1. Introduction

The 2022 Kentucky Freight Plan (KFP) was designed to supplement Kentucky Transportation Cabinet's (KYTC) 2022 Long-Range Statewide Transportation Plan (LRSTP). The LRSTP outlines KYTC's larger mission and vision for the future (Figure 1-1). Freight mobility is an important factor in achieving both aspirations.

The movement of freight is vital for every citizen in the Commonwealth. From the dairy farmer bringing in feed and shipping out milk, to the mine or quarry worker bringing in heavy equipment and shipping out raw materials, to the grocery store customer who expects to find their needed goods stocked on the shelves. Each has a need to transport raw materials, finished goods and products to be sold or to consume raw materials, finished goods, and products. KYTC's mission for all transportation system users as shown in Figure 1-1, 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."

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

Figure 1-1. KYTC Mission and Vision Statements

Mission

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

Vision

Meet or exceed the needs and expectations of our customers. Our focus is on people: our customers, our employees, and our partners. We will continually improve both the delivery of our products and services and the processes which support that delivery. As we progress through the 21st century, we recognize that change is inevitable. We will strive to manage that change to the benefit of all our stakeholders.

1.1. State Freight Plan Purpose

Kentucky businesses and individual residents are reliant 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 that have 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 Kentucky Freight Plan has a long-term outlook and is intended to serve the needs of KYTC and its partners to improve freight transportation by accomplishing the following process:

- Documenting freight assets (see Section 2)
- Defining freight goals and performance measures (see Section 3)
- Identifying future needs (see Section 8)
- Recommending strategic initiatives (see Section 9)
- Devising implementation strategies (see *Section 9*)

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

1.1.1. Freight Plan Development and Governance

In 2017, KYTC updated their 2016 KFP. This update was specifically designed to both support Kentucky's freight mobility and to comply with the federal requirements found in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and Fixing America's Surface Transportation Act (FAST Act). The 2022 KFP serves as an update to the 2017 plan, as such, includes new State Freight Plan requirements found in the Infrastructure Investment and Jobs Act (IIJA), also known as the 2021 Bipartisan Infrastructure Law (BIL). A summary of the specific BIL requirements and where they are addressed in this plan is included as an attachment.

The IIJA requires state freight plans to include supply chain cargo flows, an inventory of commercial ports, findings and recommendations from any multi-state freight compacts, the impacts of e-commerce on freight infrastructure, the considerations of military freight, and an assessment of truck parking facilities in the state.

1.2. Coordination with State Long-Range Transportation Plan and Other Modal Plans

The Kentucky Freight Plan (KFP) integrates previous freight planning work developed by KYTC and its partners. By doing so, the KFP serves as a vehicle to convene, consolidate, and coordinate key takeaways from this effort into one State Freight Plan that is to be a supplement to the LRSTP.

1.2.1. National Freight Strategic Plan

The National Freight Strategic Plan defines the United States Department of Transportation's (USDOT) vision and goals for the national multimodal freight system, assesses the conditions and performance of the freight system and barriers to freight system performance, and defines strategies to achieve its vision and goals. The Department uses this plan to guide national freight policy, programs, initiatives, and investments, inform state freight plans, identify freight data, and research needs, and provide a framework for increased cross-sector, multijurisdictional, and multimodal coordination, and partnerships.¹ The plan outlines three goals:

- Safety Improve the safety, security, and resilience of the national freight system.
- Infrastructure Modernize freight infrastructure and operations to grow the economy, increase competitiveness, and improve quality of life.
- Innovation Prepare for the future by supporting the development of data, technologies, and workforce capabilities that improve freight system performance.

Coordinated Plans

The KFP integrates several freight plans developed by KYTC and its partners, including:

- National Freight Strategic Plan
- Kentucky Highway Plan/STIP
- Kentucky Truck
 Parking Assessment
 and Action Plan
- State Rail Plan
- Kentucky Riverports, Highway and Rail Freight Study
- Strategic Highway Safety Plan
- Statewide Aviation System Plan
- MPO Freight Plans
- Mid-America Freight
 Coalition
 Multijurisdictional Plans

1.2.2. Kentucky Highway Plan/Statewide Transportation Improvement Program

Every two years, KYTC submits a draft Kentucky Highway Plan (Six-Year Plan) to the Kentucky General Assembly. The <u>Highway Plan</u> is developed with an ongoing process where KYTC, with the <u>Area Development Districts</u> (ADDs), <u>Metropolitan Planning Organizations</u> (MPOs), and highway district offices identify and prioritize projects for future highway plans. After the General Assembly approves the Highway Plan, KYTC develops the <u>Statewide Transportation Improvement Program</u> (STIP) which contains all federally funded transportation projects programmed over the next four years. The development of a Freight Investment Plan will be coordinated with both efforts.

¹ USDOT. "National Freight Strategic Plan: Executive Summary," 2021, pg. 1-2.

1.2.3. Kentucky Truck Parking Assessment and Action Plan (2022)

Truck drivers that cannot find available parking are forced to park on highway ramps, empty lots, and even residential areas, creating safety challenges for truck drivers and the traveling public. Long-distance truck drivers are typically paid by the mile but have a limit on the number of hours they can drive. As they approach their federal time limit, drivers must make a tough decision, weighing safety risks against productivity. Do they park in a nearby available spot and stop early, or do they continue driving and risk not finding a spot before their time runs out? From an economics standpoint, truck drivers lose over \$4,600 in earnings each year because of this paradox.

To help address these challenges, KYTC developed a statewide <u>Truck Parking Assessment and Action Plan</u>. This project is designed to:

- Identify truck parking supply and demand across the state and on major corridors
- Focus on safety and in particular, unauthorized parking on highway ramps
- Leverage existing KYTC right-of-way to identify low cost/high impact opportunities to increase truck parking capacity
- Act now by completing a preliminary conceptual design and estimate of new, upgraded parking facilities

1.2.4. Kentucky Statewide Rail Plan (2015)

The vision of the <u>State Rail Plan</u> was 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

1.2.5. Kentucky Riverports, Highway and Rail Freight Study (2022)

The KYTC Riverports, Highway & Rail Freight Study's focus was to better understand the breadth and depth of Kentucky's multimodal freight infrastructure, recommend a priority list of improvements based on potential return, identify potential partnerships and funding sources, and better communicate overall strengths with businesses who have a need for these services. One of the outcomes was a marketing toolkit for economic development leaders, riverport managers, local governments, and others to use to promote the network for both foreign and domestic commerce.

1.2.6. Strategic Highway Safety Plan

Kentucky's <u>Strategic Highway Safety Plan</u> (SHSP) was updated in 2020. 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 improvement and employs proven countermeasures. TZD leverages an interdisciplinary approach by integrating engineering, enforcement, education, and emergency services strategies.

1.2.7. Kentucky State (Grade Crossing) Action Plan (2022)

The KYTC <u>Division of Right of Way</u>, <u>Utility and Rails</u> recently developed a State Action Plan to address Highway-Rail Grade Crossings issues across the Commonwealth. According to the Federal Railroad Administration, "An action plan is an important part of the grade crossing program management process. It is the mechanism to implement an organizational strategy. While the strategic plan is vital to creating the framework for a State to meet its goals and support its mission statement, it is the action plan that provides how a State may accomplish this.

1.2.8. Statewide Aviation System Plan (2017)

The KYTC Department of Aviation (KDA) conducted a <u>Statewide Aviation System Plan</u> that sought to inventory and categorize the facilities and assets at the state's 59 airports and help KDA assess how well the airport system performed operationally and economically. It developed recommendations for improving the state's aviation system. The plan gathered information from each airport about its facilities, aircraft activity, environmental compliance, and safety and security aspects of the airport. Additionally, data related to the direct economic impact of each airport was collected from the airport and associated business tenants.

1.2.9. MPO Freight Plans

Four of Kentucky's MPOs - the Kentuckiana Regional Planning & Development Agency (KIPDA), KYOVA Interstate Planning Commission, OKI Regional Council of Governments and the Lexington Area Metropolitan Planning Organization (LAMPO) have developed regional freight plans or studies. Each of these plans detail freight needs and recommendations to improve freight mobility in their respective regions. Since most of Kentucky's freight moves through these metropolitan areas, it will be critical to integrate their key recommendations in the KFP.

1.2.10. Mid-America Freight Coalition

The <u>Mid-America Freight Coalition</u> (MAFC) is a regional organization that cooperates in the planning, operation, preservation, and improvement of transportation infrastructure in the Midwest. The ten states of the AASHTO <u>Mid-America Association of State Transportation Officials</u> (MAASTO) share key interstate corridors, inland waterways, and the Great Lakes. In addition to being a regional convenor on freight issues, MAFC has published several reports that support freight movement across the Midwest.

1.2.11. Institute for Trade and Transportation Studies

The <u>Institute for Trade and Transportation Studies</u> (ITTS) serves a similar function as MAFC, except that it covers the Southern Association of State Highway and Transportation Officials (SASHTO) region. The Institute has recently undertaken regional studies that look at freight bottlenecks, economic development and an update to the Southeastern Trade and Transportation Study (SETTS).

1.2.12. The Eastern Transportation Coalition

The Eastern Transportation Coalition is a partnership of 19 states and the District of Columbia focused on connecting public agencies across modes of travel to increase safety and efficiency. Formerly the I-95 Corridor Coalition, the Eastern Transportation Coalition has evolved from a small, highway-focused group to more than 200 public agencies working together to address the pressing challenges facing the eastern corridor with a focus on Transportation Systems Management & Operations, Freight, and Innovation. Kentucky recently joined the Coalition to provide an opportunity to collaborate on freight transportation needs, issues, and investments with throughout the eastern U.S., but especially with their neighbors in Tennessee and Virginia.

1.2.13. Appalachian Regional Commission

The Appalachian Regional Commission (ARC) is an economic development partnership agency of the federal government and 13 state governments focusing on 423 counties across the Appalachian Region. ARC's mission is to innovate, partner, and invest to build community capacity and strengthen economic growth in Appalachia. KYTC is an active participant in the ARC, using it as an opportunity to coordinate freight planning and investment decisions with its neighboring states of Ohio, Tennessee, Virginia, and West Virginia.

1.3. Moving Forward

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, 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 2022 KFP was designed to be compliant with the FAST and IIJA Acts.