

I INTRODUCTION

The Kentucky Freight Plan (KFP) is a supplement to the Kentucky Transportation Cabinet's (KYTC) 2014 Long-Range Statewide Transportation Plan (LRSTP). As stated in the LRSTP, "the Cabinet's mission is to provide a safe, efficient, environmentally sound, and fiscally responsible transportation system which promotes economic growth and enhances the quality of life in Kentucky." **Figure I-1** illustrates the continuous process that KYTC follows by linking the four main areas of planning, design, construction, and operations.

Figure I-1: KYTC Project Life Cycle



Source: Kentucky Long-Range Statewide Transportation Plan

The vision, which guides the work of the Cabinet in achieving this mission, is "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 movement of goods and freight throughout Kentucky is vital for each citizen in the commonwealth, from the dairy farmer to the mineworker to the pharmacist. Each has a need to transport raw materials, manufactured parts, and finished goods and then products to be sold or purchased. KYTC's long-term commitment is to meet or exceed the needs and expectations of the users of Kentucky's transportation system—residents, workers, business owners, and students.

Similarly, the Cabinet's aviation, rail, riverport, and transit plans were created with this intention. Combined with the KFP, these five modal plans provide a more detailed view of the Kentucky transportation system.

The majority of KYTC's transportation funding is comprised of the State Road Fund. Section 230 of the Kentucky Constitution mandates that this funding can only be used on highways. Therefore, KYTC has

no regulatory authority to use the State Road Fund on non-highway related uses. This presents a significant fiscal challenge for KYTC to address the many needs for modes other than highways on the freight transportation system.

The KFP has been developed upon the recommendations of the previous federal transportation bill, the Moving Ahead for Progress in the 21st Century Act (MAP-21). Enacted in 2012, MAP-21 encouraged each state to develop a comprehensive statewide freight plan for guiding state freight transportation investments. In December 2015, the President signed into law the Fixing America's Surface Transportation Act (FAST Act), which includes a number of provisions focused on ensuring the safe, efficient, and reliable movement of freight. KYTC will work to align the KFP when FAST Act federal guidance has been issued for the development state freight plans.

1.1 STATE FREIGHT PLAN PURPOSE

Every business and resident in Kentucky depends on the freight transportation system of roads, railroads, waterways, airports, and pipelines for the goods they use daily. Each investment in the freight transportation system that increases throughput, improves efficiency, and reduces costs has a direct positive impact on Kentucky's economy. At the same time, freight transportation requires significant expenditures of energy to move large quantities of industrial and consumer goods over long distances. Many agencies and businesses develop policies, investments, and programs to understand and mitigate the risks of freight transportation and to improve environmental quality and safety for all transportation system users.

The KFP has a long-term perspective and is intended to serve the needs of KYTC and its partners to improve freight transportation by accomplishing the following process:

1. Documenting freight assets (Chapter 2)
2. Identifying future needs (Chapter 8)
3. Recommending strategic initiatives (Chapter 9)
4. Devising implementation strategies (Chapter 9)

This plan considers highway, rail, aviation, and waterway needs. The plan also describes the pipeline system but does not provide investment or policy recommendations for it.

1.2 COORDINATION WITH STATE LONG-RANGE TRANSPORTATION PLAN AND OTHER MODAL PLANS

The KFP integrates the freight-relevant components of Kentucky's long-range statewide transportation plan, aviation plan, rail plan, and riverports plan, as well as studies and initiatives involving Kentucky's freight system. The following subsections highlight Kentucky's modal planning efforts and other initiatives relevant to the development of the KFP.

1.2.1 Kentucky Long-Range Statewide Transportation Plan

The 2014 Kentucky LRSTP describes and assesses the commonwealth's transportation system, including passenger and freight. It provides a basis for the vision for Kentucky's transportation system over the next 20 years.

1.2.2 Kentucky Statewide Transportation Improvement Program and Kentucky Recommended Highway Plan

The Kentucky Statewide Transportation Improvement Program (STIP) contains all federally funded scheduled projects and regionally significant state-funded projects in Kentucky for a 4-year period. KYTC prepares the STIP every 2 years upon approval of KYTC's Highway Plan by the Kentucky General Assembly. The implementation of the STIP is in accordance with federal transportation programs and guidelines and is conducted through the cooperative efforts of the KYTC, Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) to ensure that all federal-aid funding is utilized in accordance with federal guidelines and federal regulations.

Every 2 years, the Kentucky General Assembly approves a transportation budget, which drives the Kentucky Recommended Highway Plan. This plan outlines the scheduled highway project activities for a 6-year period; these projects are subject to the availability of state and federal highway dollars. On an on-going basis, KYTC works with the Area Development Districts (ADDs), Metropolitan Planning Organizations (MPOs), and highway district offices to identify and prioritize projects for future highway plans. KYTC submits the Recommended Highway Plan to the Kentucky Legislature, which then reviews, modifies, and approves the plan as part of the biennial budget process. Immediately upon completion of the state legislative process, KYTC will seek to incorporate the subset of federal projects from the Recommended Highway Plan into the update of the STIP.

1.2.3 Kentucky Statewide Rail Plan

KYTC recognizes the importance of rail as a vital component to the commonwealth's economy, and in 2015, the Cabinet completed the update of the Kentucky Statewide Rail Plan. The vision of the rail plan is to support and work with private rail carriers to provide a safe, reliable, efficient, and effective rail transportation system for the movement of passengers and freight within Kentucky, as well as to connect to domestic and international markets. KYTC recognizes that an effective rail system will help alleviate highway congestion, contribute to economic development, improve public safety, improve energy efficiency, and reduce greenhouse gas emissions. The goals of the 2015 Kentucky Statewide Rail Plan include:

- **Preservation:** Encourage the preservation of the largely privately owned and operated rail system within Kentucky
- **Economic Development:** Support economic development by working to provide roadway connectivity to the national rail system and state intermodal facilities
- **Customer Relationships/Transportation Planning Process:** Strengthen customer relationships with the rail industry through communication, cooperation, and information exchange in the KYTC transportation planning process

- **Safety and Security:** Enhance highway-railroad at-grade crossing safety and reliability to ensure mobility and maintain safe access

1.2.4 Kentucky Riverport Improvement Project

Recognizing that waterways and intermodal riverport facilities play an important role in the Kentucky economy, KYTC completed a report in 2008 entitled Kentucky Riverport Improvement Project. The Kentucky Riverport Improvement Project was initiated to show profiles of the commonwealth's riverports, to define current Kentucky governance, and to investigate what other states have done to capture the benefits of their inland waterway systems. The primary objective of the report was to assist the Cabinet in developing a plan to make Kentucky's riverports more competitive. The results provided KYTC with recommendations to initiate a statewide program to strengthen Kentucky's ability to compete in regional, national, and global markets. One of the recommendations was creating a Water Transportation Advisory Board (WTAB), which advises and makes recommendations to transportation officials and other governmental policymakers concerning matters affecting waterway transportation. In 2010, the Kentucky General Assembly passed legislation to establish the WTAB. The membership and duties of the WTAB are discussed in **Chapter 2**.

1.2.5 Strategic Highway Safety Plan

Kentucky's Strategic Highway Safety Plan (SHSP) was updated in 2015. The SHSP serves as an umbrella guide to increase coordination, communication, and cooperation among federal, state, and local agencies, along with nonprofit organizations and other highway safety advocates for reducing preventable motor vehicle crashes. Toward Zero Deaths (TZD) is a safety strategy adopted by KYTC as a central theme that guided the development of the SHSP. This strategy supports a data-driven approach that targets specific areas for improvements and employs proven countermeasures. TZD leverages an interdisciplinary approach by integrating engineering, enforcement, education, and emergency services strategies.

1.2.6 Airport Improvement Plan

KYTC is currently developing the Kentucky Statewide Aviation System Plan. The purpose of the plan is to determine the current status of all General Aviation (GA) airports across the commonwealth, ultimately assessing the current and future needs of each airport as they pertain to the overall Kentucky Aviation System. Each system airport will be categorized based on its current operational and functional status within the overall Kentucky Aviation System. The study also includes an analysis of the direct economic impacts of GA airports on the state and local economies. The Kentucky Statewide Aviation System Plan is scheduled to be completed in 2017.

1.3 FEDERAL LEGISLATION

Since 2012, more emphasis has been placed on freight in federal transportation legislation. The following subsections discuss key federal legislation that has elevated freight nationally and among state department of transportations (DOTs).

1.3.1 Moving Ahead for Progress in the 21st Century Act

MAP-21 was signed into law on July 6, 2012. This federal act provided a framework for a streamlined and performance-based approach to transportation system development and maintenance. MAP-21 established national surface transportation goal areas and created requirements for the U.S. Department of Transportation (USDOT) to develop national transportation performance measures and to promulgate rules to implement them. Of relevance to the KFP, MAP-21 established a national freight movement and economic vitality goal focused on improving the national freight network, strengthening the ability of rural communities to access national and international trade markets, and supporting regional economic development. To achieve this, the law requires USDOT to develop a National Freight Policy, which includes the following goals:

- **Economic Competitiveness:** Invest in infrastructure improvements and implement operational improvements that strengthen the contribution of the national freight network to the economic competitiveness of the U.S.; reduce congestion; and increase productivity, particularly for domestic industries and businesses that create high-value jobs
- **Safety, Security, Resiliency:** Improve the safety, security, and resilience of freight transportation
- **State of Good Repair:** Improve the state of good repair of the national freight network
- **Advanced Technology:** Use advanced technology to improve the safety and efficiency of the national freight network
- **Performance and Accountability:** Incorporate concepts of performance, innovation, competition, and accountability into the operation and maintenance of the national freight network
- **Economic Efficiency:** Improve the economic efficiency of the national freight network
- **Environmental:** Reduce the environmental impacts of freight movement on the national freight network

MAP-21 also encouraged states to develop freight plans by increasing the federal funding match eligibility on projects included in these plans. To receive the increased federal match, projects must make a demonstrable improvement in freight movement efficiency and be identified in a state's freight plan.

1.3.2 National Freight Strategic Plan

Within MAP-21 legislation, USDOT is required to develop a National Freight Strategic Plan (NFSP). To begin the process, the National Freight Advisory Committee published three overarching recommendations to guide the development of the NFSP. These recommendations were:

1. **Barriers:** An assessment of statutory, regulatory, technological, institutional, financial, and other barriers to improved freight transportation performance (including opportunities for overcoming the barriers)

2. **Best Practices:** To improve the performance of the national freight network
3. **Best Practices:** To mitigate the impacts of freight movement on communities

The draft NFSP was published in October 2015. The plan “aims to describe the freight transportation system and future demands on it; identify major corridors and gateways; assess physical, institutional, and financial barriers to improvement; and specify best practices for enhancing the system.”¹ The study identified strategies to address infrastructural, institutional, and financial bottlenecks that hinder the safe and efficient movement of goods.

I.3.3 Fixing America’s Surface Transportation Act

On December 4, 2015, the FAST Act was signed into law. This 6-year transportation reauthorization placed a major emphasis on freight investment. In particular, the law created the National Highway Freight Program (NHFP), which is funded at an average of \$1.2 billion per year and distributed to states by formula. Kentucky is slated to receive approximately \$21 million per year (before post-apportionment set-asides; before penalties; and before sequestration).² In addition, a new discretionary program entitled the Nationally Significant Freight and Highway Projects has been established, funded at an average of \$900 million per year.

States are now required to develop statewide freight plans, and the FAST Act has removed the enhanced federal funding match for freight projects. In 2016, the USDOT will begin developing federal guidance for state DOTs regarding the implementation of the FAST Act related freight components.

I.4 PLAN DEVELOPMENT

The KFP was developed in a partnership between KYTC, the Kentucky Transportation Center (KTC), and private sector stakeholders. The plan is designed to tell the Kentucky freight story. The story begins with the development of goals, inventory of the freight system, and current conditions. Current trends and strengths and weaknesses of the system are then analyzed. The document concludes with a series of recommendations for KYTC’s future freight planning efforts followed by KYTC’s Freight Investment Plan for National Highway Freight Program funding. The KFP designed to be compliant the FAST Act.

¹ Federal Highway Administration, *National Freight Strategic Plan (Draft)*, October 2015, Page 5.

² Federal Highway Administration, *Summary of Estimated FY 2016 – FY 2020 Apportionments under the Fixing America’s Surface Transportation Act Conference Report Draft* as of November 29, 2015.