



BOONE COUNTY
TRANSPORTATION PLAN

Financial Resources Document

December 29, 2017

Introduction

This Financial Resources Document was developed to identify financial resources that can be considered to fund the recommendations identified in the Boone County Transportation Plan (Transportation Plan). Boone County is the fastest-growing county in the region, and will require improvements to support the transportation needs of people who live and work in the county. A glossary of funding terms is provided on pages nine to 14 of this document.

Project Development Processes

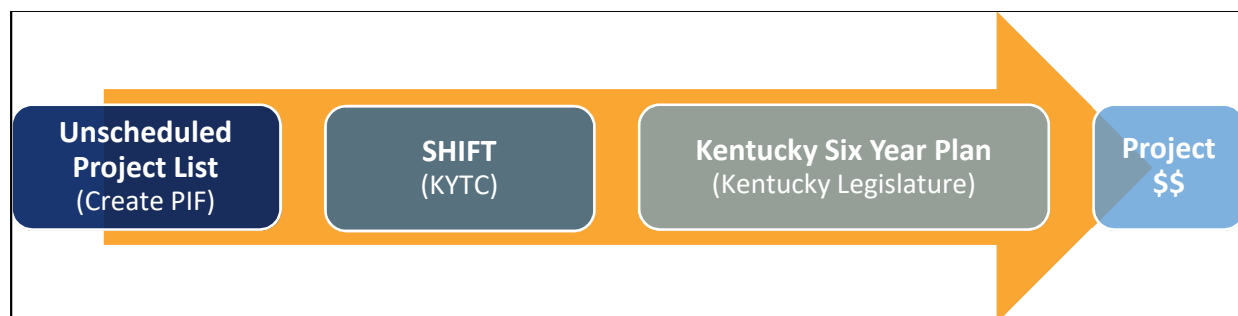
Many transportation projects in Boone County are funded through either the Kentucky Transportation Cabinet (KYTC) or the Ohio-Kentucky-Indiana Regional Council of Governments (OKI). Each of these public entities have different processes to develop transportation projects.

KYTC Project Development

KYTC allocates funds to projects through a six-year highway plan (Six Year Plan) that is updated every two years. The most current version of this plan is “Kentucky’s Fiscal Year 2016-2022 Highway Plan, Connections to the Future” that was last updated in June of 2016. Six Year Plan Projects are determined by the Kentucky Legislature based largely on input from the Kentucky Transportation Cabinet and supplemented by county transportation plans and other information provided by constituents.

When potential transportation projects in Kentucky are identified, they are noted on the Unscheduled Projects List (UPL) and a Project Information Form (PIF) is completed. This form describes the project, identifies project limits, discusses the need, and provides a cost estimate. KYTC then uses a data driven process, known as Strategic Highway Investment Formula for Tomorrow (SHIFT) to prioritize transportation projects. SHIFT assigns projects a score based on safety, system preservation, congestion reduction, economic growth, and cost/benefit. Projects with the highest scores are considered higher priority projects. KYTC provides the list of prioritized projects to the Kentucky Legislature to determine which projects will be listed in the Six Year Plan.

Figure 1. KYTC Project Development Process



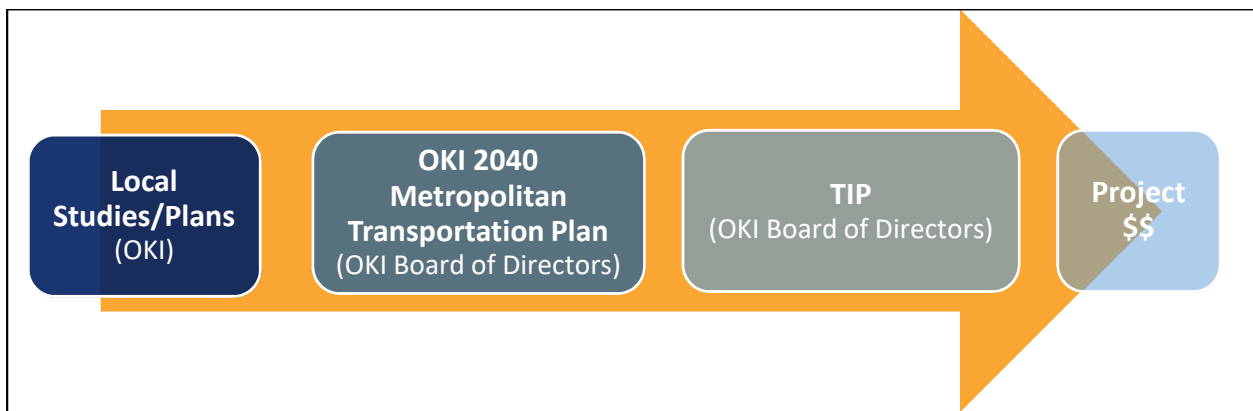
OKI Project Development

OKI identifies publicly funded highway and transit projects in the Greater Cincinnati Region through the Transportation Improvement Program (TIP). The TIP is constrained by available funding. This document covers a four-year period, is updated every two years, and amended frequently to respond to changes in

project timing and costs. The most current version of the TIP covers fiscal years 2018 through 2021. The majority of Kentucky highway projects on the TIP are funded through KYTC. However, the majority of transit projects shown in the TIP are funded through OKI.

Projects included in the TIP are identified by local studies and plans, such as the Boone County Transportation Plan. OKI federal funds are limited by federal aid requirements. Roadway projects must be on the functional class system. Bicycle/pedestrian and transit are not limited to location but have other requirements for funding depending on the funding type. OKI then uses the data driven process in the OKI 2040 Metropolitan Transportation Plan (OKI 2040 Plan) to rank and prioritize transportation needs throughout the region. Projects included in the OKI 2040 Plan and on the TIP are approved by the OKI Board of Directors.

Figure 2. OKI Project Development Process



Funding Opportunities

Public transportation projects in Boone County are primarily paid for through federal, state and/or local funding sources. These funds are typically distributed by the Kentucky Transportation Cabinet (KYTC), the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) and/or the Boone County Fiscal Court. Additionally, there are grant programs that help fund transportation projects. This section of the Financial Resources Document lists existing potential funding sources for transportation projects in Boone County. A more detailed description of each funding source can be found in the **Funding Glossary**, located at the end of this document.

Federal Funding

Federal funding amounts are based on estimates of the region's share of funds from programs authorized and appropriated by Congress. The region's share of these federally funded programs assumes that current funding levels will rise between one and 3.5 percent per year through 2040. The current Fixing America's Surface Transportation Act (FAST Act) programs that provide funding for the region's transportation system are described below.

Federal Funds Apportioned to State of Kentucky (KYTC and/or Legislature)

- Interstate Maintenance (IM)

- National Highway System (NH)
- Bridge Replacement and Rehabilitation Program (BRO, BRX, BRZ)
- Federal Safety Funds (SAF)
- Federal Emergency Relief Fund

Federal Funds Apportioned to both State of Kentucky (KYTC and/or Legislature) and/or OKI

- Surface Transportation Block Program (STBG)
- Transportation Alternatives Program (TA)
- Congestion Mitigation Air Quality (CMAQ)
- Federal Transit Administration Funding (FTA)

Competitive Funding Opportunities to Local, Regional and/or State Public Sponsors

- Nationally Significant Freight and Highway Projects (NSFHP)
 - Infrastructure For Rebuilding America (INFRA) Grants
 - Transportation Investment Generating Economic Recovery (TIGER) Program
- Advanced Transportation and Congestion Management Technologies Deployment Initiative

Kentucky State and Local Funding Sources

Money for the Kentucky Road Fund is primarily derived from vehicle fuel tax and registration fees. These funds can be used as sole source of transportation project funding or as matching funds for federal programs. Typically, these funds are used for projects on the state-maintained roadway system, which includes roadways with a Kentucky (KY) or Interstate (I) designation and all bridges on public roadways. Roadway projects on county or local roadways are typically funded with local funds or other innovative finance measures.

State Funds Available for Transportation Projects

- Kentucky Road Fund (SPP)
- State Bond Projects (SPB, SB2)
- Volkswagen Settlement Funds

Local Funding

In addition to state and federal funding, Boone County contributes local money to transportation projects. Local transportation funds can be a match to a federal program, a sole funding source, or a contribution to an important local project to speed up the implementation timeframe. For example, Boone County recognized the importance of alleviating congestion in Hebron and contributed approximately \$375,000 to the 2017 Graves Road Interchange Justification Study, which amounted to approximately half of the total cost of the study. By contributing county funds, fewer state funds were needed and the timeline to initiate and implement the study was significantly streamlined.

Innovative Finance

Innovative finance refers to a series of administrative and legislative initiatives undertaken in recent years which have removed barriers and added flexibility to federal participation in transportation finance. Policy makers recognized they could accelerate surface transportation project development and expand the base of available resources by removing barriers to private investment. This brings the time value of money, or the greater benefit of receiving money now rather than later, into federal program decision making. Encouraging the use of new revenue streams, particularly to retire debt obligations and reducing

financing and related costs, frees up savings for transportation system investment. These financing initiatives and techniques, which are commonly used in the private sector, are relatively new to federal aid transportation funding and are thus frequently referred to collectively as innovative finance.

Innovative finance is broadly defined as a combination of special funding initiatives. In the transportation industry, the term innovative finance has become synonymous with techniques that are specifically designed to supplement the traditional methods used to finance highways. The United States Department of Transportation's (USDOT) innovative finance initiatives are intended to augment rather than replace traditional financing techniques. Available Innovative Finance Tools are listed below. More information on these programs can be found in the **Funding Glossary** at the end of this document.

Innovative Finance Tools

- Credit Assistance
 - Transportation Infrastructure and Finance Innovation Act (TIFIA)
 - State Infrastructure Banks
- Tax Incremental Financing
- Debt Financing and Cash Flow Management Tools
 - Garvee Bonds
 - Advance Construction
- Public Private Partnerships
 - Availability Payment
 - Private Activity Bonds

Funding Challenges/New Opportunities to Consider

In addition to the existing financial resources, potential funding challenges and new opportunities were identified for transportation projects in Boone County. By adjusting challenges and investigating new funding opportunities, more funding could be allocated to transportation projects in Boone County.

Local Public Agency (LPA) Project Challenges

Often, local agencies such as Boone County receive funding for projects that are not implemented through the Kentucky Transportation Cabinet. These projects are known as Local Public Agency (LPA) projects and often include sidewalks and projects on local roadways. These programs are administered by KYTC's Office of Local Programs, with the oversight of the local District Office. However, these two entities are not within the same department. The Office of Local Programs is within the Department of Rural and Municipal Aid, while the District Office is within the Department of Highways. Although these programs are important to Boone County, it can take several years for projects to be constructed. Re-organizing the LPA program to be administered within one department may streamline the process and facilitate more timely construction of project. Also, by shortening the implementation timeline of transportation projects, more money could be invested into transportation projects with high public benefit rather than administration and construction costs.

Transportation Improvement Districts

In order to increase funding for transportation projects, a potential opportunity for Boone County is to work with the Kentucky Legislature to implement Transportation Improvement District (TIDs). Kentucky TIDs would be similar to the existing Kentucky Management Districts. However, these would focus on transportation improvements in addition to economic growth. The TID structure in Ohio could be used as a model for this legislation.

In Ohio, a TID is defined as a body both corporate and political that can finance, construct, maintain, and repair transportation projects. The area of a TID can include all or portions of a county and is governed by a board of members that often includes the county engineer. The purpose of a TID is to facilitate and foster increased collaboration with local partner jurisdictions and other county, regional, and state agencies to advance work on various local projects that support of economic development, including job retention and creation, in the county, the region and the state.

The need for TID proposed projects generally revolves around: a) an existing inadequate transportation network and infrastructure in the area, characterized by insufficient capacity, safety issues, and limited availability of alternative transportation options to effectively serve current and future travel demand; b) inadequate linkage and mobility to the region's key transportation corridors to developing social and economic areas; and/or, c) expected (or desired) future economic expansion and population growth in the area.

Residential Improvement Districts

Another potential strategy to generate additional transportation funds is to develop a Residential Improvement District (RID). A RID is another name for a Tax Increment Financing (TIF) incentive district. Property within the incentive district is exempt from regular property taxes. Instead of paying property taxes, the exempt property makes Payments In Lieu of Taxes (PILOT). PILOTs are the same amount as property taxes but they are not distributed the same way as property taxes. PILOTs become a public financing method for funding redevelopment, infrastructure, and other community-improvement projects within the RID or TIF designated area.

Cost Estimates

The Transportation Plan has identified a variety of project recommendations to address existing Boone County needs and forecasted conditions. Cost estimates are prepared by staff based on local and national average unit cost values. This Transportation Plan presents the cost estimate for all 84 final recommendations in Base Year 2017 dollars. For inflating costs in the future, OKI recommends applying an annual inflation rate of 2.5% which is consistent with the OKI 2040 Plan development which considers cost trends across all three states in the region.

In addition, the recommendations are placed into three categories based on the project's ability to address Transportation Plan goals, timing of development, and the improvement's dependency upon the completion of other projects.

- Tier 1 consists of the highest priority projects needed in Boone County. The construction of these recommendations is projected to be between 2020 and 2030, if funding can be identified and secured.
- Tier 2 consists of medium priority projects needed in Boone County. Some of these recommendations may depend upon the completion of Tier 1 improvements. The construction of these recommendations is projected to be between 2030 and 2040, if funding can be identified and secured.
- Unscheduled Needs consists of the lowest priority projects. Some of these recommendations may depend upon completion of Tier 1 or Tier 2 improvements. The construction of these recommendations is expected to be beyond the year 2040, the planning horizon year for this Transportation Plan.

Potential Funding Sources Identified for Recommendations

Recommendations included in the Transportation Plan have been reviewed to identify the types of funding that could be used to implement the recommendations. Potential funding sources for projects are listed below. More information on each funding source can be found in the Glossary on pages nine to 14 of this document.

- Interstate Maintenance
- National Highway System
- Bridge Replacement
- Federal Safety Funds
- Surface Transportation Block Program
- Transportation Alternatives
- Congestion Mitigation Air Quality
- Federal Transit Administration
- Infrastructure for Rebuilding America
- Transportation Investment Generating Economic Recovery
- Kentucky Road Fund
- Volkswagen Settlement Fund

Summary

In the midst of Boone County's continued, significant economic growth, the County's leadership recognized the need to take a fresh look at current and future transportation needs through the creation of this Boone County Transportation Plan. The lack of funding to meet identified transportation needs, the controversial nature of transportation investment decisions, and the increasing demand by public and private stakeholders to be involved in transportation programming drove the Transportation Plan to develop planning goals and objectives that helped prioritize final recommendations, while simultaneously, providing a transparent and extensive process for public review and comment.

The outcome is a strategic action plan for Boone County transportation investments, today to 2040. The Transportation Plan defines the priority and timing of project needs through its Tier 1, Tier 2 and Unscheduled Need recommendation categories, so that the highest priority needs can be submitted to the Kentucky Legislature for consideration in the Kentucky Six Year Plan. With adoption by the OKI Board of Directors in January 2018, eligible recommendations from the Transportation Plan will also be considered for inclusion in the fiscally-constrained OKI 2040 Metropolitan Transportation Plan, a prerequisite for potential federal funding.

The Transportation Plan identifies a total of 84 transportation recommendations. Current funding streams do not support the implementation of this volume of transportation projects over the next 20 years. With needs high and funding availability low, it is critical that money is spent wisely to maximize the positive benefit of transportation investments throughout Boone County. The level of public involvement achieved during the Transportation Plan's development is critical to support Boone County in making hard choices on what investments will be made.

This document acknowledges existing financial resources, however it is also important that more tools be added to local, county and state agency funding arsenals. Seizing opportunities to leverage public funds with private investments is a vital component. Strategic changes to KYTC's LPA process, could also streamline project implementation while encouraging more public agencies to sponsor and implement their community's transportation needs, thereby reducing dependence upon KYTC. Boone County recognizes that new, statewide legislation may be needed in order to make these administrative changes, as well as introduce new funding streams that bring together land use and economic development, two disciplines that are tied directly to transportation planning. By thinking, planning and acting in a more comprehensive manner, further progress and success can be made sooner on Boone County transportation investments. Boone County's continued leadership at the local, state and national levels will be more critical than ever to secure the legislation and funding needed to keep the county at the forefront of top socio-economic performing counties across the United States.

Glossary

Interstate Maintenance

The Interstate Maintenance (IM) program finances projects to rehabilitate, restore and resurface the interstate system. The match rate for this program is 90 percent federal and 10 percent state or local. It is administered by the states.

National Highway System

The National Highway System (NHS) consists of 222,331 miles of the nation's major roads. It includes all interstate routes, a large percentage of urban and rural principal arterials, the defense strategic highway network and strategic highway connectors. The match rate is 80 percent federal and 20 percent state or local.

A link to the OKI region's NHS system can be found here:

http://www.fhwa.dot.gov/planning/national_highway_system/nhs_maps/ohio/cincinnati_oh.pdf

Bridge Replacement and Rehabilitation Program

This program enables the states to replace significant bridges that are unsafe because of structural deficiencies, physical deterioration or functional obsolescence. The match rate is 80 percent federal and 20 percent state or local.

Federal Emergency Relief Fund

This program provides emergency funds to the state and counties for the repair or reconstruction of federal-aid highways and roads on lands that have suffered serious damage by natural disasters or catastrophic failures from an external cause. This requires a Governor's Disaster Declaration. Congress provides \$100 million nationwide annually.

Those repairs made within 180 days after the occurrence of the disaster or failure are eligible for 100 percent of federal reimbursement. Any repairs after the 180 day period are eligible for the standard federal share reimbursement (80/20 percent).

Federal Safety Funds (SAF)

Federal Safety Funds are appropriated to states for the purpose of reducing traffic crashes and the resulting deaths, injuries and property damage by implementing the state's federally approved Highway Safety Plan. The HSP establishes goals, performance measures, targets, strategies and projects to improve highway safety in the State. It also documents the State's efforts to coordinate the HSP, data collection and information systems with the State Strategic Highway Safety Plan to promote a unified approach to highway safety.

Surface Transportation Block Program (STBG)

The Surface Transportation Block Grant Program (STBG) is the most versatile type of transportation funds. Roadways that have a federal functional classification of collector or higher in are eligible to be funded by

this program. Funds may also be used for capital projects for transit agencies, regional planning and bicycle and pedestrian facilities. Ten percent of STBG funds are set aside to fund the Transportation Alternatives (TA) Program.

Other modal projects eligible for STBG funds include freight, capital transit projects, commuter rail, bus terminals and facilities, carpool projects, traffic monitoring, and bicycle and pedestrian facilities that are above and beyond the TA allocation.

STBG funds are apportioned to both OKI and KYTC. In addition to OKI's STP allocation by formula (based on population of the urban area), KYTC invests a significant portion of their state STBG funding in the region on a variety of the above identified project types. STBG funds from OKI are commonly referred to as SNK funds.

Transportation Alternatives Program (TA)

The Transportation Alternatives (TA) program is funded by a 10 percent set-aside of the STBG program. TA funds can be used for a variety of transportation projects such as pedestrian and bicycle facilities, safe routes to school, historic preservation of transportation facilities, vegetation management and environmental mitigation related to storm water and habitat connectivity. Local public agencies within OKI's urbanized area are eligible to apply for TA funds through OKI, as well as through the KYTC Office of Local Programs.

Congestion Mitigation Air Quality (CMAQ)

The Congestion Mitigation Air Quality Improvement Program (CMAQ) provides funds for transportation projects in maintenance areas for ozone and carbon monoxide. These projects contribute to meeting the attainment of national ambient area air quality standards. The OKI region is eligible for these funds because of its designation as an ozone maintenance area. Transportation projects and programs are eligible for CMAQ program funds if they are associated with documented emissions reductions and do not add to the existing roadway capacity. KYTC Office of Local Programs administers CMAQ for the Northern Kentucky portion of the region.

Federal Transit Administration (FTA) Funding

Under the Section 5310 program, the Federal Transit Administration (FTA) provides federal funds for activities including the purchase of equipment to support transportation services for the elderly and people with disabilities where existing transportation is unavailable, inappropriate or insufficient. The Federal Transit Administration provides 80% of the cost of capital items; the remaining 20% must be provided by local funding, which may include funding from other federal programs other than U.S. Department of Transportation (DOT) programs or from DOT's Federal lands highway Program.

OKI, as the Designated Recipient of the Section 5310 federal funds in the Cincinnati urbanized area, is responsible for managing the program for agencies located in Butler, Clermont, Hamilton or Warren counties in Southwest Ohio; Boone, Campbell and Kenton counties in Northern Kentucky and Dearborn County in Southeast Indiana.

Private nonprofit (501(c) (3)) corporations, public bodies identified by their state as lead agencies in a coordination project, or public bodies which certify that no private nonprofit corporations exist within their jurisdiction for the provision of elderly and disabled transportation are eligible to apply for Section 5310 federal funds. 5310 funds are available to the entire OKI region with no set state allotments.

Nationally Significant Freight and Highway Projects (NSFHP)

The Nationally Significant Freight and Highway Projects (NSFHP) program was established to provide competitive grants (INFRA Grants) or credit assistance to nationally and regionally significant freight and highway projects that align with the program goals to:

- improve the safety, efficiency, and reliability of the movement of freight and people;
- generate national or regional economic benefits and an increase in global economic competitiveness of the U.S.;
- reduce highway congestion and bottlenecks;
- improve connectivity between modes of freight transportation;
- enhance the resiliency of critical highway infrastructure and help protect the environment;
- improve roadways vital to national energy security; and,
- address the impact of population growth on the movement of people and freight.

Infrastructure for Rebuilding America (INFRA) Grants

The Infrastructure for Rebuilding America (INFRA) program provides dedicated, discretionary funding for projects that address critical issues facing our nation's highways and bridges. INFRA grants create opportunities for all levels of government and the private sector to fund infrastructure, using innovative approaches to improve the necessary processes for building significant projects, and increasing accountability for the projects that are built. The INFRA program allows public private partnerships as well as innovations in project delivery, permitting processes, and safety solutions. Performance and accountability in project delivery and operations will also be targeted.

Both large and small projects will be awarded through the INFRA program. For a large project, the INFRA grant must be at least \$25 million. For a small project, the grant must be at least \$5 million. For each fiscal year of INFRA funds, 10% of available funds are reserved for small projects.

The INFRA grant program preserves the statutory requirement in the FAST Act to award at least 25% of funding for rural projects. The Administration understands that rural needs may well exceed this limit, and the Department will consider rural projects to the greatest extent possible. For rural communities in need of funding for highway and multimodal freight projects with national or regional economic significance, INFRA is an opportunity to apply directly for financial assistance from the federal government.

INFRA grants may be used to fund a variety of components of an infrastructure project, however, the Department is specifically focused on projects in which the local sponsor is significantly invested and is positioned to proceed rapidly to construction. Eligible INFRA project costs may include: reconstruction, rehabilitation, acquisition of property (including land related to the project and improvements to the

land), environmental mitigation, construction contingencies, equipment acquisition, and operational improvements directly related to system performance.

Transportation Investment Generating Economic Recovery (TIGER) Program

The Transportation Investment Generating Economic Recover (TIGER) program is a competitive grant that provides the opportunity for state and local stakeholders to apply for \$500 million in discretionary grant funding. The program targets projects that will have a significant impact on the nation, a metropolitan area, or a region. Additionally, special consideration will be given to projects located in rural communities which emphasize improved access to reliable, safe, and affordable transportation for communities in rural areas, such as projects that improve infrastructure condition, address public health and safety, promote regional connectivity, or facilitate economic growth or competitiveness.

The FY 2017 Appropriations Act specifies that TIGER Discretionary Grants may not be less than \$5 million and not greater than \$25 million, except that for projects located in rural areas the minimum TIGER Discretionary Grant size is \$1 million.

Advanced Transportation and Congestion Management Technologies Deployment

The Advanced Transportation and Congestion Management Technologies Deployment competitive grants program provide \$60 million each fiscal year for projects that use technologies to address transportation and congestion challenges. These technologies provide communities with a cost-effective tool to address current demands and support a future of connected and autonomous mobility. The data provided by these projects will provide Congress with valuable real life feedback to help inform future policy decision making. This program requires a 50% local match.

Kentucky Road Fund (SPP)

In Kentucky, funds for both the State Projects and Rural Secondary Programs are derived from gasoline tax receipts, and are expended under the direction of the Department of Highways. These funds may be used for the construction, reconstruction, and maintenance of state and county roads and bridges.

Another source of state funds is from Unspecified Programs, which encompass all the state revenue that Kentucky allocates to the OKI counties that do not fall into any of the established state programs. These allocations usually finance 100 percent of these projects.

State Bonds (SPB, SPB2)

In addition to the state project funds contained in this Highway Plan, the Kentucky General Assembly in the past has authorized the sale of state bonds to fund transportation projects. Currently, Kentucky State Bond funds are 100 percent obligated.

Volkswagen Settlement Funds

The Kentucky Energy and Environment Cabinet (EEC) has received a settlement from Volkswagen (VW) to settle allegations of cheating emissions tests and deceiving customers. Kentucky's portion of this settlement will be administered through an Environmental Mitigation Trust that will be managed by a

nationwide Trustee, with allocation to states, territories and tribal government beneficiaries to use for specific types of diesel emission reduction projects.

The Commonwealth of Kentucky will develop and submit a mitigation plan to the Settlement Trustee that summarizes how Kentucky plans to use the funds. The Energy and Environment Cabinet is outlining the process for developing Kentucky's mitigation plan.

Transportation Infrastructure and Finance Innovation Act (TIFIA)

TIFIA was passed as part of TEA-21 and authorized the USDOT to establish a new credit program by offering eligible applicants the opportunity to compete for direct loans, loan guarantees, and lines of credit for up to one-third of the cost of large infrastructure construction projects of national significance. This is provided that the borrower has an associated revenue stream, such as tolls or local sales taxes that can be used to repay the debt issued for the project. An eligible project must be included in the applicable State Transportation Improvement Program (STIP). Major requirements include a capital cost of at least \$50 million (or 33.3 percent of a state's annual apportionment of federal-aid funds, whichever is less) or \$15 million in the case of Intelligent Transportation Systems (ITS). TIFIA credit assistance is limited to a maximum of 33 percent of the total eligible project costs. TIFIA projects include highway toll roads and bridges, transit systems, rail stations, ferry terminals and intermodal facilities.

State Infrastructure Banks

State Infrastructure Banks (SIB) are revolving infrastructure investment funds for surface transportation that are established and administered by states. A SIB, much like a private bank, can offer a range of loans and credit assistance enhancement products to public and private sponsors of Title 23 highway construction projects or Title 49 transit capital projects. The requirements of Titles 23 and 49 apply to SIB repayments from federal and non-federal sources. All repayments are considered to be federal funds.

SIBs give states the capacity to make more efficient use of transportation funds and significantly leverage federal resources by attracting non-federal public and private investment. Alternatively, SIB capital can be used as collateral to borrow in the bond market or to establish a guaranteed reserve fund. Loan demand, timing of needs and debt financing considerations are factors to be weighed by states in evaluating a leveraged SIB approach.

Tax Incremental Financing

Tax Incremental Financing (TIF) is a tool to use future gains in taxes to finance the current improvements that will create those gains. When a public project such as a road, school or hazardous waste cleanup is carried out, there is an increase in the value of surrounding real estate and often new investment such as construction of new or rehabilitated buildings. This increased site value and investment creates more taxable property, which increases tax revenues. The increased tax revenues are the tax increment. Wage assessments are also an element of Kentucky TIFs. TIF dedicates that increased revenue to finance debt issued to pay for the project. TIF is designed to channel funding toward improvements in distressed or underdeveloped areas where development would not otherwise occur. TIF creates funding for public projects that may otherwise be unaffordable to localities.

Garvee Bonds

In the broadest sense, a GARVEE is a type of anticipation vehicle, which are securities (debt instruments) issued when moneys are anticipated from a specific source to advance the upfront funding of a particular need. In the case of transportation finance the anticipation vehicles' revenue source is expected federal-aid grants.

Specific to highways, a GARVEE is used as a term for a debt instrument that has a pledge of future Title 23 federal-aid funding. The issuer may be a state, political subdivision or a public authority.

GARVEEs enable a state to accelerate construction timelines and spread the cost of a transportation facility over its useful life rather than just the construction period. The use of GARVEEs expands access to capital markets as an alternative or in addition to potential general obligation or revenue bonding capabilities. The upfront monetization benefit of these techniques needs to be weighed against consuming a portion of future years' receivables to pay debt service. This approach is appropriate for large, long-lived, non-revenue generating assets.

Advance Construction

The use of [advance construction](#) and partial conversion of advance construction, facilitates state issuances of GARVEEs. GARVEEs are used in conjunction with advance construction to enable using federal-aid funds for future debt service payments.

Public Private Partnerships

A public-private partnership (P3) is a broad term that collectively refers to contractual agreements formed between public and private sector partners, where the private sector partner steps outside of its traditional role and becomes more active in making decisions as to how a project will be completed. P3s would allow for working with the private sector in new and innovative ways to develop, finance, maintain or operate a transportation facility. One of the strengths of a P3 is the number of ways to fund a project as compared to traditional methods through state gas tax and federal dollars. FHWA supports project funding using P3s. P3s include availability payments, tolling, and Private Activity Bonds.

Availability Payment

Availability Payments (APs) may be the best method for funding a large-scale, long-term transportation project worth hundreds of millions or over \$1 billion in cost. A private firm pays the upfront cost of the entire project in exchange for annual payments from the state department of transportation (DOT) over a specified period of time. The private entity does not use tolling or any other user-based fee with AP. The AP financing allows for the delivery of a large-scale project much sooner than the traditional financing mechanism.

Private Activity Bonds

Private Activity Bonds (PAB) bring the benefit of tax-exempt bond financing to the transportation industry. PAB's provide private developers and operators with access to tax-exempt interest rates which lowers the cost of capital. The result of increasing the involvement of private investors in highway projects generates new sources of money, ideas and efficiency.