This project received national recognition for the partnership.

A P3 helped deliver the State Street Redevelopment Project, a set of infrastructure and aesthetic improvements on Purdue University's campus and in the City of West Lafayette. This multimodal project included bicycle facilities, transit stops, wider sidewalks, landscaping, and public art. To deliver the project, the City of West Lafayette and Purdue University entered into a P3 agreement with Plenary Roads State Street, a private consortium. The consortium included an equity group, a construction contractor, an engineering firm, and a landscape architecture company. The consortium's bid included a privately placed bond with fixed credit spreads. Under a 22-year design-build-finance-maintain P3 agreement, the Plenary Roads State Street consortium was responsible for financing, designing, and constructing the project, and will remain responsible for maintaining the pavement for 22 years after project completion. After project completion, availability payments compensated the consortium. West Lafayette tax increment finance districts provided $122.7 million From the consortium, $25 came from a senior credit facility, $40 million from senior notes, and $5 million from private equity (FHWA, n.d. b).

One of the most important parts of effective project delivery, particularly for P3s, is specifying clear roles for all stakeholders (Shared-Use Mobility Center, 2020) (Pedestrian and Bicycle Information Center, 2020a). Project partners can work together to determine how to distribute risk, ownership, operations, and management responsibilities (Shared-Use Mobility Center, 2020). Taking time at the beginning of a project to designate and document roles and responsibilities makes it easier to address hurdles later in the process.

Emerging and Supporting Strategies to Deliver Active Transportation Projects

Leveraging Funding Sources and Financing Methods

Agencies can accelerate and deliver successful projects by using combinations of funding and financing strategies from multiple sources. Financing methods can often help leverage additional funding sources, and vice versa. For instance, agencies can use grants as leverage for loans. For example, in order to build active transportation facilities, the City of Salem, Oregon implemented tax increment financing. Having this revenue stream helped the City access grants from FHWA's Surface Transportation Block Grant (STBG) Urban funding program. This strategy helped expand and improve active transportation facilities in downtown Salem. Many special assessment districts also use their funding to leverage State and Federal funding sources.

Agencies can also leverage funding and financing tools from multiple Federal agencies. Beyond the U.S. Department of Transportation, there are other agencies that offer both funding and financing for transportation projects. For example, the U.S. Department of Agriculture (USDA), Economic Development Administration (EDA), and Department of Housing and Urban Development (HUD) have funding programs that can work with FHWA-backed financing options. These programs often target rural or economically disadvantaged areas. USDA's *Community Facilities Programs* provide loans, loan guarantees, and grants that help improve public facilities in rural communities. Agencies can integrate many of these funding and financing programs with FHWA programs to create comprehensive financing packages.

The U.S. Environmental Protection Agency (EPA) is another example of a Federal agency that may be able to support active transportation projects. The EPA's *Building Blocks for Sustainable Communities* program has helped communities across the country plan for bikeshare systems, Complete Streets, and emerging mobility. Communities have used the funding to create Green Streets strategies and to conduct walkability audits (EPA, 2021). The Center for Disease Control and Prevention (CDC) has also contributed to active transportation projects throughout the U.S. The *Preventive Health and Health Services (PHHS) Block Grant Program* provides funding for community-driven initiatives that help achieve healthy communities. In Fiscal Year 2020, over $40 million helped fund public health infrastructure (CDC, 2021).

Leveraging strategies can also accelerate project delivery. With innovative financing and cross-agency financial participation, agencies can sometimes begin projects immediately, and if interest rates offered through other agency programs (e.g., USDA, EDA, or HUD) are less than the rate of inflation or comparable FHWA programs, these cross-agency programs can save money.

Green Funding and Finance

As governments across the country begin to address the consequences of climate change, innovative policies such as cap-and-trade and green financing programs have begun to emerge. Many of these programs create new funding and financing options for low-carbon footprint activities. Because active transportation projects can support a reduction in greenhouse gas emissions, these climate-related programs may open new funding and financing opportunities for bicycle and pedestrian infrastructure.

Cap-and-Trade

Cap-and-trade policies can generate significant revenues and often designate these revenues for low-carbon activities â€“ such as active transportation infrastructure. Policymakers expect that the Transportation and Climate Initiative Program will generate nearly $100 million annually in each participating State. These funds will support clean transportation projects, which may include bicycle and pedestrian infrastructure (Fisher, 2020). California's Cap-and-Trade Program has generated billions of dollars for the Greenhouse Gas Reduction Fund, which has provided $10 million for California's Active Transportation Program and funded several other programs that support low-carbon, multimodal transportation options (California Air Resources Board, 2020).

Some cap-and-trade programs target transportation-sector emissions. In December 2020, Connecticut, Massachusetts, Rhode Island, and Washington, D.C. committed to the Transportation and Climate Initiative Program, which targets gasoline and diesel suppliers (Fisher, 2020). California's program, launched in 2013, initially covered electricity generators and large industrial facilities and, in 2015, expanded to include natural gas and transportation fuel distributors (California Air Resources Board, 2015). In April 2021, the Washington State Legislature passed legislation for an economy-wide cap-and-trade program and a carbon fuel standard program. With the carbon fuel standard legislation, transportation fuel producers and importers incur deficits for fuels at a certain level of carbon intensity. These companies can offset deficits by importing, selling, or producing fuels with carbon intensity lower than the standard; implementing carbon capture projects; and creating infrastructure programs (Grannett and Green, 2021).

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Green Financing

Green financing is opening new opportunities for low-carbon transportation activities such as active transportation. Green financing describes a broad set of financial activities that support sustainability objectives (United Nations Environmental Programme, n.d.). These mechanisms include green bonds, green insurance, and energy efficiency mortgages. Green bonds, for instance, are bonds that fund projects with sustainability-related objectives. In Rhode Island, voters approved Green Economy Bonds in 2016 and 2018, which have dedicated millions of dollars to bicycle paths throughout the State (Belmore, 2017). Some financial institutions offer green loans, which also help finance sustainability projects (National Law Review, 2019). Clean transportation and multimodal projects qualify under the *Green Loan Principles* (Loan Market Association et al., 2021).

Demonstration Projects

Communities that have seen and experienced the benefits of a bicycle lane are much more likely to support one. Jeannette Sadik-Khan, who oversaw the building of nearly 400 miles of bicycle lanes in New York City, found that it was important to get a few initial projects off the ground quickly, even if the facilities were not permanent, to show residents the benefits of active transportation infrastructure (Pedestrian and Bicycle Infrastructure, 2020a). In Lincoln, Nebraska, the creation of a protected cycle track downtown catalyzed support for additional bicycle lanes throughout the city. The Lincoln MPO built this project quickly and built off of this success to create support for several other projects in the downtown area (FHWA, 2020c).

Quick Build

Quick Build is an approach that focuses on rapid installation of bike lanes in order to show communities the benefits of active transportation facilities. Agencies often build these facilities with the use of semi-permanent materials that they can replace them with more permanent materials in the long-term. Quick Build projects are typically focused, streamlined efforts that require support from leadership. Agencies may use quick installation techniques, consolidated design processes, expedited review phases, and coordinated agency teams to move the project from planning to implementation. Bicycle networks in Harris County, Texas; Minneapolis, Minnesota; and San Jose, California have used Quick Build methods to substantially expand their bicycle networks in just a matter of years (Pedestrian and Bicycle Information Center, 2020b). PeopleforBikes explains key considerations and steps in *Quick Builds for Better Streets: A New Project Delivery Model for U.S. Cities (2016).*

Better Block

The Better Block method, designed by Jason Roberts, is another innovative strategy for building public support. Better Block is a 24-hour intervention that temporarily transforms a public space in order to help communities reimagine it. A community development organization used this method on Broad Avenue in Memphis. For one weekend, the corridor featured a temporary bike lane, pop-up businesses, and art installations. This event helped build public support and attracted the attention of City officials. Ultimately, the City of Memphis built the Hampline (a featured case study) in this corridor (ioby, 2014). Cities such as Fort Wayne, Indiana; Des Moines, Iowa; and Pittsfield, Massachusetts, have used this method to help build support for active transportation infrastructure.

Case Studies

As noted throughout the toolkit, the effectiveness of each strategy depends highly on context. Many agencies throughout the country have already implemented these strategies and learned valuable lessons in the process. These case studies, provided in Appendix A, highlight six agencies and transportation organizations' successful implementation of innovative funding and financing strategies. These case studies vary in project type, funding/financing method, location, and scale of project. The objective of these case studies is to serve as reference points for agencies planning active transportation projects. Each case study includes background context, the reasons for selecting a particular funding/financing strategy, the project timeline, lessons learned, and effective practices. Transportation planners can share these case studies with other planners and leaders to understand how these strategies work in practice and/or to demonstrate that these strategies have been effective for other agencies. Figure 1 shows the locations of the six case studies and Table 2 summarizes the funding and/or financing methods used to deliver each case study project.

The Center for Innovative Finance Support website lists additional examples of effective funding and financing strategies, for active transportation projects as well as other project types. These project profiles cover a wide range of strategies and project types, including large-scale bridge and Complete Street projects that included active transportation facilities.

Figure 1: Map of Case Studies

Table 2: Summary of Case Studies

Project	Value Capture Methods	Federal Funding Sources	Public-Private Partnerships	Local Funding Options	Debt Financing	Procurement / Delivery Strategy	Summary
Tweetsie Trail				x		In-house construction, in-kind donations, and design-bid-build	The Tweetsie Trail is a 9.6-mil rails-to-trails project in Johnsc City, Tennessee. The project used local funding, individual donations, and in-kind donations. Johnson City has a population of 66,778.
Zach Scott Street and Schieffer Avenue Improvements					x	Field engineering and Indefinite delivery, indefinite quantity concrete contract	This case study covers one project built with Austin Mobili Bond revenues: a 0.7-mile, two-way protected bikeway. T Austin Mobility Bonds are bon packages that have made millions of dollars available for active transportation projects Austin, Texas. Austin has a population of 964,254.
Maurice Avenue Cycle Track	x			x		Design-bid-build	The Maurice Avenue cycle trac is a two-way, protected bike lane in Missoula, Montana. The bike lane was part of a larger set of improvements paid for b a University special improvement district, the city Missoula, and the Montana Department of Transportation. Missoula has a population of 75,516.
Cully Boulevard Green Street Project	x					Design-bid-build. Trained local work force for construction flaggers and landscaping.	The case study focuses on the Cully Boulevard Green Street project, which included separated bike lanes. Transportation System Development Charges, one-tir development fees that fund transportation infrastructure ir Portland, Oregon, supported this project. Portland has a population of 653,115.
The Hampline		x	x	x		Design-bid-build	The Hampline is a 1.7-mile bicycle corridor in Memphis, Tennessee. Funding for this project came from crowdsourcing, a Congestion

							Mitigation and Air Quality Improvement Program (CMAQ grant, the City of Memphis, ar other private donations. Memphis has a population of 650,618.
Seattle Children's Hospital Livable Streets Initiative			x			In-house design and construction (Seattle DOT)	Seattle Children's Hospital committed $4 million for pedestrian, bicycle, and other transportation projects in northeast Seattle, Washington

Peer Exchange Summary

Introduction

In order to highlight additional perspectives and to showcase more stories of successful innovative financing and funding methods, the project team hosted a virtual peer exchange. Six participants prepared presentations and shared their stories of active transportation project planning, funding/financing, and implementation. These participants represented cities with populations of just over 3,000 (Pickens, South Carolina) to over 6 million (the Atlanta metropolitan area) and worked in transportation agencies, city government, a community improvement district, and a nonprofit. The projects were selected to cover a variety of funding and financing methods as well as active transportation project types. Table 2 shows the list of participants and focus areas. FHWA internal stakeholders and members of the Stakeholder Working Grou also attended this event.

Table 2. Peer Exchange Participants

Name	Current Entity	Current Title	Presentation Focus	Links
Julie Warncke	City of Salem (OR)	Transportation Planning Manager	HSIP funding changes; Urban Renewal Districts	https://www.oregon.gov/odot/engineering/pages/arts.aspx %20(All%20Roads%20Transportation%20Safety%20Program)https://w downtown-urban-renewal-area.aspx (Riverfront-Downtown Urban Renew
Joe Allen	Gwinnett Place Community Improvement District (GA)	Executive Director	Community Improvement Districts and project partnerships	https://gwinnettplacecid.com/
Susannah Barton	Memphis Medical Collaborative (TN)	Director of Quality Public Spaces	Medical district and Quick Build streetscape	https://www.mdcollaborative.org/streetscape-improvement
Julie Christesen	City of Tallahassee (FL)	Principal Planner	Micromobility program funding	https://www.talgov.com/place/pln-scoot.aspx
Amy Goodwin	Atlanta Regional Commission (GA)	Planning Coordinator	Livable Center Initiative funding program	https://atlantaregional.org/community-development/livable-centers-initi
Blake Sanders	Studio Main (Consultant to Town of Pickens, SC)	Consultant	Rail-to-trail funding and community partnerships	https://www.cityofpickens.com/doodle

The peer exchange took place on May 11, 2021. It was a virtual event hosted on Zoom. Each of the six participants share a five-minute presentation that summarized an active transportation program or project success story. These examples all used innovative methods to fund, finance, and/or accelerate project delivery. Participants shared details about these projects, implementation methods, challenges, and successes. Following the presentations, participants answered follow-up questions in a discussion.

Summary of Presentations

Overview of FHWA Resources

Innovative Finance

Pete Mancauskas of the Center for Innovative Finance Support (CIFS) provided an overview of the types of innovative finance programs available through FHWA and other U.S. government agencies. The CIFS program supports agencies interested in using Grant Anticipation Revenue Vehicle bonds (GARVEEs), State Infrastructure Banks (SIBs), Value Capture, and Public/Private Partnership (P3) funding initiatives. Mr. Mancauskas reviewed the ways in which the CIFS can assist State and local agencies and their infrastructure partners. CIFS provides training and grant writing support to help agencies find and implement financing and funding solutions for projects. The presentation included a definition of Innovative Finance and listed many of the techniques most commonly used for financing and funding projects (see Table 3). These methods can work together and complement each other.

Innovative Project Finance

Specially designed techniques and tools that supplement traditional highway financing methods, improving governments' ability to deliver transportation projects.

Table 3. Innovative Funding and Financing Techniques

Funding	Financing
Tolling	Opportunity Zones

Public Private Partnerships	GARVEE Program
Funds Leveraging	TIFIA
Special Assessments	Joint Ventures
Tax Increment Financing	State Infrastructure Banks
Fees	FHWA Grant Programs
Advertising and Naming Rights	Other Federal Financing
Developer Contributions	
Concessions	
Joint Development	
Toll Credits	

CIFS is currently developing training materials and resources for planners to use in the planning process. The CIFS makes these resource available to project proponents to help them work on funding, financing, and P3 strategies. It also offers real-time technical assistance in developing financial plans and assisting with grant applications. CIFS is also developing other tools and resources to assist local planning agencies in identifying innovative finance methods that are applicable to a wide range of projects.

The presentation also contrasted conventional funding versus innovative financing methods (Table 4). Conventional funding relies on a "pay-as-you-go" concept that often requires substantial time to aggregate revenues before sufficient funds are available to support a project. This typically includes "banking" underwriting funds before State or local bonds can be issued and construction can begin. Innovative financing allows structured debit to be taken on earlier in the project development process. Appropriately structured financing can be aligned to the life of the asset, producing a more equitable way of paying for projects over time.

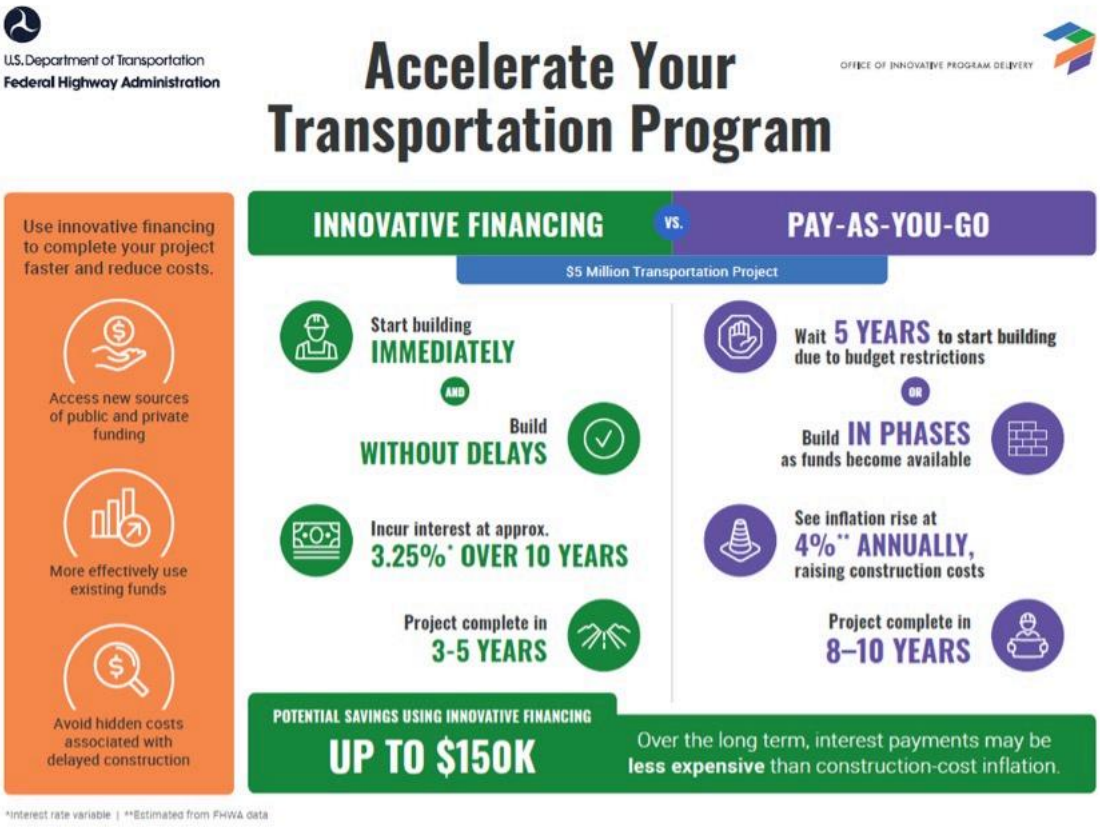
Table 4. Innovative vs. Conventional Methods for Funding and Financing Active Transportation Projects

Innovative Methods	**Conventional Methods**
Use of project-based revenues (e.g., tolling, value capture)	Gas taxes
Debt Financing (Public or Private)	Pay-as-you-go
Expanded private sector role in financing and delivering projects	Issue State-backed bonds
Value Capture leveraging	
Funds leveraging – identifying projects that have dual funds' eligibility across existing Federal programs.	

Mr. Mancauskas also highlighted advantages of innovative finance, including the ability to leverage existing funds to do larger projects or to develop more projects more quickly. In some communities, innovative finance may involve new methods that require outreach and support from stakeholders. Working with new methods offers an opportunity for planners and project developers to engage the community. As part of the communication process, planners can explain the advantages and benefits of innovative financing and answer questions. This process often helps to elevate community awareness of financing methods as well as the benefits of the project itself.

Figure 1 demonstrates how the advantages of innovative financing can be communicated. In this example, banking the funds to build a project under a "pay-as-you-go" approach may require waiting for several years due to budget restrictions. If the interest rate for innovative financing is less than the rate of construction cost inflation, that can be a reason to consider innovative financing. Further, projects that depend on "pay-as-you-go" financing can often be accelerated through innovative financing, which can result in cost savings from delivering a project quickly.

Figure 1 – Advantages of Innovative Financing for Project Delivery



Source: Center for Innovative Finance Support (CIFS)

Finally, Mr. Mancauskas emphasized that there is more than just the FHWA involved in transportation finance. Innovative finance can involve many Federal agencies and the leveraging of a variety of programs designed to support community infrastructure development. Many of these agencies target rural or economically underdeveloped areas. Agencies like the U.S. Department of Agriculture (USDA), the U.S. Department of Commerce's Economic Development Administration (EDA), and the U.S. Department of Housing and Urban Development (HUD) often offer programs that work well with FHWA funding sources. An example was given of work on a recent collaboration with the USDA to use FHWA Federal aid to support loan repayment through the GARVEE program to repay a USDA loan. Also, shopping around for different programs offered through other agencies in the U.S. government can often lead to obtaining better interest rates or terms, which can bring overall project financing cost down substantially.

Training, tools, and resources can be found on the CIFS web site.

Active Transportation and Multimodal Connectivity

Fleming El-Amin, Team Leader for the Livability Team within the Office of Human Environment, explained the partnership between the Office of Planning, Environment, and Realty (HEP) and the CIFS. He explained that the role of the Office of Human Environment within HEP is to help coordinate bicycle and pedestrian network planning and to provide technical assistance to regions, States, and local governments in enhancing multimodal connectivity. He also discussed ongoing research on achieving transportation equity and helping stakeholders integrate micromobility (such as e-bikes and e-scooters), shared mobility, and other emerging technologies into the transportation network.

The Office of Human Environment also supports other program initiatives like the Recreational Trails Program, Safe Routes to School, Transportation Alternatives Set-Aside, value capture, economic development, and equity assessments. Several resources are available through FHWA's *Bicycle and Pedestrian Program* website. These include a self-directed bicycle facility design course offered through the National Highway Institute, strategies to accelerate multimodal program delivery, a guidebook describing strategies for measuring multimodal connectivity, fact sheets on micromobility and Complete Streets, and a guidebook with strategies for accelerating multimodal project delivery. There is also an emphasis on implementing Complete Streets and providing design resources to assist in planning Complete Streets. FHWA's Office of Safety also maintains bicycle and pedestrian safety resources on their webpage. Web links to all of these resources and additional information that may be of interest to participants in the Peer Exchange are included in Additional Support for Bicycle and Pedestrian Projects.

Funding Walking and Bicycling Infrastructure in Salem, Oregon

Salem, Oregon initiated a study of mobility in the Downtown Salem area in 2011 with the Central Salem Mobility Study (CSMP). The study used local planning funds and produced a series of recommendations for the short-, medium-, and long-term. Recommendations included locations and cost estimates for directional conversions on local streets, creation of family-friendly bikeways, pedestrian safety projects, and improved connectivity between the Central and North Downtown areas. The study focused on how pedestrians and bicyclists got to and through congested areas of Downtown Salem. Study recommendations were adopted by the Salem City Council in 2013 and incorporated into the Salem Transportation System Plan (STSP) in 2014. The City is in the process of implementing the short-term recommendations with bike lanes

Project Summary

Project: Salem, OR Mobility Projects

- Urban Bicycle and Pedestrian Improvements

and bikeway projects located primarily in the Riverfront-Downtown Urban Renewal Area (R-DURA) (see the Central Salem Mobility Study). The Riverfront-Downtown Urban Renewal Area, established in 1975, is administered by the Urban Renewal Agency. The Urban Renewal Agency consists of a board with the mayor as the chair, the city manager as the executive director, and the City Council as board members.

- Multiyear, long-range plan for Urban Renewal Area
- Benefits: Safety, access and mobility for pedestrian and bicyclists in Central Salem
- Partnership with Urban Renewal Area
- Funding Sources: STBG-U ($580,000); CMAQ ($2.3 million); ODOT's ARTS Program
- Improvements on-going based on long-range plan

Funding

Two sources of funds are being used in the City of Salem to fund bike and pedestrian projects: Urban Renewal funds and State and Federal highway funds. Urban Renewal funds financed through Tax Increment Financing (TIF) were used to leverage $580,000 in grants from the FHWA's Surface Transportation Block Grant – Urban (STBG-U) funding program for projects inside the R-DURA. Congestion Mitigation and Air Quality (CMAQ) program funds ($2.3 million) were used for projects outside of the R-DURA. Each of the projects was focused on implementing the short-term recommendations from the CMSP as part of the STSP. When it came to implementing the plan, Urban Renewal funding was vital for the projects, and also for leveraging Federal funds. There was one project that crossed the Urban Renewal boundary, so they were only able to use Urban Renewal funds for part of that project.

The City also used Highway Safety Improvement Program (HSIP) funds for improving bicycle and pedestrian infrastructure. These funds were used in areas outside of the Urban Renewal area. For example, these funds were used on bike lanes and protections for pedestrian crossings recommended by the Commercial Vista Corridor Plan.

Challenges and Opportunities

Oregon DOT was changing how it programed the Highway Safety Improvement Funds at about the same time as the City was applying for funds for their mobility projects through the All Roads Transportation Safety (ARTS) Program. ARTS was designed to address safety issues on local roads as well as on State highways. The Commercial Vista Corridor Plan projects were eligible for funding from the ARTS program, as data identified safety issues and effectiveness of countermeasures. The alignment of ARTS funds and the City's project provided an opportunity to expand and accelerate some of the bicycle and pedestrian projects located outside the R-DURA.

Outcomes

In 2017, the City completed a pedestrian bridge that had been in planning since 1975. It took 42 years from planning to implementation. This project used Federal funding, State funding, two different Urban Renewal districts, private funding, Tribal funding, and other sources of funds that were contributed over the years to keep the project going. The lesson for success in this project and in the other, more recent projects is that it often requires time to develop funding sources, and that more often than not, multiple sources of funds are required to leverage grants from Federal and State programs. Also, as new programs emerge or are reconfigured, such as with the ARTS funding from the Oregon Department of Transportation, these changes in program structure provide opportunities for project funding that may not have been in place when the project was first initiated. Successful funding of projects requires diligence, creativity in applying for and leveraging funds, and patience.

A Legacy of Partnerships - Gwinnett Place Community Improvement District

Project Summary

Project: Gwinnet Place Mobility Projects

- Interchange, Roundabout, and Streetscape Improvements
- Community Improvement District: Self-taxing district allowing commercial property owners to invest in planning, studies, and infrastructure to enhance district vitality
- Benefits: Support of businesses, improved safety, access, and efficient movement across modes
- Partnerships with County, State, MPO, Chamber of Commerce, and others
- Funding Sources: CID millage (tax) on real property, Special Purpose Local Option Sales Tax (SPLOST), Georgia Transportation Infrastructure Bank, Atlanta Regional Commission, private sector

The Gwinnett Place Community Improvement District (CID) was organized in March 2005. It covers Gwinnett County's Central Business District, located north of downtown Atlanta. In Georgia, CIDs are self-taxing districts that that allow commercial property owners to invest in planning, studies, and infrastructure improvements. This mechanism was created by the Georgia Constitution. CIDs are established through local legislation and a Governing Authority Resolution. Area investors agree to be part of the CID and elect a Board of Directors that then sets a millage (tax) rate on property to raise funding. Gwinnett Place CID is one of 34 CIDs in Georgia as of 2020 and the second formed in Gwinnett County. Comprised of 244 parcels with 180 individual property owners, Gwinnett Place CID raises approximately $1.2 million annually based on a rate of 5 mills ($5 for every $1,000 of property value). The CID is involved with landscaping, right-of-way maintenance, visitor assistance, safety initiatives, and overall advocacy and support for economic development initiatives. It also has a variety of incentives in place for development including being a designated Tax Allocation District (Georgia's form of tax increment financing) and an Opportunity Zone.

Funding

Gwinnett County CID funds infrastructure investments through partnerships with Gwinnett County Government, Georgia Department of Transportation (GDOT), the Atlanta Regional Commission (ARC), the State Road and Tollway Authority, the Georgia Transportation Infrastructure Bank, the Gwinnett Chamber of Commerce, and others. They have not directly used Federal funds but do benefit from Federal funding through ARC and GDOT. The most important source of funding is Gwinnett County's special purpose local option sales tax (SPLOST). The CID taps into that funding and lobbies for projects in the CID. ARC funding, including the Livable Centers Initiative, has also helped fund studies and advance projects. Pedestrian and bicycle-oriented projects funded inside the CID area and advanced by CID advocacy and study include:

- A Diverging Diamond Interchange (DDI) that enhanced safety for pedestrians
- Installation of additional sidewalks and landscaping as part of a roundabout project and commitment to maintaining landscaping
- Construction of 20 miles of sidewalks and streetscape

Figure 2 – Projects Initiated by the Gwinnett County CID (DDI, Roundabout, Sidewalk, and Streetscape)

Sources, from left to right: Camera Works Media and Gwinnett County CID.

Challenges and Opportunities

The Gwinnett Place CID has been focused on transforming an auto-centric area anchored by a dead mall into a more walkable, dense, urban community. The CID works as a facilitator of change, focusing on achieving shifts in perception of the area, on quality of life/economic development initiatives, and on infrastructure investment. The CID's vision is for Gwinnett Place to be the model for an internationally diverse, livable urban community. The area has a significantly higher presence of Millennials and Generation Xers than the county and Atlanta metropolitan area. It is racially diverse, with no single racial group representing more than 30% of the population.

One of the challenges with infrastructure is that local government does not always have the resources or desire to investigate a need or issue facing the Gwinnett Place. In these cases, the CID steps into study needs and issues. This allows Gwinnett Place to set the agenda and control their own destiny.

Outcomes

Community Improvement Districts are created for six years. After that time, property owners can vote to shut down the CID or to continue it and its voluntary self-taxing. This ensures close accountability with funders and the community served.

Gwinnett Place CID has success in focusing on accelerating the delivery of projects by serving as the initiator and providing funds to fill in gaps. For example, for the Diverging Diamond Interchange (DDI) Project, the CID took the lead to study needs, initiated creation of concepts, prepared construction plans, and then sought/lobbied for funding partners. The funding partners were Gwinnett County (the SPLOST), the State Road and Tollway Authority's Georgia Transportation Infrastructure Bank, and the CID. The CID also stayed in close contact with Gwinnett County, which managed the construction of the DDI and the roundabout. The CID was there to assist and interact with nearby impacted businesses and to assist with public relations and marketing. They also now manage landscaping and lighting on the bridge.

For the sidewalks and streetscape projects, the CID has directly handled almost all the construction, which helped to move things quickly through approvals, requests for proposals, etc. However, Gwinnett County managed construction for a large streetscape project on Pleasant Hill Road, Gwinnett's main street. The CID and county were able to work in partnership to keep things moving forward.

Overall, the CID has seen success as an initiator, through partnerships, and by leveraging their funding to help advance projects that otherwise would not have occurred.

Quick Build Streetscape in Memphis, Tennessee

The Memphis Medical District Collaborative (MMDC) was founded in 2016 by major hospitals, universities, and local philanthropy. It works with anchor institutions to strengthen the connections, communities, and campuses in the Memphis Medical District, so they are more vibrant, prosperous, and equitable. MMDC has five priorities: collaborating with anchor institutions, increasing housing supply, strengthening commercial corridors, building community wealth, and improving public life. The MMDC Quality Public Spaces Program addresses the "improving public life" priority. The program has completed 2.5 corridor miles of streetscape improvements and improved 24 intersections in four years. MMDC also funds and manages regular maintenance of these projects.

Project Summary

Project: Quick Build Streetscape in the Memphis Medical District

- Completed over 2.5 miles and 24 intersections in 4 years
- Maintains improved infrastructure
- Benefits: improve safety, walkability, and community satisfaction through low-cost simple quick-build projects
- Partnerships with the City to align with resurfacing projects and fund design, enhancement plans, and manage

Funding

MMDC's funding is a mix of anchor institution member dues (57%) and philanthropy (43%). The Quality Public Spaces Program accounts for approximately 20% of the total organizational program budget, with a total investment to date of $1.5 million.

enhancement installation and maintenance

- Funding Sources: Anchor institution member dues and philanthropy

The types of streetscape enhancements funded by MMDC include bulb-outs, bike lane protections, protected intersections, and public art elements. For example, MMDC worked with the City on implementing a road diet, buffered bike lanes, and artistic mid-block crossings on Manassas street. Another project improved a mile-long corridor heavily trafficked by seniors with mobility challenges. The corridor is adjacent to the largest Section 8 senior housing facility in Memphis, which is across from a small park. The project added a diverter to redirect traffic and stop dangerous left-hand turns. Other projects have added better delineators to make the street safer and more user friendly.

Figure 3 – Quick Build Streetscape Projects Funded by MMDC

Source: Memphis Medical District Collaborative.

Challenges and Opportunities

A goal of MMDC is to reallocate street space more equitably for all users. Infrastructure projects can sometimes take a long time and be costly. To overcome this challenge, MMDC has developed a Quick Build strategy. They partner with the City to align their work with resurfacing projects managed by the City. MMDC engages a design firm to develop striping plans for the City, including enhancement plans. MMDC then manages installation of enhancements while the City manages overall the overall road resurfacing. MMDC focuses on low-cost, simple solutions and follows a "test before you invest" strategy. In the case of one Quick Build project, they had challenges with the materials and ultimately determined with the City that a more permanent solution was necessary. That project is moving into final construction with the City in 2021.

Outcomes

MMDC has found that the private funding model allows for testing of designs and products, accelerates project implementation, and informs future infrastructure investments. Results from 2016-2020 of a Medical District Community Survey show an 81% increase in satisfaction with walkability and a 71% increase in satisfaction with public spaces. Projects like those funded by MMDC are now being replicated and planned in other parts of Memphis. A Quick Build intersection project is leading to permanent curb extensions. Going forward, MMDC is working with a consultant on a "Streetscape Lookbook" to develop 12 streetscape concepts and provide a guide for investments over the next 5-7 years.

Tallahassee Shared Micromobility Program

The Tallahassee Shared Micromobility Program grew out of an e-scooter sharing pilot program initiated in July 2019 at the behest of the Tallahassee City Commission. The program launched before the COVID-19 pandemic began and was impacted by the pandemic. The pilot was extended from its original 3-month period through October 2020. The initiative was structured so that it would be self-supporting – generating the revenue needed to fund staffing oversight, data collection, and other community support functions such as surveys of community acceptance needed to successfully test and implement a permanent program. Although initially conceived as an e-scooter program, the final implementation also included a bikeshare program using e-bikes. The success of the program has provided the City of Tallahassee's staff with the opportunity to share lessons learned in both the pilot and implementation stage with other cities interested in similar programs.

Project Summary

Project: Tallahassee, FL Micromobility Program

- Urban e-scooter and e-bike sharing concessions.
- Vendor-based pilot and implementation program.
- Benefits: improved mobility for wide range of users, including women and minorities.
- Close cooperation and support of vendors during pilot phase.
- Funding Sources: Self-funded based on vendor permits and per-ride user fees.
- Permit and fee structure reviewed every six months based on performance

Funding

The fee structure for the pilot program was designed around a permit fee of $5,000 per vendor and a $1 daily fee for each of the 200 e-scooters authorized under the pilot program. The pilot program was designed to last for three (3) months, and all revenues (permits and per day e-scooter fees) were lumped into a one-time $25,000 payment for each of the vendors. Initially there were five (5) vendors, yielding $125,000 in total pilot fees, which was enough to self-fund the initial program.

The pilot program lasted more than 3 months due to the pandemic, which extended the pilot period to October 2020. This extended period gave the City a chance to see how well the program was working and to make essential changes in how they decided to administer the program. In October 2020, the City transitioned to an on-going program with two vendors. Each vendor was allowed to field up to 750 e-scooters, with a minimum of 200 scooters required to be operational on a daily basis. The ongoing program is a three-year program funded by a $2,500 permit fee, a $0.60 per day e-scooter fee, and a fee of $0.20 per ride.

The City wanted to encourage bike-share and e-bike programs, too. So, they allowed vendors to offer e-bikes with no City-imposed permit requirement. The City also offered a $0.10 discount on the per ride fee for e-bikes.

Figure 4 – Tallahassee Multi-Vendor E-Scooter Program

Source: Tallahassee-Leon County Planning Department, 2021.

The structure of the financing and fees assessed by the City allows for the program to be fully self-sustaining. Fees from the pilot and the on-going program fully support the program and pay for the staffing, data aggregation, infrastructure, and other program requirements. No outside funding for program operations is required. Further, the presence of the e-scooter program has provided incentives for the City to make improvements to enhance the safety and operations of the bicycle infrastructure used by users of the scooter program.

Challenges and Opportunities

The challenges centered around micromobility's reputation as a “disruptive technology.” Most of this perception emerged from the introduction of a mode that people were not used to seeing or accommodating in their daily use of transportation infrastructure. For instance, people were not used to seeing e-scooters and e-bikes without dedicated docking stations. The City worked with vendors to resolve these problems before they became issues for businesses and nonusers.

The transition between the pilot and the permanent program also occurred when there was a major uptick in COVID-19 fears leading to uncertainty about how to transition the program during this situation. This occurred in April 2020 when the planning for the transition was initiated by the Tallahassee City Commission. The City was proactive in address the overriding sanitary concerns of the public and users, which turned out to be an important part of the transition to a permanent program.

Figure 5 – Micromobility Program Implemented Using Two Vendors

Source: Tallahassee-Leon County Planning Department, 2021.

The determination of fees was also a challenge. The city reviewed fee structures in other jurisdictions and made changes that they felt would work for the conditions in Tallahassee. The contracts with the current vendors include a provision that the fee structure will be evaluated every six (6) months based on the fact that operations and costs can change rapidly in this emerging, technologically driven segment of the transportation services market.

A portion of the fees collected by the City go to ridership data analysis. This analysis provided some interesting findings in terms of who uses the services and how they are used. Based on this data, the City has shown that the program supports both full- and part-time employment in the Tallahassee area. Many of the businesses whose workers use the program are minority- and women-owned. The micromobility program also provides new transportation options for nonwork and recreational trips. Existence of the program also increased the utilization of multiuse paths and paved trails that the City has invested in over the years, improving the return on investment in these facilities.

Outcomes

The success of the program is tied to its funding – the more successful the program is, the more the City can support it with expenditures. So far, the program has offered 275,000 rides, with few complaints from the public or interactions with the police. This was attributed to the very high level of communication between the vendors and the City staff. The City used the fees collected to support a designated staff person to work with the vendors and communicate with the public. The City also worked with other jurisdictions to help them address ways to start up programs. In the process of counseling other jurisdictions, the City was able to stay ahead of fast-changing conditions in the micromobility world.

The biggest factor influencing the program's success was the ability to adapt quickly to changing situations, communicate with vendors and users, and adjust the fees and funding to keep the program self-contained. Rather than adopt an adversarial or overly regulatory approach, the City viewed itself as a partner and worked with the vendors to address safety, equipment management, and, when the pandemic hit, the sanitary concerns of the public and City officials. Providing the City's designated program coordinator with both the responsibility and authority to work collaboratively with the vendors was a key to success of the project and acceptance by policymakers. Vendors also felt that they had a supportive partner and were more willing to work to make changes in how they managed their resources.

Livable Centers Initiative - Atlanta Regional Commission

The Atlanta Regional Commission (ARC) is the Metropolitan Planning Organization (MPO) for the Atlanta region. It is the federally designated agency charged with developing the regional long-range transportation plan and allocating Federal funds to the 20-county region with 5.5 million residents. ARC's Livable Centers Initiative (LCI) was created in 1999 in in response to a regional crisis. ARC was facing losing its Federal transportation funds due to its regional plan not meeting air quality standards. At that time, the infrastructure plan was filled with expansion projects. ARC responded by creating the LCI program. This program was designed to combat sprawl by supporting planning, policy implementation, and transportation infrastructure funds—primarily for bicycle and pedestrian facilities and transit access improvements.

Project Summary

Project: ARC Livable Centers Initiative

- Funds transportation projects, primarily bicycle and pedestrian facilities
- Competitive funding program with ARC working to support local governments
- Equity incorporated as a factor in funding decisions
- Benefits: Support for alternative modes and directed growth in town centers
- Funding Sources: Federal funding

Funding

LCI provides competitively awarded funding to local jurisdictions for three types of programming:

1. **Master Plans** (LCI Plans) incorporating land use and transportation: The purpose of these plans is focusing growth in downtown employment districts and station areas to direct growth to areas that combat sprawl and support active transportation and transit.
2. **Policy and Plan Implementation**: LCI provides funding and technical assistance for zoning, regulation, feasibility studies, etc.
3. **Transportation Projects**: The transportation projects that LCI funds are typically Complete Streets improvements. These projects often have innovative

scopes beyond typical pedestrian and bicycle facilities, including green stormwater management infrastructure, protected cycle tracks, and road diets.

- Experimentation with flexing funds to FTA to improve project delivery

ARC's Regional Transportation Plan currently commits $2 million per year for studies and $20 million for transportation infrastructure. Since its establishment in 1999, LCI has provided $293 million for 122 transportation projects and $19.5 million for 289 studies in 128 distinct centers and corridors. ARC allocates Federal funding sources to this program.

Challenges and Opportunities

MPOs like ARC have a lot of flexibility to create bicycle and pedestrian funding and technical assistance programs using the Federal Surface Transportation Block Grant Program (STBG). Use of Federal funds comes with the requirement to follow Federal regulations for procurement, right-of-way acquisition, environmental approvals, design standards, and construction. This requires dedicated and skilled staff. Based on the 106 LCI projects that have been built or authorized for construction to date in the ARC region, it generally takes seven years from notice-to-proceed with preliminary engineering to notice-to-proceed for construction.

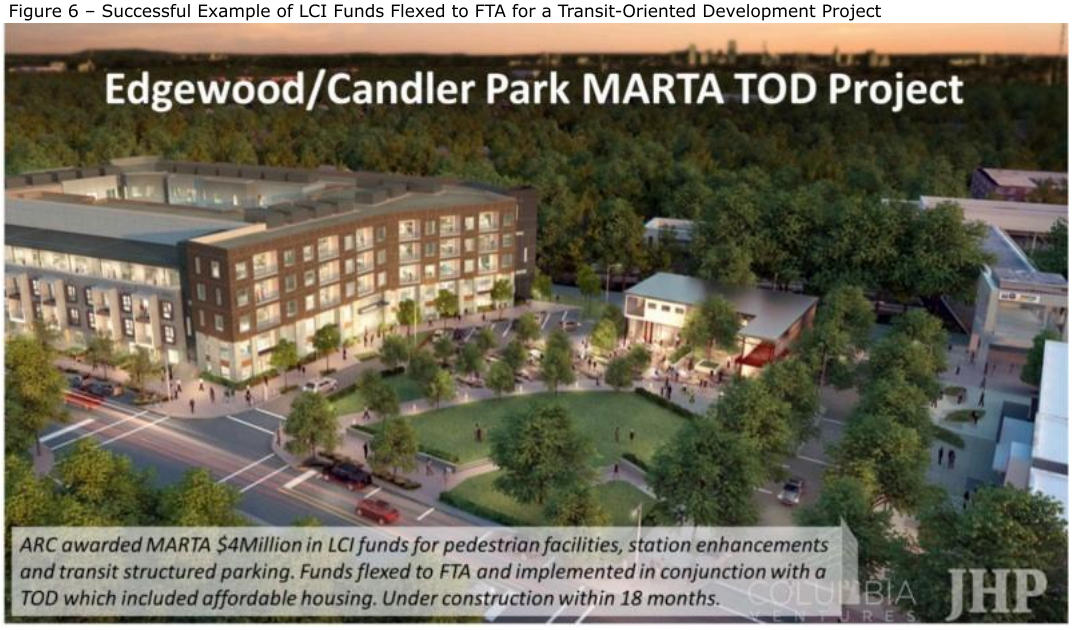
LCI projects share challenges with other locally led projects in the region, including:

- **High staff turnover** at partner agencies (both local government and GDOT)
- **Limitations in local government capacity**, g., City Managers charged with project management may not have the capacity to execute projects.
- **Change in political administrations/elections** – new leaders may decide not to adopt plans and/or may change direction on planned design concepts, such as road diets.
- **Difficulty in meeting local match requirements**, especially for historically disadvantaged communities, which may not have access to strategies such as tax increment financing and community improvement districts. This challenge can be compounded by timing issues of aligning local budget calendars, Special Purpose Local Option Sales Tax votes, etc.
- **Innovation of scope.** Sometimes, localities, consultants, and GDOT face challenges when incorporating innovations, such as public art/placemaking, larger street trees, road diets, reverse angle parking, charging stations, and green infrastructure, into the project scope.

Outcomes

Having a dedicated staff person at ARC to work closely with localities on the LCI projects, including providing technical assistance, guidance, convening meetings, and providing evaluation and follow up, is key to keeping the projects moving towards completion. ARC has also experimented with flexing funds to FTA to improve on project delivery. The agency is also investigating the possibility of "funding swaps;" other MPOs have had success with swapping local funds for Federal funds in order to use the local funds on LCI-type projects and Federal funds on already federalized projects, such as interstate widenings. The North Central Texas Council of Governments and the Metropolitan Transportation Commission have successfully implemented this strategy.

Figure 6 – Successful Example of LCI Funds Flexed to FTA for a Transit-Oriented Development Project



Source: Atlanta Regional Commission. Photo by Columbia Ventures & JHP, 2016.

One unique aspect of the LCI competitive process is that since 2011, up to 25% of project scores can be rewarded for equity-related characteristics. Up to 15% of the evaluation score is awarded for projects located in Environmental Justice Index areas or that directly serve HUD subsidized housing. Additionally, up to 10% of points can be awarded if the local jurisdiction has an adopted inclusionary housing ordinance or incentives. ARC has worked to improve their evaluation of equity over time.

Trail Funding and Implementation in South Carolina

The Doodle Trail is a nonmotorized, 9.5-mile walk/bike trail connecting two small cities in South Carolina's Greenville metropolitan area. The trail runs along a recently abandoned (2013) rail spur between Easley and Pickens, SC. The City of Easley has a population of about 20,000 and the City of Pickens has about 3,000 people. In addition to the trail, the project includes parks at both ends. New amenities have been introduced into the local communities, including a repurposed rail car that hosts new businesses, playground equipment, and signage along the trail and at trail heads. New housing, new businesses, and substantial new economic activity have all resulted directly from investments in this project.

Project Summary

Project: Doodle Trail

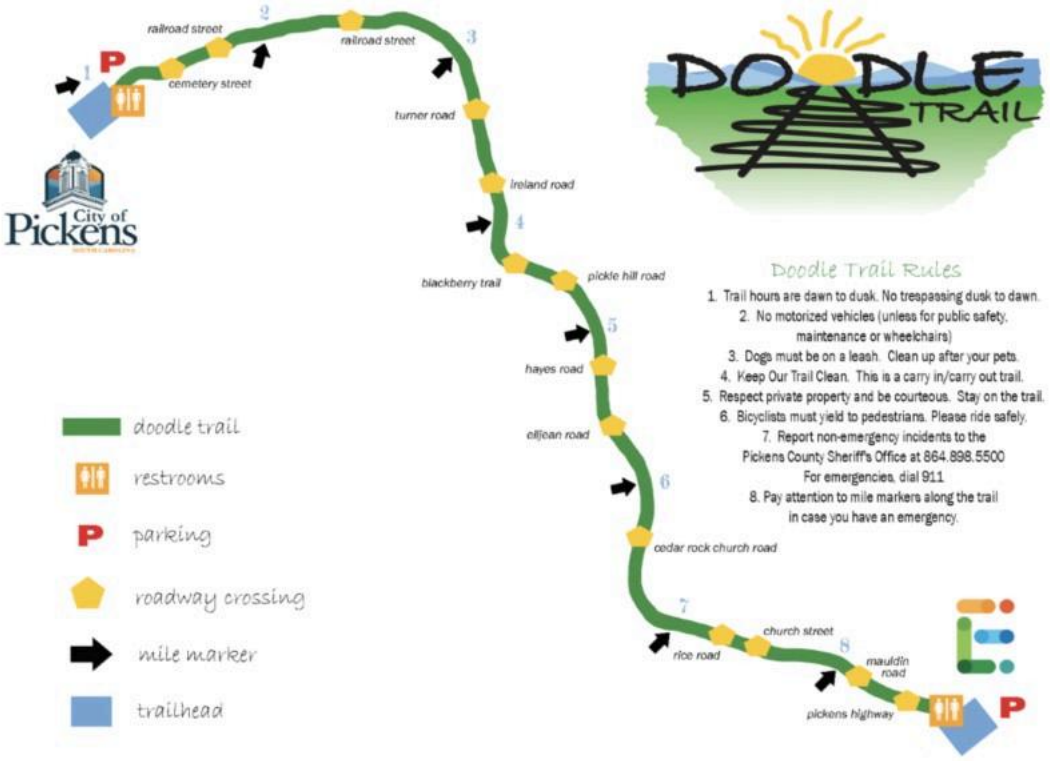
- 5-Mile Rural Walk/Bike Trail
- 2-year Construction Period
- Costs: ~$237,000 per mile
- Benefits: ~ $10 million per year in local economic activity linked to the trail and adjacent recreation complex
- Partnership between cities of Easley, SC and Pickens, SC
- Funding Sources: Local Grants + mix of TIF, CDBG, local taxes and Private funds

Funding

The funding for the project development came from a mix of private donations, public grants, dedicated local taxes, and regional transportation improvement funds. The project involved bringing together several different partners – each with a specific role to play and interest in the project. The trail master planning study was funded by the Greenville-Pickens Area Transportation Study (GPATS), the region's MPO. Both Pickens and Easley used their hospitality taxes as a source of bond funding for the purchase of the abandoned rail spur right-of-way.

Brownfield sites at both ends of the project needed remediation, which was funded by EPA grants. The parks that anchor both ends of the trail were funded by grants from the Appalachian Regional Commission (ARC) ($250,000) and a Regional Trails Program grant ($100,000). Doodle Park is located about one mile from downtown Easley and the trail head in Pickens ends near the downtown area. In addition, South Carolina DOT's Transportation Alternatives Program (TAP) funded a one-mile connector from the City of Pickens to the trail head. Funds from a dedicated portion of the State gas tax (2.66 cents) – the "C" Fund – supported paving of the trail and repaving of several of the local roads crossed by the trail.

Figure 7 – Map of Doodle Trail



Source: City of Pickens, Doodle Trail Map.

Challenges and Opportunities

Last mile connections proved to be the most challenging component of the project to fund. Also, having amenities at the terminals of the trail proved to be an important factor in contributing to a positive user experience. Since most of the traditional transportation enhancement funds and grant sources were used to acquire the 7.5-mile-long rail spur and to construct the main portion of the trail, construction of the remaining two miles of connectors into the downtown areas of Pickens and Easley was funded using the revenues from hospitality taxes. Land acquisition for the Pickens trail extensions included the use of Community Development Block Grant (CDBG) funds for property acquisition.

In Pickens, it was estimated that the trail helped attract as many as ten new businesses, including restaurants, taprooms, breweries, and equipment rental businesses located near the trail head – each generating additional hospitality tax revenues. These businesses included a bike rental shop and a local outfitter selling walking gear. Local restaurants in Pickens have also benefited from trail activity and the City has installed bike racks nearby to provide safe, secure places to store bikes used by trail riders. Some of the increased activity was also attributed to Clemson University's NCAA Division I Football National Championship in 2018.

Easley businesses directly benefiting from the trail include a running and biking outfitter shop and a local ice cream shop. The City also established a small business incubator in a repurposed rail car that is offered rent-free to start-ups. TIF funds are being used to improve local streetscapes near the park in Easley.

Figure 8 – Easley Rail Car Business Incubator

Source: Studio Main LLC.

In addition, other amenities like playgrounds, bike racks, and enhanced trail access were funded by private sources. These sources included contributions from local hospital/medical establishments (AnMed), power and utility companies (Blue Ridge Power Company and Duke Energy), the Rotary Club, and private companies (Michelin), among others.

One of the most unusual and interesting aspects of the Doodle Trail is that the City of Easley was able to develop 19 units of affordable housing using access to active transportation as a basis for leveraging affordable housing financing as shown in Figure 9. The City found partners for this initiative in the local utility companies and were able to work with local banks to prequalify individuals for participation in a locally based affordable home ownership initiative.

Figure 9 – Integrated Affordable Housing Linked to Trail-Based Activity

Source: City of Easley, 2018.

Outcomes

There were several factors that contributed to the success of the Doodle Trail development. First, the project relied on bringing together several potential funding sources, each contributing one or more key elements of the trail development process. No single funding source, especially in small rural communities, could have supported this project. Second, there was a wide range of willing partners, including private businesses, utility companies, and nonprofit community groups that shared resources in creative ways. The most important lesson in this case was that to get support, groups need to be asked. Finally, managing design and construction through a single point of contact contributed to consistent messaging, which helped convey the mission and supported its success.

The housing component also magnified the success of the project. It has inspired additional initiatives to support affordable housing linked to active trail use, new business development that leverages trail activity into business revenues that support the hospitality taxes used to fund the trail, and long-term planning for greater connectivity to other trail systems in the region. Moreover, planners are exploring new, technology-oriented wayfinding options to further enhance the trail use experience.

Summary of Discussion

Discussion Questions

After the presentations were completed, the presenters responded to a series of questions posed by the moderator and the participants. These questions included the following:

- What are some of the other challenges and successes that presenters have encountered?
- What does it take to start conversations about financing for project development and construction?
- What are the biggest lessons in identifying keys to success?
- What types of strings are attached to private donations and CID/BID contributions?
- What kinds of considerations were influential in deciding how you wanted to fund your projects?
- Are there other value capture methods that might work well for future projects?

Summary of Responses

What are some of the other challenges and successes that presenters have encountered?

Equity issues have become more important to the evaluation of active transportation investments. This has added new challenges to those who are charged with assessing the effectiveness of these investments. Data at a level of disaggregation that can identify low-income, minority, and underserved communities is a challenge. Some planning agencies are moving to scoring systems that address equity and underserved populations. Using zip code level data to supplement other, more aggregate data usually used in analysis is being done. But assessing overall equity can be tricky i a "link-by-link" assessment is used. This is because there may be benefits to underserved communities attributable to projects that traverse more well-off areas. So, assessment of equity can be tricky if a "whole system" approach is not used.

In another context, the issue of investing equity rests on the ability of underserved areas to support what is sometimes a lengthy and expensive process of qualifying for funding in the first place, especially since local community resources are often stretched. The challenge is that underserved areas often do not submit applications because they do not have the resources to prepare the applications. And even when applications are submitted, they are few and far between, making the chances of success lower. So, it is important to recognize that more supportive resources are needed in underserved communities just to identify projects, identify funding options, and provide the background for project evaluation.

There was a concern that relative to communities with resources, organizations, and up-front money, applications for funding submitted by more well-off or connected communities have an advantage even if projects in disadvantaged communities are submitted. Often organizations with deeper pockets have "shovel-ready" projects already identified and can act more quickly to take advantage of available funding. These areas also tend to have the necessary matching funds available when a notice of funding availability is announced. So, in some cases, having the capacity to supplement local funds to produce an acceptable level of matching funds is needed. All of these factors can present obstacles to disadvantaged communities and result in inequitable allocation of funds offered through otherwise supportive programs. Reducing the burden of the local match for underserved and minority communities may need to be considered.

What does it take to start conversations about financing for project development and construction?

There were several ideas presented that primarily stemmed from the organization and mission of the agencies involved. For example, organizations with independent boards and their own financial resources, like CIDs and BIDs, stressed identifying opportunities and reaching out to business partners to publicly advocate for needed projects while providing the supporting planning and information resources so that these partners have the background and information necessary to move ideas forward. These organizations often undertake the up-front studies that are required to get projects to the point that they are fundable. This includes identifying community needs and opportunities. This sort of "pump priming" role is a key to getting ideas rolling and pulling together the threads to get projects off the ground.

Some organizations made up of larger institutional members can leverage their resources to bring attention to community needs. This can start the conversation about mobility needs and also leverage investments that these larger members are making by linking them to broader public initiatives. This was illustrated by the emphasis on major hospitals in the Memphis Medical Collaborative to fund studies identifying ways that progress can be made in walkability projects by investing their own resources in projects on their campus, and then showing how additional public investments can extend the benefits of private initiatives.

Project advocates can also be supported by demonstrating a history of success that they can build on. Some presenters pointed out that they undertook several smaller "Quick Build" projects early in the development of their organizations to demonstrate success and show what can be done on a small scale. Then using these initial successes, organizations can transition to larger, more visible projects. For organizations that include larger business contributors or independent sources of funds, some of the studies needed to get projects moving, like safety studies, traffic studies or other studies that identify and document community needs can be undertaken to get major projects out of the conceptual stage and into the planning and preliminary design stage so that funding can be secured.

What are the biggest lessons in identifying keys to success?

Sometimes the conversation starts with a project and then moves to how to fund it. But another way of approaching the issue of funding is to look at the available funding sources and assess how these available funding options can be used to meet desired needs and outcomes in a community. This requires that organizations understand community needs and have a range of potential fundable projects identified so that when funds become available with certain criteria, the organizations can match the project to the funds.

Understanding how a community works and having a narrative that supports the need and utility of active transportation projects can be a big advantage. This helps to provide a clearer picture of how the community may be able to build on an investment, like a bike/walking path or micromobility. Having a deep understanding of community dynamics can help bring in a wider range of interests and advocates, especially if it is possible to demonstrate how they may benefit from projects that they might otherwise not be aware of or for which they may not fully appreciate how they may benefit.

In this regard, leadership and community buy-in are important. It is important for organizations that advocate for bike, pedestrian, and other nontraditional mobility options to be visible in the community, not necessarily advocating for projects all the time. Participating in community events, understanding how other activities can benefit from better mobility options, and connecting with and supporting a community on several other levels can help in getting buy-in when a proposed project is being developed.

What types of strings are attached to private donations and CID/BID contributions?

Many private donations have less strings attached than governmental sources. Some organizations such as Rotary Clubs or local service clubs do not usually attach strings. Private, nonprofit organizations can be more flexible. For example, private donations were able to commit funds for maintenance activities for a pedestrian bridge that could not be funded with other available funding sources. Continuing maintenance and operations funds are often an obstacle since many public funding sources are focused on capital expenditures.

Private funding can be negotiated to fill gaps in enhancements that would otherwise go unmet. In one case, this meant that wayfinding, signage, online GIS portals and specific amenities, like playgrounds or senior work-out stations, could be added to enhance a project if they met the goals and objectives of the fund providers. It takes a bit of creativity and alignment of the interests of the private organization with the needs of the community, but it can often be an important enhancement to an existing project.

What kinds of considerations were influential in deciding how you wanted to fund your projects?

In the case of the Tallahassee micromobility project, they knew that they wanted to support staff and that they did not want this to be a drain on existing staff resources. So, they worked out a self-funding plan that was sustainable and managed to initiate a program that was based on a self-sustaining model. The idea was to have a clear-eyed understanding of funding objectives and then work with the available resources and partners to communicate what is necessary to meet these objectives.

Are there other value capture methods that might work well for future projects?

One example offered was the tax allocation district (TAD) that was set up for the Atlanta Beltline project. The Atlanta Beltline project is a conversion of rail corridor into trails and transit. The TAD is a variant of a TIF that was adapted to wha was possible locally. They have extended this concept of collecting funds through a special tax district to create a fund in coordination with new development (e.g., office, commercial and high-end residential investments) that helps underwrite an affordable housing fund.

Key Takeaways

There are eight key takeaways that emerged from the presentations and discussion during the Peer Exchange. These takeaways focused on three broad areas:

- Leveraging funding sources,
- Engaging the community and business leaders in supporting and championing initiatives, and
- Supporting relationships with both traditional partners and community members, including the importance of addressing equity considerations in meeting community needs.

Leveraging Funding Sources

Consider leveraging multiple funding sources. Most of the successful projects and programs discussed in the peer exchange combined several sources of funding to achieve their goals. Those interested in using Federal funds were also encouraged to look outside of USDOT programs for other funding sources, including loan guarantees, that could be combined with value capture concepts. Where there is a desire to undertake independently funded initiatives based on fees and permit revenues, it is important to work with program participants, vendors, and sponsors to be sure that there is a common understanding of the goals and objectives of the initiative.

Early successes are important for a sustainable program of active transportation initiatives. There are a few ke factors to consider in developing projects as programs are initiated and sustained. Bringing smaller projects on-line early can help demonstrate how projects work and that they can be executed successfully. Having a range of possible projects in the process of development also provides options as funding sources become available. Considering leveraging innovative financing to accelerate construction can both advance the timeline for project initiation and also avoid delays that add to the costs of construction.

Develop a "portfolio" of projects so that you are not constrained by funding requirements. Funding for specific projects is not always available or easily obtained, especially if there are multiple competing needs for well-subscribed funding programs. Identifying innovative funding is as much "opportunistic" as it is planned and programmed. So, the wider the range of project types that are part of an organization's overall strategy, the more chance there is of taking advantage of funding opportunities as they arise. Having one or two projects and trying to find funding for them is often more difficult than matching funding that becomes available to a project. For this reason, advanced system planning can also be very helpful in establishing a blueprint or vision to work towards.

Engaging Community and Business Leaders

Pay attention to amenities and ancillary development that can increase the use of a project. Successful projects highlighted in the peer exchange were able to increase interest and use of their facilities by developing parks, local business opportunities, and even affordable housing initiatives as part of broader activity promotion associated with their projects. This was possible on both large-scale projects like the Atlanta Beltline and smaller projects like the Doodle Trail. Providing opportunities at the terminals and at places along a trail or pathway for both aesthetic interest, recreation, and even business opportunities can increase interest in a project and also provide a source of funds.

Consider providing data and feedback on community satisfaction. Several of the participants in the peer exchange cited the use of surveys and follow-ups with sponsors that showed how well the projects met their goals and the level of community satisfaction and acceptance of the projects. This sort of documented feedback helps in motivating sponsors

and champions of new projects and also provides the sponsoring organizations with important feedback on the success of their initiatives.

Supporting Relationships with Traditional Partners and Community Members

Seek out creative and supportive partnerships. Traditional partnerships built around existing planning and funding sources are most often helpful in tapping into funding available through larger Federal and State programs. While these funds can be substantial and serve to support larger initiatives, they can require long lead times, up-front planning studies, and substantial coordination and participation in the planning process. However, they often offer the types of funds needed for larger initiatives. Smaller initiatives or those that are not well-aligned with existing programs depend more heavily on creative finance and partnerships with nontraditional sources. Private companies and nonprofits with a mission to support community partnerships, service organizations, and local businesses are often both willing and able to provide sources of funds that can be leveraged to address project requirements.

Outreach and stakeholder communications should be broad and multidimensional. Understanding the motivations of potential sponsors and funders is important, especially when seeking nongovernmental funding. Awareness of new and emerging programs is important to align projects with available funding. However, it was also emphasized that communications with the community of potential users is critical to getting local support. Several of the organizations participating in the peer exchange explained how they work with and interact with the communities they hope to serve. Understanding their needs can be done both formally, through structure outreach programs, but also by simply "walking around" and participating in local community gatherings. The most successful organizations showed a willingness to reach out to potential funders to understand how they allocated and prioritized their distribution of funds, and to communicate directly with local businesses, community groups and even informal weekend gatherings and festivals to better understand the needs of the community.

Recognize that equitable investments in active transportation may require added up-front support to low-income, minority and isolated community members. Providing equitable access to active transportation funds and project development for these communities can be challenging. Both the up-front costs to prepare initial studies, and even the identification of community needs requires special attention to resource constraints (both time and money) that these communities face. The time needed to secure Federal funding and the expertise needed to move through the design and permitting process can be a barrier for these communities. Supporting equity-based projects from concept through construction requires dedicated resources that may not be needed for more well-off communities.

A Final Note

The success of the Peer Exchange depended on the engagement and willingness to share valuable experiences by each of the presenters, and the active participation of the attendees. The participants shared important ideas, creative solutions to common problems, and optimism that their presentations and the ensuing discussion. FHWA thanks all who participated for their contributions to these timely and important conversations that improve understanding of funding options for bicycle and pedestrian mobility initiatives.

Considerations for Implementation

To support delivery of active transportation projects, agencies may wish to consider the following questions when identifying potential funding sources and financing strategies.

Scale

- **What is the scale of the project?** The geographical extent of the influence of projects is important for determining financing strategies, particularly for mechanisms that involve value capture. Land value or split value taxes can be more appropriate for larger-scale projects that benefit an entire jurisdiction, while special assessment districts are well-suited for projects with more localized benefits (National Cooperative Highway Research Program [NCHRP], 2018). Some bicycle and pedestrian projects may have effects that are too small for land value return methods.

  The scale of a project may also play a role in determining the processes and procedures involved. Despite many bicycle and pedestrian projects being too small as standalone projects to use certain funding and financing methods, many agencies have successfully incorporated bicycle-pedestrian infrastructure into larger projects, such as bridge construction, multimodal developments, or resurfacing projects (Center for Innovative Finance Support, n.d.). Some agencies have resolved this by bundling or grouping bicycle-pedestrian projects together to access Federal funding (FHWA, 2018).

  Agencies can break down active transportation projects into sets of smaller projects, giving community organizations many different opportunities to be involved. For the Doodle Trail in South Carolina, many funding sources and partners supported specific, discrete components of the project, such as playgrounds, bike racks, and trail access points. The Tweetsie Trail also effectively engaged local organizations, which donated resources such as signage, paving materials, and bridge design support.

- **What is the revenue potential?** A key consideration when choosing a funding or financing mechanism is the potential of the project to generate revenue. Value return methods can help deliver projects that can generate revenue. The *Guidebook to Funding Transportation Through Land Value and Recycling* lists key factors for revenue feasibility: merits of the project, the geographic extent of the benefits, the number and nature of beneficiaries, the timing of benefits, and the level of fees (NCHRP, 2018). For the Doodle Trail in South Carolina, hospitality tax revenues funded a portion of the trail. The trail led new businesses to open, generating additional hospitality tax revenues that support the trail.

  Working with private partners can open new revenue opportunities and/or improve cost-effectiveness. For the Tallahassee Shared Micro-Mobility Program, featured in the peer exchange, the City of Tallahassee structured the initiative to be self-supporting. Vendors paid fees to participate, which covered the costs of staff oversight, data collection, and other community support functions.

- **Are there opportunities to leverage multiple sources?** Many successful projects combine several sources of funding and/or financing to achieve their goals. Federal funds can supplement funding sources and/or loan guarantees from other agencies. Agencies can leverage funding sources to access various financing strategies, implement value capture, and more.

Legal and Policy Context

- **Are there existing policies or legal requirements?** Many value capture strategies require certain legal conditions. For example, in some States, laws stipulate that land and buildings must be taxed at the same rate, making a land value tax infeasible. States must authorize certain methods, such as tax increment financing. Other policies, like special assessment district fees, may require approval by residents. Projects that affect multiple jurisdictions may need to fulfill additional legal requirements (NCHRP, 2018). States and local governments can revise policies to help prioritize bicycle and pedestrian infrastructure. For instance, level of service requirements and zoning requirements can affect the feasibility of bicycle and pedestrian investments. For the Livable Centers Initiative, the Atlanta Regional Commission not only helps fund active transportation projects, but also supports implementation of favorable policies and helps recipients navigate zoning requirements and regulations policies.
- **Does the funding program involve supplemental requirements?** In addition to environmental review processes, Federal funding and financing options involve additional program requirements. For instance, the Surface Transportation Block Grant (STBG) Program and Transportation Alternatives Set-Aside each require that agencies use a portion of funds in urbanized areas.
- **Does the funding source require environmental review and approval?** Federally funded or approved projects must comply with the National Environmental Policy Act (NEPA). While many bicycle and pedestrian projects are eligible for categorical exclusions (CEs) and do not require substantive documentation of an environmental review. Although those projects listed under 23 CFR 771.117(c)(3) and (9)(ii) that would result in impacts to waters of the U.S. or a finding of â€œadverse effectâ€ to historic properties under the National Historic Preservation Act would not be eligible as a CE, the analysis and documentation of impacts required by the NEPA process (e.g., Environmental Assessment) can add value and result in a project that minimizes impacts while maximizing benefits. Additionally, some States, such as Washington, California, Minnesota, North Carolina, and New York, have environmental review and approval procedures for expenditures of State funds.
- **What are the agency's policy goals?** Beyond raising revenue for infrastructure, financing policies often incentivize user and developer behaviors (NCHRP, 2018). Therefore, agencies can select financing methods that support local and regional policy objectives. For instance, split rate taxes incentivize development and increased density (NCHRP, 2018). Additionally, agencies can revise project selection criteria to align with agency goals. For instance, project selection criteria can award points for projects that help reduce greenhouse gas emissions or that help create healthier communities.

Public Support and Community Engagement

- **Is there public and political support for a project?** Local enthusiasm for bicycle and pedestrian infrastructure is another important factor when selecting a funding or financing strategy. It is often much easier to secure funding for projects when community members, local officials, and businesses are excited about building out a bicycle and pedestrian network. As noted in the Zach Scott Street and Schieffer Avenue Improvements case study, demonstrating transparency in project planning and fostering collaborative community engagement in Austin increased public support for active transportation and ultimately led to passing a bond initiative in 2020 focused primarily on active transportation. At the Seattle Children's Hospital (as discussed in the case study), transportation initiatives helped build community support for a broader set of developments plans at the hospital. By listening to community members' concerns about hospital expansions, the project team was able to design a set of transportation improvements that mitigated traffic concerns and enhanced the livability of the neighborhood. The public engagement efforts, which included a large community event, an interactive web map, and collaborations with local organizations, helped the project team design transportation improvements that reflected the desires of the community.
- **Does the agency have a champion for active transportation?** Creating a dedicated position or office can be an important step towards prioritizing and advancing active transportation projects. In Memphis, a key first step to meeting bicycle infrastructure goals was hiring the city's first pedestrian and bicycle coordinator. An additional benefit of dedicated agency staff is the opportunity to implement equitable programming for active transportation to enhance connectivity for all bicyclists and pedestrians in the agency's jurisdiction. For example, agencies can assess the distribution of potential costs and benefits of projects, especially for strategies that involve landowner or user fees. Active transportation coordinators can also lead community outreach to ensure that projects address the needs and concerns of community members.
- **Does your community have a compelling story or narrative?** A lead planner for the Doodle Trail noted that a cohesive story of a community – what it is, who the people are, and what it will be – can go a long way in advancing projects. A community narrative can help stakeholders understand how active transportation infrastructure fits into and builds upon the work of local governments and community organizations.
- **Can you track community satisfaction?** In the Peer Exchange, several projects used surveys and other methods to gather feedback. Documented feedback can help organizations and agencies understand the success of initiatives and helps motivate sponsors and champions of new projects.
- **How can the community be engaged?** With any infrastructure project, it is important to solicit community input at every step of the planning and implementation process. In particular, project leaders can solicit input from underrepresented stakeholders and work to address environmental justice concerns, such as lack of access to safe pedestrian facilities. Each funding and financing method has different equity implications, agencies should consider at each step of the planning process. For the Cully Boulevard Green Street Project, one of the featured case studies, the Portland Bureau of Transportation engaged residents throughout the planning process, worked with subcontractors to hire neighborhood residents, and worked with a local nonprofit organization to provide educational seminars in the neighborhood.
- **How is equity a part of this process?** Throughout the project planning process, it is important to solicit input from stakeholders and to assess the equity implications of the funding or financing method to be employed. Doing so can help address barriers to access and safety disparities. American Indian, Alaska Native, and Black individuals face higher risks of bicyclist and pedestrian traffic deaths are disproportionately than the general population (Governors Highway Safety Association, 2021). People in low-income neighborhoods and older adults suffer higher injury and fatality rates while walking (National Complete Streets Coalition and Smart Growth America, 2021). This underscores the need for equitable access to safe active transportation facilities. When considering some of the funding and financing methods available for active transportation, project sponsors should assess whether a systematic bias exists. For example, land value and related funding options as mechanisms for cost recovery and finance, individual donations, and crowdsourcing may favor more privileged communities. It is also important to look at the methods for allocating funding. Scoring systems that allocate funding based on zip code-level data may miss important nuances; approaches that consider the “whole system” are preferable. Lengthy funding qualification processes, even those that prioritize equity areas, can be cost-prohibitive for under-

resourced organizations. Agencies may consider providing additional support to under-resourced organizations to enhance the equity of active transportation projects. See the Additional Support for Bicycle and Pedestrian Projects section for additional equity and active transportation resources.

- **Are there opportunities to collaborate with other agencies?** Bicycle and pedestrian projects often involve coordination across local agencies and on the State and Federal level. Projects may involve collaboration between agencies focused on transportation, economic development, environmental issues, public health, and housing. The *Innovative DOT* handbook notes that as States and local agencies have authority over different land and transportation-related issues, collaborations can help integrate land use and transportation decision-making (State Smart Transportation Initiative and Smart Growth America, 2015). Collaborative efforts may open additional opportunities for funding in addition to adding administrative challenges.

  The Gwinnett County Community Improvement District partners with the Gwinnett County Government, Georgia DOT, Atlanta Regional Commission, State Road and Tollway Authority, Georgia Transportation Infrastructure Bank, and Gwinnett Chamber of Commerce to fund and finance projects. The Memphis Medical District Collaborative partners with the City of Memphis to align work with resurfacing projects managed by the City. They plan streetscape improvements at the same time as routine resurfacing projects, which can help save money and time. For the Zach Scott Street in Austin, a featured case study, the City worked with the developer of an adjacent mixed-use project to create a two-way protected bike lane. The City also coordinated the project with routine resurfacing to reduce costs and avoid duplicative efforts.

- **Are there opportunities for support from other partners?** Agencies may be able to work with nonprofit and advocacy groups focused on active transportation to support project implementation. For example, the Rails-to-Trails Conservancy partners with Federal, State, and local agencies to build trails; it helps secure funding and creates resources by providing technical assistance for communities seeking to build trails and connect trail systems. PeopleForBikes provides community grants and resources (such as webinars and tip sheets) to help improve biking for all people. The group's focus also includes development of equitable access to safe bike networks that connect to jobs, education, and other essential services. Other advocacy groups include the League for American Bicyclists and People Powered Movement. Within a community, local businesses, nonprofit organizations, volunteer associations, and utility companies may be willing to support active transportation projects.

  FHWA's *Health in Transportation Corridor Planning Framework* includes a step-by-step approach for engaging health partners and key stakeholders in advancing health through transportation investments at the community level. Partnerships with health agencies, advocacy groups, anchor institutions such as hospitals, clinics, universities and businesses, and others are essential to advancing improvements associated with health, such as active transportation. Although the Framework follows a typical corridor planning process, it can be effectively used in regional, statewide, and project planning as well. For more information on how to adapt to those scales, see the *PlanWorks Health in Transportation Application*.

Additional Support for Bicycle and Pedestrian Projects

The following resources provide additional support for bicycle and pedestrian projects.

AARP Livable Communities

Bicycle and Pedestrian Safety

Bicycle Facility Design Course

Center for Innovative Finance Support

Fact Sheet on Complete Streets and Transportation Safety

FHWA: Small Town and Rural Multimodal Networks

FHWA Bicycle and Pedestrian Resources

FHWA Pedestrian and Bicycle Funding Opportunities

Guidebook for Measuring Multimodal Connectivity

League of American Bicyclists (initially published by Advocacy Advance): Active Transportation Equity: A Scan of Existing Master Plans

League of American Bicyclists

Milwaukie Safe Access for Everyone Program

Pedestrian and Bicycle Information Center, Complete Streets Resources

Safe Routes Partnership: At the Intersection of Active Transportation and Equity

Strategies for Accelerating Multimodal Project Delivery

Value Capture

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