

I. Introduction

Factors Affecting the 2024 Enacted Highway Plan

The development of the Biennial Highway Plan and the recommended projects for the four years beyond the upcoming biennium constitute Kentucky's six-year highway plan. Highway system asset management and performance measures are used to prioritize projects involving pavement, bridge, and guardrail needs, while safety improvements, economic growth, traffic congestion, and new connectivity projects across the Commonwealth are prioritized through other methods. The costs of these investments are weighed against the anticipated annual state and federal funding and efforts are made to fiscally balance both the Enacted Biennial Highway Plan and the out-four-years of the Highway Plan. In accordance with KRS 48.110 (6) (f) and 176.430, the Governor typically submits the Recommended Highway Plan to the Kentucky General Assembly in January of each even-numbered year, and as the chart below illustrates, the General Assembly deliberates over, and ultimately enacts, a highway plan on or before April 15 with the final published version of the enacted highway plan made available by KYTC in June of each even-numbered year.



The 2024 Enacted Highway Plan is a practical action guide to support the Commonwealth's goal of building a better Kentucky through transportation. The journey is the safest when the roadmap is the clearest and this plan proposes effective ways to invest state and federal dollars to maintain and build our transportation system. With all users in mind, Kentucky's vision, mission, and goals for its highway system are as follows:



KENTUCKY'S TRANSPORTATION STRATEGY

Kentucky's transportation vision and mission statements serve to guide the strategies employed to most effectively utilize state and federal revenue streams to deliver needed highway system improvements.

Kentucky's Transportation Vision

Striving to be national leaders in transportation who provide transportation infrastructure and services for the 21st century that deliver new economic opportunities for all Kentuckians.

Kentucky's Transportation Mission

To provide a safe, efficient, environmentally sound and fiscally responsible transportation system that delivers economic opportunity and enhances the quality of life in Kentucky.

Goal 1

Promote Safety in All Decision Making

Goal 2

Strengthen Stakeholder and Customer Relationships

Goal 3

Deliver Economic Opportunities and Enhance Quality of Life

Goal 4

Optimize Performance through People and Innovation

Goal 5

Nurture a Culture of Diversity and Inclusion

As KYTC recommends highway projects and programs that align with Kentucky's vision and mission, it is critical that KYTC makes every effort to address its existing backlog of pavement and bridge needs while pursuing highway improvement projects that provide enhanced roadway safety, improved regional access, and increased economic opportunity for each geographic region of Kentucky.

The 2024 Enacted Highway Plan is divided into four distinct focus areas to stress the commitment toward **Asset Management** (taking care of the existing roads and bridges), **Capacity Improvements** (providing new and wider roads to handle future traffic), a **"ZVARIOUS"** category of funds necessary to honor past funding commitments and support various ongoing program activities and a **County Priority Projects Program** directed by the 2024 General Assembly. The following sections outline each of these focus areas.

Accordingly, the 2024 Enacted Highway Plan is divided into four distinct focus areas, enabling the Kentucky General Assembly to appreciate KYTC's commitment to the following sections outlined in each of these focus areas. A

Asset Management and Performance:

KYTC's Investment in Bridges and Pavements (taking care of Kentucky's existing roads and bridges)

B

Capacity Improvements:

KYTC's Investment in Priority System Upgrades (providing new and wider roads to handle Kentucky's future traffic)



"ZVARIOUS" Funding:

KYTC's Investment in Ongoing Program Activities

(a category of funding necessary to honor past funding commitments and support various ongoing program activities)

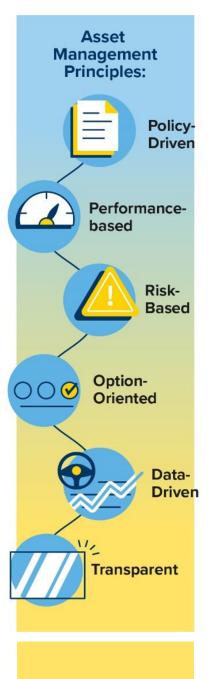
County Priority Projects Program: KYTC's Investment in County Priority Projects

(providing state road funds to assist with improvements to county and city roads approved by the General Assembly)



ASSET MANAGEMENT AND PERFORMANCE:

KYTC's Investment in Bridges and Pavements



Kentucky's transportation network provides a critical connection between people and businesses within the Commonwealth.

To maintain its assets responsibly, KYTC has made a strong commitment to ongoing investments to preserve asset conditions and system performance as cost-effectively as possible. This approach reflects the Cabinet's strong commitment to its Transportation Asset Management (TAM) framework, which:

- Links planned investments to performance expectations.
- Extends the service life of the transportation system economically using low-cost treatments early in an asset's service life.
- Reduces agency risk and exposure from unplanned events such as flooding.
- Enhances system resilience.

KYTC's Performance-Based Approach

KYTC's Performance-Based Approach to managing its pavements and bridges relies on performance measures to monitor system performance, identify needs, and develop investment priorities. As part of this process, KYTC establishes goals that represent the desired state of good repair for its entire state-managed transportation system. These performance measures are also used to establish budget requirements and life cycle plans for pavement and bridge preservation. Since pavements and bridges represent the Commonwealth's largest capital investment and one of the largest components of Kentucky's public wealth, preserving these assets effectively is a top priority.





Hal Rogers Parkway between Manchester and Perry Counties Photo by Les Nicholson

Best Combination of Treatments

The Six Year Plan Works to Present the Best Combination of Treatments

for assets to manage the transportation network. KYTC allocates available funding to programs to maintain and improve pavement and bridge conditions based on an analysis of current condition and the estimated life cycle needs. Using life cycle planning, KYTC evaluated the best combination of treatments over an analysis period to extend asset service life as cost-effectively as possible. Life cycle planning recognizes that the balanced selection of treatments slows deterioration and minimizes risk to the traveling public.

Effective Pavement & Bridge Programs Balance Treatment Needs

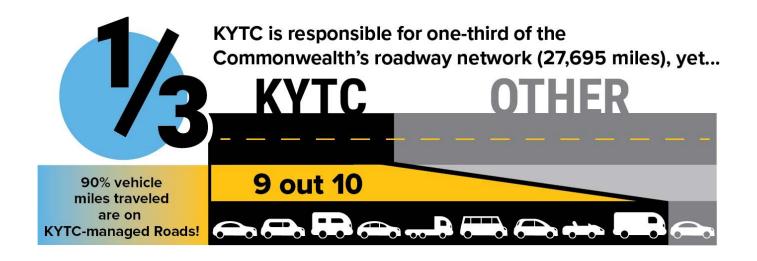
| s |
|----------------------|
| Reactive Maintenance |
| Preservation |
| Rehabilitation |
| Reconstruction |



Maintaining transportation assets in a state of good repair is pivotal for the health, safety, and economic vitality of the state.

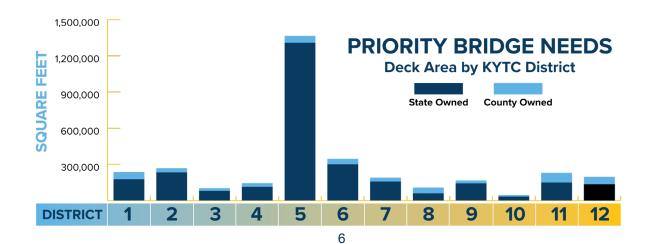
INVESTMENT STRATEGY

While KYTC's planned investment strategies seek to make the best use of available 2024 Enacted Highway Plan funding, the level of funding is not adequate to achieve its desired state of good repair. Approximately 5% of the bridge inventory across the Commonwealth is currently in Poor condition. As time goes by, deterioration will continue, and that percentage will rise. KYTC has decided to be proactive on state-owned bridges by spending enough on replacements and rehabilitation to slow the rate of deterioration and to reduce the percentage of bridges in Poor condition. Improving/maintaining integrity of structures will reduce risk of weight restrictions that limit the movement of emergency response, snow-plows, freight, and other heavy vehicles. Pavement conditions are also expected to improve by implementing the life cycle strategies recommended in the TAM.



The Performance Investment Projects allow KYTC to Actively Manage Transportation Assets as conditions,

economics, and events change the needs and benefits. These projects are aimed at investing available funding effectively to address short-, medium-, and long-term agency priorities to ensure that planned expenditures are aligned with the Cabinet's strategic objectives.





CAPACITY IMPROVEMENTS:

KYTC's Investment in Priority System Upgrades



Complete Streets Project - Kentucky Street in Bowling Green

To assist in the prioritization of highway capacity and improvement needs, KYTC developed a prioritization tool entitled the Strategic Highway Investment Formula for Tomorrow (SHIFT). The SHIFT process is a data-driven, objective, and collaborative approach to developing a geographically sensitive, data-informed highway plan. SHIFT was developed by KYTC through concerted interaction with the Cabinet's planning partners. During each highway plan cycle, KYTC continually seeks to improve SHIFT and its associated processes, always working to ensure that it employs the most current and effective technical methodologies.

An effective highway program must support all areas of system performance in a strategic way. Effective performance management requires an understanding of the interconnection between performance areas. Maximizing asset conditions at the expense of needed investments in the other performance areas would not lead to the best overall system performance. The SHIFT program is designed to address the connection between multiple performance areas. This system is a needs-based approach used to rank potential highway improvement projects by KYTC highway district for inclusion in the Highway Plan. The SHIFT formula is an objective process that uses data on safety, congestion, asset management, economic growth, and benefit-cost ratios to rank potential projects relative to others.

KYTC starts with a list of projects previously identified by state and local transportation leaders (ADDs, MPOs, and KYTC Districts). To move forward, projects must either be sponsored by local transportation leaders or be committed projects (those listed in the previous Highway Plan). KYTC districts coordinate with MPOs, ADDs, and state and local officials to ensure their priorities are considered.

KYTC Highway Plan projects are scored by SHIFT based on seven key attributes:





The SHIFT process evaluates potential project types including large scale safety improvements, road widening, reconstruction, construction of new routes, and interchange improvements. Projects outside the SHIFT process include pavement and bridge asset management projects, rural and secondary road projects, maintenance projects, and a variety of projects scheduled to use federally dedicated funds.

SHIFT key attributes are scored based on the following: Safety scores are calculated using the project location crash history and current roadway characteristics. Congestion scores are based on vehicle hours of delay. The economic growth score considers increased accessibility to jobs by decreasing travel times as a result of the project. The benefit-cost ratio represents the calculated benefits derived from anticipated travel-time and crash reduction savings divided by the project cost. The asset management component considers bridge and pavement needs within the project limits addressed by the proposed project. The resilience measure prioritizes critical roadways to ensure the continued flow of people and goods. The non-motorized mobility component considers proposed project improvements that include dedicated facilities for pedestrians, bicyclists and other non-motorized modes of travel.

The SHIFT prioritization process acknowledges current highway funding shortfalls, and offers a reliable, balanced approach to project prioritization, selection, and scheduling to use when applying state and federal highway funding across Kentucky's highway system. It is important to acknowledge as KYTC continues to transition to institutionalized data-driven processes, other information is necessary to consider alongside SHIFT scoring to develop a recommended highway plan. These considerations include investments-to-date and associated impacts to communities, fulfillment of previous Highway Plan commitments, the recognition of new transportation priorities designated by Congress through the Bipartisan Infrastructure Law, and completion of significant highway and transportation corridors across Kentucky.



"ZVARIOUS" FUNDING:

KYTC's Investment in Ongoing Program Activities



The "ZVARIOUS" section of the 2024 Enacted Highway Plan is a longstanding element of KYTC's biennial presentation of highway needs to the Kentucky General Assembly. In the early days of the Highway Plan, technology was limited and the way that these various program commitments were listed at the end of the alphabetical county-by-county listing of projects was to add a "Z" to the "Various County" identification for these programs. Over time, the "ZVARIOUS" heading has become accepted Highway Plan nomenclature.

Found under its own tab in this booklet, the **ZVARIOUS section** of this Highway Plan

addresses programmatic needs and commitments, all designed to provide essential flexibility in implementing the upcoming biennial highway program.

Each of these activities are a critical part of KYTC's annual highway construction program. The funds represented give KYTC the flexibility to react immediately to unanticipated bridge and pavement needs, as well as be in position to utilize federal and state funding as it becomes available for the indicated actions.

- Anticipated federal funding for Intelligent Transportation Systems (ITS) activities
- >> Anticipated annual Transportation Alternatives Program (TAP) funding
- >> Anticipated annual Congestion Mitigation and Air Quality (CM) funding
- >> Emergency pavement repair and rehabilitation funding
- >>> Statewide federal bridge inspection funding
- >> Statewide federal Railroad Protective Devices (RRP) funding
- Statewide highway project design funding to support the state and federal highway programs
- >> Statewide replacement of bridge navigational lighting for safety purposes
- >>> Border State commitments to major river bridge repairs
- >> Statewide rockfall and landslide mitigation and repair projects
- >>> Statewide rest area maintenance
- Statewide initiatives to enhance truck parking at rest areas, welcome centers, and weigh stations
- >> Statewide federal Highway Safety Improvement Program (HSIP) funding
- Statewide federal and state funding for HSIP projects for highway safety near schools
- >>> Statewide funding for bridge scour mitigation activities
- Statewide funding for the Kentucky-specific Americans with Disabilities Act (ADA) transportation plan implementation activities
- >> Statewide funding for federal Carbon Reduction Program
- >>> Statewide funding for federal Protect Formula Program
- Annual federal payback commitments for GARVEE Bonds used to support previously authorized and upcoming Highway Plan projects



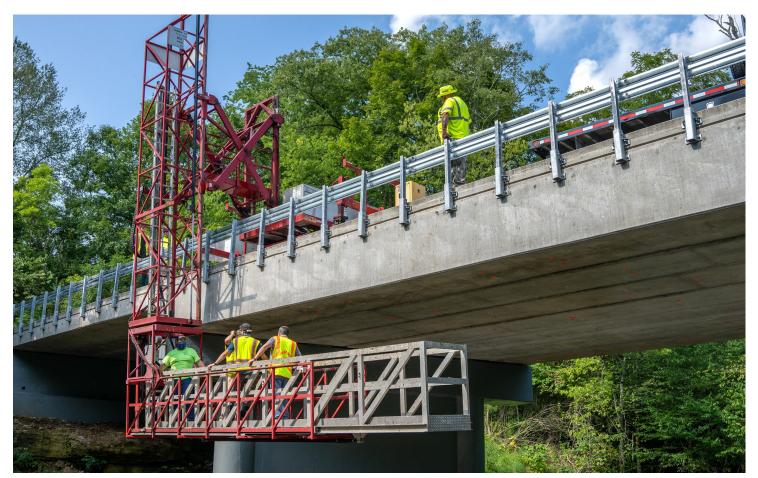
"County Priority Projects Program:

KYTC's Investment in County Priority Projects

The County Priority Projects Program is outlined in House Bill 265, Section 17, as approved by the Kentucky General Assembly. The General Assembly appropriated \$20 million of road funds in FY 2025 and \$20 million of road funds in FY 2026 to assist with improvements to county and city roads. The listing of projects scheduled within the "County Priority Projects" section of the 2024 Enacted Highway Plan was approved and itemized by the Kentucky General Assembly during the 2024 Regular Session through House Joint Resolution (HJR) 92. County Priority Projects were designated in the resolution by the acronym "CPP", and the list of projects are listed behind HJR/CPP Tab of this document. The projects in HJR 92 were pulled from a compendium of unfunded Contingency Account projects accumulated by KYTC for the prior year. In an effort to address a portion of the March 2024 backlog of unfunded Contingency Account requests totaling more than \$30 million, the General assembly set aside \$20 million through HJR 92 for specific CPP projects previously identified by the Cabinet. Any additions, adjustments, modifications, or interpretations of these identified projects will be provided by the General Assembly in future legislative actions.

II. Environmental Update

Kentucky's Anti-degradation Policy Implementation Methodology contained in 401 KAR 10:030 requires that all project development activities address the protection of water resources. The regulation recognizes the Kentucky General Assembly's authority for approval of projects in the highway plan. Projects are included in the highway plan only after a measured decision that the project enhances the quality of life, vitality of the Commonwealth and promotes the public good. The provisions of the amended regulation specify that inclusion of a project in the highway plan satisfies the requirements for conducting an anti-degradation socioeconomic benefit demonstration. Inclusion of a project is an indication of the General Assembly's conclusion that the reduction in water quality that may occur as a result of the project is acceptable given the socioeconomic benefits to be derived. Citizens who may be concerned about the potential of a project to affect water quality should provide information to their legislator for consideration when evaluating projects for inclusion in the highway plan.

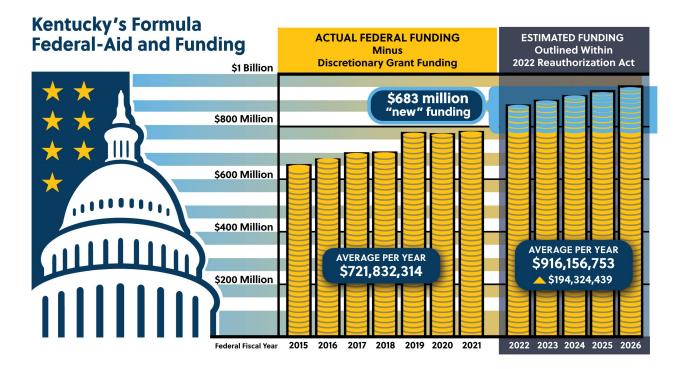


Ecologists conducted a bat survey under a KYTC bridge that was repaired in 2021. The bridge was designed to create animal habitat for the gray bat, an endangered species. (Photo by Kaitlin Keane)



III. Revenue Estimates and Assumptions

The 2024 Enacted Highway Plan is based on the most recent federal and state revenue estimates. State and Federal revenue estimates have been assumed to be "flat-lined" from FY 2026 through FY- 2030. Federal highway programs received a much-needed boost through the Congressional passage of a new federal transportation authorization act, the Infrastructure Investment and Jobs Act (IIJA) of 2021, now called the Bipartisan Infrastructure Law (BIL). As the chart below shows, the BIL reauthorized federal formula highway funding at amounts that exceeded the previous authorization act by approximately \$683 million over the five- year life of the new act. These additional funds are spread throughout the formula federal-aid highway programs with dollars escalating each year. The average five-year formula funding to Kentucky under the BIL is \$916.2 million compared to the previous five-year "FAST Act" average formula funding level of \$721.8 million annually. While the BIL did increase federal formula program size by \$194.4 million, or about 27%, much of this increase was offset by post-COVID transportation sector cost increases and inflation. The BIL also provided a significant infusion of Federal General Fund dollars targeted toward fixing America's deficient bridges, including about \$88 million annually expected to be allocated to Kentucky.





In January 2023, President Joe Biden came to Covington, KY to present the Brent Spence Bridge Corridor Project with federal funding grants worth more than \$1.635 billion. Joining him were Kentucky Gov. Andy Beshear, Ohio Gov. Mike DeWine, Kentucky U.S. Senator Mitch McConnell, former Ohio Senator Rob Portman, and Ohio Senator Sherrod Brown.

While the increase in formula federal-aid highway funding is certainly welcome, it should be noted that three new formula programs were also added by Congress. The first is a carbon reduction program ("CARB") to provide funding to states for activities that reduce carbon dioxide emissions from on-road highway sources. The second is a Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation ("PROTECT") program to help states improve the resiliency of transportation infrastructure. The third is a formula allocation to assist each state in developing an Electric Vehicle (EV) charging network.

The BIL also provided discretionary transportation grant programs to be administered by the United States Department of Transportation (USDOT). These grant programs require the states to formally apply for the funds with USDOT determining the grant winners. The following are some of the key grant programs through which KYTC has applied/will be applying for project assistance:

- The Multimodal Project Discretionary Grant Program (MPDG) which includes the National Infrastructure Project Assistance grants program (Mega*), the Nationally Significant Multimodal Freight and Highways Projects grants program (INFRA*) and the Rural Surface Transportation Grant program (Rural)
- >> The Rebuilding American Infrastructure with Sustainability and Equity (RAISE*)
- >> The Bridge Investment Grant Program (BIP*)
- >> The Electric Vehicle Charging and Fueling Infrastructure Grant Program
- >> The PROTECT Grant Program (supplements the formula PROTECT Program)
- >> The Safe Streets and Roads for All Grant Program*
- >> The Wildlife Crossings Pilot Grant Program*
- >> The Reconnecting Communities and Neighborhoods Grant Program*

*Denotes grant program from which Kentucky has received funding.

While KYTC cannot predict with certainty that it will receive USDOT federal discretionary grant funding, it will actively seek federal grant funding at every opportunity. Some of the larger projects for which grant funding will play a major role are the I-71/75 Brent Spence Bridge Corridor Project in Northern Kentucky, the I-69 Ohio River Crossing (ORX) at Henderson-Evansville, and the completion of the 4-lane Mountain Parkway Extension along a new alignment from Salyersville to Prestonsburg. Kentucky and Ohio received \$1.6 billion in BIP and Mega Grant funding for the Brent Spence Bridge project in 2022, and MPDG applications have been submitted this year for the I-69 Ohio River Crossing and the Mountain Parkway Extension projects. Kentucky and Indiana also plan to resubmit a BIP Grant request for the I-69 Ohio River Crossing project.

The 2024 Enacted Highway Plan is based on using the BIL authorized formula federal-aid funding projections for Kentucky as provided by the Federal Highway Administration (FHWA). These authorized funding levels were used to develop the funding chart in Figure 1 and are subject to the annual federal appropriations process. Congressional appropriators could change these numbers slightly but, at the time of this writing, FHWA's formula funding calculations represent the best estimate of annual federal funding through Federal FY-2026. For the purposes of this highway plan, the Federal FY-2026 funding levels have been extended through Federal FY-2030 at the Federal FY-2026 level.

In preparing the 2024 Enacted Highway Plan, both federal and state revenue sources have been considered and the projected state and federal-aid highway funds made available to KYTC for major highway projects are displayed in Figure 1. Consistent with past trends and current forecasts, this edition of the Enacted Highway Plan is being developed on the basis of the most recent federal transportation authorization, the BIL Act, and state revenue estimates consistent with projections made by Kentucky's Consensus Forecasting Group (CFG). The CFG is a committee of specially designated experts whose revenue forecasts are used by the Executive Branch and the General Assembly to craft the biennial state budget.

For the 2024 Enacted Highway Plan, FY-2025 through FY-2030 funding estimates total nearly \$9.85 billion, including \$6.4 billion in federal funds, \$1.4 billion in required state matching funds, \$114 million in local matching funds, \$950 million in state construction funding expected to be available for state priority "SPP" projects, \$450 million in State General Fund money identified for "High Growth Counties" projects, and \$300 million of State General Fund revenue that was made available for the I-69 Ohio River Crossing (ORX) and Mountain Parkway Extension projects should MPDG grants be awarded for those two projects, and \$40 million of state road funds for HJR 92/CPP projects. It is important to note that the ability of KYTC to provide the federally required, regular state matching funds and to undertake major state-funded projects is a function of available State Road Fund cash and requires the careful management of State Road Fund expenses. The Cabinet is committed to maintaining cash to a "floor" of \$100 million. The cash management process (as described in "Section II, Part B") currently yields daily cash balances for internal use and provides information for monthly meetings where estimated future cash outlays, including state matching funds for the federal-aid program, can be updated and project funding decisions can be refreshed. As KYTC has gained experience with this process, confidence has grown in both the methodology and the resulting cash flow decisions.

\$0

2025

2026

FEDERAL AND STATE HIGHWAY FUNDING LEVELS **AVAILABLE FOR OBLIGATION FROM 2025 THROUGH 2030**

\$2,500 MILLION \$2,285 \$1,703 \$1,453 \$1,453 \$1,453 \$1,503 TOTALS \$20 \$150 \$2,000 MILLION \$250 \$250 -\$20 \$200 \$150 \$1,500 MILLION \$19 -\$19 \$19 \$19 \$19 \$19 \$234 \$234 \$234 \$234 \$234 \$234 \$190 \$170 \$140 \$140 \$140 \$170 \$1,000 MILLION \$1,042 \$1,060 \$1,060 \$1,060 \$1,060 \$1,060 \$500 MILLION

(\$9.8 Billion estimated by Kentucky Transportation Cabinet)



2027

2028

2029

2030

A. Federal Revenue Projections

The FY 2025 - 2030 federal revenue forecasts are based on expected formula federal-aid allocations from the BIL Act through FY 2026 and straight-line projections for FY 2027 - FY 2030. The use of straight-line projections for FY 2027 through FY 2030 is a FHWA approved methodology for estimating revenue in years beyond the period covered by the current federal authorization act. Expected state-by-state levels of federal-aid highway funding under the BIL Act were calculated by FHWA and the resulting category-by-category formula funding amounts were provided through "apportionment tables" for each federal fiscal year.

Figure2 shows the anticipated federal funding category target amounts used to fiscally balance the 2024 Governor's Recommended Highway Plan. The anticipated total formula federal-aid dollars and matching funds available to fund projects scheduled for FY 2025 through FY 2030 is expected to be about \$7.8 billion. While the Governor's recommended 2024-2026 budget and out-year assumptions include sufficient state highway funding to match formula federal-aid dollars through FY-2030, the opportunity to apply for BIL competitive grant programs with matching requirements will be limited by state funding availability. The Brent Spence Bridge Corridor project federal competitive grant award benefitted from the devotion of \$250 million in additional state monies through the General Fund in the 2022-2024 budget. The Enacted 2024- 2026 budget recommendation includes another \$300 million from the state General Fund to supplement the federal grant applications for the I-69 Ohio River Crossing at Henderson-Evansville, and the completion of the 4-lane Mountain Parkway Extension.

Another concern on the federal program side is the FHWA's requirement of "fiscal constraint" for the federalaid highway element of the highway plan. The federal portion of the Highway Plan is required by federal law (23CFR 450) to be fiscally balanced. Immediately upon completion of the state legislative process, KYTC begins preparing the new Statewide Transportation Improvement Program (STIP). To the extent fiscally possible, the new STIP will incorporate the federal projects from the 2024 Enacted Highway Plan and will be submitted to the Federal Highway Administration (FHWA) for approval.

This task is made more difficult by the Enacted Highway Plan's inclusion of three federal funding categories ("APD", "FED", and "STP" totaling \$54.5 million) for which federal program revenues were not specifically associated. There are also projects identified within federal categories such as "NH" for which the identified project does not meet the eligibility criteria for that fund source. KYTC will look for opportunities to fund these projects in the upcoming biennium, but cannot guarantee that this will be possible due to legislative adjustments to other formula federal-aid programs, each with its own specific eligibility criteria and highway system performance criticality. Biennial federal funding category adjustments made by the legislature are as follows:

Federal Fund Differences between 2024 Recommended and Enacted Highway Plans

| Funding Category | KYTC Recommended Plan (\$Million) | Legislature's Enacted Plan (\$Million) | Difference (\$Million) |
|---|--------------------------------------|---|------------------------|
| NHPM (Interstate and Parkway Pavements and Bridges) | 545 | 292 | -253 |
| NH | 672 | 760 | 88 |
| STP1 | 53 | 87 | 34 |
| STP2 | 120 | 183 | 63 |
| STP3 | 24 | 19 | -5 |
| STP4 | 27 | 22 | -5 |
| STP5 | 68 | 55 | -13 |
| STPF | 210 | 265 | 55 |
| SAF | 188 | 205 | 17 |
| APD | 0 | 5 | 5 |
| FED | 0 | 21 | 21 |
| STP | 0 | 29 | 29 |
| TOTAL | 1,719 | 1,943 | 224 |

Fiscal constraint for federal-aid highway funding is an important consideration for federal agencies, and the STIP is the document through which fiscal constraint is measured. Any state efforts that result in overprogramming of the federal element of the highway plan cannot be accommodated by the federal rules governing the STIP process. Failure to gain FHWA approval of the STIP would result in the suspension of the annual federalaid program and its approximate \$1.06 billion annual funding for Kentucky. As the STIP is prepared, KYTC will work to achieve federal program fiscal balance while recognizing the 2024 Enacted Highway Plan's expectation that more projects will be accomplished than there will be dollars available to accommodate.

FIGURE 2

| Name | BIPARTISAN INFRASTRUCTURE LAW FEDERAL-AID HIGHWAY TYPE OF FUNDING | PERCENT OF REQ. MATCHING FUNDS | FFY 2025 | FFY 2026 | FFY 2027 | FFY 2028 | FFY 2029 | FFY 2030 | COMBINED TOTALS |
|------|--|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| GAR | GARVEE BOND DEBT SERVICE FD53 | TOLL CREDITS | | 70.0 | 70.0 | 12.0 | 0 | 0 | 222.0 |
| NH | FEDERAL NATIONAL HIGHWAY SYSTEM FUNDS | 20% | 234.5 | 245.1 | 251.1 | 297.0 | 308.4 | 308.4 | 1,644.5 |
| NHPM | FEDERAL NATIONAL HIGHWAY SYSTEM FUNDS FOR PAVEMENTS | 20% | 194.3 | 194.3 | 186.3 | 187.9 | 187.9 | 187.9 | 1,138.6 |
| STP1 | STP (5-200K Pop) | 20% | 14.0 | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | 87.0 |
| STP2 | STP (<5K Pop) | 20% | 28.7 | 29.8 | 32.2 | 43.1 | 43.1 | 43.1 | 220.0 |
| STPF | STP Flex Funding | 20% | 51.3 | 67.8 | 67.6 | 56.7 | 56.7 | 56.7 | 356.8 |
| STP3 | STP (5-200K Pop) for Pavements | 20% | 6.8 | 6.8 | 6.8 | 6.8 | 6.8 | 6.8 | 40.8 |
| STP4 | STP (<5K Pop) for Pavements | 20% | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 82.8 |
| STP5 | STP Flex Funding for Pavements | 20% | 24.7 | 10.3 | 10.4 | 21.4 | 21.4 | 21.4 | 109.6 |
| BRO | BRO (BRIDGES ON SYSTEM) | 20% | 56.0 | 56.0 | 56.0 | 56.0 | 56.0 | 56.0 | 336.0 |
| BRX | BRX (BRIDGES ON/OFF SYSTEM) | 20% | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 271.8 |
| BRZ | BRZ (BRIDGES OFF SYSTEM) | 20% | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 82.8 |
| FBP | FEDERAL BRIDGE PROGRAM | 20% | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 480.0 |
| FBP2 | "FEDERAL BRIDGE PROGRAM (15% OFF SYSTEM BRIDGES)" | 0% | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 84.0 |
| RRP | SAFETY-RAILROAD PROTECTION | 10% | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 11.4 |
| RRS | SAFETY-RAILROAD SEPARATION | 10% | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 11.4 |
| SAH | "FEDERAL STP FUNDS DEDICATED TO HUNTINGTON/ ASHLAND (20% Local Match Required)" | 20% | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 10.8 |
| SHN | "FEDERAL STP FUNDS DEDICATED TO HENDERSON (CARRY FORWARD AND 20% Local Match Required)" | 20% | 0 | 0 | 0 | 0 | 0 | 0 | - |
| SLO | "FEDERAL STP FUNDS DEDICATED TO LOUISVILLE (20% Local Match Required)" | 20% | 26.3 | 26.8 | 26.8 | 26.8 | 26.8 | 26.8 | 160.3 |
| SLX | "FEDERAL STP FUNDS DEDICATED TO LEXINGTON (20% Local Match Required)" | 20% | 7.7 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 46.7 |
| SNK | "FEDERAL STP FUNDS DEDICATED TO NORTHERN KENTUCKY (20% Local Match Required)" | 20% | 8.4 | 8.6 | 8.6 | 8.6 | 8.6 | 8.6 | 51.4 |
| APD | FEDERAL APPALACHIAN DEVELOPEMENT HIGHWAYS | 20% | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 14.0 | 84.0 |
| SAF | FEDERAL HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) | 10% | 55.7 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 340.2 |
| СМ | "CONGESTION MITIGATION/AIR QUALITY (20% Local Match Required)" | 20% | 15.8 | 16.2 | 16.2 | 16.2 | 16.2 | 16.2 | 96.8 |
| ТАР | "FEDERAL TRANSPORTATION ALTERNATIVES PROGRAM (20% Local Match Required)" | 20% | 12.1 | 12.3 | 12.3 | 12.3 | 12.3 | 12.3 | 73.6 |
| CARB | CARBON REDUCTION PROGRAM | 20% | 22.8 | 23.3 | 23.3 | 23.3 | 23.3 | 23.3 | 139.3 |
| PROT | PROTECT FORMULA PROGRAM | 20% | 25.9 | 26.5 | 26.5 | 26.5 | 26.5 | 26.5 | 158.4 |
| IF | INNOVATIVE FINANCING | 20% | | | Driven E | By Financi | al Analyse | es | - |
| | COMBINED TOTALS | | 1,042 | 1,060 | 1,060 | 1,060 | 1,060 | 1,060 | 6,341 |

Note:

1. Mandated GARVEE Bond Debt Service Payments for FFY 2025 through FFY 2030.

2. Previously set-aside upfront "Toll Credits" are used as state match on GARVEE Bond Debt Service Payments as outlined within agreement with GARVEE Bond Holders and with FHWA.

3. No remaining "Toll Credits" available for required state match on new federal funding obligations during FFY 2025 through FFY 2030.

4. The FBP and FBP2 "Federal Bridge Program" funding is funding through National General funds, not through Highway Trust Funds.

B. State Project Funding Projections

A forecast of \$2.35 billion in state road fund cash is expected to be available to support new state-funded highway plan project obligations between FY-2025 and FY-2030. This amount is based on the projected state road fund revenue minus the non-federal state funded fixed budgetary costs and remaining expenditures of currently authorized projects not yet completed. The projected available state road fund cash is based upon a number of assumptions about project cost payouts, revenues accruing to the Road Fund, non-Six-Year Plan costs, state bond debt service payments, unexpected cost increases, and project change orders. Actual decisions about when to obligate state project dollars and how much state project work can be afforded at any point will be made by the Secretary of Transportation and based on monthly cash management evaluations received from KYTC's Authorization Review Team (ART).

The ART consists of the Cabinet's Secretary, Deputy Secretary, the State Highway Engineer and deputies, and the KYTC Budget Director. These individuals work closely together to monitor the state funding cash balance, meeting monthly to carefully evaluate actual expenditures for the prior month and planned expenditures for upcoming months relative to future fiscal capacity calculated from ongoing project and program cost projections. Every planned, state-funded project funding decision undergoes a rigorous two-part assessment in which the following questions are asked: (1) Is the project ready to move forward from the project development standpoint? (2) Can KYTC afford to move the project forward considering the cash flow implications of doing so? Only a satisfactory response to both questions permits a project to move forward in the funding process.

The ART provides approval for authorization of state and federal funding for preconstruction phases of projects, for awards of construction phases, system preservation activities, and other highway program activities. The ART takes the necessary steps to assess all planned program outlays and manage cash flow.

In summary, KYTC's current projection of state road fund revenues available for state project obligations for the Highway Plan's "SPP" projects and state matching funds for the federal-aid highway funding program are as follows:

| FISCAL YEAR | State Matching Requirement | SPP Project Dollars | | |
|-------------|----------------------------|---------------------|--|--|
| FY-2025 | \$234 million | \$170 million | | |
| FY-2026 | \$234 million | \$170 million | | |
| FY-2027 | \$234 million | \$140 million | | |
| FY-2028 | \$234 million | \$140 million | | |
| FY-2029 | \$234 million | \$140 million | | |
| FY-2030 | \$234 million | \$190 million | | |
| Total | \$1.4 Billion | \$950 Million | | |
| | | | | |

State Road Fund Availability FY-2025 through FY-2030

As Column 3 (SPP Project Dollars) of the previous table demonstrates, KYTC anticipates very limited road fund capacity to pursue "SPP" projects from the 2024 Enacted Highway Plan. Both the 2024 Recommended Highway Plan and the 2024 Enacted Highway Plan recognized previously enacted highway plan projects and contain considerably more "SPP" projects than we expect to have dollars available to implement. The following table shows the extent to which both documents contained more "SPP" projects than dollars expected:

| | 2024 Biennial Highway Plan Total Dollar Amounts for "SPP" Funding | | | | | | | |
|---|---|---|-------------------------------------|---|--|--|--|--|
| • | State Funding Category | 2024 Recommended Highway Plan Amount | 2024 Enacted Highway Plan Amount | Actual Expected Biennial "SPP" Amount | | | | |
| | SPP | \$1.887 Billion | \$1.023 Billion* | \$340 Million | | | | |

*Difference funded through HGC or slipped into the "out years" of the Enacted Highway Plan

KYTC is developing a path forward for the 2024 Enacted Biennial Highway Plan and will seek to implement as many projects as possible, as quickly as possible, within the upcoming biennium.

Moving to Debt Service projections for the upcoming biennium and beyond, Figure 3 illustrates that the current federal and state road fund debt service totals approximately \$1.3 billion over the life of the bonds (2024 through 2042). As the note below the chart says, this debt does not include the \$300 million of GARVEE Bonds authorized, but not yet sold.

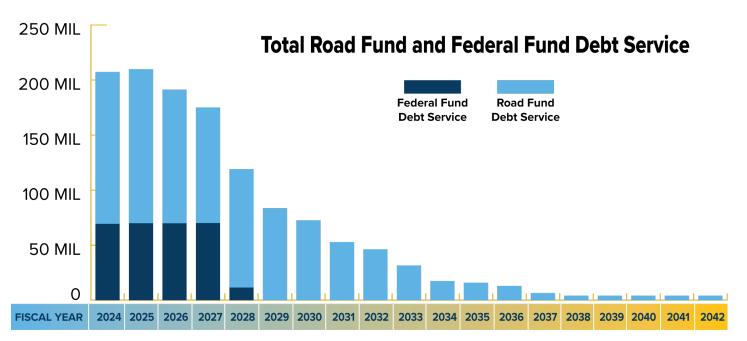


FIGURE 3

Total Debt Service (principal and interest) is approximately \$1.3 billion over the life of the Bonds.

*Does not include Federal Fund and Road Fund debt service for about \$300 million in authorized but unissued debt for GARVEE bonds but does include Road Fund debt service for \$12.5 million in authorized but unissued debt for the KDLIS driver licensing program.

IV. Kentucky Mega Projects

Brent Spence Bridge Project

KYTC has worked alongside the Ohio Department of Transportation (ODOT) for many years to pursue funding for a project to provide relief from the traffic congestion that has been a major chokepoint for freight movement in the I-71/75 Corridor that crosses the Ohio River. With the recent passage of the BIL Act, the states were elated to see that Congress determined the Brent Spence Bridge freight chokepoint as a major infrastructure problem that the nation must solve. In 2022, KYTC and ODOT were provided \$1.6 billion in federal grant funding under the BIL Act to offset a large portion of the project's cost. The \$3.3 billion project will provide a companion bridge for the Brent Spence Bridge and rework the bridge approaches on both sides of the river to achieve the freight capacity so desperately needed at this location. Kentucky's share of the estimated cost of the Brent Spence Bridge Project is estimated at \$1.5 billion. The federal grant funding will cover \$778 million of KYTC's project costs with \$285 million in regular matched federal NH Funds, \$250 million of state General Fund money, and \$195 million of state matching funds to meet the current costs. There is \$150 million of GARVEE bonds in the 2024 Enacted Highway Plan to cover additional costs necessary to move this project toward construction using design-build techniques that have proven successful on other large Kentucky projects.



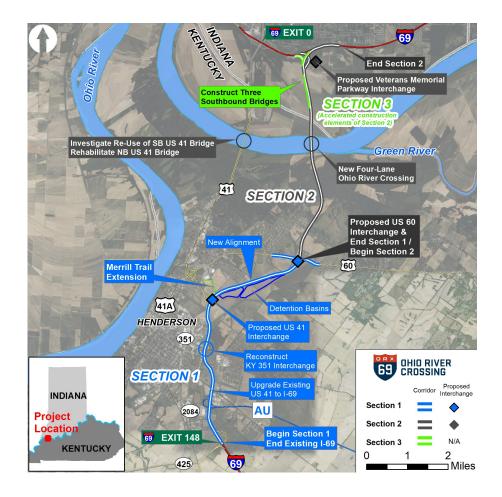


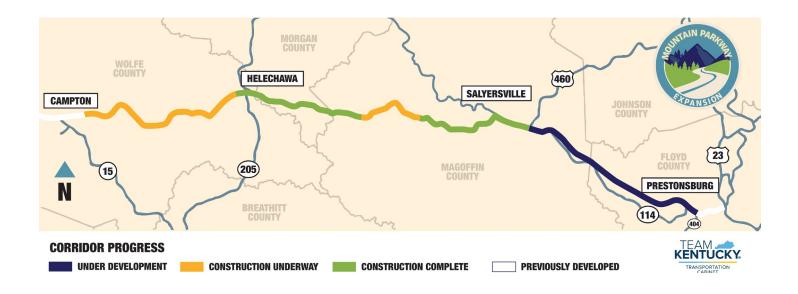


I-69 Ohio River Crossing Project

KYTC is working closely with Indiana to fund the remainder of the new I-69 bridge and approaches at the Ohio River between Henderson and Evansville. Each state is currently engaged in building approach work on its respective side of the Ohio River with KYTC having "Section 1" under construction from the Henderson Bypass to US 60, and the Indiana Department of Transportation (INDOT) having just recently let to construction "Section 3" of the project which ties into existing I-69 at Evansville. It is anticipated that the Ohio River crossing ("Section 2") will be ready to move to construction around the Year 2027, or sooner if federal grant funding is received. The 2024 General Assembly under Senate Bill 91, Section 55, appropriated General Funds from the Budget Reserve Trust Fund Account (KRS 48.705) in the amount of \$150,000,000 in fiscal year 2023-2024 Biennial Highway Construction Plan for the I-69 ORX project contingent upon award of a federal Multimodal Project Discretionary Grant for the project. To that end, KYTC and INDOT have jointly applied for \$210 million in federal Multimodal Program Discretionary Grant (MPDG) and intend to apply for federal Bridge Investment Program (BIP) grant funding to help offset project cost requirements. The result of the federal MPDG grant selection process will not be known until mid-to-late calendar year 2024.

Kentucky's share of the funding necessary to develop the river crossing, "Section 2", component of the project is \$486 million. The 2024 Enacted Highway Plan has included \$142 million of matched federal NH Funds and is looking to leverage a combination of significant federal grant funding, state General Fund monies, and GARVEE Bonds alongside Indiana's cost share to complete the 1-69 Ohio River crossing. Inflation, financing, and interest could increase these costs, but the states are committed to seeing the project through to completion. When the Ohio River crossing is complete, Kentucky and Indiana will have completed the construction of I-69 from the Tennessee Border all the way to Indianapolis.





Mountain Parkway Expansion

KYTC initiated work to 4-lane the Mountain Parkway from Campton through Salyersville (orange and green sections on the map below) in 2014. The final segments of that section of the parkway are currently under construction. Consideration has now shifted to extending the Mountain Parkway as a modern 4-lane facility eastward to Prestonsburg. The extension from Salversville to Prestonsburg (see the blue line above) would complete the vision of a 4-lane highway connection all the way from I-64 at Winchester to the US 23 Corridor at Prestonsburg. The 2022 Enacted Highway Plan provided funding to initiate the Mountain Parkway Extension project, and a design-build team has been selected to develop the project. The project is to be located on new alignment north of the existing route at an estimated cost of \$403 million. The 2024 Enacted Highway Plan has allocated \$104 million of matched federal NH Funds and expects to use a combination of a significant federal grant, state General Fund monies, and GARVEE Bonds to round out the costs for the project. The 2024 General Assembly under Senate Bill 91, Section 56, appropriated General Funds from the Budget Reserve Trust Fund Account (KRS 48.705) in the amount of \$150,000,000 in fiscal year 2023-2024 Biennial Highway Construction Plan for the Mountain Parkway Project contingent upon award of a federal Multimodal Project Discretionary Grant for the project. KYTC has submitted an application requesting \$116 million of federal MPDG funding which would go a long way toward meeting the project's cost requirement. The result of the federal MPDG grant selection process will not be known until mid-to-late calendar year 2024.



V. Historic Construction Awards

Over the past 30 years, KYTC's ability to deliver needed construction projects for the citizens of Kentucky has ebbed and flowed in accordance with available state and federal funding dedicated to that purpose. As the chart below indicates, recent years have seen the calendar-year construction awards vary from year-to-year with the highest years representing funding for major projects, most notably the Louisville and Southern Indiana Ohio River Bridges project in 2012. KYTC works to deliver a consistent annual program of lettings, thereby ensuring its appropriate contribution to Kentucky's economy.

Figure 4

| Calendar | AWARDS | Number of | HISTORIC | CONST | RUCTION A | WARDS CHART |
|----------|-------------|-----------|----------------|----------------|-----------|--|
| YEAR | (millions) | CONTRACTS | December 2023 | | | |
| 1990 | \$424 | 991 | - | | | |
| 1991 | \$605 | 1083 | - | |] | |
| 1992 | \$333 | 978 | - | | | |
| 1993 | \$410 | 906 | - | | | Awards (Millions) |
| 1994 | \$417 | 922 | - | | l | |
| 1995 | \$553 | 883 | _ | | | |
| 1996 | \$382 | 752 | - | | | |
| 1997 | \$564 | 736 | _ | | | |
| 1998 | \$638 | 757 | _ | | | |
| 1999 | \$689 | 715 | - | | | |
| 2000 | \$736 | 707 | - | | | |
| 2001 | \$792 | 768 | - | | | |
| 2002 | \$693 | 693 | _ | | | |
| 2003 | \$655 | 707 | _ | | | |
| 2004 | \$463 | 537 | _ | | | |
| 2005 | \$761 | 783 | _ | - | | |
| 2006 | \$1,050 | 520 | _ | | | |
| 2007 | \$1,570 | 695 | _ | | | |
| 2008 | \$410 | 509 | - | | | |
| 2009 | \$777 | 600 | - | | | |
| 2010 | \$861 | 690 | - | | | |
| 2011 | \$1,010 | 642 | _ | | | |
| 2012 | \$1,870 | 778 | *I SIORB \$860 | M (see NOTE 1) | | |
| 2013 | \$1,090 | 813 | | | | |
| 2014 | \$1,180 | 726 | _ | | | *NOTE 1: |
| 2015 | \$924 | 718 | - | | | THE CALENDAR YEAR |
| 2016 | \$735 | 580 | _ | | | 2012 TOTALS INCLUDE THE AWARDED \$860 |
| 2017 | \$640 | 589 | _ | | | MILLION DESIGN-BUILD |
| 2018 | \$812 | 696 | - | | | LOUISVILLE OHIO RIVER BRIDGE DOWNTOWN |
| 2019 | \$1,500 | 844 | - | | - | PROJECT. |
| 2020 | \$632 | 349 | - | | | |
| 2021 | \$1,170 | 723 | - | | | |
| 2022 | \$1,190 | 674 | - | | | |
| 2023 | \$1,164 | 652 | | | | |
| | In Millions | | 0 | 500 | 1000 | 1500 2000 |

VI. Program Continuity

The 2024 Enacted Highway Plan represents a major step toward achieving Kentucky's transportation vision, mission, and goals. As we look ahead to both Congressional and state legislative expectations for our highway program, KYTC must protect past investments in the existing highway system by at least maintaining the total funding made available for roadway pavements and bridges. Using performance and data-driven pavement and bridge prioritization processes, \$3.2 billion of state and federal-aid funding is allocated in this plan for FYs 2025 through 2030 toward preserving Kentucky's existing road and bridge infrastructure. This amount represents about 40% of the total funding expected to be available through the Year 2030, an amount consistent with the 2022 Enacted Highway Plan.

The remainder of the funds allocated for use in this highway plan upgrade the existing highway system by enhancing roadway safety, relieving traffic congestion, widening existing routes for freight accommodation, or completing roadway connections that will bring economic opportunity to the Commonwealth. In addition to the regular state and federal funding made available through the federal government's recent enactment of the Bipartisan Infrastructure Law (BIL) and the state legislature's enactment of the previous highway plan, the BIL Act created many new sources of competitive federal grant funding that Kentucky has demonstrated it is prepared to pursue. The 2024 Enacted Highway Plan references pursuing those grant programs for significant funding for the construction of the I-69 Ohio River Crossing (ORX) project and the completion of the Mountain Parkway Extension in Eastern Kentucky. KYTC is using the experience gained from the successful application developed by Kentucky and Ohio through which the states were awarded a \$1.6 billion federal grant for the Brent Spence Bridge freight capacity improvement. There are many other projects across Kentucky that state and local governments are coordinating efforts to pursue federal grant funding in the months ahead as we all seek to bring those additional federal funds to Kentucky projects.

To quote Kentucky's Transportation Strategic Plan, "A good plan is like a road map - the journey is the safest when the road map is the clearest." The 2024 Enacted Highway Plan presents a reasonably clear path forward that provides both essential highway system investments and enhanced future opportunities for the economy and quality of life for Kentucky's citizens.

