

U.S. Department of Transportation

Federal Transit Administration Region IV 230 Peachtree Street, NW Ste 1400 Atlanta, GA 30303 215-656-7100 215-656-7260 (fax) Federal Highway Administration KY Division 330 West Broadway, Ste 264 Frankfort, KY 40601 502-223-6720 502-223-6735 (fax)

October 8, 2024

In Reply Refer To: HDA-KY

Mr. Jim Gray Secretary Kentucky Transportation Cabinet 200 Mero Street, Room 613 Frankfort, KY 40622

Dear Secretary Gray,

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) has reviewed the Kentucky Transportation Cabinet (KYTC) and Metropolitan Planning Organization (MPO) planning processes, plans, and self-certifications. We make a joint Federal Planning Finding that the KYTC and Kentucky MPOs use continuing, cooperative, and comprehensive planning processes that substantially comply with applicable statewide and MPO planning laws and regulations, including 23 U.S.C. 134 and 135, 49 U.S.C. 5303-5305, and 23 CFR Part 450 (Subparts A, B, and C).

We also jointly find that the FY 2025-2028 Kentucky Statewide Transportation Improvement Program (STIP) substantially meets applicable sections of the above laws and regulations, including 23 CFR Part 450.218 and Part 450.220 and approve this document.

Our planning findings are based on FHWA's and FTA's

- Regular stewardship and oversight of State and MPO planning partners,
- On-going involvement in, and review of, planning products,
- Provision of technical assistance,
- Promotion of best practices,
- Division and Region Office Risk Assessments,
- Federal certification reviews of Metropolitan Transportation Areas (MTAs),
- KYTC's statewide and metropolitan planning self-certification statements, and related supporting documentation,
- Kentucky MPO's self-certification statements and related supporting documentation,
- KYTC Transportation Asset Management Process (TAMP), and
- Input from the public, local elected officials, transportation agencies, and other planning partners.

This STIP approval does not constitute a final commitment of Federal funds. Federal funding for projects included in the STIP are finalized when a request for project authorization is approved by FHWA or upon approval of a grant by FTA. Should amendments to this STIP become necessary, highway amendments will be acted upon by FHWA and transit amendments will be acted upon by FTA.

Our review found the KYTC has several planning activities worthy of commendation.

The KYTC award winning Statewide Complete Streets, Roads, and Highways Manual focuses on building a multi-modal network that supports all users. The manual was developed as a general guide on complete streets best practices and standards, while assisting with progressively detailed guidance and recommendations for site-specific applications. This effort also includes a periodic update to this manual to reflect current best practices, while publishing and promoting the new KYTC Statewide Bicycle and Pedestrian Master Plan. The implementation of is manual included complete streets training opportunities throughout the state of Kentucky for KYTC staff, partner agencies, and consultants in 2022 and 2023.

The KYTC 2022 Statewide Bicycle and Pedestrian Master Plan includes the following action plan items. The primary step is to assist in implementing KYTC's new Complete Streets policy. This includes consideration of active transportation in project development and prioritization decisions; create a Pedestrian and Bicycle Strategic Safety Plan; improve and enhance multimodal data collection and sharing of data; continued support to local planning agencies (LPA) in their effort to implement bicycle and pedestrian projects; and continue to educate the public to increase mode sharing, while promoting safety throughout a multi-modal transportation system. This also includes promoting state statutes to further enhance mobility corridors for bicycles and pedestrians.

The 2022-2045 Long-Range Statewide Transportation Plan (LRSTP) is a living, policy-oriented document, in compliance with federal transportation requirements, which establishes broad goals and principles along with strategic actions to assist KYTC towards meeting their vision for the commonwealth's multimodal transportation system. This document serves to enhance KYTC's partnerships with local, state, and federal agencies by gathering valuable input from them along with the public and private sectors to assist in the development of the vision, goals, and objectives. This includes the funding framework for coming years through the passing of the Bipartisan Infrastructure Law (BIL) in November 2021 to address the investment needs in the nation's infrastructure.

KYTC continues to enhance their public outreach and education efforts to include interactive data collection with storybook type mapping portals for various planning studies.

Various Studies and Plans: Several planning studies and plans are identified within the STIP with a few statewide studies currently at various stages of development as follows:

The KYTC 2024 Statewide Rail Plan is underway as part of the 2022 Kentucky Statewide Freight Plan. It is intended to not only meet federal requirements but provide priorities and strategies to guide enhancements to future rials service for the public, outline the role of rail transportation within Kentucky's transportation system, and coordinate with the goals and programs of other state transportation planning documents including, but not limited to, the Statewide Freight Plan and the LRSTP.

Implementation efforts are currently underway as part of the Statewide Truck Parking Action Plan to address opportunities identified in the plan starting with those low cost/high impact areas.

We appreciate the time and effort that you and your staff put forth in the development of this STIP and look forward to continuing our coordination with the KYTC, the MPOs, the regional and local transit service providers, and Kentucky's other transportation stakeholders to

further implement planning process.

Sincerely,

For: Shundreka R. Givan, AICP
Kentucky Division Administrator
Federal Highway Administration

Yvette G. Taylor, PhD
Region 4 Administrator
Federal Transit Administration

By email:

cc: Ron Rigney, Division of Program Management, KYTC Mikael Pelfrey, Division of Planning, KYTC Lewis Grim, Eastern Federal Lands Division, FHWA



Andy Beshear

Jim Gray SECRETARY

200 Mero Street Frankfort, Kentucky 40601

September 20, 2024

Shundreka R. Givan, AICP FHWA Kentucky Division Administrator Federal Highway Administration 330 W. Broadway St., Suite 264 Frankfort, Kentucky 40601

Dear Ms. Givan:

As per the August 15, through September 14, 2024, "Public Review" comments from FHWA and FTA, we have finalized the Kentucky Transportation Cabinet's Fiscal Years 2025-2028 Statewide Transportation Improvement Program (STIP) for your approval. The 2024 STIP was developed in accordance with federal regulations. The implementation of the 2024 STIP will be in accordance with the "Infrastructure Investment and Jobs Act" (IIJA) programs and guidelines, and will be conducted through the cooperative efforts of the KYTC, FHWA, and FTA to ensure that all federal-aid funding is utilized in accordance with federal guidelines and federal regulations.

The STIP contains listings of highway and transit projects within the 120 Kentucky counties and the District 99 Zvarious funding categories. Projects shown in the listing of STIP projects located within the Metropolitan Planning Organization (MPO) requiring MPO TIP actions are identified. The MPO TIP actions adding the identified projects, and adding future projects within the MPO areas not identified within the current MPO TIP will be processed through the corresponding MPO's TIP modification or amendment process. Upon completion of the MPO TIP modification or amendment, the modification or amendment will be added to the STIP via the STIP modification process prior to authorization of federal funding for the corresponding project.

We appreciate the assistance of FHWA and FTA, and look forward to implementation of the FY 2025-2028 Statewide Transportation Improvement Program (STIP).

Sincerely,

Ronald B. Rigney
Ronald B. Rigney (Sep 20, 2024 10:14 EDT)

Ronald B. Rigney, P.E. & P.L.S. Director, Division of Program Management

RBR:SAC

c: James Ballinger, State Highway Engineer Mikael Pelfrey, Director, Division of Planning



Kentucky's

Statewide Transportation Improvement Program for FY 2025-2028

The Kentucky Legislature enacted House Bill 265; House Bill 266; House Joint Resolution (HJR) 91; House Bill 1; and Senate Bill 91 during the 2024 Regular Session of the General Assembly. House Bill 265 is the Annual Budget for the Kentucky Transportation Cabinet and provides operating funds for FY 2025-2026. House Bill 266 is the Biennial Highway Construction Plan for FY 2024-2026. HJR 91 is the Highway Preconstruction Program Plan for FY 2027 through FY 2030, and these combined bills make up the Enacted 2024 Highway Plan. In addition, House Bill 1 outlines the \$450 million of General Funds for the High Growth Counties (HGC) listed in Enacted Highway Plan (Section 231), and House Bill 1 includes numerous other Kentucky projects to be funded with General Funds. Senate Bill 91 outlines the \$150 million of General Funds for the I-69 ORX project and \$150 million of General Funds for the Mountain Parkway Expansion project, contingent upon receiving USDOT MEGA Grants for each project (Sections 55, 56, 57 on page 19 of 29). The Transportation Cabinet's overall transportation program contained within the FY 2025-2028 STIP is consistent with the state and federal revenue estimates and assumptions and contains projects as identified within the 2024 Enacted Highway Plan.

http://transportation.ky.gov/Program-Management/Pages/2024-STIP-Book.aspx

CONTACT PERSON: James Ballinger, *P.E.*

State Highway Engineer
Department of Highways
200 Mero Street, 6th Floor
Frankfort, Kentucky 40622

Phone: (502) 564-3730

Statewide Transportation Improvement Program for FY 2025-2028

TABLE OF CONTENTS

	$\underline{\mathbf{P}}_{1}$	<u>AGE</u>							
I.	Introduction	1							
II.	STIP Development	5							
	A. Planning Process Considerations								
	A-1. Agreements.								
	A-2. Public Involvement Process.								
	A-3. Air Quality Considerations.								
	A-4. Congestion Mitigation and Air Quality Improvement Program								
	A-5. Fiscal Constraint								
	A-6. Revisions to the LRSTP or STIP								
	B. STIP Projects	24							
	B-1. Planned Highway Improvements								
	B-2. Highway Safety Improvement Program	27							
	B-3. Intelligent Transportation System	30							
	B-4. Maintenance and Traffic Operations	30							
	B-5. Transportation Alternatives Program	31							
	B-6. Recreational Trails Program								
	B-7. Planned Public Transportation (Transit) Projects								
	B-8. Human Service Transportation Delivery Process								
	B-9. Planned Aviation Improvements								
	B-10. Kentucky's "Mega Projects"								
	B-11. FAST Act Grants								
	B-12. Performance Measures	38							
III.	Appendix A - Exhibits								
	A-1. State Certification Letters								
	A-2. Public Involvement Process for STIP and Statewide Transportation Plan								
	A-3. Public Involvement Documents and Comments for this Edition of the STIP								
	A-4. Air Quality Conformity Determinations for Maintenance Areas								
	A-5. STIP Projects								
	A-6. Congestion Mitigation and Air Quality Projects								
	A-7. Transportation Alternatives Projects								
	A-8. Recreational Trails Projects								
	A-9. Public Transportation (Transit) Projects								
	A-10. Aviation Improvements								
IV.	Appendix B - Metropolitan Planning Organization (MPO) Financial Plans								
V.	Appendix C - Glossary of Transportation Terms and Abbreviations								
VI.	Appendix D - Important Addresses and Phone Numbers								
VII.	Appendix E – FY24-27 Eastern Federal Lands Transportation Improvement Pro	ojects							

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM for FY 2025-2028

I. Introduction

The current Transportation Act, "Infrastructure Investment and Jobs Act" (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was signed into law November 15, 2021, by President Joe Biden. This Act replaces the previous Act, Fixing America's Surface Transportation Act (Fast Act). The IIJA/BIL is the largest long-term investment in our infrastructure and economy in the Nation's history. It provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, mass transit, water infrastructure, resilience, and broadband.

The IIJA/BIL provides the basis for Federal Highway Administration (FHWA) programs and activities through September 30, 2026. It makes a once-in-a-generation investment of \$350 billion in highway programs. This includes the largest dedicated bridge investment since the construction of the Interstate Highway System. New programs under the BIL focus on key infrastructure priorities including rehabilitating bridges in critical need of repair, reducing carbon emissions, increasing system resilience, removing barriers to connecting communities, and improving mobility and access to economic opportunity. Many of the new programs include eligibility for local governments, Metropolitan Planning Organizations (MPOs), Federally recognized Tribes, and other public authorities, allowing them to compete directly for funding.

In accordance with the IIJA/BIL, Section 11132 "Rural Surface Transportation Grant Program" of Title 23, United States Code (U.S.C.) was amended. The amended language includes specific details pertaining to the bundling of eligible projects in a rural area in the Statewide Transportation Improvement Program (STIP) for the Rural Surface Transportation Grant Program.

The IIJA/BIL states that "each State is required to carry out a continuing, cooperative, and comprehensive performance-based statewide multimodal transportation planning process, including the development of a long-range statewide transportation plan and STIP, that facilitates the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight (including accessible pedestrian walkways, bicycle transportation facilities, and intermodal facilities that support intercity transportation, including intercity bus facilities and commuter van pool providers) and that fosters economic growth and development within and between states and urbanized areas, and take into consideration resiliency needs while minimizing transportation-related fuel consumption and air pollution in all areas of the state, including those areas subject to the metropolitan transportation planning requirements of 23 U.S.C. 134 and 49 U.S.C. 5303."

As required by Title 23, U.S.C., section 135, paragraph (g) (1): Each state shall develop a statewide transportation improvement program for all areas of the state. Such program shall cover a period of 4 years and be updated every 4 years or more frequently if the Governor elects to update more frequently. The STIP is to be developed for all areas of the state in cooperation with MPOs and local officials, shall be deemed consistent with the applicable State Implementation Plan

developed pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.), shall contain primarily those project phases for which funding can reasonably be expected, and shall reflect the statewide priorities for programming and funds expenditure. The STIP is to be a truly multimodal plan, and the public must be afforded the opportunity to comment on the proposed program. FHWA and FTA reviews the STIP and issues a Planning Finding in accordance with 23 CFR 450.220 as per the requirements of 23 U.S.C. 134 and 135 of 49 U.S.C. 5303-5305.

The IIJA/BIL legislation will:

1. Ensure every American has access to reliable high-speed internet.

KentuckyWired is a state-run project constructing over 3,000 miles of high-speed, high-capacity fiber optic cable in every county in Kentucky. The KentuckyWired network is a "middle mile" project connecting government offices, universities, community colleges, state police posts, state parks, and other government institutions to the global internet. Anywhere along its path, Internet Service Providers will be able to connect to the network and bring faster, more reliable internet to every corner of the Commonwealth. Cellular providers will also be able to connect to KentuckyWired and build more cell phone towers throughout the state. Its 288-strand fiber optic cable will serve the needs of government agencies, universities, businesses, and citizens for decades to come.

In addition, as of January 2024, Kentucky has received \$1.3 billion for development and installation of high-speed internet. Kentucky has received \$1.1 billion through the Broadband Equity, Access, and Deployment (BEAD) Program to provide access to highspeed internet to everyone in Kentucky. Also, about 448,000 households in Kentucky are enrolled in the Affordable Connectivity Program.

2. Repair and rebuild our roads and bridges with a focus on climate change mitigation, resilience, equity, and safety for all users.

The legislation includes the first ever Safe Streets and Roads for All discretionary grant program to support projects to reduce traffic fatalities, which claimed nearly 43,000 lives in 2021. In fiscal year 2022, Kentucky was awarded 14 action plans totaling \$3,346,104 and one implementation plan in Louisville for \$21,416,800. In fiscal year 2023, the commonwealth was awarded five demonstration plans for \$1,033,344 and two implementation plans for \$29,220,000 – in Lexington and Louisville. All awarded implementation plans include a focus on improvements for pedestrians.

3. Improve transportation options for millions of Americans and reduce greenhouse emissions through the largest investment in public transit in U.S. history.

Based on formula funding alone, Kentucky expects to receive approximately \$394 million over five years under the Bipartisan Infrastructure Law to improve public transit across the state. This funding is anticipated to expand healthy, sustainable transportation options in Kentucky, where non-white households are 6.2 times more likely to commute via public transportation and 14% of transit vehicles in the state are currently past useful life. As of January 2024, Kentucky has been allocated \$151 million to improve public transportation options across the state.

4. Build a national network of electric vehicle (EV) chargers.

Through the National Electric Vehicle Infrastructure Program alone, Kentucky is expected to receive approximately \$69 million in formula funding over five years to support the expansion of electric vehicle charging in the state. To date, Kentucky has been allocated \$39.9 million to build a network of EV chargers across the state.

KYTC's Division of Planning has completed Electric Vehicle Infrastructure Deployment Plans in the summers of 2022 and 2023. A Request for Proposals (RFP) to solicit qualified entities to design, build, operate, and maintain Direct Current Fast Charging (DCFC) EV Supply Equipment Stations was open for 60 days through August 24, 2023. As a result of developed evaluation criteria, 24 DCFC sites were awarded on designated Alternative Fuel Corridors (AFCs), all interstates and parkways, in October 2023. A second RFP in February 2024 will aim to fill in gaps on AFCs to achieve build out.

5. Make our infrastructure resilient against the impacts of climate change, cyberattacks, and extreme weather events.

The KYTC's Division of Environmental Analysis is leading the effort in to enhance infrastructure resiliency with support from the Kentucky Transportation Center at the University of Kentucky. Statewide assessments regarding the vulnerability of NHS assets to extreme weather and natural hazards, with an emphasis on flooding, earthquakes, sinkholes, and landslides have been completed. The output of these assessments has help develop a GIS-based data system that enables the Cabinet to better track impacts and costs to its infrastructure from natural disasters.

Additionally, these assessments led to the development of a Transportation Resilience Improvement Plan (RIP) for Kentucky that was approved by FHWA in 2023. The RIP will aid KYTC to better prepare for, respond to, and withstand future extreme weather and natural hazard events affecting the transportation system. This plan involves a risk-based assessment that factors the likelihood of the event, the severity of the damages, and the criticality of the transportation assets. Strategies included in this plan can be implemented to improve transportation resilience in support of KYTC's overall mission.

Kentucky was the first state in the Country to have a statewide transportation resilience plan approved by FHWA. With this plan, Kentucky will utilize federal funds through the PROTECT Formula Program to identify and prioritize investments toward repairing and rebuilding transportation assets that have been damaged or destroyed by natural disasters.

It should be noted that Kentucky's transportation programs are developed and implemented under strict legislative oversight at the state level. In particular, the highway program is governed by a section of state law that requires multiple considerations in highway program development. It also requires in-depth reporting to the state legislature of many program events such as monthly program authorizations, bid tabulations, construction project awards, change orders, and cost overruns. The KYTC's Enacted Highway Plan is updated biennially under these guidelines, and the first two years of the Plan, the "biennial element," is line-itemed into the state's enacted biennial budget. The STIP covers a period of four years (FY 2025-2028) and contains federally funded

projects. Regionally significant state-funded projects are also included to meet air quality conformity requirements.

Kentucky submitted its first formal STIP document in 1992. Since that time, the KYTC has been working with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), MPOs, Area Development Districts (ADDs), and local governmental units to define and strengthen the cooperative processes put into practice by each Transportation Act. Requirements pertaining to management system implementation, public involvement in strategic planning, environmental justice, and statewide and metropolitan planning have all been carefully reviewed and processes identified to facilitate future transportation program development in Kentucky. These processes continue to evolve. This document demonstrates Kentucky's commitment to the development of a continuing planning process.

As noted, the FY 2025-2028 STIP contains all federally funded scheduled projects in Kentucky, including projects located within the metropolitan planning areas for the following urban areas with over 50,000 population: Bowling Green, Cincinnati-Northern Kentucky, Clarksville-Oak Grove, Evansville-Henderson, Huntington-Ashland-Ironton, Lexington, Louisville, Owensboro, and Radcliff-Elizabethtown. A project located within these metropolitan planning areas must be included in the appropriate MPO's TIP before it can be included in the STIP and before funding can be authorized. Since the Paducah urban area was only identified as having a population over 50,000 starting with the 2020 census, they are not required to adopt a TIP until December 29, 2026. Each TIP must be approved by the MPO's Policy Board.

The following TIPs are incorporated by reference into this document:

- Bowling Green TIP approved August 2023
- Cincinnati-Northern Kentucky TIP approved April 2023
- Clarksville-Oak Grove TIP approved October 2022
- Evansville-Henderson TIP approved March 2023
- Huntington-Ashland-Ironton TIP approved April 2023
- Lexington TIP approved September 2020
- Louisville TIP approved May 2023
- Owensboro TIP approved November 2022
- Radcliff-Elizabethtown TIP approved September 2021

When new MPO TIPs or Federal Lands TIP are finalized or existing TIPs are amended, the changes will be incorporated into the STIP document directly or by reference through the STIP amendment or administrative modification process. The KYTC recognizes the role of the MPOs in regional planning and fully supports STIP contributions resulting from MPO decision-making processes.

The Planning and Research Annual Work Program is in compliance with the provisions of 23 CFR 420.111 and includes programs and operations for planning activities in the KYTC and the Kentucky Cooperative Transportation Research Program (KCTRP). The Division of Planning is responsible for recommending, advising, and assisting the chief administrators of the KYTC in the development of the overall goals, policies, project priorities, and procedures relating to the total

transportation program. The KCTRP is concerned with the development and conduct of a comprehensive research program in cooperation with the U.S. Department of Transportation, Federal Highway Administration (FHWA) and is administered through the KYTC State Highway Engineer's Office.

In addition to research developed in cooperation with FHWA, the KCTRP performs other services for the KYTC. The scope of these services includes activities such as research studies and special investigations of various engineering and operation activities. The Research Program and Implementation Advisory Committee (RPIAC), headed by the State Highway Engineer and coordinated through the Research Coordinator, gives direction to the research program.

II. STIP Development

Section 135 of Title 23, United States Code, includes a number of elements, which must be considered within a state's continuous transportation planning process. These planning process elements as outlined in Section 135 (d)(1)(A-J) ensure connectivity between transportation, land use, environmental issues, investment strategies, national energy goals, and other "big picture" components of a comprehensive planning process. The KYTC recognizes the planning process requirements outlined in Sections 135 (d) and (e) and is developing mechanisms for evaluating these items as it strives to implement Kentucky's transportation planning process.

Appendix A, Exhibit A-1, contains the state's certification letters, including a self-certification statement, which certifies that Kentucky's transportation planning process is being carried out in accordance with all applicable federal requirements. Copies of policies and acknowledgments regarding the following are on file in the Highway District Offices and the Central Office of Human Resource Management:

- 1. Political Activities
- 2. Conflict of Interest
- 3. Code of Ethics
- 4. Smoking
- 5. Drug-Free Workplace
- 6. Americans with Disabilities (ADA)
- 7. Workplace Violence
- 8. Work Performed Off the Rights-of-Way of State Maintained Roads and Highways
- 9. Anti-harassment/Anti-discrimination
- 10. Employee Dress
- 11. Internet and Electronic Mail Acceptable Use
- 12. Memo of Holidays for State Personnel
- 13. Kentucky Employee Assistance Program (KEAP)
- 14. Confidential and Sensitive Information
- 15. Translation Services

A. <u>Planning Process Considerations</u>

A-1. Agreements

To ensure that the statewide transportation planning process is carried out in

coordination with other state and federal agency requirements, the KYTC has formalized agreements with the various transportation and resource agencies. These agreements have defined the roles of these agencies and governments and yield a stronger platform from which future STIPs will be developed. The KYTC hereby affirms its commitment to these agreements for the purpose of stabilizing the statewide planning process. Copies of the MPO agreements for the urban planning processes are included in the MPOs Unified Planning Work Programs submitted to FHWA annually. Copies of the agreements with the ADDs for the non-urban transportation planning process are maintained by the KYTC and available upon request.

A-2. Public Involvement Process

The KYTC works with the ADDs and MPOs to ensure that public involvement processes are utilized that provide opportunities for public review and comments at key decision points. See Exhibit A-2 for a complete detailed description of the public involvement process.

A-3. Air Quality Considerations

Conformity

Projects contained in the FY 2025-2028 STIP and located in areas designated "nonattainment" or "maintenance" for air quality standards must be consistent with Kentucky's State Implementation Plan (SIP) developed by the Kentucky Energy and Environment Cabinet's Division for Air Quality (DAQ) pursuant to the Federal Clean Air Act. In the absence of a SIP, transportation conformity requirements still apply. Transportation plans involving areas designated as "nonattainment" and "maintenance" require a transportation conformity determination to ensure that planned projects will neither create nor contribute to violations of the National Ambient Air Quality Standards (NAAQS) and to ensure that the area will be able to meet the NAAQS in future years.

In Metropolitan Planning Areas (MPAs), the transportation conformity determination is conducted for each new TIP or MTP and amendment for the applicable MPO's MTP. If acceptable, the project list of the shorter-range metropolitan area TIP must also be determined to be consistent with the MTP and in conformance with the SIP. STIP projects for "nonattainment" and "maintenance" areas outside an MPA, KYTC conducts the conformity analysis to demonstrate transportation conformity. All plans, TIPs, and projects are evaluated as required for transportation conformity in each area. Once conformity has been evaluated, USDOT will make a conformity determination for each area. Additionally, project level conformity is required in areas that have been designated as "nonattainment" or "Maintenance" for Particulate Matter 2.5 to ensure that the project does not create, or contribute to, an air quality standard violation.

Designations

The 2015 8-hr Ozone Standard Final Rule was effective May 8, 2018, and the following apply to the following Kentucky counties:

• Boone, Campbell, and Kenton – on November 3, 2023, Northern Portions

designated as maintenance for the 2015 8-hr Ozone Standard

• Bullitt, Jefferson, Oldham – designated as non-attainment for the 2015 8-hr Ozone Standard, and they must also show conformity for the 1997 8-hr Ozone Standard

The 1997 fine particulate matter (PM2.5) NAAQS standard was officially revoked for transportation conformity purposes on October 24, 2016, for all Kentucky areas that were in "attainment" or "maintenance" as of that date. The planning requirement is still in effect. This meant the Kentucky counties of Boone, Boyd, Campbell, Kenton, and a portion of Lawrence were no longer required to do transportation conformity for the 1997 PM2.5 standard. Kentucky counties of Bullitt and Jefferson were "nonattainment" at the date of revocation, which meant the counties are still required to do transportation conformity until redesignated. On April 7, 2017, Bullitt and Jefferson counties were redesignated to "maintenance" for the 1997 PM2.5 standard. On the same date, KIPDA is no longer required to do transportation conformity for PM2.5 or Ozone. The planning requirements are still in effect. All 120 Kentucky counties are in "attainment" for the 2012 PM2.5 standard, which became effective April 15, 2015.

The 1971 SO2 standard, which included Muhlenberg and a portion of Boyd Counties, was officially revoked in June 2010. At revocation, these counties had been redesignated from "nonattainment" to "maintenance." In June 2010 the 2010 SO2 standard was implemented, which included a portion of Campbell and Jefferson counties being designated as "nonattainment." The portion of Campbell County has since been redesignated to "maintenance" for the standard, while Jefferson County still remains as "nonattainment." No regional transportation conformity is required for the SO2 pollutant. However, project level analysis may be needed.

A-4. Congestion Mitigation and Air Quality Improvement Program

The FY 2025-2028 STIP has been developed in full recognition of Title 23, which establishes a distinct funding source to address Congestion Mitigation and Air Quality (CMAQ) issues. FHWA sets aside funds for CMAQ. The funds are made available for projects within the identified designated air quality areas for the purpose of reducing traffic congestion and improving air quality. Funding for these projects is awarded through an application process and must be transportation related, must reduce emissions, and must be in an air quality nonattainment or maintenance area. Formerly designated areas are still eligible to apply for CMAQ funding. If the proposed project is located within an urbanized area, the sponsor submits applications to the MPO for their prioritization, which then forwards the applications and rankings to the KYTC's Office of Local Programs. The Governor selects eligible CMAQ projects to be funded as the federal CMAQ funding is available. FHWA makes an eligibility determination and the KYTC is responsible for the disbursement and management of the CMAQ funds. Application cycles may vary depending upon the availability of federal CMAQ funding. CMAQ projects are listed in Appendix A, Exhibit A-6.

A-5. Fiscal Constraint

In accordance with 23 CFR 450.216(a)(5), the STIP is required to be financially constrained by year, include sufficient financial information to demonstrate which projects are to be implemented using current revenues, and which projects are to be implemented using proposed revenue sources, while the system as a whole is being adequately operated and maintained. In addition, with the passage of the enabling legislation by the Kentucky General Assembly to use "Grant Anticipation Revenue Vehicles (GARVEEs)" bond funds, the fiscal constraint calculations include the debt service payments for GARVEE bonds (Table 1). The FY 2025-2028 STIP Fiscal Balance Worksheets show anticipated funding levels (apportionments) and compares them against planned outlays (obligations) for each of the next four fiscal years (FY 2025 through FY 2028). The anticipated federal-aid highway funding and scheduled obligations for FY 2025-2028 are shown in Table 2. Also, included within Table 2 are the rolled-up totals for each of the "Infrastructure Investment and Jobs Act (IIIA) federal-aid highway funding categories for "Anticipated Apportionments" vs "Planned Obligations" and "Projected End of Fiscal Year Advance Construction." The anticipated federal transit funding apportionments and scheduled obligations for FY 2025-2028 are shown in Table 3.

The planned federal obligations are based upon the estimated project phase costs in projected "Year of Expenditure" dollars by using the "Cost in Today's Dollars" and using a 4 percent yearly inflation factor for design, utility, and construction phases and using a 5 percent yearly inflation factor for the right-of-way phase (FHWA accepted Financial Plans inflation factors). The FY 2025-2028 STIP federal funding level forecasts are based on the current IIJA Transportation Act, which was enacted by the United States Congress. The IIJA Transportation Act was signed into law by President Joe Bidden on November 15, 2021, to provide over \$973 billion for fiscal years FY 2022 through FY 2026.

For the purposes of this edition of the FY 2025-2028 STIP, the funding levels for FY 2022 through FY 2026 are from the IIJA funding, and the anticipated funding for FY 2027 through FY 2028 are a straight-line extension of the FY 2026 funding levels. These state-specific levels of funding are broken down into individual program funding categories as determined by IIJA application to Federal Highway Trust Fund formulas.

Kentucky's federal highway program will be matched with a combination of "toll credits" and "state funding". Toll credits are attributed to Kentucky by federal highway law in accordance with calculations that consider past levels of state fund investment, such as state-sponsored toll roads, in the federal highway system. Toll credits do not generate cash and cannot be accounted as such; however, they do permit the KYTC the flexibility to use 100% federal funding on federal-aid projects. By doing so, the KYTC can allocate more of its own state funding for state-funded projects, yielding increased cash management controls.

The federal funding target amounts used to fiscally balance the FY 2025-2028 STIP, were based upon projected estimated apportionments of category-by-category federal-aid highway funding expectations of total federal-aid dollars available during FY 2022 through FY 2026 are from the IIJA funding, and the anticipated funding for FY 2027 through FY

2028 are a straight-line extension of the FY 2026 funding levels. The FY 2025 – FY 2028 IIJA anticipated apportionments for Kentucky are approximately \$4.2 billion. Adding the carry-over federal funding from FY 2024, the total revenue expectation that supports projects in this edition of the STIP is approximately \$4.8 billion. The total of the scheduled federal-aid funding obligations for the FY 2025-2028 STIP is approximately \$4.7 billion.

The ratio of the scheduled federal-aid obligations to the scheduled federal-aid apportionments is 0.985 for the planned projects listed in the FY 2025-2028 STIP. KYTC will utilize the "KYTC State Funding Cash Management Balance" process to monitor daily cash balances to maintain fiscal constraint of the STIP. KYTC will the use cash management balance process to determine if an increase in the amount of state matching funds is required to reduce the amount of federal funding obligations for STIP projects. In addition, KYTC will use the cash management process to determine when to delay the conversion of federal Advance Construct (AC) federally funded projects. This will delay submittal of requests for federal-aid highway reimbursements down to individual federal-aid highway funding categories based upon actual available federal-aid apportionment. By strategically using supplemental state funding via the cash management process the overall combined ratio of planned obligations to anticipated apportionments will be approximately 1.00 as per federal fiscal constraint mandates. Thus, the KYTC FY 2025-2028 STIP is fiscally constrained.

As to planned obligations, the listing of projects in Exhibit A-5 outlines the scheduled projects for FY 2025 – FY 2028 sorted alphabetical by the county name of the location of project, by the SYP Item Number, by scheduled phase (P, D, R, U, and C) of the project. In addition, the project listing includes each scheduled project phase, the scheduled type of funding, the scheduled fiscal year of funding, and the corresponding scheduled amount of federal funding and required matching funds of each scheduled project phase. Also, noted in the list of projects are project phases listed as an "Illustrative Project" in the event that delays occur in project obligations, or if additional federal-aid highway funding becomes available, or special financing mechanisms becomes available beyond the anticipated planned apportionments. The "Illustrative Projects" may be moved into the fiscal constraint calculation in accordance with the process of scheduled projects being delayed, and as KYTC receiving new additional federal-aid highway funding or special financing mechanisms becomes available. Anytime the STIP is amended the KYTC conducts a "fiscal constraint" recalculation to compare the federal funding obligations to the planned obligations to assure that the federal program is "fiscally constrained."

It is important to note that Kentucky utilizes the federal pre-financing provisions in programming federal funding through FHWA, defined as "Advance Construction" (AC). The federal pre-financing AC process is defined as "Advance Construction of Federal-aid Projects," whereby the state may request and receive approval from FHWA that the requested project phase meets federal-aid regulations as being eligible for federal-aid funding for reimbursement of project expenditures, but the state elects to defer the use of the current available federal-aid apportionments and obligation authority to a future time period based upon actual project expenditures, using state funding to cover project expenditures and delaying request for reimbursement of federal-aid funding. By using the AC funding mechanism, this provides Kentucky the ability to maximize the use of federal-aid funding,

while at the same time accelerating the start of many federal highway projects, with the expenditures of each phase of the project being spread over several federal fiscal years.

The KYTC's Cash Flow Management Process for using the federal AC pre-financing process outlines that the goal of KYTC is keep the federal-aid highway program "Earned Unbilled" to less than \$150 million. The "Earned Unbilled" federal-aid highway funding amount is the amount of state dollars that have been used to pay vendors and project expenditures on federal AC pre-financed project phases. Through the AC conversion process, these projects will be converted to current federal-aid highway funding apportionments and obligation authority, and then a federal billing request will be sent to FHWA for reimbursement of eligible project expenditures. The current "Earned Unbilled" total for those projects, is under \$150 million. The AC conversion process is a continuous "KYTC State Funding Cash Management Balance" process throughout each fiscal year, to maximize the available state and federal-aid highway funds.

Through the remainder of Kentucky's FY 2024 AC conversion process and anticipated August Redistribution of Additional FY 2024 Obligation Authority, the projected end of fiscal year "advance construction" is \$650 million to \$1.2 billion; \$702 million to \$1.2 billion for FY 2025; \$678 million to \$1.2 billion for FY 2026; \$751 million to \$1.3 billion for FY 2027; and \$556 million to \$1.2 billion for FY 2028. However, the amount of "advance construction" will depend upon several factors including the timing of the actual congressional release of yearly federal-aid highway funding obligation authority and the programming of federal-aid highway funded projects near the end of each federal fiscal year, and the "End of Fiscal Year August Redistribution of Additional Obligation Authority. The availability to use the federal AC pre-financing depends on each state's cash balance of state funding to delay request for reimbursement of eligible expenditures of project phases having AC federal-aid funding as outlined within the approved FHWA-KYTC federal programming agreement for each associated federal-aid funded project.

The KYTC continually monitors the "net cash balance" of the federal AC prefinanced projects, and the results are part of the KYTC management decision of availability of federal-aid highway funding to begin new project phases outlined within the projects listed in the STIP. Through the "Cash Flow Management" procedures, using state funding from the state "Road Fund" cash balance until the federal share of these costs can be billed to the federal government, the KYTC can maximize the usage of both state road funds and federal-aid highway funding to deliver the overall state and federal funded transportation program.

It is also important to note that the KYTC utilizes innovative financing options permitted under federal transportation law. The 2008 General Assembly made available the ability to use \$231 million of GARVEE bond funds to support the Louisville Bridges project within House Bill 410. Also, during the 2010 Extraordinary Session, the General Assembly made available the option to use an additional \$105 million of GARVEE bond funds to support the Louisville Bridges project within House Bill 3. In addition, the option to use \$330 million of GARVEE bond funds to support the construction of the two US 68/KY 80 bridges over Kentucky Lake and Lake Barkley was made available within House Bill 3. Therefore, the Kentucky General Assembly has provided the KYTC the ability to use

\$1.1 billion in GARVEE bond funds, along with the approval of usage of federal-aid highway funding to provide debt service payments on the GARVEE bonds.

The GARVEE financing technique is permitted by federal law and involves the commitment of future federal-aid appropriations as leveraging for current year highway improvements. The primary benefit of such an arrangement is that major highway improvements can be purchased at today's prices and paid for with interest over a multi-year timeframe. The application of the GARVEE principle is very similar to home mortgage financing but is used to purchase major highway investments when "pay-as-you-go" is not the desirable course.

With the passage of the enabling legislation by the Kentucky General Assembly to use GARVEE bond funds, the KYTC has begun activities on the corresponding approved projects. The breakdown of the required federal-aid highway funding to cover the corresponding debt service for each of the GARVEE bond funded projects is shown under the "ZVarious" County item numbers as shown on Table 1, on page 13.

Each of these projects constitutes a necessary investment in Kentucky's future. The need to accommodate both people movement and freight movement is critical to Kentucky's economy in the years ahead. Without the GARVEE bond program, these highway projects would continue to be piecemealed over time, and likely not completed until beyond 2025. The innovative idea of GARVEE bonds, along with determined state leadership, will yield the kind of realistic solution necessary to reverse the "always behind" mentality of the past and help restore hope to Kentucky's transportation program.

The federal funding for the construction phases identified within the GARVEE bond program will be programmed through FHWA as Advance Construct (AC) projects. Again, as explained previously, the AC process is defined as "Advance Construction of Federal-Aid Projects," whereby the state may request and receive approval to construct federal-aid projects in advance of the apportionment of authorized federal-aid funds. The AC conversion of the federal funding for the GARVEE bond program will be distributed over a period of fourteen years and will be in accordance with the GARVEE bond program Memorandum of Agreement (MOA). At the beginning of each federal fiscal year, federal programming documents for GARVEE bond projects AC conversions will be submitted to FHWA to use current federal-aid highway funding apportionments and current formula funding obligation authority. The total amount of the AC conversions will be the amount of federal funding required to cover the yearly debt service (principal, interest, and other costs incidental to the sale of eligible bond issue) as outlined within each of the approved GARVEE bond programs. The required NHPP and STP funding to cover the yearly debt service amount for the GARVEE bonds will be included in the end-of-year "Fiscal Constraint" determination and will be included within the preparation of future STIPs and fiscal constraint calculations. The KYTC has set aside the required amount of "toll credits" for the matching funds for the federal-aid highway funding to cover the GARVEE bond debt service payments through 2028.

As noted, the list of projects within the FY 2025-2028 STIP includes federally-funded projects and the state-funded projects that are regionally significant to meet

transportation air quality conformity requirements, including the projects within the MPO areas. The projects located within each of the MPO areas included within the STIP are subject to approval and inclusion within the respective MPO's TIP and subsequent amendments for each of these MPO areas. In addition, like the FY 2025-2028 STIP, in accordance with 23 CFR 450.326(g) each MPO TIP is required to be financially constrained by year and include a financial plan that demonstrates which projects can be implemented using current revenues, and which projects are to be implemented using proposed revenue sources, while the existing transportation system is being adequately operated and maintained. Each of the MPO's TIP financial plans are developed in cooperation with the KYTC and the transit operators, based upon projected estimates of available federal and state funds within the MPO areas. Based upon the financial plan, the MPOs TIPs contain only project phases that funding can be reasonably expected to be available for each of the project's identified phase, funding source, fiscal year schedule, and the estimated cost.

As evidenced by Table 2 and Table 3, Kentucky's STIP is fiscally constrained for the next four years. For informational purposes, the STIP also contains several state-funded projects, shown in Appendix A, Exhibit A-5 B, which are critical for SIP compliance and conformity determinations. As future allocation of state road funds is being considered for funding authorizations, each of these state-funded projects that are critical for SIP compliance and conformity determinations, will be included in the KYTC prioritization process for the utilization of available state road funds. The authorization and programming of all state and federal funding for the transportation program will be accommodated through the KYTC's cash flow management program. When the planned obligations exceed estimated apportionments by program category, unobligated previous apportionments will be used, funds will be transferred between categories, or flexible funding such as "Minimum Guarantee" will be used to close the program-specific funding gap to the extent that air quality conformity for the region is not jeopardized.

To reiterate, the KYTC's goal is to fund the federal-aid highway program as outlined in the 2024 Enacted Highway Plan as approved by the 2024 Kentucky General Assembly, unless Congress and FHWA direct otherwise. The project phases listed in no way constitute an effort to denigrate the importance of any project to the community or region it serves. The KYTC will work diligently to implement all STIP projects as quickly as funding limitations will permit.

Shifting projects between fiscal years of the STIP may be conducted when determined essential to the effective use of federal-aid highway program dollars. It is expected that such changes would normally be "minor," for example, advancing an Illustrative listed project phase to replace a project phase not able to meet the assigned schedule, with respect to STIP activity. If such adjustments involve actions determined by the KYTC to be "major" in nature (e.g., acceleration of a controversial project), then a formal STIP amendment would be pursued.

The operation and maintenance of existing transportation facilities within the state is a primary concern among Kentucky citizens and included within the FY 2025-2028 STIP are federally-funded system preservation projects. In addition to the federally funded system preservation projects, Table 2 contains a line-item outlining the FY 2025-2028 scheduled

state and local funding for none "Toll Credits" matching funds and for the KYTC's operations and maintenance program.

Included within each MPO's TIP is a financial plan that demonstrates how the TIP can be implemented, identifies funding resources from public and private sources, and identifies innovative financing techniques to finance projects and programs. The development of the projected estimates of funding resources is developed through cooperative efforts of the MPO, the KYTC, and Public Transportation Agencies. Also included within the financial plan are grouped project line-items for projected funding and obligations for operations and maintenance activities for existing facilities. Again, the projected funding resources were prepared through cooperative efforts of the MPO, the KYTC, and Public Transportation Agencies by utilizing expenditures data from the KYTC Fiscal Year Audit Reports for actual operations and maintenance expenditures within the MPO areas. (See Appendix B-Metropolitan Planning Organization (MPO) Financial Plans).

TABLE 1

GARVEE PROJECT	FY 2025 (millions)	FY 2026 (millions)	FY 2027 (millions)	FY 2028 (millions)	TOTAL (millions)
Interstate 65, Interstate 75, and Interstate 64 Widening ZVarious 99-9050 Series	Paid Off	Paid Off	Paid Off	Paid Off	Paid Off
Louisville Bridges Project ZVarious 99-9659 Series	30	30	Paid Off	Paid Off	60
US 68/KY 80 Lake Barkley and Kentucky Lake Bridges ZVarious 99-9068 Series	42	42	72	12	168
TOTALS	72	72	72	12	228

2024 STIP FISCAL CONSTRAINT CALCULATIONS ANTICIPATED APPORTIONMENTS VS SCHEDULED OBLIGATIONS

TABLE 2

FEDERAL FUNDING PROGRAM AS SUBALLOCATED BY RENTUCKY GENERAL ASSEMBLY	FY 2024 CARRYOVER APPOR IXONENTS IN MILLIONS	FY 2025 APPORTIONMENTS IN MILLIONS	PY 2026 APPORTIONMENTS PLUS CARRYOVER IN MILLIONS	PROJECTED END OF FY 2024 ADVANCE CONSTRUCTION PROJECTS (SEE NOTE 5) IN MILLIONS	FY 2025 PLANNED OBLIGATIONS IN MILLIONS		FY 2025 CARRYOVER APPORTIONMENTS IN MILLIONS		FY 2028 APPORTIONMENTS PLUS CARRYOVER BN MILLIONS	FY 2026 PLANNED OBLIGATIONS IN MILLIONS	END OF FY 2026 PROJECTED AC IN MILLIONS		FY 2027 APPORTIONMENTS IN MILLIONS
I. HIGHWAY FEDERAL FUNDS													
Federal Appalaohlan Development Highways (APD)	61.1	14	75.1	0.0	1.2	0.0	73.9	14	87.9	2.8	0.0	85.1	14
Federal Bridge Replacement- On System (BRO)	0	56	56	0.0	60.3	4.3	0.0	56	56.0	51.7	0.0	0.0	56
Federal Bridge Replacement - On/Off System (BRX)	0	45.3	45.3	0.0	56.4	11.1	0.0	45.3	45.3	34.9	0.7	0.0	45.3
Federal Bridge Replacement - Off System (BRZ)	2.5	13.8	16.3	0.0	27.5	11.2	0.0	13.8	13.8	15.8	13.2	0.0	13.8
Carbon Reduction Program (CARB)	10.2	22.8	33	0.0	28.5	0.0	4.5	23.3	27.8	23.3	0.0	4.5	23.3
Congection Mitigation/Air Quality (CM)	2	15.8	17.8	1.1	25.1	8.4	0.0	16.2	16.2	13.0	5.2	0.0	16.2
Electric Vehicles Charging Infrastructure (EV)	20.4	13.8	34.2	0.0	22.0	0.0	12.2	13.8	26.0	11.0	0.0	15.0	13.8
Federal Bridge Program (FBP)	137	80	217	123.0	122.9	28.9	0.0	80	80.0	94.3	43.2	0.0	80
Federal Bridge Program Second Tier (FBP2)	31.1	14	45.1	39.5	27.5	21.9	0.0	14	14.0	10.5	18.4	0.0	14
Garvee Bond Debt Service (GAR)	0	72	72	0.0	72.0	0.0	0.0	72	72.0	72.0	0.0	0.0	12.0
Kentuoky Disoretionary (KYD)	5.6	91	96.6		17.6	0.0	79.0	0	79.0	7.4	0.0	71.6	0.0
Federal National Highway System (NH)	23	234.5	257.5	84.9	306.4	133.8	0.0	245.1	245.1	239.8	128.5	0.0	251.1
Federal National Highway System Funds for Pavement Management (NHPM)	9.6	194.3	203.9	0.0	103.4	0.0	100.5	194.3	294.8	105.4	0.0	189.4	186.3
Proteot Formula Program (PROT)	2.6	25.9	28.5	2.4	18.2	0.0	7.9	26.5	34.4	16.9	0.0	17.5	26.5
Safety - Raliroad Protection (RRP)	5	1.9	6.9	0.9	5.9	0.0	0.1	1.9	2.0	0.0	0.0	2.0	1.9
Safety - Railroad Separation (RRS)	11	1.9	12.9	0.0	1.0	0.0	11.9	1.9	13.8	8.6	0.0	5.2	1.9
HSIP Federal Safety Funds (SAF)	1	55.7	56.7	58.8	70.3	72.4	0.0	56.9	56.9	71.7	87.2	0.0	56.9
Federal STP Funds Dedicated to Huntington/Ashland (SAH)	6.1	1.8	7.9	0.0	2.9	0.0	5.0	1.8	6.8	1.4	0.0	5.4	1.8
Federal STP Funds Dedicated to Henderson (SHN)	6.2	0	6.2	5.5	0.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Federal STP Funds Dedicated to Louisville (SLO)	52.5	26.3	78.8	17.2	42.1	0.0	19.5	26.8	46.3	21.4	0.0	24.9	26.8
Federal STP Funds Dedicated to Lexington (SLX)	13.1	7.7	20.8	1.1	12.4	0.0	7.3	7.8	15.1	6.2	0.0	8.9	7.8
Federal STP Funds Dedicated to Northern Kentucky (SNK)	24.4	8.4	32.8	1.1	13.3	0.0	18.4	8.6	27.0	6.9	0.0	20.1	8.6
STP (5-200K Pop) (Not for bridge projects and not for pavement projects) (STP1)	1.3	14	15.3	50.7	38.7	74.1	0.0	14.6	14.6	5.1	64.6	0.0	14.6
STP (<sk (not="" (stp2)<="" and="" bridge="" for="" not="" pavement="" pop)="" projects="" projects)="" td=""><td>1</td><td>28.7</td><td>29.7</td><td>89.0</td><td>75.6</td><td>134.9</td><td>0.0</td><td>29.8</td><td>29.8</td><td>26.8</td><td>131.9</td><td>0.0</td><td>32.2</td></sk>	1	28.7	29.7	89.0	75.6	134.9	0.0	29.8	29.8	26.8	131.9	0.0	32.2
STP (6-200K Pop) for Pavements (STP3)	0	6.8	6.8	0.0	12.6	5.8	0.0	6.8	6.8	2.8	1.8	0.0	6.8
STP (<6K Pop) for Pavements (STP4)	0	13.8	13.8	0.0	5.5	0.0	8.3	13.8	22.1	10.3	0.0	11.8	13.8
STP Flex Funding for Pavements (STP6)	0	24.7	24.7	69.3	11.0	55.6	0.0	10.3	10.3	12.2	57.5	0.0	10.4
STP Flex Funding (Not for bridge projects and not for Pavement projects) (STPF)		51.3	51.3	104.0	86.6	139.3	0.0	67.8	67.8	54.7	126.2	0.0	67.6
Federal Transportation Alternative Program (TAP)	45.5	12.1	57.6	1.5	19.2	0.0	36.9	12.3	49.2	9.8	0.0	39.4	12.3
SUBTOTALS "HIGHWAY FEDERAL FUNDS"	472.20	1148.30	1620.50	650.00	1286.82	701.70	385.40	1075.40	1460.80	936.70	678.40	500.80	1015.70
III. STATE AND LOCAL FUNDING					FY 2025					FY 2026			
STATE MATCHING FUNDING					254	1				185			
LOCAL MATCHING FUNDS					3.84					2			
STATE FUNDED OPERATIONS AND MAINTENANCE PROGRAM					450					450			
SUBTOTALS "STATE FUNDS" AND LOCK FUNDING					707					637			

2024 STIP FISCAL CONSTRAINT CALCULATIONS ANTICIPATED APPORTIONMENTS VS SCHEDULED OBLIGATIONS

TABLE 2

FEDERAL FUNDING PROGRAM AS SUBALLOCATED BY RENTUCKY GENERAL ASSEMBLY L. HIGHWAY FEDERAL FUNDS	FY 2927 APPORTIONMENTS PLUS CASSIVOVER IN MILLIONS	FY 2027 PLANNED OBLIGATIONS IN MILLIONS	END OF FY 2027 PROJECTED AC IN MILLIONS	FY 2027 CARRYOVER IN MILLIONS	FY 2028 APPORTIONMENTS IN MILLIONS	FY 2028 APPORTIONMENTS PLUS CARRYOVER IN MILLIONS	FY 2028 PLANNED OBLIGATIONS IN MILLIONS	END OF FY 2028 PROJECTED AC IN MILLIONS	FY 2028 CARRYOVER IN MILLIONS	COMBINED FY 2024 CARRYOVER APPORTIONMENTS PLUS FY 2025 THRU FY 2028 APPORTIONMENTS IN MILLIONS	INCREASE OR (DECREASE) IN AC AMOUNT IN MILLIONS	TOTAL OF FY 2025 THRU FY 2028 AC CONVERSIONS AND OBLIGATIONS IN MILLIONS
Federal Appalachian Development Highways (APD)	99.1	12.0	0.0	87.1	14	101.1	0.0	0.0	101.1	117.1	0.0	16.0
Federal Bridge Replacement- On System (BRO)	56.0	32.9	0.0	23.1	56		52.7	0.0	26.4	224.0	0.0	197.6
Federal Bridge Replacement - On/Off System (BRX)	45.3	64.8	20.2	0.0	45.3	600000	31.7	6.6	0.0	181.2	6.6	187.8
Federal Bridge Replacement - Off Syctem (BRZ)	13.8	15.1	14.5	0.0	13.8		4.3	5.0	0.0	57.7	5.0	62.7
Carbon Reduction Program (CARB)	27.8	23.3	0.0	4.5	23.3	27.8	23.3	0.0	4.5	102.9	0.0	98.4
Congection Mitigation/Air Quality (CM)	16.2	13.0	2.0	0.0	16.2	16.2	13.0	0.0	1.2	66.4	(1.1)	65.2
Electric Vehicles Charging Infrastructure (EV)	28.8	11.0	0.0	17.8	13.8	31.6	11.0	0.0	20.6	75.6	0.0	55.0
Federal Bridge Program (FBP)	80.0	33.9	0.0	2.9	80	82.9	87.3	4.4	0.0	457.0	(118.6)	457.0
Federal Bridge Program Second Tier (FBP2)	14.0	3.1	7.5	0.0	14	14.0	17.3	10.8	0.0	87.1	(28.7)	87.1
Garvee Bond Debt Service (GAR)	12.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	156.0	0.0	156.0
Kentuoky Disoretionary (KYD)	71.6	42.8	0.0	28.8	0.0	28.8	0.0	0.0	28.8	96.6	0.0	67.8
Federal National Highway System (NH)	251.1	334.0	211.4	0.0	297.0	297.0	170.7	85.1	0.0	1,050.7	0.2	1,050.9
Federal National Highway System Funds for Pavement Management (NHPM)	375.7	394.5	18.8	0.0	187.9	187.9	198.9	29.8	0.0	772.4	29.8	802.2
Proteot Formula Program (PROT)	44.0	30.1	0.0	13.9	26.5	40.4	26.5	0.0	13.9	108.0	(2.4)	94.1
Bafety - Ratiroad Proteotion (RRP)	3.9	0.0	0.0	3.9	1.9	5.8	1.4	0.0	4.4	12.6	(0.9)	8.2
Safety - Railroad Separation (RRS)	7.1	0.0	0.0	7.1	1.9	9.0	0.0	0.0	9.0	18.6	0.0	9.6
HSIP Federal Safety Funds (SAF)	56.9	64.9	95.2	0.0	56.9	56.9	64.0	102.3	0.0	227.4	43.5	270.9
Federal STP Funds Dedicated to Huntington/Ashland (SAH)	7.2	1.4	0.0	5.8	1.8	7.6	1.4	0.0	6.2	13.3	0.0	7.1
Federal STP Funds Dedicated to Henderson (SHN)	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	6.2	(5.5)	6.2
Federal STP Funds Dedicated to Louisville (SLO)	51.7	21.4	0.0	30.3	26.8	57.1	21.4	0.0	35.7	159.2	(17.2)	123.5
Federal STP Funds Dedicated to Lexington (SLX)	16.7	6.2	0.0	10.5	7.8	18.3	6.2	0.0	12.1	44.2	(1.1)	32.1
Federal STP Funds Dedicated to Northern Kenfucky (SNK)	28.7	6.9	0.0	21.8	8.6	30.4	6.9	0.0	23.5	58.6	(1.1)	35.1
STP (5-200K Pop) (Not for bridge projects and not for pavement projects) (STP1)	14.6	6.7	56.7	0.0	14.6	14.6	8.4	50.5	0.0	59.1	(0.2)	59.1
STP (<sk (not="" (stp2)<="" and="" bridge="" for="" not="" pavement="" pop)="" projects="" projects)="" td=""><td>32.2</td><td>34.3</td><td>134.0</td><td>0.0</td><td>43.1</td><td>43.1</td><td>0.2</td><td>91.1</td><td>0.0</td><td>134.8</td><td>2.1</td><td>136.9</td></sk>	32.2	34.3	134.0	0.0	43.1	43.1	0.2	91.1	0.0	134.8	2.1	136.9
STP (5-200K Pop) for Pavements (STP3)	6.8	10.1	5.1	0.0	6.8	6.8	4.6	2.9	0.0	27.2	2.9	30.1
STP (<6K Pop) for Pavements (STP4)	25.6	13.7	0.0	11.9	13.8	25.7	3.0	0.0	22.7	55.2	0.0	32.5
STP Flex Funding for Pavements (STP6)	10.4	11.3	58.4	0.0	21.4	21.4	21.1	58.1	0.0	66.8	(11.2)	66.8
STP Flex Funding (Not for bridge projects and not for Pavement projects) (STPF)	67.6	68.9	127.5	0.0	56.7	56.7	38.4	109.2	0.0	243.4	5.2	248.6
Federal Transportation Alternative Program (TAP)	51.7	9.8		41.9	12.3	54.2	9.8	0.0	44.4	94.5	(1.5)	50.1
SUBTOTAL 3 "HIGHIWAY FEDERAL FUNDS"	1516.50	1278.10	751.30	311.30	1062.20	1373.50	823.50	555.80	354.50	4773.80	(94.20)	4514.62
IIL STATE AND LOCAL FUNDING		FY 2027					FY 2028					
STATE MATCHING FUNDING		254					163					
LOCAL MATCHING FUNDS		2					2					
STATE FUNDED OPERATIONS AND MAINTENANCE PROGRAM		450					450	E.				
SUBTOTALS "STATE FUNDS" AND LOCK FUNDING		706					615					

2024 STIP FISCAL CONSTRAINT CALCULATIONS ANTICIPATED APPORTIONMENTS VS SCHEDULED OBLIGATIONS

TABLE 2

FEDERAL FUNDING PROGRAM AS SUBALLOCATED BY KENTUCKY GENERAL ASSEMBLY	RATIO OF TOTAL OBLIGATIONS AND AC CONVERSIONS / APPORTIONMENTS	PROJECTED END OF FY 2024 ADVANCE CONSTRUCTION PROJECTS (SEE NOTE 5)	INCREASE OR (DECREASE) IN AC AMOUNT	PAY DOWN ON AC CONVERSIONS	TOTAL FY 2025 THRU FY 2028 OBLIGATIONS AND AC CONVERSIONS	
L HIGHWAY FEDERAL FUNDS						
Federal Appalachian Development Highways (APD)	0.1	0.0	0.0	0.0	16.0	0.1
Federal Bridge Replacement- On System (BRO)	0.9	0.0	0.0	0.0	197.6	0.9
Federal Bridge Replacement - On/Off System (BRX)	1.0	0.0	6.6	0.0	187.8	1.0
Federal Bridge Replacement - Off System (BRZ)	1.1	0.0	5.0	0.0	62.7	1.1
Carbon Reduction Program (CARB)	1.0	0.0	0.0	0.0	98.4	1.0
Congection Mitigation/Air Guality (CM)	1.0	1.1	(1.1)	0.0	65.2	1.0
Electric Vehicles Charging Infrastructure (EV)	0.7	0.0	0.0	0.0	55.0	0.7
Federal Bridge Program (FBP)	1.0	123.0	(118.6)	118.6	575.6	1.3
Federal Bridge Program Second Tier (FBP2)	1.0	39.5	(28.7)	28.7	115.8	1.3
Garvee Bond Debt Service (GAR)	1.0	0.0	0.0	0.0	156.0	1.0
Kentucky Discretionary (KYD)	0.7		0.0	0.0	67.8	0.7
Federal National Highway System (NH)	1.0	84.9	0.2	0.0	1,050.9	1.0
Federal National Highway System Funds for Pavement Management (NHPM)	1.0	0.0	29.8	0.0	802.2	1.0
Proteot Formula Program (PROT)	0.9	2.4	(2.4)	2.4	96.5	0.9
Safety - Railroad Proteotion (RRP)	0.7	0.9	(0.9)	0.9	9.1	0.7
Safety - Railroad Separation (RRS)	0.5	0.0	0.0	0.0	9.6	0.5
HSIP Federal Safety Funds (SAF)	1.2	58.8	43.5	0.0	270.9	1.2
Federal STP Funds Dedicated to Huntington/Ashland (SAH)	0.5	0.0	0.0	0.0	7.1	0.5
Federal STP Funds Dedicated to Henderson (SHN)	1.0	5.5	(5.5)	5.5	11.7	1.9
Federal STP Funds Dedicated to Louisville (SLO)	0.8	17.2	(17.2)	17.2	140.7	0.9
Federal STP Funds Dedicated to Lexington (SLX)	0.7	1.1	(1.1)	1.1	33.2	0.8
Federal STP Funds Dedicated to Northern Kentucky (SNK)	0.6	1.1	(1.1)	1.1	36.2	0.6
STP (5-200K Pop) (Not for bridge projects and not for pavement projects) (STP1)	1.0	50.7	(0.2)	0.2	59.3	1.0
STP (<5K Pop) (Not for bridge projects and not for pavement projects) (STP2)	1.0	89.0	2.1	0.0	136.9	1.0
STP (5-200K Pop) for Pavements (STP3)	1.1	0.0	2.9	0.0	30.1	1.1
STP (<5K Pop) for Pavements (STP4)	0.6	0.0	0.0	0.0	32.5	0.6
STP Flex Funding for Pavements (STP5)	1.0	69.3	(11.2)	11.2	78.0	1.2
STP Flex Funding (Not for bridge projects and not for Pavement projects) (STPF)	1.0	104.0	5.2	0.0	248.6	1.0
Federal Transportation Atternative Program (TAP)	0.5	1.5	(1.5)	1.5	51.6	0.5
SUBTOTALS "HIGHWAY FEDERAL FUNDS"	24.68	650.00	(94.20)	188.40		0.9852
III. STATE AND LOCAL FUNDING					COMBINED 930	
LOCAL MATCHING FUNDS					1800	
STATE FUNDED OPERATIONS AND MAINTENANCE PROGRAM					2741	

2024 STIP FISCAL CONSTRAINT CALCULATIONS ANTICIPATED APPORTIONMENTS VS SCHEDULED OBLIGATIONS

TABLE 2

NOTES FOR ITEMS WITHIN FY 2025 - FY 2028 STIP FISCAL CONSTRAINT CALCULATIONS;

- (1) THE APPORTIONMENT BALANCES USED TO BEGIN THE FISCAL CONSTRAINT CALCULATIONS AND THE APPORTIONMENT BALANCES SHOWN ARE AS OF JULY 1, 2024.
- (2) FEDERAL FUNDS FOR FY 2025, FY 2026, FY 2027, AND FY 2028 ARE BASED ON THE IIJA TRANSPORTATION ACT ANTICIPATED APPORTIONMENT TABLES FOR FY 2022 FY 2026, AND STRAIGHT LINED FOR FY 2027 THRU FY 2028.
- (3) SURFACE TRANSPORTATION PROGRAM BALANCES INCLUDE MINIMUM GUARANTEE AND EQUITY BONUS LIMITATION ADJUSTMENT FUNDING. THE DEDICATED STP FUNDING FOR SHN, SLO, SLX, AND SNK FUNDING CATEGORIES, ALONG WITH OTHER FEDERALLY FUNDED PROJECTS WITHIN THE MPO AREA ARE FISCALLY CONSTRAINED WITHIN EACH OF THE CORRESPONDING MPO TIP'S FINANCIAL PLAN.
- (4) TOLL CREDITS WILL BE USED FOR REQUIRED MATCHING FUNDS FOR AC CONVERSIONS FOR PROJECTS OBLIGATED PRIOR TO OCTOBER 1, 2019, AND STARTING IN FY 2020 KYTC WILL BEGIN USING STATE FUNDS AS MATCHING FUNDS FOR NH, STP, HPP, KYD, RRP, RRS, AND HSIP FUNDING. LOCAL MATCHING FUNDS WILL BE REQUIRED FOR CM, TAP, AND DEDICATED STP FUNDS IN THE MPO AREAS FOR FY 2020 THRU FY 2024.
- (5) IF PLANNED OBLIGATIONS ARE GREATER THAN THE ANNUAL APPORTIONMENTS IN A GIVEN FISCAL YEAR, THE DIFFERENCE WILL BE MANAGED USING THE FEDERAL "ADVANCE CONSTRUCTION" MECHANISM. THE GOAL OF THE KYTC IS TO MANAGE THE YEARLY TOTAL OF FEDERAL "ADVANCE CONSTRUCTION" THROUGH THE KYTC CASH MANAGEMENT PROCESS AND BY INCREASING THE AMOUNT OF STATE MATCHING FUNDS TO REDUCE THE AMOUNT OF REQUIRED FEDERAL FUNDING. THE AMOUNT OF FEDERAL "ADVANCE CONSTRUCTION" WILL DEPEND UPON SEVERAL FACTORS INCLUDING THE TIMING OF THE ACTUAL CONGRESSIONAL RELEASE OF YEARLY FEDERAL-AID HIGHWAY FUNDING OBLIGATION AUTHORITY AND THE PROGRAMMING OF FEDERAL-AID HIGHWAY FUNDED PROJECTS NEAR THE END OF EACH FEDERAL FISCAL YEAR.

2024 STIP PUBLIC TRANSIT FUNDING FISCAL CONSTRAINT ANTICIPATED APPORTIONMENTS VS SCHEDULED OBLIGATIONS

TABLE 3

IV. FEDERAL TRANSIT/STATE ASSISTANCE	FY 2025 APPORTIONMENTS	FY 2025 OBLIGATIONS	FY 2026 APPORTIONMENTS	FY 2026 OBLIGATIONS	FY 2027 APPORTIONMENTS	FY 2027 OBLIGATIONS	FY 2028 APPORTIONMENTS	FY 2028 OBLIGATIONS
	IN MILLIONS							
SECTION 5311 RURAL TRANSPORTATION	25.60	25.60	25.86	25.00	26.12	25.20	26.38	26.00
SECTION 5310 SPECIALIZED PROGRAMS	5.60	4.00	5.66	5.00	5.72	5.61	5.78	5.75
KENTUCKY SECTION 5307	38.40	30.00	38.78	30.00	39.17	31.00	39.56	32.00
KENTUCKY SECTION 5303 & 5304	1.60	1.20	1.62	1.25	1.64	1.30	1.66	1.40
PUBLIC TRANSIT CAPITAL 5339	7.10	4.00	7.17	5.00	7.24	5.31	7.31	5.58
SUBTOTALS "TRANSIT FEDERAL FUNDS"	78.30	64.80	79.09	66.25	79.89	68.42	80.69	70.73
SECTION 5311 (STATE FUNDING)	0.82	0.82	0.83	0.83	0.84	0.84	0.85	0.85
SECTION 5311 (LOCAL FUNDING)	20.00	20.00	20.20	20.20	20.40	20.40	20.60	20.60
SECTION 5311 (CONREV & FAREBOX FUNDING)	70.70	69.00	71.41	70.00	72.12	71.00	72.84	72.00
SECTION 5310 (STATE FUNDING)	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.74
SECTION 5310 (LOCAL FUNDING)	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.74
SECTION 5307 (LOCAL FUNDING)	16.30	16.30	16.46	16.46	16.62	16.62	16.79	16.79
SECTION 5303 & 5304 (LOCAL FUNDING)	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20
PUBLIC TRANSIT CAPITAL 5339 (STATE MATCH)	3.30	3.30	3.33	3.33	3.36	3.36	3.39	3.39
PUBLIC TRANSIT CAPITAL 5339 (LOCAL MATCH)	3.30	3.30	3.33	3.33	3.36	3.36	3.39	3.39
SUBTOTALS "NON FEDERAL TRANSIT FUNDS"	116.24	114.34	117.40	115.79	118.56	117.24	119.74	118.69
TRANSIT FUNDING TOTALS	194.54	179.14	196.49	182.04	198.45	185.66	200.43	189.42

2024 STIP PUBLIC TRANSIT FUNDING FISCAL CONSTRAINT ANTICIPATED APPORTIONMENTS VS SCHEDULED OBLIGATIONS

TABLE 3

IV. FEDERAL TRANSIT/STATE ASSISTANCE	TOTAL FY 2025 THRU FY 2028 APPORTIONMENTS IN MILLIONS	TOTAL FY 2025 THRU FY 2028 OBLIGATIONS IN MILLIONS	RATIO OF OBLIGATIONS / APPORTIONMENTS
SECTION 5311 RURAL TRANSPORTATION	103.96	101.80	0.98
SECTION 5310 SPECIALIZED PROGRAMS	22.76	20.36	0.89
KENTUCKY SECTION 5307	155.91	123.00	0.79
KENTUCKY SECTION 5303 & 5304	6.52	5.15	0.79
PUBLIC TRANSIT CAPITAL 5339	28.82	19.89	0.69
SUBTOTALS "TRANSIT FEDERAL FUNDS"	317.97	270.20	0.85
SECTION 5311 (STATE FUNDING)	3.34	3.34	1.00
SECTION 5311 (LOCAL FUNDING)	81.20	81.20	1.00
SECTION 5311 (CONREV & FAREBOX FUNDING)	287.07	282.00	0.98
SECTION 5310 (STATE FUNDING)	2.90	2.90	1.00
SECTION 5310 (LOCAL FUNDING)	2.90	2.90	1.00
SECTION 5307 (LOCAL FUNDING)	66.17	66.17	1.00
SECTION 5303 & 5304 (LOCAL FUNDING)	1.60	0.80	0.50
PUBLIC TRANSIT CAPITAL 5339 (STATE MATCH)	13.38	13.38	1.00
PUBLIC TRANSIT CAPITAL 5339 (LOCAL MATCH)	13.38	13.38	1.00
SUBTOTALS "NON FEDERAL TRANSIT FUNDS"	471.94	466.06	0.99
TRANSIT FUNDING TOTALS	789.91	736.26	0.93

Grouped Projects

Often times after the identification and scheduling process of transportation projects included within the approved STIP and approved MPO TIPs, new transportation needs arise. In order to address these new transportation needs, the STIP and the MPO TIPs include "Grouped Project" lists outlining categories of types of projects that can be added to the STIP and TIP an Administrative Modification.

Outlined within Exhibit A-5: "Federally-funded ZVarious" is a list of federal funding for various anticipated "Grouped Projects" transportation needs, available to break out individual project funding via the Administrative Modification process for projects throughout the Commonwealth and MPO areas to address these unforeseen and unscheduled project activities.

The following Table 4 illustrates estimated annual statewide obligations by general grouped project category as well as available funding sources for each category. KYTC is responsible for maintaining fiscal constraint for federal-aid highway funds and works closely with each MPO receiving dedicated STP funding to monitor fiscal constraint within each MPO area.

TABLE 4

GROUPED PROJECTS	FY 2025 (MILLIONS)	FY 2026 (MILLIONS)	FY 2027 (MILLIONS)	FY 2028 (MILLIONS)	Total (MILLIONS)	ZVARIOUS GROUP PROJECT FUNDING SOURCES ITEM NUMBER SERIES
Air Quality Improvements	18	18	18	18	72	99-219 SERIES
Bicycle, Pedestrian, and Transportation Alternative Improvements	12.5	12.5	12.5	12.5	50	99-195 SERIES
Roadway and Bridge Preservation, Rehabilitation, and Replacement	54.5	54.5	54.5	52.5	216	99-65; 224; 327; 337; 346; 369; 388; 510; 514; 1063; 1071; 1074; 2700;
Roadway Operational Improvements	30.2	34.2	46.6	50	161	99-66; 239; 518; 600; 601;
Safety Improvements	72	71	71	72	286	99-352; 911; 3011; 8500
TOTAL	187.2	190.	2 202.6	205	785	

The listing of grouped project categories defined within each of the MPO TIPs are often more granular than the broad categories shown in the table and description of each of the categories. The following descriptions of "Grouped Projects" outlines the general grouped project categories and type of work within each of the categories.

Air Quality Improvements Air Quality Improvement projects consists of the construction congestion mitigation projects to help reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas.) Projects that improve traffic flow, including efforts to provide signal systemization, streamline intersections, add turning lanes, improve transportation systems management and operations that mitigate congestion and improve air quality. Transit investments, including transit vehicle acquisitions and construction of new facilities or improvements to facilities that increase transit capacity. Alternative fuel projects including participation in vehicle acquisitions, engine conversions, and refueling facilities.

Bicycle, Pedestrian, Transportation Alternative Improvements Bicycle, Pedestrian, and Transportation Alternative Program Improvement projects consists of construction/reconstruction of bicycle and pedestrian facilities, recreational trails, safe routes to school, community improvements such as historic preservation, and vegetation management, and environmental mitigation related to stormwater and habitat connectivity. Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act. Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for nondrivers, including children, older adults, and individuals with disabilities to access daily needs. Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other nonmotorized transportation users. Construction of turnouts, overlooks, and viewing areas. Infrastructure-related projects.-planning, design, and construction of infrastructure-related projects on any public road or any bicycle or pedestrian pathway or trail in the vicinity of schools that will substantially improve the ability of students to walk and bicycle to school, including sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure bicycle parking facilities, and traffic diversion improvements in the vicinity of schools. SRTS projects must be within approximately two miles of a school for kindergarten through eighth grade as specified in SAFETEA-LU §1404. (23 U.S.C. 402 note)

Roadway and Bridge Preservation, Rehabilitation and Replacement Roadway and Bridge Preservation, Rehabilitation, and Replacement projects consists of the construction/reconstruction of roadways, resurfacing, restoration, rehabilitation, or preservation of roadways and bridges to extend the useful life of the existing facility, or replacement of existing facilities. Protection (including painting, scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events) for bridges (including approaches to bridges and other elevated structures) and tunnels on public roads, and inspection and evaluation of bridges and tunnels and other highway assets.

<u>Roadway Operational Improvement</u> The Roadway Operational Improvement projects consists of design and construction of operational improvements and capital and operating costs for traffic monitoring, management, and control facilities and programs.

Safety Improvements The Safety Improvements projects consists of (A) any highway safety improvement project on any public road or publicly owned bicycle or pedestrian pathway or trail; (B) as provided in subsection 23 U.S.C. 148(g)(special rules for High-Risk Rural Road Safety and Older Drivers); or (C) any project to maintain minimum levels of retroreflectivity with respect to a public road without regard to whether the project is included in an applicable State strategic highway safety plan. Terms, including "highway safety improvement project" are defined in 23 U.S.C. 148.

A-6. Revisions to the LRSTP or STIP

On various occasions, revisions may be required to the STIP. Revisions to a STIP may involve a minor revision or a major revision. On a case-by-case basis, the KYTC, FHWA, and/or FTA determines whether the revision is minor or major as per definition of "Administrative Modification" and the definition of "Amendment" outlined in 23 CFR 450.104. The KYTC, FHWA, and FTA will utilize applicable requirements and classifications of projects that are not considered to be of appropriate scale for individual identification in a given program year as outlined in 23 CFR 771.117 (c) and (d) and/or 40 CFR part 93.126 "Exempt Projects" and 93.127 "Projects Exempt from Regional Emissions Analysis." These appropriately identified projects may be grouped by function, work type, and/or geographic area into the ZVarious programs and other program placeholders to determine if a STIP revision is required.

Administrative Modifications to STIP

Administrative modifications are minor revisions to the STIP that include minor changes to:

- Projects/project phase costs.
- Funding sources of previously included projects.
- Project phase initiation dates.
- The delineation of projects in program placeholders which include:
 - o Congestion Mitigation and Air Quality (CMAQ) projects
 - o Transportation Alternatives (TA) projects
 - o High-Cost Safety Improvement (HSIP-HCS) projects

An administrative modification is a revision that does not require:

- Public review and comment.
- Re-demonstration of fiscal constraint.
- A conformity determination (in air quality conformity nonattainment and maintenance areas).

For administrative modifications to the STIP, the official STIP mailing list will be utilized to distribute information pertaining to the revision. As STIP administrative modifications are made, each administrative modification will be posted on the KYTC web site. Each of these documents will be provided in an electronically accessible format with the means to search and print as appropriate.

Amendments to the STIP

Amendments are revisions to the STIP that include major changes to a project included in the STIP. This includes a major change in:

- Project cost.
- Project/project phase initiation dates.

- Design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects).
- The addition or deletion of projects, except those types of projects not considered to be of appropriate scale for individual identification as outlined in 23 CFR 771.117 (c) and (d) and/or 40 CFR part 93.126 "Exempt Projects" and 93.127 "Projects Exempt from Regional Emissions Analysis," which are the grouped projects listed in the ZVarious programs and other program placeholders such as the Transportation Alternatives (TA) and Congestion Mitigation and Air Quality (CMAQ).

An amendment is a revision that requires:

- Public review and comment.
- Redemonstration of fiscal constraint.
- A conformity determination (in air quality nonattainment and maintenance areas).

For STIP amendments that have not undergone public involvement through the MPO process or the Highway Plan process, a 15-day public review period will be provided, and public notice advertisements will be placed in statewide, significant regional, and demographically targeted newspapers. Selected newspapers will be identified through assistance from the corresponding ADDs and MPOs. In addition, other possible public outreach efforts targeted to the specific region of the state directly affected by the proposed STIP amendment may be required and will be determined on a case-by-case basis.

The proposed amendment will be posted on KYTC Central Office as well as the appropriate Highway District, ADD, and MPO websites for public review and comment. KYTC will make available to the public the description of project, location of project, proposed project phases, proposed type of funding, and scheduled fiscal year of each phase that KYTC wants to amend into the STIP. Also, KYTC will revise the "Fiscal Constraint" tables outlined in the STIP to reflect the required funding for the proposed new project versus available funding. KYTC will provide hard copies of the information and the information will be made available on the KYTC STIP web site. The public will be provided the means to submit written and electronic review comments on proposed STIP amendments.

At the conclusion of the 15-day review period, public comments will be addressed, additional public outreach may be conducted as necessary, and the final STIP amendment will be provided to FHWA and FTA for approval. For amendments to the STIP from areas within MPO boundaries, the public involvement process conducted for the respective MPO TIP will suffice as the required public involvement for the STIP.

As STIP amendments are approved, each amendment will be posted on the KYTC web site. Each of these documents will be provided in an electronically accessible format with the means to search and print as appropriate.

B. STIP Projects

The FAST Act advocates that transportation planning processes be broadened to include the intermodal aspects of the nation's transportation system. The IIJA/BIL continued and expanded on those provisions. The IIJA/BIL continues the National Highway Freight Program (NHFP) to improve the efficient movement of freight on the National Highway Freight Network (NHFN) as support several goals, to include investing in infrastructure and operational improvements that strengthen economic competitiveness, reduce congestion, reduce the cost of freight transportation, improve reliability, and increase productivity; improving the safety, security, efficiency, and resiliency of freight transportation in rural and urban areas; improving the state of good repair of the NHFN; using innovation and advanced technology to improve NHFN safety, efficiency, and reliability; improving the efficiency and productivity of the NFFN; improving State flexibility to support multistate corridor planning and address freight connectivity; and reducing the environmental impacts of freight movement on the NHFN¹.

The KY Freight Plan was originally published in September 2016 and amended in September 2017 with final FHWA approval in December 2017. The IIJA/BIL compliant KY Freight Plan was updated in 2022, with final FHWA approval in May 2023. Highway and multimodal projects were added with input from the Kentucky Freight Advisory Committee for Transportation (KY FACT) in accordance with requirements of the NHFP found in IIJA/BIL. The KYTC allocated 10% or approximately \$2 million per year of the NHFP for multimodal projects to improve the National Highway Freight Network. Specific activities the KYTC has undertaken to develop an intermodal planning process include integrating freight movement and modal access tasks into the Annual Work Program of the ADDs, identifying and discussing intermodal issues through the statewide transportation planning meetings, the identification of intermodal access projects and the dedication of specific staff to the freight movement issues. A four-tiered KY Freight Highway Network was developed using a data-driven process with ADD, MPO, HDO, and freight peer input.

Improvement projects and strategies resulting from the studies and prioritization process based on selected criteria, as well as the other pertinent data, will be considered for inclusion in the statewide transportation plan for future implementation.

In accordance with the IIJA/BIL requirements, the KYTC mission is "to provide a safe, efficient, environmentally sound and fiscally responsible transportation system that delivers economic opportunity and enhances the quality of life in Kentucky.3" Simply stated, the KYTC's goal is to provide "safe and reliable roads, roads that lead to jobs," and the 2024 Enacted Highway Plan and FY 2025-2028 STIP have been developed in support of that goal.

B-1. Planned Highway Improvements

In developing the highway element of the FY 2025-2028 STIP, the KYTC relied heavily upon its ongoing project identification and scheduling mechanisms, particularly the long-range planning process. The KYTC projected federal and state funding levels were used in the development of the Recommended FY 2024-2030 Highway Plan submitted to

^{1.} https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nhfp.cfm

^{3.} The Strategic Plan, KYTC Updated September 2021

the Kentucky General Assembly in January 2024. The Kentucky General Assembly by law has the right to remove, add to, or edit projects contained in the Recommended Highway Plan. The 2024 General Assembly approved Kentucky's 2024 Highway Plan (FY 2024-2030) in April 2024. The 2024 Enacted Highway Plan is the primary basis for the federal-aid highway element of the FY 2025-2028 STIP. Included within the 2024 Enacted Highway Plan are projects that are scheduled to use GARVEE bond funding as described within STIP Development; Section A-5: Fiscal Constraint.

To help achieve these goals, the identification of highway needs has been accomplished through in-house evaluations of highway performance and adequacy, meshed with input received from state legislators, local officials, MPO and ADD transportation committees, the general public, and from within our own agency's Central Office and District Offices. Each of these sources yielded valuable input for consideration in the development of the state's Long-Range Transportation Plan and the Highway Plan.

The KYTC considered technical data on the ability of candidate projects to improve safety, increase system reliability, and contribute toward enhancing regional economic attractiveness. Unfortunately, the needs of our highway system far outweigh available resources. The KYTC is working to improve the evaluation process for active and potential projects to ensure that every dollar we spend is used to address the most critical and cost-effective improvements. In doing so, the KYTC can concentrate available funds on those projects that truly result in safer roadway conditions, better pavements and bridges, and improved local economies.

As the Highway Plan was developed, projects were selected using the Strategic Highway Investment Formula for Tomorrow (SHIFT) scoring process. SHIFT uses a data driven process including public input, project identification, project sponsorship, data verification, project prioritization and project selection. Criteria considered are congestion, benefit-cost, safety, economic development, freight, and asset management. The Cabinet's long-range planning efforts have and will continue to maintain a stream of prioritized candidate projects for inclusion and advancement in Kentucky's Highway Plan. As the federally-required long-range planning process matures, the Highway Plan and STIP documents will be strengthened by the focus on longer-range program management considerations. It is expected that future editions of Kentucky's STIP will reflect a strategy for implementation resulting from more clearly defined longer-range transportation goals.

As outlined within the STIP Introduction, the FY 2025-2028 STIP is a planning document that covers a period of four years and is updated every two years upon approval of the KYTC's Highway Plan by the Kentucky General Assembly. With the STIP being a planning document, the projects, schedules, and estimated costs identified within the FY 2025-2028 STIP are based upon the most current project information at the time of preparing the Highway Plan and STIP. As work progresses within each phase of the projects, the project team refines the project scope, schedules, and estimated costs to complete the project. The programming of project funding for project refinements will follow the STIP amendments/revisions process as described within STIP Development; Section A-6: Revisions to the LRSTP or STIP, along with the STIP end of fiscal year "fiscal constraint" recalculations.

The listing of FY 2025-2028 STIP projects is contained in Appendix A, Exhibit A-5. The KYTC will administer each of the projects listed unless clearly indicated in the project description as being handled otherwise. Included as part of the listing of projects, is the "Priority" column, which is a quick reference for project priority of the corresponding project. The project priority is listed as Safety, Reliability, New Routes, or Economic Development as defined by the following definitions:

<u>Safety:</u> Providing for the safety and security of motorized and non-motorized users who travel Kentucky's highways is the KYTC's highest priority. The FY 2025-2028 STIP includes several programs of projects that serve to address the safety needs on Kentucky's highways. In accordance with the FAST Act, Kentucky has developed a Strategic Highway Safety Plan (SHSP) that combines all statewide enforcement, engineering, education, and emergency response issues into a single coherent plan. The "engineering" element of the SHSP is primarily addressed through the Highway Safety Improvement Program (HSIP), which funds infrastructure-related safety improvements. The "educational" and "enforcement" elements of the SHSP are addressed in the Highway Safety Plan (HSP), which funds behavioral-related safety improvements.

Reliability: The condition of roads and highways in the state is a primary concern among Kentucky's citizens. Poor pavements detract from the driving experience, and road maintenance and resurfacing are the top transportation investment needs in our state. These issues certainly resonate with the KYTC, as we too see the value in protecting the infrastructure in which the public has entrusted to us.

New Routes: This is for the development of a roadway that does not currently exist.

Economic Development: This is for the reconstruction of major interchanges.

In an effort to provide a consistent, ongoing set of performance measurements for the maintenance condition of Kentucky's state-maintained highway system, the KYTC has developed a Maintenance Rating Program (MRP). The purpose of the MRP is to assess maintenance activities as they relate to customer expectations, provide data to support needed performance improvements, ensure that the KYTC system preservation strategies are working, and to meet federal asset management requirements. Through the MRP, the KYTC has proposed some budgetary adjustments for the FY 2025-2028 STIP to increase funding for the maintenance and resurfacing programs in an effort to improve conditions on Kentucky's roadways. There has also been a concerted effort to include essential, major pavement reconstruction projects in the FY 2025-2028 STIP. The KYTC's desire is to improve overall pavement conditions and meet the public expectation that Kentucky's roads will be kept in the best possible shape.

The process to track bridge condition has changed to match the industry standard of "Good", "Fair", and "Poor." The three levels correspond to the condition of the three main structural elements: deck, superstructure, and substructure. If all elements rate above 7 on a 1 to 10 scale the bridge is rated as "Good." If any element is rated 4 or lower the bridge is considered "Poor." According to the KYTC inventory data, approximately 30% of

Kentucky's bridges are in good condition, 63% are in fair condition, and 7% are in poor condition.

Economic Development: Kentucky's future economy and congestion concerns: Highway congestion and its impact on economic development in Kentucky is very much a "relative" issue. While Kentucky does not have the overly oppressive highway congestion found in many of the nation's very large cities, there are times when congestion in our urban centers is just as frustrating to Kentucky drivers. Morning and afternoon "rush hours" create traffic problems on many of our city streets, urban beltlines, and metro area interstate highway arteries. Additionally, "just in time" delivery schedules have created "rolling warehouses" on many of Kentucky's rural interstates, resulting in truck percentages of 50% in some instances. Such heavy truck volumes reduce levels of service on our major roadways, and create safety issues and driver frustration. As traffic and freight volumes increase in the years ahead, our existing highway network will become more and more constrained and potentially impact Kentucky's competitiveness in the global marketplace.

Each of the FY 2025-2028 STIP projects, whether identified with a purpose of safety, reliability, or economic development, truly has an effect on Kentucky's future economy and congestion concerns.

B-2. Highway Safety Improvement Program (HSIP)

The HSIP is a core Federal-aid highway program, the purpose of which is to achieve a significant reduction in fatalities and serious injuries on all public roads. The HSIP is a federally-funded, state administered program that is legislated under 23 U.S.C. 148, 23 U.S.C. 150, and 23 U.S.C. 130 and regulated by 23 CFR Parts 924 and 490.

23 CFR 924.5 states: Each State shall develop, implement, and evaluate on an annual basis an HSIP that has the objective to significantly reduce fatalities and serious injuries resulting from crashes on all public roads. HSIP funds shall be used for highway safety improvement projects that are consistent with the State's SHSP (Strategic Highway Safety Plan). HSIP funds should be used to maximize opportunities to advance highway safety improvement projects that have the greatest potential to reduce the state's roadway fatalities and serious injuries.

To be eligible for HSIP funds, all highway safety improvement projects must:

- 1. Address Strategic Highway Safety Plan (SHSP) priority,
- 2. Be identified through a data-driven process, and
- 3. Contribute to a reduction in fatalities and serious injuries.

In addition, all highway safety improvement projects are subject to general requirements under Title 23 of the United States Code.

In general, non-infrastructure projects that promote the awareness of the public and educate the public concerning highway safety matters or enforce highway safety laws are not eligible for HSIP funds. However, eligible non-infrastructure projects include road safety

audits, improvements in the collection and analysis of data, or transportation safety planning activities.

Most projects originate from HSIP Initiatives outlined in the HSIP Investment Plan, which is based on the strategies listed in the SHSP. Further, projects in each HSIP Initiative are identified through Data-Driven Safety Analysis (DDSA) methodologies outlined in the Highway Safety Manual (HSM). Each year, DDSA methods are used to screen the statewide network for safety improvement opportunities in various HSIP Initiatives, such as High Friction Surface, Cable Median Barrier, Guardrail Installation, Roadway Departure, and Intersections. Low cost, systemic safety treatments are often implemented with the HSIP projects identified through network screening, but some systemic-only safety projects are implemented based on analysis of statewide trends and risk factors observed in the crash data.

Projects meeting the program's requirements listed above are submitted to FHWA for review and approval into the program. Upon approval of the identified projects, funding for the projects is initiated based upon statewide priorities for activities that are most likely to reduce the number of, or potential for, fatalities and serious injuries and upon available funding. An annual report is submitted to FHWA that describes the progress being made, assesses the effectiveness of the improvements, and describes the extent to which the improvements funded contribute to the safety goals.

As part of the HSIP report, the state must report annually on the safety performance measures identified later in this document.

Railway-Highway Crossings Program

This program funds safety improvements to reduce the number of fatalities, injuries, and crashes at public grade crossings. The railway-highway crossing program will be conducted in accordance with regulations as outlined in the corresponding section of the FAST Act, Section 1108; and 23 USC 130.

The railway-highway crossings program funding level determined for each state is set aside from the state's HSIP amount. Activities funded under this program are also eligible for funding under the broader HSIP eligibilities. The federal-aid highway funding anticipated apportionments and planned obligations for the Railway-Highway Crossings railroad protective devices (RRP) and the railroad separation (RRS) projects are included within the HSIP – Safety categories in the Fiscal Constraint tables.

Highway Safety Plan (HSP)

The purpose of the Highway Safety Plan (HSP) is to identify opportunities throughout the state regarding the behavioral aspects of highway safety, develop performance goals and objectives, and establish programs and projects to prevent serious injuries and deaths on Kentucky's transportation network. The federal funding is a combination from FHWA and the National Highway Traffic Safety Administration (NHTSA). The HSP is an integral part of Kentucky's overall Strategic Highway Safety Plan

(SHSP) as required by the FAST Act. Emphasis areas in SAFEKY – Kentucky's 2020-2024 Strategic Highway Safety Plan – are as follows:

- a. Aggressive Driving
- b. Distracted Driving
- c. Impaired Driving
- d. Occupant Protection
- e. Roadway Departure
- f. Vulnerable Road Users

Grants Management

Grants are a significant part of the HSP for law enforcement, communities, research, and data. It takes a cooperative effort by many agencies to prevent deaths and serious injuries on our transportation system. Both FHWA and NHTSA provide federal funding that is dispersed to various agencies based upon the identified opportunities. National high visibility law enforcement mobilizations are conducted each year to specifically draw attention to safety belt usage and impaired driving. These are "Click It or Ticket," and "Drive Sober or Get Pulled Over." Our safe summer-driving state initiative is "Blue Lights Across the Bluegrass," focuses on aggressive driving, but also encompasses other emphasis areas.

Highway Safety Education Program

The Highway Safety Education Program (Education Branch) was created in 1994 as the educational arm of the Cabinet's Safety Corridor Program. The Education Branch is now one of the two branches under the Division of Highway Safety Programs. Funding for these programs has come primarily from NHTSA. The Education Branch focuses heavily on community-based events to target the newest and youngest drivers to get them started in the right direction. There are many programs, including simulators that focus attention on different problem areas regarding highway safety. Below is a listing of these.

- a. Active in local highway safety committees
- b. Ghost Out
- c. Mock Crash
- d. Judgement Day
- e. Fatal Vision Goggles
- f. 3D Drunk and Drugged Driving Simulator
- g. Motorcycle Safety events
- h. Mature driving presentations

All of these programs focus on targeted areas of the state where data shows increased opportunities to prevent deaths and injuries, low safety belt usage, and high incidences of drunk or drugged driving.

B-3. <u>Intelligent Transportation System (ITS)</u>

The KYTC has a variety of Intelligent Transportation System (ITS) programs both operational and under construction throughout Kentucky. The Cabinet manages both regional (TRIMARC) and statewide Traffic Operation Centers (STOC). TRIMARC services Louisville and Northern Kentucky. The STOC provides traffic management services to the remainder of the Commonwealth. The City of Lexington operates an independent operation center. The Cumberland Gap Tunnel (CGT) Center provides traffic management, as well as other tunnel-related services. The Cumberland Gap Tunnel Authority operates for KYTC but is independent from the State Transportation Operations Center (STOC).

The KYTC has implemented ITS projects in the Lexington, Louisville, Elizabethtown, Bowling Green, Richmond, Paducah, and Ft. Campbell areas. These projects include Dynamic Message Signs (DMS), cameras (CCTV), 13 Truck Parking Information Management Systems (TPIMS), dynamic signage, and advanced signalized intersection detection. The Cabinet is actively working on a Wrong Way Driver Prevention Project to prevent wrong way driving by installing wrong way driver prevention technology across multiple limit access facilities in Louisville and Lexington in 2024/25. The Cabinet is currently updating the Statewide ITS Architecture for 2024.

The TRIMARC system has been expanded within the Louisville Metro area as part of the Ohio River Bridges project. KIPDA is using the reporting capabilities of TRIMARC. Other operational systems include the Road Weather Information Stations (RWIS) in 39 locations to provide Highway District Maintenance personnel, as well as others, with vital roadway weather information for critical purposes such as snow and ice maintenance.

Because of the requirements of 23 CFR 511 and compliance with the Real-Time System Management Information Program (RTSMIP), the KYTC has implemented a new real-time Roadway Advisory Map to process and publish data, GoKy.ky.gov. The partnerships with the Cabinet's District Offices, Transportation Operations Center in Frankfort, Division of Maintenance, Kentucky Vehicle Enforcement, WAZE, and Kentucky State Police ensures the highest level of information provided to the traveling public.

B-4. Maintenance and Traffic Operations

The KYTC is responsible for ensuring that the State Road System is maintained and operated in a manner focused on the Cabinet's mission. The Cabinet's goal is to provide the highway user maximum safety and comfort with minimal travel interruptions. Table 2 contains a line-item list outlining the FY 2025-202 8 scheduled state funding for the KYTC's operations and maintenance program, and Appendix B contains the MPOs Financial Plans, which includes a line-item list outlining the operations and maintenance program within each MPO area.

The annual state-funded Maintenance and Traffic Operations Programs are comprised of four major sub-programs: Roadway Preservation, Bridge Preservation, Roadside Environmental, and Traffic Operations.

The Roadway Preservation unit is responsible for maintenance on the approximately 27,629 miles of highways in Kentucky in the State Road System. This unit is responsible for routine upkeep such as pavement repairs, ditch cleaning, pavement resurfacing, drainage, guardrails, and landslides.

The Bridge Preservation Program performs bridge and tunnel inspections and load ratings of over 14,000 bridges on public roadways within the state and administers projects to repair, preserve and replace bridges on state-maintained roadways.

The Roadside Environmental Program provides upkeep and janitorial services at 22 rest area facilities and 4 truck rest havens across the state, along with the maintenance and upkeep of the various truck weigh stations located throughout the Commonwealth. The unit also administers contracts for statewide mowing, litter pickup and snow and ice activities. Snow and ice activities include contracts for salt, contract drivers and equipment.

The Traffic Operations Program is responsible for the installation and maintenance of electronic traffic control devices, including traffic signals, flashing beacons, LED-enhanced signs, school flashers, roadway lighting, navigational lighting, and aviation obstruction lighting on state-maintained highways. They also provide the development of design plans for electronic traffic control devices and the establishment of material specifications for items used in the installation and maintenance of these devices. Traffic Operations also establishes and maintains coordinated traffic signal systems to support the efficient movement of traffic. This program also administers the federally funded Highway Safety Improvement Program (HSIP).

In addition to the ongoing highway maintenance and traffic operations programs, the KYTC also budgets annual funding to resurface roads on the state road system. These funds are in addition to the monies funneled through the Cabinet's Rural and Municipal-aid Programs for improvements to county roads, city streets, and the state rural-secondary road system. Each of the rural and municipal-aid program components is accomplished through an ongoing dialogue with Kentucky's city and county governmental entities.

B-5. Transportation Alternatives Program (TAP)

The Transportation Alternatives Program (TAP) was continued as a set-aside of the federal Surface Transportation Block Grant (STBG) program under the Bipartisan Infrastructure Law (BIL), with an increase in the size of the TAP Set-Aside. The set-aside funds a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, construction of turnouts, overlooks, and viewing areas; community improvements such as historic preservation and vegetation management; environmental mitigation related to stormwater and habitat connectivity; recreational trails; safe routes to school projects; and vulnerable road user safety assessments.

Funding for a state's Recreational Trails Program is taken off the top of the state's TAP apportionment unless the Governor opts out.

The remaining funds are divided, with 59% of the funding suballocated to sub-State

areas based on relative population size and 41% of the funding for use in any area of the state using a competitive selection process.

The funding suballocated to sub-State areas is distributed as follows:

- Urbanized areas with populations over 200,000
- Urbanized areas with populations of 50,000 to 200,000
- Urban areas with populations of 5,001 to 200,000 and;
- Areas with population of 5,000 or less.

The funding sub-allocated to areas with populations over 200,000 is managed by the Regional Metropolitan Planning Organization (MPO) and awarded through a competitive application process held by the MPO. The MPO awards projects that are then administered through the KYTC Office of Local Programs (OLP). The other funding categories are awarded through a statewide competitive selection process and administered by OLP. All TAP projects require a 20% local match. Application cycles are typically held each year but are dependent on the availability of funds. As new project selections are made, the new projects will be incorporated into the STIP thru the STIP Administrative Modification process.

Transportation Alternatives Program (TAP) Projects are listed in Appendix A, Exhibit A-7.

B-6. Recreational Trails Program

The Recreational Trails Program provides funds to develop and maintain recreational trails for motorized and non-motorized recreational trail users. Funds are apportioned under 23 U.S. Code 206 (d). Funds may be used to provide and maintain trails, trailside, and trailhead facilities, including provisions to facilitate access for people with disabilities. Funds may also be used to acquire easements or land for trails. Trail uses are for hiking, walking, biking, mountain biking, skating, equestrian, access to canoeing, and ATVs.

The Governor of a state designates an agency to administer the program, which may be an agency other than the State Department of Transportation. The Kentucky Recreational Trails Program is administered by the Governor's Office, Department for Local Government (DLG).

Planned Recreational Trails Projects are included in Appendix A, Exhibit A-8.

B-7. Planned Public Transportation (Transit) Projects

The Federal Transit Law (49 U.S.C. Chapter 53) is the basis for the federally-assisted public transportation programs. Program funds included for the rural portion of the state (Section 5311), for the small urban and urbanized portions of the state (Section 5307), for seniors and persons with disabilities in the state (Section 5310), for technical assistance and transit planning (Section 5303 & Section 5304), training for rural transit operators (RTAP), for capital bus and bus facilities (Section 5339) and discretionary capital investment grants

for heavy rail, commuter rail, light rail, streetcars, and bus rapid transit (Section 5309) grants. Projects that go beyond the Americans with Disabilities Act (ADA) and that provide transportation for the low income to work and training are included under the Section 5311, 5307 and 5310 programs. Local coordinated plans are required.

Section 5311 program funds are used for planning, capital, and operating assistance by local public bodies, nonprofit organizations, and operators of public transportation services. These funds are used to give people access to health care, shopping, employment, education opportunities, public services, recreation, etc. Public transportation systems in rural areas assume the responsibility of meeting these needs. Kentucky utilizes 15% of these funds for provision of intercity bus services.

Section 5307 program funds are used by transit operators in urbanized areas. The KYTC has approval authority for operating, planning and capital funding for operators in areas of 50,000 to 200,000 populations. These funds do not flow through the Cabinet for all areas, but the allocation is done by the Governor. Areas larger than 200,000 are allocated a specific grant amount by the FTA.

Section 5303 program funds are used for planning purposes by the MPOs and the KYTC. MPO funds are formula allocated by the KYTC and are identified for use in urbanized area unified planning work programs. Statewide transit planning for the rural areas is also funded with Section 5304 funds.

Section 5310 program funds are used primarily for capital purposes. Vans and other equipment critical to providing transportation services for seniors and individuals with disabilities are purchased through this program. Up to 45% of these funds may also be used for public transportation projects that exceed the requirements of the ADA, that improve access to fixed-route services and decrease reliance on complementary paratransit, and/or utilize alternatives to public transportation that assist seniors and individuals with disabilities. This funding can be operating or capital.

The Section 5339 program is a formula capital program that replaces, rehabilitates, and purchases buses and related equipment and constructs bus-related facilities for rural or urbanized public transportation systems. Section 5339(b) are funds that are available to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Section 5339(c) are funds that are part of the Low or No Emission competitive program that provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities.

The Rural Transit Assistance Program (RTAP) is designed to provide training, technical assistance, research, and other related support services for rural transit operators.

In general, the KYTC receives applications from areas and agencies for the FTA program funds. These applications describe the needs for public transit funds (type of service needed, etc.), the funding required, and local matching sources. The KYTC allocates

the money based on several factors including potential ridership, area to be served, availability of services, etc. Each agency is accountable to the Cabinet for the allocated funds. Required monthly report submissions, site visits and compliance reviews, vehicle inspections, drug and alcohol testing, timely invoicing, and audits are among the monitoring activities the Cabinet performs.

With regard to transit project identification, the KYTC advertises annually for competitive proposals for Sections 5310, 5311, 5303, 5304, and 5339, as well as relying heavily upon past experience to develop the transit element of the FY 2025-2028 STIP. Since the passage of MAP-21 and under the current authorization, Infrastructure Investment and Jobs Act (IIJA), the KYTC has been cognizant of the many opportunities for combining highway and transit funding for individual projects and programs, and fully expects to take advantage of these opportunities in the future. Kentucky's MPOs are seriously studying transit options for addressing metropolitan traffic issues, and are engaged in the project prioritization efforts, which truly represent a multimodal approach to overcoming urban congestion.

Planned transit improvements are listed in Appendix A, Exhibit A-9.

B-8. <u>Human Service Transportation Delivery Process</u>

Welfare reform legislation has greatly influenced changes in the Human Service Transportation Delivery (HSTD) process. This process/program utilized combined transportation resources of the Health and Family Services Cabinet and the Education Cabinet's Vocational Rehab and Blind Services Division to provide a coordinated network of transportation providers to provide safe, efficient, and accessible transportation for Kentucky's health, human service, and workforce program clients.

Medicaid, Vocational Rehabilitation, and Blind Services Division funds will flow from the two human service Cabinets to the KYTC for operating funds for providers and administrative funds for the KYTC to manage the program.

The Commonwealth is divided into fifteen Human Service Transportation Delivery Regions. This division was based upon items such as operating authority, fleet sizes and capacities of existing providers, and historical transportation utilization.

Through the use of a financial consultant, the Cabinets developed a "capitated rate" payment system, essentially a flat rate (a fee paid per member, per month). This will reward providers for operating efficiency, discourages over utilization, and significantly reduces fraud and abuse. Some parts of the program will be paid on a fee-for-service basis.

There will be one broker per region who will be responsible for securing transportation from private and public transportation subcontractors in order to guarantee transportation to non-emergency medical services for eligible recipients. The Kentucky Finance Cabinet will secure and contract with the transportation brokers on behalf of all the programs. The KYTC will monitor all other service requirements of the brokers. A Coordinated Transportation Advisory Committee (CTAC) includes representatives of each

of the different programs and will monitor the programs' interests in the network. The KYTC staff will monitor the brokers to make sure they operate as CTAC agrees. Details of each trip will be recorded by the broker and will be used to report program results to state and federal agencies.

In order to fully implement this program, two accomplishments were needed. One was getting legislation passed (HB 468 and HB 488) which requires brokers and subcontractors to meet safety standards, and the other was getting emergency regulations signed so this initiative could begin operation. This legislation has been passed and the emergency regulations are signed.

The KYTC's Office of Transportation Delivery receives funding from the Department of Medicaid to finance the transportation brokerage for Human Service Transportation Delivery non-emergency medical transportation. The Blind Services Division and Vocational Rehab reimburse the transportation broker at the local level, and funding does not flow through the Transportation Cabinet. Each funding stream meets the respective program requirements. Public Transit, Vocational Rehab, Blind Services Division, and non-emergency medical trips are coordinated at the transportation broker level. Non-Emergency Medical Transportation ridership is over 3.6 million annually.

Beginning August 1, 2020, KYTC's Office of Transportation Delivery begins a new partnership with the Kentucky Justice & Public Safety Cabinet's Department for Corrections. This partnership will provide transportation services to former inmates who are paroled or on probation to jobs, medical appointments, substance abuse treatment, and meetings with parole/probation offices. The goal in this new project is to help reduce the recidivism rate in Kentucky in overcoming barriers to success for these former inmates.

B-9. Planned Aviation Improvements

The Airport Improvement Program (AIP) was established by the Airport and Airway Improvement Act of 1982 (Title V of the Tax Equity and Fiscal Responsibility Act of 1982, Public Law 97-248), and amended by the Airport and Airway Safety and Capacity Expansion Act of 1987, (Public Law 100-223), and the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century of 2000 (AIR-21). Current legislation supports and provides funding for the following: (1) airport planning, (2) noise compatibility planning, and (3) noise compatibility programs as set forth in the Aviation Safety and Noise Abatement Act of 1979, (Public Law 96-193).

The funds for the AIP are distributed in accordance with provisions contained in the 2000 Act, as amended. In grant parlance, funds distributed by formula for use at a specific airport or in a specific state or insular area are referred to as apportionment funds. The remaining funds are for use at the discretion of the Secretary of the U.S. Department of Transportation and are known as discretionary funds.

The federal apportionment level for Kentucky airports is difficult to project due to historical variances and the addition of onetime COVID monies (FY2020 - \$131m includes CARES; FY2021 - \$107m includes CRRSA/ARPA; FY2022 - \$73m; FY2023 - \$62m).

The entire amount and locations of spending using the FY2024 federal apportionment money in Kentucky is unknown at this time due to continuing distribution announcements but so far this year \$673,620 has been announced (see attached for detail). This decision is made at the FAA district and region level and these projects are typically not identified until late in the federal fiscal year. At present, there is no way to estimate the level of federal discretionary funding that may be made available during the upcoming biennium. Normally both federal apportionment and federal discretionary funding are matched using a 90% federal, 5% state, 5% local ratio. Historically the Kentucky Department of Aviation (KDA) reserves \$2,200,000 million cover the state's portion of the local share for General Aviation airports.

Current projects are identified in Appendix A, Exhibit A-10.

B-10. Kentucky's "Mega Projects"

As the 2024 Highway Plan was developed, strong consideration was given to the funding needs associated with three (3) "Mega Projects" located in Kentucky. The three (3) "Mega Projects" in Kentucky are (1) the proposed Interstate 69 Ohio River Crossing project between Henderson, Kentucky and Evansville, Indiana; (2) completion of the widening of the Mountain Parkway from Campton through Salyersville; and (3) the Interstate 71/75 Brent Spence Bridge project in Northern Kentucky. The combined cost of these three projects is \$4.1 billion, with Kentucky's share of the combined cost being \$2.3 billion. Each of these projects are expensive projects, beyond the current financial means of KYTC without special financing mechanisms.

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 Widening

KYTC initiated work to 4-lane the Mountain Parkway from Campton through Salversville 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 Salyersville 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.

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.

B-11. FAST Act Grants

Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)

As outlined in the FAST Act funding fact sheets, "the Advanced Transportation and Congestion Management Technologies Deployment Program is to provide competitive grants for the development of model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment." For a complete detailed description and eligible activities, please see the following link to the FHWA FAST Act website: http://www.fhwa.dot.gov/fastact/factsheets/advtranscongmgmtfs.cfm

Fostering Advancements in Shipping and Transportation for the Long-Term Achievement of National Efficiencies (FASTLANE) Grants

As outlined in the FAST Act funding fact sheets, "the Nationally Significant Freight and Highway Projects (NSFHP) program to provide financial assistance—competitive grants, known as FASTLANE grants, or credit assistance—to nationally and regionally significant freight and highway projects." For a complete detailed description and eligible activities, please see the following link to the FHWA FAST Act website: http://www.fhwa.dot.gov/fastact/factsheets/fastlanegrantsfs.cfm

Surface Transportation System Funding Alternatives Program (STSFA)

As outlined in the FAST Act funding fact sheets, "the Surface Transportation System Funding Alternatives Program is to provide grants to States or groups of States to demonstrate user-based alternative revenue mechanisms that utilize a user fee structure to maintain the long-term solvency of the Highway Trust Fund." For a complete detailed description and eligible activities, please see the following link to the FHWA FAST Act website: http://www.fhwa.dot.gov/fastact/factsheets/surftransfundaltfs.cfm

B-12. Performance Measures

Moving Ahead for Progress in the 21st Century Act (MAP-21) established and the Fixing America's Surface Transportation (FAST) Act continued performance measurement and reporting requirements associated with safety, asset management, system performance, and Congestion Mitigation and Air Quality (CMAQ) performance. KYTC provided updated non-safety targets in February 2023. Safety targets are reported through the Highway Safety Plan submitted to NHTSA by June 30 each year and the HSIP Annual Report submitted to FHWA by August 31 each year starting in 2017.

The summary below includes performance measures for asset management, system performance, and congestion mitigation and air quality (CMAQ). The subject performance measures have been coordinated with the ten Metropolitan Planning Organizations as various times through the past year.

Asset Management	Target	
Pavement Performance	2 Yr	4 Yr
% Good Interstate	55.0%	60.0%
% Poor Interstate	4.0%	3.0%
% Good Non-Interstate NHS	35.0%	40.0%
% Poor Non-Interstate NHS	6.0%	5.0%
NHS Bridge Performance		
% Good Condition by Deck Area	31.0%	27.0%
% Poor Condition by Deck Area	3.7%	3.6%
System Performance		
Level of Travel Time Reliability (LOTTR)	2 Yr	4 Yr
% Reliable Interstates	95.0%	93.0%
% Reliable Non-Interstate NHS		91%
Truck Travel Time Index (TTTR)	1.3	1.35
Congestion Mitigation and Air Quality (CMAQ)		
OKI Regional Council of Governments		
Peak Hours of Excessive Delay (PHED-hrs)		9.0
Non-Single Occupancy Vehicles (SOV) Travel	18.5%	18.5%
Emissions Measure		
VOC	100	200
NOx	100	200

Safety

The safety performance metrics include five measures – number of fatalities, rate of fatalities per 100 million vehicle miles traveled (VMT), number of serious injuries, rate of serious injuries per 100 million VMT, and number of non-motorized fatalities and non-motorized serious injuries. Annual state targets are established for these five performance measures through a collaborative effort involving the Kentucky Office of Highway Safety (KOHS) and the Highway Safety Improvement Program (HSIP). Performance measures are evaluated using a five-year rolling average and are reported to both NHTSA and FHWA. KOHS and HSIP share identical safety performance targets for the following metrics: number of fatalities, rate of fatalities, and number of serious injuries. HSIP includes two additional safety performance targets for rate of serious injuries and number of non-motorized fatalities/serious injuries.

Metropolitan Planning Organizations (MPOs) are also required to set targets for the five HSIP safety performance measures. To provide MPOs with flexibility, MPOs may support all the state targets, establish their own specific numeric targets for all of the performance measures, or any combination.

KYTC's most recent target setting efforts focused on the 2024 calendar year and resulted in the following safety targets for Kentucky:

Safety Performance Measure	2024 Target
Number of Fatalities	764
Rate of Fatalities per 100 Million Vehicle Miles Traveled	1.575
Number of Serious Injuries	2,658
Rate of Serious Injuries per 100 Million Vehicle Miles Traveled	5.52
Number of Non-motorized Fatalities and Non-Motorized Serious Injuries	289

Asset Management

The asset management performance metrics include pavement condition and bridge condition for the National Highway System (NHS). Both metrics require 2- and 4- year targets. Each metric reports the percentage of the system in "Good" and "Poor" condition with minimum condition levels for both bridge and pavement condition. KYTC submitted its Transportation Asset Management Plan (TAMP) in December 2022 in accordance with MAP-21 and FAST ACT requirements. In June 2020, an implementation progress report was provided to FHWA in outlining KYTC efforts to align investments with the TAMP.

System Performance

Targets required to be set at the state level include Level of Travel Time Reliability (LOTTR) and Truck Travel Time Index (TTTI). LOTTR measures the percent of reliable occupancy-weighted vehicle-miles traveled on Interstates and non-Interstate National Highway System routes. TTTI indicates the additional factor of time beyond the average travel time that freight movers must factor into delivery times to ensure on-time delivery 95% of the time. Both metrics require 2- and 4- year targets.

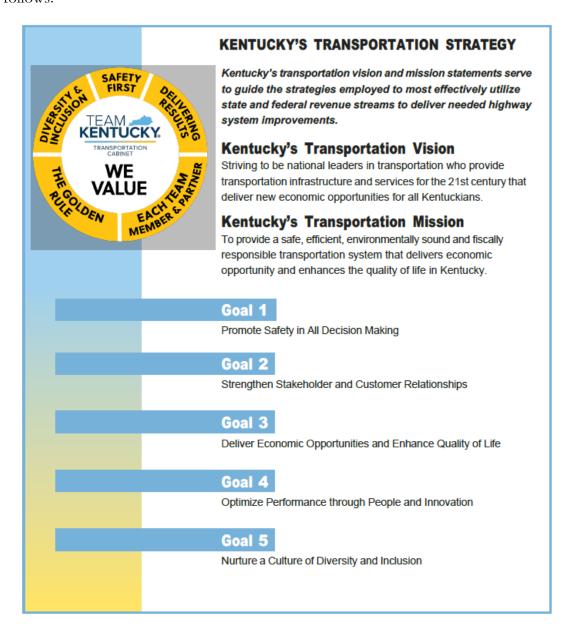
Congestion Mitigation and Air Quality (CMAQ)

MPOs with an urbanized area population greater than 1 million that are in maintenance or non-attainment for air quality must report per-capita Peak Hours of Excessive Delay (PHED), percent non-SOV travel and CMAQ funded emissions reductions. Currently the only area in Kentucky subject to this requirement is the Cincinnati-Northern Kentucky urbanized area; the designated MPO for this area is the Ohio-Kentucky-Indiana Regional Council of Governments (OKI). In addition to the statewide targets, some targets are specific to the urbanized area and are reported by each state (Kentucky and Ohio).

Alignment of 2024 Enacted Highway Plan, LRSTP, TAMP, and STIP

KYTC planning efforts are designed to ensure that the Cabinet achieves its performance goals for safety, mobility, and asset conditions. These planning efforts are aimed at investing available funding effectively to address short-, medium-, and long-term agency priorities. The plans increase accountability and transparency in the Cabinet's decision-making processes and ensure that investments are aligned with the Cabinet's

strategic objectives. The LRSTP relies on a performance-based planning and programming (PBPP) process that uses data to support decisions that help achieve the desired outcomes. The performance-based planning and programming framework identified within the previous 2014 LRSTP was continued within the 2022-2045 LRSTP with the description of KYTC's SHIFT process that provides a data-driven pathway for improvements from need identification to prioritization and programming. A set of five goals were derived from input and were aligned with the seven national performance goals of: Safety, Infrastructure Condition, Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Environmental Sustainability, and Reduced Project Delivery Delays. The investment plans outlined in the TAMP and STIP support the goals outlined in the 2022-2045 LRSTP through the analysis of data to assess funding needs and program priorities. With all users in mind, Kentucky's vision, mission, and goals for its highway system are as follows:



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.

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 Program (TAMP) 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

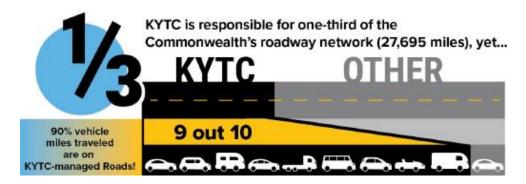
KYTC's Performance-Based Approach to managing its pavements and bridges relies on performance measures to monitor system performance, identify needs, and develop investment priorities. As part of this process, KYTC establishes goals that represent the desired state of good repair for its entire state-managed 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.



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 established 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.

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 TAMP.



The Performance Investment Projects allows 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.

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.

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.

Transit Asset Management (TAM) Plan

The Kentucky Transportation Cabinet/Office of Transportation Delivery (KYTC/OTD) is the designated recipient of the Federal Transit Administration (FTA) Section §5311, §5310, and §5339 funds. As the designated recipient, it is the Office of Transportation Delivery's responsibility to administer FTA funds and provide oversight for operating and capital projects for transit agencies across the Commonwealth of Kentucky, who provide services such as Demand Response, Deviated/Fixed Routes and Intercity

Transportation. As KYTC/OTD is the designated recipient, KYTC/OTD sponsors the Tier II Group Transit Asset Management (TAM) Plan for all of the subrecipients that have, or currently, receive federal funds, and possess capital assets with Federal interest.

The objective of the Kentucky Transportation Cabinet/Office of Transportation Delivery (KYTC/OTD) Tier II Sponsored Transit Asset Management Plan is to provide a quality plan using accurate data that supports the decision making tools used to determine the replacement or maintenance value of existing assets in a cost-effective way, and, assist transit agencies in managing their physical assets and maintain a State of Good Repair (SGR), which means the condition in which a capital asset is able to operate at a full level of performance. This implementation would minimize the overall rehabilitation/maintenance costs and maximize the assets useful life. Transit agencies that utilize the Transit Asset Management Plan, could potentially make investment decisions that ultimately reduce the costs of maintaining its system.

The TAM final rule requires transit providers that receive federal financial assistance to develop a TAM Plan, or, be involved in a sponsored group plan. All TAM Plans for Tier II providers must include the following components:

- 1. An inventory of assets Listing of Capital assets and information about assets.
- 2. Condition assessment of inventory assets Rating of the asset's physical state; to be completed for assets an agency has direct capital responsibility for (level of detail sufficient to monitor and predict performance of inventoried assets).
- 3. Description of Decision support tools An analytical process of tools that 1. Assists in capital asset investment prioritization and/or 2. Estimates capital needs over time.
- 4. Prioritized list of investments A prioritized list of projects or programs to manage or improve the SGR of capital assets. Background: Introduction: KYTC/OTD Tier II Transit Asset Management Plan 3.

The KYTC/OTD TAM Plan includes 26 subrecipients participating in the Plan:

- Audubon Area Community Services
- Blue Grass Community Action Partnership
- Carroll County Wellness Transit
- Central Kentucky Community Action Council
- Daniel Boone Community Action Agency
- Harlan County Community Action Agency
- Frankfort Transit System
- Fulton County Transit Authority
- Gateway Community Action Service Organization
- Glasgow Transit System
- Kentucky River Foothills Development Council
- Leslie Knott Letcher Perry Community Action Council
- Licking Valley Community Action Program
- Louisville Wheels Transportation
- Middle Kentucky Community Action Partnership
- Murray Calloway Transit Authority
- Maysville Transit System

- Northeast Kentucky Community Action Agency
- Owen County Public Transit
- Paducah Transit Authority
- Pennyrile Allied Community Services
- Rural Transit Enterprises Coordinated
- Scottsville Transit System
- Sandy Valley Transportation Services
- University of Louisville Transportation
- Western Kentucky University Transportation

The projects funded with Section 5311 Rural Area Formula Public Assistance Program, Section 5339 Bus and Bus Facilities Formula Grants, and Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Bus and Bus Facility Program, detailed in the STIP, will help the group plan participants meet the targets in the updated Kentucky Public Transit Tier II Sponsor Transit Asset Management Plan. The funds are intended to assist in the projected procurement of 493 new transit vehicles, across several asset classes, detailed in the Kentucky Public Transit Tier II Sponsor Transit Asset Management Plan. If successful, the addition of these vehicles to the Rolling Stock Asset Category will provide for substantial progress in meeting Performance Targets.

Performance Targets are established, annually, by reviewing data for each asset class. The analysis and methodology for target revisions is as follows: when reviewing each asset class, the Sponsored Plan closely looks at assets that have met or exceeded the Useful Life Benchmark (ULB), the asset's age, mileage, and condition. A TERM or Condition rating for each asset is created on a scale from one to five with the following descriptors: Poor, Marginal, Adequate, Good, or Excellent. KYTC/OTD's goal is to prioritize investments by replacing assets that meet the lowest scores first which replaces those assets that are in greatest need of repair. Therefore, items that are ranked Poor or Marginal will be replaced before assets that rank Adequate, Good, or Excellent. With the amount of funds estimated in the Statewide Transportation Improvement Plan (STIP), Section 5311 funds will be dispersed for Maintenance of Effort (MOE) first. Remaining Section 5311 funds will be used for capital projects based on the priorities listing in the Kentucky Public Transit Tier II Sponsor Transit Asset Management Plan in Table 3, page 6.

See the "Kentucky Public Transit Tier II Sponsor Transit Asset Management Plan" for detailed information at:

https://transportation.ky.gov/TransportationDelivery/Documents/KYTC%20Sponsored%20TIER%20II%20Transit%20Asset%20Management%20(TAM)%20Plan%20REVISED%20SFY2025.pdf

The current Performance Targets are included in the chart below for SFY2025 and are projected for the following three years.

	Performance Measure	2025 Target	2026 Target	2027 Target	2028 Target
Rolling Stock – Automobiles	The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.	72%	72%	63%	54%
Rolling Stock – Buses	The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.	60%	60%	48%	36%
Rolling Stock – Cutaway Buses	The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.	9%	9%	7%	5%
Rolling Stock – Minivans	The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.	36%	36%	23%	16%
Rolling Stock – SUVs	The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.	15%	15%	13%	11%
Rolling Stock – Vans	The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.	5%	5%	3%	1%
Facilities – Administrative/Maintenance	The performance measure for facilities is the percentage of facilities within an asset class, rated below condition 3 on the TERM scale.	0%	0%	0%	0%
Facilities – Parking/Park and Ride	The performance measure for facilities is the percentage of facilities within an asset class, rated below condition 3 on the TERM scale.	0%	0%	0%	0%
Facilities – Passenger Bus Transfer Station	The performance measure for facilities is the percentage of facilities within an asset class, rated below condition 3 on the TERM scale.	0%	0%	0%	0%
Equipment – Non-Revenue Vehicles	The performance measure for non- revenue, support-service and maintenance vehicles equipment is the percentage of those vehicles that have either met or exceeded their ULB.	56%	56%	48%	40%
Equipment – Maintenance/Administrative	N/A	N/A	N/A	N/A	N/A
Infrastructure	N/A	N/A	N/A	N/A	N/A

Progress toward meeting Performance Targets is documented in the chart below.

Asset Category	Count	Avg Age	Avg TERM (Facilities)/ Condition Rating	Met or Exceeded ULB	Difference from Previous Year ULB
Equipment					
Non-Revenue Service Vehicles	24	12 Years	N/A	54.17%	6.02%
Maintenance/Administrative	2	14 Years	2	N/A	N/A
Bus Shelter	1	16 Years	3.6	N/A	N/A
Facilities					
Administrative/Maintenance	38	16 Years	3.95	N/A	N/A
Parking/Park and Ride	2	16 Years	4	N/A	N/A
Passenger Bus Transfer Station	1	15 Years	3.5	N/A	N/A
Rolling Stock:					
Automobiles	15	11 Years	N/A	80.00%	17.50%
Buses	38	12 Years	N/A	42.11%	-5.62%
Cutaway Buses	656	6 Years	N/A	12.50%	5.43%
Minivans	353	6 Years	N/A	25.50%	2.31%
SUVs	174	6 Years	N/A	20.69%	7.47%
Vans	318	5 Years	N/A	17.30%	12.46%
Infrastructure:					
None	N/A	N/A	N/A	N/A	N/A