

## 9. Recommendations

The Kentucky Freight Plan's overarching recommendation is to improve infrastructure that is most beneficial to freight movement and Kentucky's residents. This section outlines several policy, program, and project-level recommendations, and identifies potential funding sources for future freight investment.

### 9.1. Program-Level Recommendations

- Focused investment on the Kentucky Freight Network;
- Implement recommendations outlined in the Truck Parking Plan, Aviation Plan, Riverports, Highway & Rail Freight Study, and State Rail Plan;
- Continued focus and expansion of freight performance measures;
- Identify/Monitor/Maintain roadways that support the air cargo, advanced manufacturing, agriculture, and energy industries;
- Sustained work to integrate freight stakeholders in the state and MPO planning process(es);
- Continued partnership with MAFC and regional initiatives like ITTS, TETC, and TPIMS expansion;
- Collaborate with KCED, EDCs, ADDs and MPOs to ensure transportation supports economic development strategies; and
- Update freight modal and system plans on a regular basis.

### 9.2. Policy-Level Recommendations

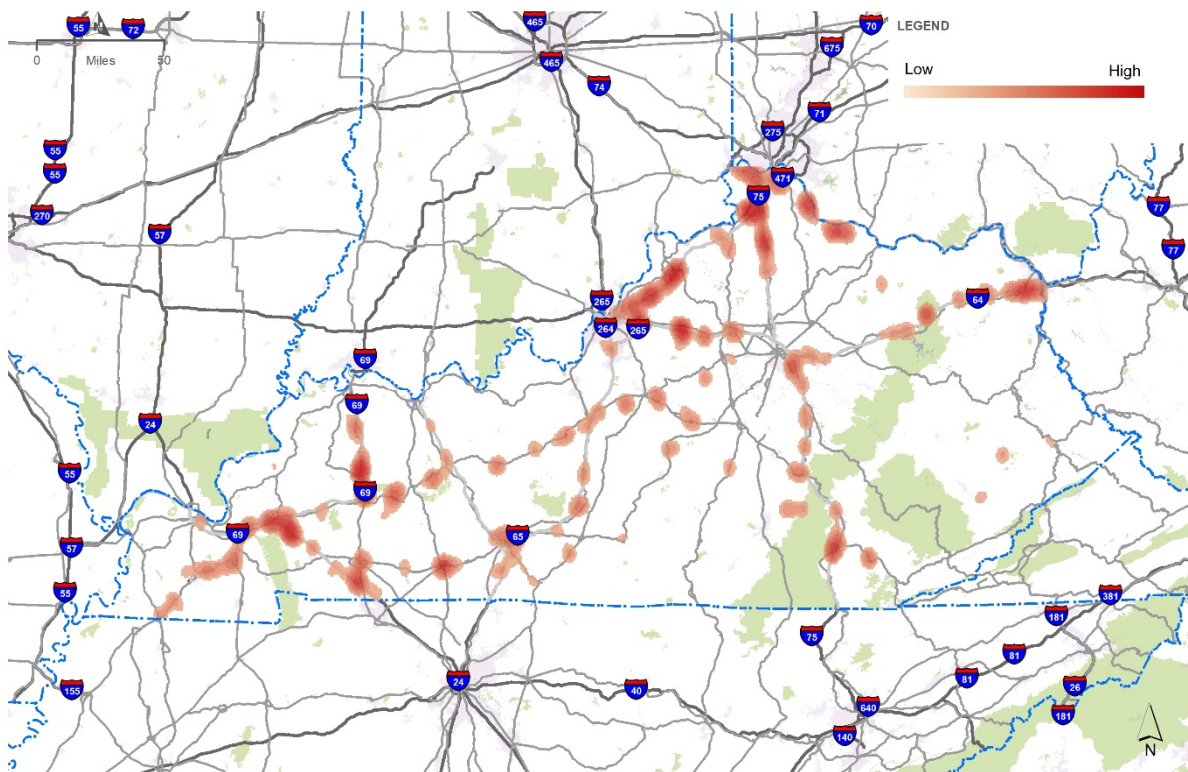
The policy recommendations assist KYTC in focusing its efforts on issues that impact the movement of freight. These types of recommendations address the goals of the Plan through actions, partnerships and research that have direct relevance to the key findings and needs in moving goods throughout the Commonwealth.

#### **Goal 1: Enhance Safety**

- Encourage participation of freight stakeholders in the development of future KYTC safety plans
- Work with legislators and the railroads to expand grade crossing safety funding opportunities
- Partner with the Kentucky State Police (KSP) to address safety – specifically truck parking and overweight truck enforcement
- Expand the MAASTO Regional Truck Parking Information Management System (TPIMS) initiative to include more locations in Kentucky
- Implement recommendations from the Truck Parking Assessment and Action Plan to reduce unauthorized truck parking on highway ramps and shoulders
- Encourage increased truck safety analysis in the next KYTC Strategic Highway Safety Plan
- Support engineering improvements ranging from technical improvements, such as landing and navigational aids, weather monitoring equipment, and rescue and firefighting equipment, to simpler treatments, such as runway lighting, land acquisition for protection zones, and fencing to prevent wildlife incursions onto runways.

- Reduce impact of animal-vehicle collisions. By its design, transportation infrastructure poses negative impacts on wildlife habitat and movement. As shown on **Figure 9-1**, numerous animal-vehicle collisions occur for vehicles moving freight across Kentucky. The Kentucky Crash Data Analysis Tool (CDAT) database shows that between 2015 to 2019, there were 414 collisions between trucks and animals on Kentucky roadways. One mitigation technique to reduce the frequency of these collisions is the construction of wildlife crossings. These crossings allow wildlife to move more safely between habitat areas through an underpass or overpass, bypassing the roadway. There are currently no dedicated wildlife crossings installed on Kentucky roadways. However, there are several tunnels in the state that effectively provide wildlife crossings. These include the Cochran Hill and East End Tunnels in the Louisville area and the Cumberland Gap Tunnel on the Kentucky/Tennessee border. Given the impact on driver safety and wildlife preservation, KYTC will consider new purpose-built wildlife crossings in areas where a safety analysis and wildlife considerations warrant. These crossings would be added where they are needed and feasible to improve the safety of drivers, enhance the preservation of wildlife, and protect the environment.

Figure 9-1. Kentucky Animal-Truck Collision Density



Source: KY CDAT Database 2015-2019.

## Goal 2: Deliver a high level of maintenance and resiliency

- Increase corridor-level investment in facilities that show high truck volumes and declining pavement/bridge quality
- Further evaluate multimodal freight corridors for the redundancy and resiliency to mitigate the impacts and severity of extreme weather or natural disasters on the multimodal freight system

- Mitigate air, water and noise pollution by developing infrastructure and associated support structures and measures to minimize local and regional impacts resulting from freight movement.
- Mitigate freight flow disruptions along key freight corridors (especially those with resiliency/redundancy issues) by closely monitoring bridge inspection reports
- Determine KYTC's role in encouraging new technologies (such as truck platooning, Unmanned Aerial Vehicles (UAV), etc.) as methods to prolong the state's infrastructure.
- Work with railroads (through the development of the Kentucky Statewide Rail Plan) to identify issues and needs on their network(s)
- Implement recommendations of the Kentucky Riverport, Highway and Rail Freight Study that pertain to riverport maintenance and overall resiliency of the waterway system
- Continue to work with the riverports to identify opportunities and solve unique riverport infrastructure challenges throughout Kentucky

### **Goal 3: Ensure a reliable flow of people and freight**

- Work with the Kentucky State Police (KSP) to develop and implement alternative route plans for major incidents/unplanned closures
- Work to identify and improve highway connectivity with other modes
- Improve and expand Intelligent Transportation Systems (ITS) technology along key corridors to increase efficiency and reliability
- Actively work to reduce the impact and address freight bottlenecks
- Proactively protect KYTC assets from potential freight-related incidents
- Identify potential barriers restricting freight movements, plan work zones, detours to handle freight vehicles, etc.

### **Goal 4: Provide local, regional, and global connectivity for communities**

- Partner with local governments and private partners to proactively manage the condition of intermodal connectors and connectivity points
- Develop a program to educate local officials on the importance of intermodal connectors and work with local officials to mitigate negative impacts of the projected increase in truck traffic volumes
- Identify and address any first or last mile gaps near major manufacturing hubs and multimodal connectivity points

### **Goal 5: Reduce environmental impact through improved freight system efficiencies**

- Support the use of CMAQ funds for freight-related transportation projects that reduce emissions, with specific attention to the localized air quality impacts of freight movement
- Ensure that new freight infrastructure and state-supported freight facility investments analyze, mitigate, and improve the impacts of freight movement on wildlife habitat loss, flooding, and stormwater runoff.
- Partner with industry associates to develop alternative fueling infrastructure for freight movement modes. Alternative fueled modes will improve freight movement efficiency and reduce GHG emissions and air pollution.

### 9.3. Project-Level Recommendations

KYTC will work to progress the projects identified in the 2022-2028 Kentucky Highway Plan. Specifically, the Cabinet will focus on developing the mega-projects identified in the plan – many of which are along major freight corridors, or in the case of the Brent Spence Bridge a national freight bottleneck. The mega-projects are defined as a project with over \$1 billion costs. Advancing improvements to the I-64 Kentucky River Bridges was also identified as a high priority project. The current projects include:

- I-69 Ohio River Crossing Project (Henderson)
- Mountain Parkway Widening (Campton to Salyersville)
- Brent Spence Bridge Project (Covington)
- I-64 Kentucky River Bridges project (Franklin County)

### 9.4. Funding Programs for Freight-Related Projects

Funding multimodal freight projects can be difficult due to funding restrictions at the state and federal levels. For example, the Kentucky Road Fund is constitutionally mandated to be used only on highways. The purpose and use of public funds are defined by legislative bodies through the budgeting process, while environmental, labor, and procurement laws affect processes and expenditures for all aspects of transportation projects from planning through maintenance. Federal and state funding programs for freight-related projects are summarized below.

#### 9.4.1. Key Federal Freight Funding and Financing Provisions

Various federal grant/loan opportunities are available for freight-related projects, and each of the programs has its own unique requirements. Most of the funding for freight-related improvements is administered through the USDOT, with additional funding from non-USDOT sources. Following the passage of the IIJA in late 2021, the FHWA announced that it will provide \$52.5 billion in funding to all 50 states and the District of Columbia, constituting the largest Federal Highway apportionment in decades. This apportioned funding for FY 2022 represents an increase of more than 20% as compared to FY 2021. This funding will help reduce the backlog of major repairs for highways and bridges and support community-based strategies to reduce traffic deaths and serious injuries. The federal transportation infrastructure funding and financing programs are discussed in this section.

##### 9.4.1.1 National Highway Freight Program (NHFP)

The National Highway Freight Program (NHFP) was established with the passage of the FAST Act and continued with the subsequent IIJA/BIL. The NHFP includes new freight planning policy, a new National Highway Freight Network (NHFN), and new formula funding for freight projects. To be eligible for NHFP funds, freight projects must contribute to the efficient movement on freight on the NHFN and be identified in the freight investment plan. In addition to highway projects, any surface transportation project to improve the flow of freight into and out of a freight intermodal or freight rail facility is an eligible project. KYTC's freight investment plan is presented in the *Section 10*.

#### 9.4.1.2 Multimodal Projects Discretionary Grant Program (MPDG)

The Multimodal Project Discretionary Grant (MPDG) is a combined Notice of Funding Opportunity (NOFO) that allows the use of one application to apply for up to three separate USDOT funding opportunities:

- MEGA: known statutorily as the National Infrastructure Project Assistance program (49 U.S.C. 6701)
- INFRA: known statutorily as the Nationally Significant Multimodal Freight and Highway Projects program (23 U.S.C. 117)
- Rural Surface Transportation Grant: (23 U.S.C. 173)

#### 9.4.1.3 The MEGA Grant Program

The MEGA program (known statutorily as the National Infrastructure Project Assistance program) is a new program enacted as part of the IIJA that will support large, complex projects that are difficult to fund by other means and likely to generate national or regional economic, mobility, or safety benefits.

A total of \$5 billion is available from FY 2022 through FY 2026.

Eligible applicants for the MEGA grant program include:

- A state or a group of states
- A metropolitan planning organization
- A unit of local government
- A political subdivision of a State
- A special purpose district or public authority with a transportation function, including a port authority
- A Tribal government or a consortium of Tribal governments
- A partnership between Amtrak and one or more other types of entities described in this list,
- A group of entities described in this list

Eligible projects under the MEGA grant program include:

- A highway or bridge project carried out on—
  - the National Multimodal Freight Network;
  - the National Highway Freight Network; or
  - the National Highway System;
- A freight intermodal (including public ports) or freight rail project that provides a public benefit
- A railway-highway grade separation or elimination project
- An intercity passenger rail project
- Certain public transportation projects that are eligible for Federal Transit Administration funding under Title 49, United States Code, and is a part of one of other eligible project types listed above.

#### 9.4.1.4 Infrastructure for Rebuilding America Grants (INFRA)

The Nationally Significant Freight and Highway Projects (NSFHP) program provides financial assistance—competitive grants, known as the Infrastructure for Rebuilding America or INFRA grants, or credit assistance—to nationally and regionally significant freight and highway projects that align with the program goals. These goals include improving the safety, efficiency, and reliability of the movement of freight and people, generating national or regional economic benefits, improving connectivity between modes of freight transportation, and addressing the impact of population growth on the movement of people and freight. A total of \$7.25 billion is available from FY 2022 through FY 2026.

Eligible applicants for the INFRA program include:

- A state or a group of states
- A metropolitan planning organization that serves an urbanized area (as defined by the Bureau of the Census) with a population of more than 200,000 individuals
- A unit of local government or a group of local governments
- A political subdivision of a State or local government
- A special purpose district or public authority with a transportation function, including a port authority
- A federal land management agency that applies jointly with a State or group of States
- A Tribal government or a consortium of Tribal governments
- A multistate corridor organization
- A multistate or multijurisdictional group of entities described in this list

#### 9.4.1.5 Rural Surface Transportation Grant Program (RURAL)

The Rural Surface Transportation Grant Program (RURAL) will support projects to improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life. RURAL is a new program enacted as part of the IIJA in 2021. A total of \$1 billion is available from FY 2022 through FY 2026.

Eligible applicants for RURAL include:

- States
- Regional transportation planning organizations
- Local governments
- Tribal governments

Eligible projects under RURAL include:

- Highway, bridge, or tunnel projects eligible under the National Highway Performance Program, Surface Transportation Block Grant Program, or the Tribal Transportation Program
- Highway freight projects eligible under the National Highway Performance Program
- Highway safety improvement projects
- A project on a publicly-owned highway or bridge improving access to certain facilities that support the economy of a rural area

- An Integrated mobility management system, transportation demand management system, or on-demand mobility service

#### 9.4.1.6 Rebuilding American Infrastructure with Sustainability and Equity Program (RAISE)

The Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program, referred to statutorily in the IIJA as the Local and Regional Project Assistance Program, continues to provide USDOT an opportunity to invest in road, rail, transit, and port projects that promise to achieve national objectives. Through RAISE and through previous iterations of the program (TIGER and BUILD), USDOT has awarded nearly \$9.9 billion to fund projects that have had a significant local or regional impact.

Eligible applicants for RAISE include:

- States and the District of Columbia
- Any territory or possession of the United States
- A unit of local government
- A public agency or publicly chartered authority established by one or more States
- A special purpose district or public authority with a transportation function, including a port authority
- A federally recognized Indian Tribe or a consortium of such Indian Tribes
- A transit agency
- A multi-state or multijurisdictional group of entities that are each separately eligible

Capital projects eligible under RAISE include:

- Highway, bridge, or other road projects eligible under Title 23, United States Code
- Public transportation projects eligible under Chapter 53 of Title 49, United States Code
- Passenger and freight rail transportation projects
- Port infrastructure investments (including inland port infrastructure and land ports of entry)
- The surface transportation components of an airport project eligible for assistance under Part B of Subtitle VII of Title 49, United States Code
- Intermodal projects
- Projects to replace or rehabilitate a culvert or prevent stormwater runoff for the purpose of improving habitat for aquatic species while advancing the goals of the RAISE program
- Projects investing in surface transportation facilities that are located on Tribal land and for which title or maintenance responsibility is vested in the federal government
- Any other surface transportation infrastructure project that the Secretary of Transportation considers to be necessary to advance the goals of the RAISE program

Planning projects eligible under RAISE include:

- Development of master plans, comprehensive plans, integrated land use and transportation plans, or corridor plans

- Planning activities related to the development of a multimodal freight corridor, including those that seek to reduce conflicts with residential areas and with passenger and non-motorized traffic
- Development of port and regional port planning grants, including statewide or multi-port planning within a single jurisdiction or region
- Risk assessments and planning to identify vulnerabilities and address the transportation system's ability to withstand probable occurrence or recurrence of an emergency or major disaster

#### 9.4.1.7 National Highway Performance Program

The National Highway Performance Program (NHPP) guides activities and provides funding related to the condition and performance of the Interstate System and NHS. It ensures that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS.<sup>87</sup> The purposes of the NHPP are:

- to provide support for the condition and performance of the National Highway System;
- to provide support for the construction of new facilities on the National Highway System;
- to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's Transportation Asset Management Plan (TAMP) for the National Highway System; and
- to provide support for activities to increase the resiliency of the National Highway System to mitigate the cost of damages from sea level rise, extreme weather events, flooding, wildfires, or other natural disasters.

Unless otherwise noted, all eligible projects must be located on the Interstate or National Highway System. KYTC will receive \$495 million in total NHPP apportioned funds from FY 2022 through FY 2026. States are permitted to transfer up to 50 percent of the NHPP dollars to other programs, including the Surface Transportation Program (STP), Highway Safety Improvement Program (HSIP), and the Congestion Mitigation and Air Quality Improvement program (CMAQ).

#### 9.4.1.8 Surface Transportation Program Block Grant Program (STBG)

The Surface Transportation Block Grant Program (STBG) provides flexible funding for projects on any federal-aid highway, on bridges on any public roads, and on bridge and tunnel inspection and inspector training.<sup>88</sup> Eligible freight projects also include bridge clearance increases to accommodate double-stack freight trains, capital costs of advanced truck stop electrification systems, freight transfer yards, and truck parking facilities.

#### 9.4.1.9 Congestion Mitigation and Air Quality Program (CMAQ)

The Congestion Mitigation and Air Quality Program (CMAQ) program is a flexible funding transportation improvement program that was continued in the IIJA/BIL to help meet the requirements of the Clean Air Act. CMAQ funds supports transportation projects that reduce mobile source emissions in areas

<sup>87</sup> U.S. Department of Transportation, FHWA, <https://www.fhwa.dot.gov/map21/factsheets/freight.cfm>, Accessed July 2022.

<sup>88</sup> Ibid

designated by the U.S. The EPA determines that Federal CMAQ funds must be spend in non-attainment or maintenance areas. Eligible activities include those related to rail intermodal freight transportation improvements. CMAQ funding is administered jointly by the FHWA and FTA and is allocated among the states based on the severity of their air quality status.

#### 9.4.1.10 Diesel Emissions Reductions Act (DERA)

The EPA awards competitive grants under the Diesel Emissions Reductions Act (DERA) National Grants Program. The purpose of the program is to achieve significant reductions in diesel emissions and exposure, particularly from fleets operating in areas designated by the Administrator as poor air quality areas. In 2021, the EPA awarded approximately \$46 million to applicants in competitive grants under this Act towards lower diesel emissions.

#### 9.4.1.11 Highway Safety Improvement Program

The Highway Safety Improvement Program (HSIP) supports projects that improve the safety of road infrastructure. These projects could add capacity; improve alignment or operations, such as intersections and curves; or make road improvements, such as signing, pavement markings, or adding rumble strips.

#### 9.4.1.12 Motor Carrier Safety Assistance Program (MCSAP)

The Motor Carrier Safety Assistance Program (MCSAP) is a fiscal year fund provided by the Federal Motor Carrier Safety Administration (FMSCA) to improve driver safety and reduce the number and severity of crashes, injuries and fatalities involving commercial motor vehicles. The FY 2021 authorization amount was approximately \$304 billion, and FMSCA expects to award a similar allowed amount in full under a future authorization effective for FY 2022. Only the state lead agency (as designated by the Governor) is eligible to apply for MCSAP grant funding by submitting a commercial vehicle safety plan (CVSP), in accordance with the provisions of 49 CFR 350.201 and 205. Individuals and businesses are not eligible.

#### 9.4.1.13 High Priority Grant Program

The High Priority (HP) grant program is a competitive discretionary grant program designed to provide federal financial assistance to enhance CVSP activities, maintain innovative technology, and fund new project(s) not included in the CVSP that will have a positive impact on CMV safety.

The HP grant program provides financial assistance to carry out activities and projects that augment motor carrier safety which may include:

- Supporting participation in performance and registration information systems management
- Conducting safety data improvement projects
- Increasing public awareness and education on CMV safety
- Targeting unsafe driving of CMV and Non-CMV in areas identified as high-risk crash corridors
- Improving the safe and secure movement of hazardous materials
- Improving safe transportation of goods and persons in foreign commerce
- Demonstrating new technologies to improve CMV safety
- Otherwise improving CMV safety and compliance with CMV safety regulations

Applicants other than state lead agencies are also eligible for HP grants that improve CMV safety.

#### 9.4.1.14 The Transportation Infrastructure Finance and Innovation Act (TIFIA)

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. The goal of TIFIA financing is to leverage federal resources and stimulate private capital investment in transportation infrastructure. TIFIA financing is available for large-scale public or private transportation projects. The program is aimed at large projects with a minimum value of approximately \$50 million.

Historically, TIFIA has been a useful tool for large, complex transportation infrastructure projects that needed low-cost financing. TIFIA is a flexible tool that allows borrowers to customize their loan terms and amortization. However, this flexibility can prolong the application process due to the custom negotiations the Bureau and its advisors undertake with each borrower.

With TIFIA Lite (a new program), experienced borrowers with strong credit and small, shovel-ready projects can access an expedited application process. By agreeing to use a loan template with standard terms and forgoing the typical negotiation process, borrowers can access the traditional benefits of TIFIA (low interest rate, payment deferral up to five years, no pre-payment penalties, etc.) with a shorter review process. Projects eligible for TIFIA Lite can be approved up to six months faster than an average TIFIA application. Eligible projects can receive up to a \$100 million loan.

#### 9.4.1.15 Consolidated Rail Infrastructure and Safety Improvements Program (CRISI)

The Consolidated Rail Infrastructure Safety Improvements Program funds Capital Project development and implementation under the FRA to improve the safety, efficiency, and reliability of intercity passenger and freight railroads. Projects eligible for funding under this grant program include, but are not limited to, highway-rail grade crossing improvement projects, deployment of railroad safety technology, rail line relocation and improvement projects, and other capital projects that help mitigate congestion at chokepoints affecting rail service and facilitate ridership growth along heavily traveled rail corridors.

#### 9.4.1.16 Railway-Highways Crossing (Section 130) Program

Funds to improve railway-highway crossings are set-aside from the federal HSIP apportionment. The program provides funds for the elimination of hazards at railway-highway crossings and is apportioned to states by formula.

#### 9.4.1.17 Railroad Crossing Elimination Program (RCE)

The Railroad Crossing Elimination (RCE) Program is a new grant program established under the IIJA that provides funding for highway-rail or pathway-rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods.

Eligible applicants for RCE include:

- States, including the District of Columbia, Puerto Rico, and other United States territories and possessions
- A political subdivision of a state
- A federally recognized Indian Tribe
- A unit of local government or a group of local governments

- A public port authority
- A metropolitan planning organization
- A group of the entities described above

Eligible projects under RCE include:

- Highway-rail grade separation or closure, including through the use of a bridge, embankment, tunnel, or any combination thereof
- Track relocation
- Improvement or installation of protective devices, signals, signs, or other equipment at crossings
- Measures to improve safety related to a separation, closure, or track relocation project
- Other means to improve the safety if related to the mobility of people and goods at highway-rail grade crossings (including technological solutions)
- The planning, environmental review, and design of any other eligible project type

#### 9.4.1.18 Federal Rail Safety Improvement Act of 2008

The Federal Rail Safety Improvement Act primarily addresses rail safety through regulations. It also authorizes grants for investing in rail technology, railroad safety infrastructure, rail grade crossing improvements, and education, subject to annual appropriations. Provisions under this act are administered by the FRA.

#### 9.4.1.19 Railroad Rehabilitation and Improvement Financing Program (RRIF)

The Railroad Rehabilitation and Improvement Financing (RRIF) program provides direct federal loans and loan guarantees to finance the development of railroad infrastructure. Under this program, established in 1998, the FRA provides up to \$35 billion in direct loans and loan guarantees. The loans can be used to refinance outstanding infrastructure debt and new projects such as to include new signal installations, signal upgrades, signal relocation, crossing surface rehabilitation, and crossing closures. The program helps to finance project investments directly, up to the total cost of the project. State and local governments, government-sponsored authorities, corporations, railroads, and others can participate in the program.

#### 9.4.1.20 America's Marine Highway Program (AMHP)

The MARAD Marine Highway program (AMHP) was established by Section 1121 of the Energy Independence and Security Act of 2007 to reduce landside congestion through the designation of Marine Highway Routes. Section 405 of the Coast Guard and Maritime Transportation Act of 2012 further expanded the scope of the program to increase the utilization and efficiency of domestic freight or passenger transportation on Marine Highway Routes between U.S. ports. The National Defense Authorization Act for Fiscal Year 2016 then expanded the definition of short sea shipping to include freight vehicles carried aboard commuter ferry boats and cargo shipped in discrete units -- or packages that are handled individually, palletized, or unitized specifically for transport.

#### 9.4.1.21 Port Infrastructure Development Program (PIDP)

The Port Infrastructure Development Program (PIDP) is a discretionary grant fund administered by the U.S. Maritime Administration (MARAD) that helps strengthen, modernize, and improve maritime systems and gateway ports to support the efficient movement of commerce in the U.S. For FY 2022, the IIJA appropriated \$450 million to the PIDP, including \$3.32 million for the Bulk Yard Infrastructure Revitalization and Expansion Project in Paducah, KY.

#### 9.4.1.22 U.S. Army Corps of Engineers Harbor Maintenance Trust Fund (HMTF)

The USACE is responsible for maintaining federal navigation channels. Under the Harbor Maintenance Trust Fund (HMTF), the principal legislative vehicle for guiding the USACE Civil Works Program under the 2014 Water Resources Reform and Development Act (WRRDA), expenditures will increase each year until 2025, when 100 percent of available funds will be directed towards operations and maintenance activities. The HMTF is funded by a Harbor Maintenance Tax (HMT) on imported and domestic waterborne cargo and cruise passengers. This fund is used to cover the USACE's cost of dredging channels, maintaining jetties and breakwaters, and operating locks along the coasts and in the Great Lakes. The HMTF may be drawn on only with an appropriation by Congress.

#### 9.4.1.23 Inland Waterways Users Trust Fund for Locks and Dams (IWTF)

The Inland Waterways Trust Fund (IWTF) was established by the Water Resources Development Act of 1986. The act established a federal marine fuel tax of \$0.29 per gallon on barge fuel paid by shippers using the navigation channels, to support 50 percent of the cost of inland waterway infrastructure development and rehabilitation projects. In 2015, the barge fuel tax increased from \$0.20 per gallon with the passing of the Achieving a Better Life Experience (ABLE) Act. The increase raises approximately \$25 million in additional annual funds, helping cut down on the backlog of maintenance projects, like the Olmsted Locks and Dam. The Annual Construction Funding from the Inland Waterways Trust Fund reached approximately \$400 million from 2016 through 2018, declining in 2019 to \$329.8 million and \$335 million in 2020.<sup>89</sup>

#### 9.4.1.24 Federal Aviation Administration Airport Improvement Program (AIP)

The Airport Improvement Program (AIP) is administered by the FAA and provides grants for planning and developing public-use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). For large and medium primary hub airports, the grant covers 75 percent of eligible costs (or 80 percent for noise program implementation). For small primary, reliever, and general aviation airports, the grant covers a range of 90 to 95 percent of eligible costs, based on statutory requirements. Eligible projects include improvements related to enhancing airport safety, capacity, security, and environmental concerns. In general, sponsors can use AIP funds on most airfield capital improvements or repairs and, in some specific situations, for terminals, hangars, and non-aviation development. Kentucky airports received a total of approximately \$482 million of AIP funding from FY 17 to FY 21, with approximately 45 percent (\$213.8 million) of funds received in FY 20.<sup>90</sup>

#### 9.4.1.25 Advanced Transportation and Congestion Management Technologies Deployment Program (ATCMTD)

<sup>89</sup> Infrastructure Report Card, Inland Waterways, 2021, <https://infrastructurereportcard.org/wp-content/uploads/2020/12/Inland-Waterways-2021.pdf>, Accessed August 2022.

<sup>90</sup> Federal Aviation Administration, Airport Improvement Program (AIP) Grant Histories, [https://www.faa.gov/airports/aip/grant\\_histories#history](https://www.faa.gov/airports/aip/grant_histories#history), Accessed August 2022.

The purpose of the Advanced Transportation and Congestion Management Technologies Deployment Program (ATCMTD) is to make 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.

#### 9.4.1.26 Innovative Technology Deployment (ITD)

The Federal Motor Carrier Safety Administration (FMCSA) established the Innovative Technology Deployment (ITD) Program as part of the FAST Act of 2015 and continued under IIJA/BIL to improve commercial motor vehicle safety and productivity. The purpose of the ITD Program is to simplify enforcement operations on high-risk operators, increase efficiency and effectiveness of commercial vehicle safety programs through targeted enforcement, reduce Federal/State and industry regulatory and administrative costs, achieve nationwide deployment of the program, with all jurisdictions participating, and improve security of data and improve sharing of commercial vehicle data within States and between States and FMCSA.

#### 9.4.1.27 Department of Commerce

The U.S. Department of Commerce (DOC) administers federal funding for grants and cooperative agreements in the form of discretionary and nondiscretionary funds. The grants most germane to freight are administered by the Economic Development Administration (EDA). The EDA provides public works funds for distressed communities to revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term, private sector jobs, and investment.

### 9.4.2. State Transportation Funding Programs/Sources

The state highway fund is constitutionally mandated, to be used only on highways. However, the Kentucky General Fund provides the mechanism for state funding for rail projects on a competitive basis with other statewide needs. Recent rail funding initiatives include the Kentucky Short Line Railroad Assistance (KSRA) Fund and Kentucky Railroad Crossing Improvement (KRCI) Fund. The following subsections describe state-based transportation funding programs and sources available for transportation projects.

#### 9.4.2.1 Kentucky Road Fund

The Kentucky Road Fund is funded through four revenue sources: fuel taxes, usage taxes, registration fees, and licensing fees.

Approximately 50 percent comes from state taxes on motor vehicle fuels as shown in **Figure 9-2**. Kentucky uses a percentage tax rate based on the wholesale cost of fuel, with a per gallon statutory floor of \$0.246 per gallon. This amount includes a \$0.064 fixed component plus a variable component, which is based on the average wholesale prices of gas. The rate cannot increase by more than 10 percent of the variable rate established at the close of the previous fiscal year. Current tax rates for stand at about \$0.26 per gallon of gasoline and about \$0.23 per gallon of diesel.

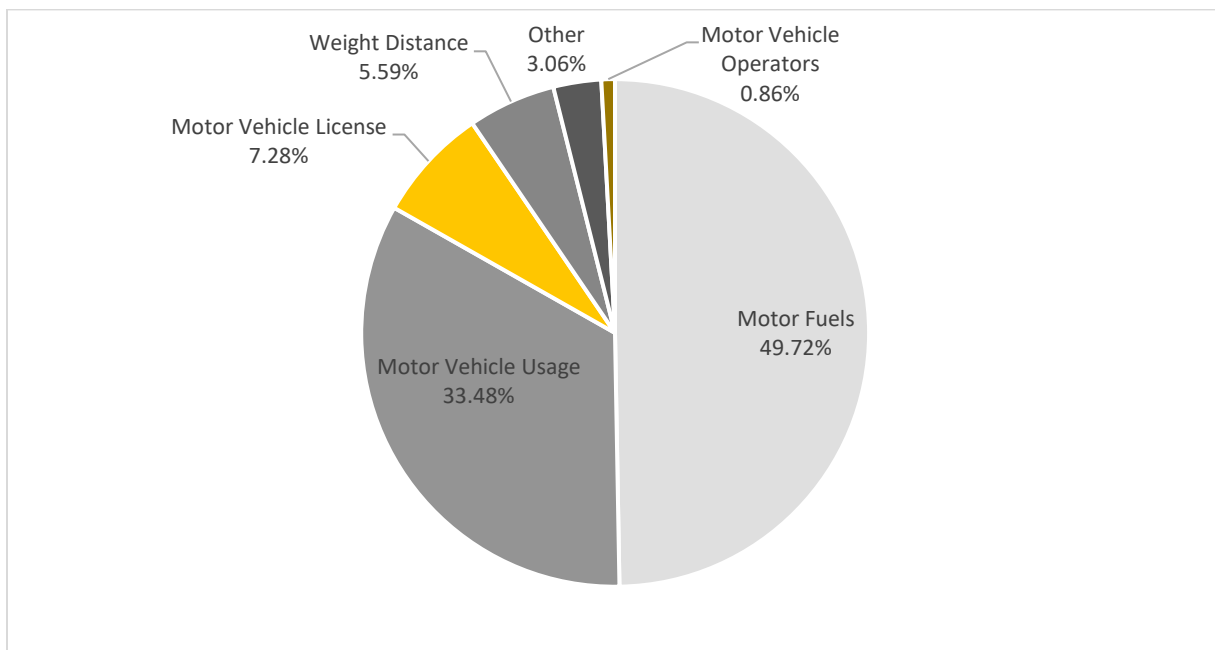
The vehicle sales tax, also called a usage tax, makes up about 25 percent of annual revenue.

Registration and licensing fees paid by commercial trucking companies generate approximately 10 percent of fund revenues, with the remaining 5 percent from vehicle and driver licensing and other fees.

**Kentucky Constitution, Section 230:** *Money not to be drawn from Treasury unless appropriated -- Annual publication of accounts -- Certain revenues usable only for highway purposes.*

No money shall be drawn from the State Treasury, except in pursuance of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published annually. No money derived from excise or license taxation relating to gasoline and other motor fuels, and no moneys derived from fees, excise or license taxation relating to registration, operation, or use of vehicles on public highways shall be expended for other than the cost of administration, statutory refunds and adjustments, payment of highway obligations, costs for construction, reconstruction, rights-of-way, maintenance and repair of public highways and bridges, and expense of enforcing state traffic and motor vehicle laws.

Figure 9-2. Sources of Revenue for State Road Fund



Source: General Fund and Road Fund Receipts for Fiscal Year 2020.

One of the greatest challenges confronting KYTC is managing public expectations with limited funding available to meet the commonwealth's highway needs. Highway maintenance costs are far from routine when a major bridge can cost \$200 million to replace, a mile of interstate highway can cost \$5 to \$10

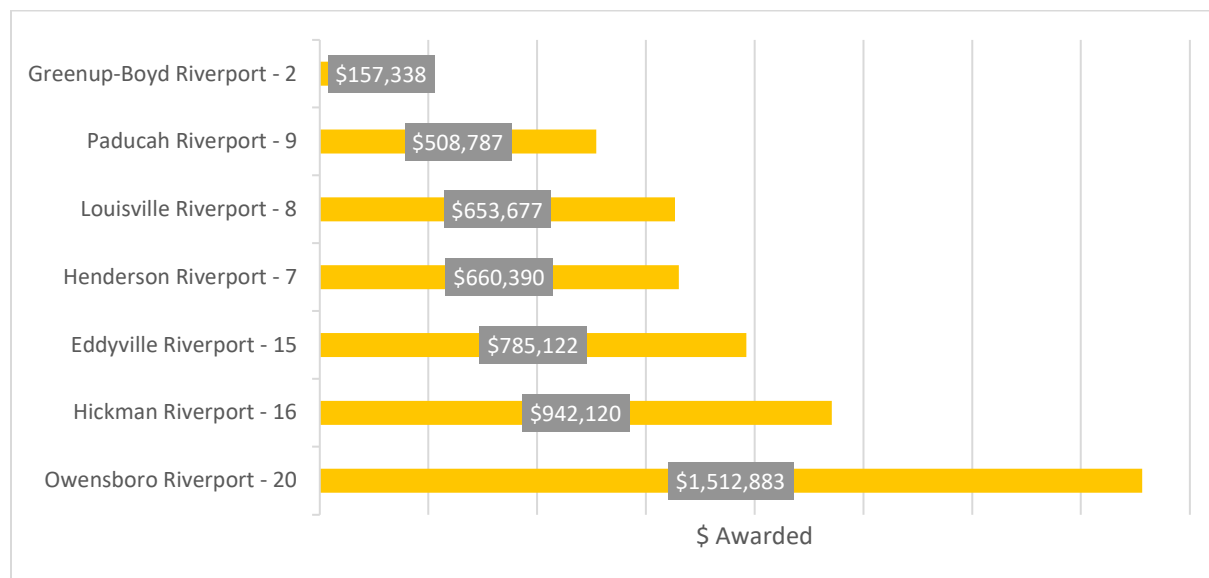
million to repair, and overall identified highway needs throughout Kentucky total more than \$50 billion. In the face of these overwhelming basic needs, KYTC's Recommended Highway Plan is predicated upon several assumptions about the revenue stream that is expected for future state and federal highway construction programs administered by the Cabinet.

Until recently, Kentucky's federal highway program was largely matched with toll revenue credits. These credits were attributed to Kentucky by the federal government according to calculations that consider past levels of state fund investments (such as state-sponsored toll roads) in the federal highway system. The toll revenue credits did not generate cash and could not be counted as real cash when used as a match. However, the credits allowed KYTC the flexibility to use 100 percent federal funding on federal-aid projects. This provided KYTC the option to allocate more of its own funding for state projects under complete state control and oversight.

#### 9.4.2.2 Kentucky Riverport Improvement

In 2012, the Kentucky General Assembly appropriated \$500,000 in dollar-for-dollar matching funds in FYs 2013 and 2014 for the Riverport Improvement Program. The purpose of this program is to improve public riverports within Kentucky, with improvements originally limited to dredging and maintenance of access. This enactment has continued annually through FY 2023, designating \$500,000 from the General Fund in each fiscal year. The project limitations have since been removed now allowing for any project that provides dredging or improves Riverport facilities, infrastructure, or critical material handling equipment. These funds are made available to public riverports, and specific projects are recommended to the KYTC Secretary by the WTAB. This board advises state agencies, the Governor's Office, and General Assembly concerning matters affecting waterways. The General Assembly has appropriated this funding for riverport improvement grants and has tasked the WTAB with prioritizing the funds for optimum utilization. **Figure 9-3** shows the number of riverport improvement grants and total state grant funding awarded to each riverport listed from FY 2013 to FY 2023.

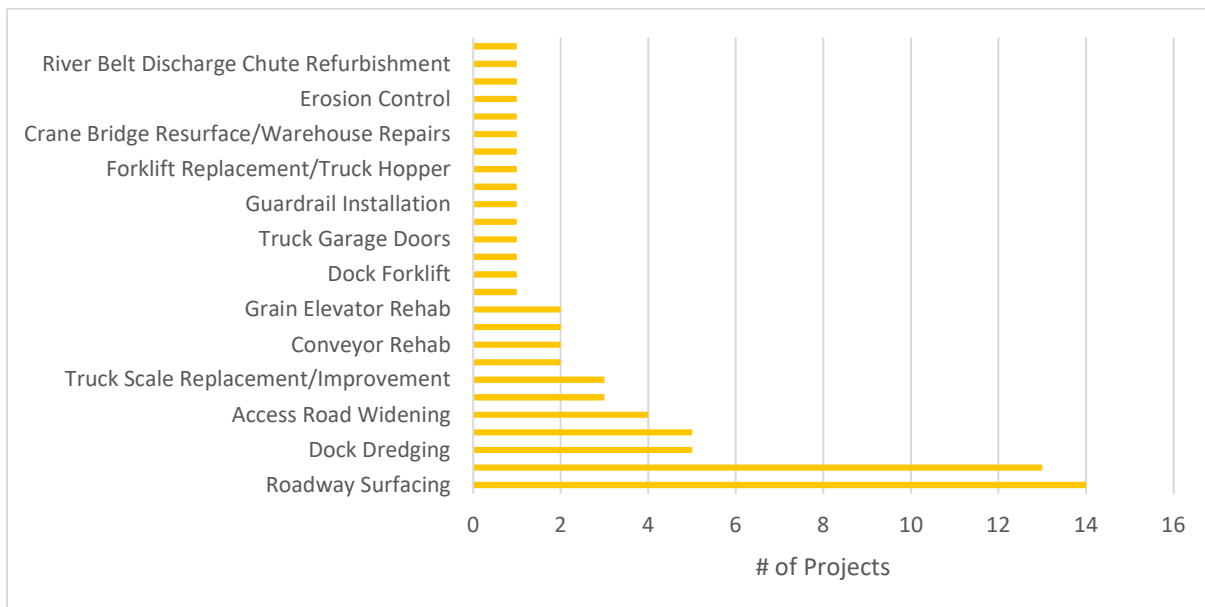
Figure 9-3. FY 2013 to FY 2023 Riverport Improvement Grants



Source: Kentucky Riverport Improvement (KRI) Grant Program, 2022.

A summary of all project types of the awarded riverport improvement grants are shown in **Figure 9-4**. Over half of the project types involved railroad rehabilitation and roadway surfacing.

Figure 9-4. Summary of all Kentucky Riverport Improvement Project Types



Source: : Kentucky Riverport Improvement (KRI) Grant Program, 2022.

#### 9.4.2.3 Kentucky Railroad Crossing Improvement Fund

In June 2021, the commonwealth announced that it was awarding \$2.5 million to improve at-grade rail crossings and boost multimodal freight transportation. The funds were issued through the Kentucky Rail Crossing Improvement (KRCI) Program, jointly administered by KYTC Division of Planning and Division of Right of Way and Utilities. The program will fund 80 percent of the total project cost to maintain and improve public at-grade rail crossings in 10 Kentucky counties, and the program recipients will provide a 20 percent match. Another \$1.6 million was entered into the Transportation Budget by the Kentucky Legislature for FY 2021 and FY 2022 to make additional rail safety improvements. These funds have been restricted to public safety and service improvements of railroads, including at-grade railroad crossing reconstruction, railroad crossing safety equipment improvements, and the removal of obstructive vegetation.

#### 9.4.2.4 Freight Enhancement Loan Fund

The Kentucky Highlands Freight Enhancement Loan Fund primarily is used to provide lines of credit to finance operating costs for transportation-related businesses in the Kentucky Highlands service area. In addition, the Kentucky Highlands may use fund proceeds to provide fully collateralized equipment financing for eligible borrowers. The origin of the fund is through the FY 2004 Omnibus Appropriations Act. The funds passed through FHWA and are administered by KYTC.

## 9.5. Next Steps

The 2022 Kentucky Freight Plan documents freight assets, identifies future needs, and recommends an overall freight strategy comprised of programs and policies. The KFP was created with the intention of guiding the work of the Cabinet in achieving its visions, “striving to be national leaders in transportation who provide transportation infrastructure and services for the 21st century that deliver new economic opportunities for all Kentuckians.”

The next step is important. KYTC must respond to the regulations set forth in new federal transportation legislation (the BIL/IIJA) and communicate—to both the private sector and the public—Kentucky’s commitment to supporting economic development and addressing freight transportation needs.