2006 KENTUCKY STATEWIDE
INTERMODAL FREIGHT PLAN

Prepared by the Division of Planning

Kentucky Transportation Cabinet

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1.0 Goals and Objectives

The primary goal of Kentucky’s Intermodal Freight Plan is to facilitate the safe, efficient movement of goods and freight through Kentucky in an environmentally and fiscally responsible manner. The plan focuses on addressing highway congestion and bottlenecks while promoting other modes to divert freight traffic from highways.

In order to better identify needed projects a freight focus network will be defined. This network considers high priority highway routes, and primary freight facilities; including ports, air freight terminals, highway freight terminals, rail intermodal terminals, and roadway connections between the high priority highway routes and the freight facilities. The Intermodal Freight Plan recognizes the importance of all modes; highway, air, rail, water, intermodal connections, and their ability to provide competitive access to regional, national, and international markets.

The Intermodal Freight Plan also involves strategies for plan implementation. The needs of the network will be identified. This includes data that could be used to identify congestion, bottlenecks, etc. Possible solutions may be suggested, such as the collection of needed data and the identification of new public intermodal opportunities. Alternate modes of freight transport will need to be analyzed and compared. Possible funding needs and sources for each mode will need to be addressed.

Today KYTC does not have a list of projects nor priorities for modes other than roadways. The ultimate goal of this plan is to be able to compare investments between modes. If KYTC had $100 million to improve freight movements, where would we want to invest; water, air, highways, or rail, to get the best fiscal result? What part of the Commonwealth would see the greatest return on this investment through reduced congestion, improved safety, and greater economic vitality?
2.0 Background

2.1 Requirements

The Kentucky Transportation Cabinet (KYTC) is currently required to perform several activities associated with freight:

- Review Public Riverport Applications
- Provide Oversight on Development Activities Involving Riverport Authorities
- Send Out and Review Railroad Annual Reports
- Utilize the Highway Performance Monitoring System
- Develop a Statewide Transportation Plan
- Report Coal Haul Tonnages
- Review Highway Routes for the National Truck Network (NN)

The Safe Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU), which authorized the federal surface transportation programs for highways, requires that freight be considered in statewide transportation planning. The following are among the transportation planning factors promoted by SAFETEA-LU:

- Increase accessibility and mobility of people and freight
- Enhance the integration and connectivity of the transportation system, across and between modes for people and freight

In an effort to meet federal requirements as defined by SAFETEA-LU and the goals of the Statewide Transportation Plan, KYTC will prepare and utilize an Intermodal Freight Plan.

2.2 Why Have a Freight Plan?

The movement of goods and people is a key component to Kentucky’s economic vitality. SAFETEA–LU and FHWA have identified freight movements as one of the fastest growing and rapidly changing characteristic on our highways. According to the Freight Analysis Framework (FAF), domestic freight transportation grew by approximately 20 percent over the past decade and is expected to increase another 65 to 70 percent by 2020. The FAF estimates that about 29 percent of the urban NHS will be congested, with an additional 13 percent approaching congestion, during peak periods in 2020. Many of Kentucky’s highways already carry large percentages of trucks and several highway segments already exceed capacity (see Figures 2.2.1 and 2.2.2).
Figure 2.2.1

Truck Percentage on the Freight Focus Road Network

- < 15%
- 15 - 19.9%
- 20 - 25%
- > 25%
- Unavailable *

* Classification data not available on all routes

Figure 2.2.3

Volume Service Flow (VSF) on the Freight Focus Road Network

VGF
- < 0.80
- 0.81 - 0.95
- 0.96 - 2.00
- > 2.00
- Unavailable *

* Classification data not available on all routes
The Intermodal Freight Plan will be used to help identify projects to be recommended for Kentucky's Six Year Plan, the Statewide Long Range Plan, and the Unscheduled Projects List.
3.0 Kentucky’s Commodity and Mode Profiles

3.1 Kentucky’s Top Commodities

It is recommended to place more emphasis facilitating the movement of major commodities in Kentucky. However, the major commodities shipped by establishments vary when measured by value or by weight. Figures 3.1 and 3.2 show Kentucky’s top commodities measured by weight and value, respectively. Information for the graphs was obtained from the latest version of the Freight Analysis Framework (FAF²), which contains data from 2002.

![Figure 3.1.1 Kentucky's Top Commodities by Weight](image1)

![Figure 3.1.2 Kentucky's Top Commodities by Value](image2)
By weight, freight shipments within and to the state of Kentucky usually occur by truck. However, according to FAF² data, rail carries more tons of freight leaving the state than any other mode. This is probably due to the dry, bulk nature of Kentucky’s commonly exported commodities, such as coal. For a detailed account of shipments by weight in Kentucky, see Table 3.1.1.

<table>
<thead>
<tr>
<th>Tons (millions)</th>
<th>Within State</th>
<th>From State</th>
<th>To State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Total</td>
<td>178.6</td>
<td>100</td>
<td>263.7</td>
</tr>
<tr>
<td>Truck</td>
<td>130.0</td>
<td>73</td>
<td>73.8</td>
</tr>
<tr>
<td>Rail</td>
<td>7.1</td>
<td>4</td>
<td>99.9</td>
</tr>
<tr>
<td>Water</td>
<td>3.0</td>
<td>2</td>
<td>29.9</td>
</tr>
<tr>
<td>Air, air and truck</td>
<td>&lt;0.1</td>
<td>&lt;1</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

Table 3.1.1: Shipments by Mode, 2002 (Source: FAF²)

By value, freight shipments within and to, from and with the state of Kentucky usually occur by truck. Table 3.1.2 shows the value of commodities distributed by mode.

<table>
<thead>
<tr>
<th>Value ($ millions)</th>
<th>Within State</th>
<th>From State</th>
<th>To State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Total</td>
<td>60,590.7</td>
<td>100</td>
<td>173,256.7</td>
</tr>
<tr>
<td>Truck</td>
<td>55,092.3</td>
<td>91</td>
<td>128,934.1</td>
</tr>
<tr>
<td>Rail</td>
<td>357.7</td>
<td>&lt;1</td>
<td>7,013.5</td>
</tr>
<tr>
<td>Water</td>
<td>57.1</td>
<td>&lt;1</td>
<td>3,593.3</td>
</tr>
<tr>
<td>Air, air and truck</td>
<td>0.5</td>
<td>&lt;1</td>
<td>743.7</td>
</tr>
</tbody>
</table>

Table 3.2: Shipments by Mode, 2002 (Source: FAF²)
4.0 Facility Identification

Kentucky has a wide range of facilities used for transporting goods and people, including:

- Riverports
- Waterways
- Airports
- Highways
- Rail
- Intermodal Connectors

The intermodal network also includes pipelines, bikeways and pedways; however, we do not recommend analysis of these facilities at this time.

4.1 Riverports

Riverports provide reliable, safe transport of commodities that travel long distances at low cost. They are an alternative to highways and rail transport, thus reducing highway as well as rail congestion and construction needs, while providing potential for considerable infrastructure savings.

Paducah-McCracken County Riverport, 2006

4.1.1 Public Riverports

The following is a list of the 11 approved public riverport authorities within the state of Kentucky:

- Henderson County Riverport Authority
- Hickman-Fulton County Riverport
- Louisville and Jefferson County Riverport International
- Lyon County Riverport Authority
• Maysville-Mason County Riverport Authority
• Owensboro Riverport Authority
• Paducah-McCracken County Riverport
• Marshall County-Calvert City Riverport
• Meade County Riverport
• Port Authority of Greenup and Boyd Counties
• Wickliffe-Ballard County Riverport Authority

4.1.2 Private Riverports

Kentucky has over 160 private riverport terminals. The location of major private point facilities, including distributions centers, will be identified and considered when prioritizing freight projects.

4.2 Waterways

Kentucky has 1070 miles of navigable waterways. According to the Freight Analysis Framework (FAF²), waterborne shipments account for over 9 percent of Kentucky’s freight shipments by weight and approximately 2 percent by value. Kentucky’s navigable waterways include the:

• Ohio River
• Green River
• Kentucky River
• Cumberland River
• Tennessee River
• Mississippi River
• Big Sandy River
• Licking River

Ohio River, 2006
4.3 Airports

Kentucky currently has 63 general aviation airports. Approximately 24 of these have runways that are 5,000 feet or longer. Kentucky’s commercial service airports include:

- Blue Grass-Lexington Airport
- Cincinnati-Northern Kentucky International Airport
- Louisville International Airport – Standiford Field
- Owensboro-Davies County Airport
- Barkley Regional-Paducah Airport

The major hub for the United Parcel Service, Inc. (UPS), the UPS Worldport, is located at the Louisville International Airport. It employs more than 17,000 people and sorts 304,000 packages per hour. UPS is the largest employer in the state.

Airports and Aviation issues are the responsibility of KYTC’s Department of Aviation. Information on freight volumes at the commercial airports in Kentucky can be seen in Table 4.3.1.

<table>
<thead>
<tr>
<th>Annual Service Volumes of Commercial Airports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Cincinnati/No. Ky. International</td>
</tr>
<tr>
<td>Louisville International</td>
</tr>
<tr>
<td>Blue Grass - Lexington</td>
</tr>
<tr>
<td>Paducah</td>
</tr>
<tr>
<td>Owensboro-Davies County</td>
</tr>
</tbody>
</table>

Table 4.3.1 Source: KYTC Department of Aviation

4.4 Highways

The Kentucky Transportation Cabinet maintains over 27,000 miles of roadways. Approximately 43 percent of freight tonnage shipped within, to, or from Kentucky is by truck; however, 73 percent of freight shipments within the state are by truck. There are over 40,000 freight carriers authorized to operate in Kentucky.

The proposed network to be used for roadway analysis as part of the freight plan is Kentucky’s Backbone Network (KBN). The Division of Planning has developed KBN, which is a 5000-mile system of highways designated to be important to the nation’s
economy, defense, and mobility. Included in the KBN are highways which provide access to major riverport, airport, public transportation facilities, or other intermodal transportation facilities.

The KBN is

- Less than 20% of the state-maintained highway network
- Less than 7% of all the streets and roads in the Commonwealth
- Carries 58% of the total statewide vehicle miles of travel

The KBN includes:

- Nearly the entire Kentucky portion of the National Highway System (NHS),
- Principal arterial highway routes not on the NHS, and
- Segments of the Kentucky portion of the National Truck Network (NTN).

The KBN can be viewed on the Intermodal Facilities map. For more information on the KBN, see Appendix A.

Highway connector routes to intermodal facilities, which may or may not be part of KBN, are also an important consideration in the movement of freight.

4.5 Rail

The Kentucky Rail System is comprised of 18 freight railroads and one United States Government rail line. Rail shipments account for over 20 percent of Kentucky’s freight shipments by weight and approximately 4 percent by value. Approximately 82 percent of Kentucky’s rail system is Class I. There is one Class II carrier and 12 Class III carriers in Kentucky. For more information on Kentucky’s railways, see Kentucky’s Statewide Rail Plan.

Norfolk Southern, 2006
4.6 Intermodal Connectors

Kentucky has numerous other intermodal point facilities that move goods including major rail/highway facilities in Georgetown, Shelbyville, and Louisville where trailers and containers change modes. There are also coal transloading facilities located in regions throughout the state. A list of Kentucky’s official NHS intermodal connectors can be seen in the appendix. Other connectors to major freight distribution and manufacturing centers will also be identified and analyzed.
5.0 Available Resources

Currently, there are several resources available to help identify Kentucky’s Freight Focus Network and Kentucky’s intermodal opportunities. Federal resources include:

- Federal Highway Association (FHWA)
- Federal Rail Association (FRA)
- Federal Aviation Association (FAA)

The state counterparts to the federal organizations include:

- Kentucky Transportation Cabinet (KYTC)
- Kentucky Rail Association (KRA)
- Kentucky Aviation Association (KAA)
- Kentucky Association of Riverports (KAR)

Formerly, KYTC was responsible for weigh stations, vehicle enforcement, and regulation of commercial vehicles. Although a portion of KYTC’s funds are still dependent upon this data, Kentucky Vehicle Enforcement moved to the Justice and Public Safety Cabinet in 2004. Other state government agencies that may have useful information include the:

- Economic Development Cabinet (short and long range plans)
- Commerce Cabinet
- Governor’s Office of Local Development

Documents prepared for or by KYTC that may provide helpful information include:

- *Kentucky Statewide Aviation System Plan*
- *Kentucky’s Public Riverports and Waterways* (1999)
- *Kentucky Statewide Transportation Improvement Program (STIP)*
- *Kentucky Six-Year Highway Plan*
- Metropolitan Organization (MPO) Long-Range Plans

The following truck data is collected by KYTC:

- **Vehicle Classification:** Describes what type of truck is on what road.
- **Traffic Count Data:** Number of vehicles utilizing a segment of highway, which includes truck percentages.
- **Crash Data:** Describes where, when, what, who, and sometimes why a crash happened.
• **Coal Haul Tonnages:** Includes tons of coal hauled on coal haul routes as part of an annual report submitted to FHWA.

Other data sources include:

• **Freight Analysis Framework (FAF):** A resource from FHWA which estimates commodity flows and related freight transportation activity among states and regions.

• **Waybill Data:** Waybill data contains railroad and shipper data, including routing information and description and weight of the commodity.

• **Reebie/Transearch Data:** This data includes an analysis of the complex flow of goods and services with detailed information on traffic in the United States. KYTC owns Reebie/Transearch data from the year 2000 at the county level.

• **2002 Commodity Flow Survey:** This survey published by the Bureau of Transportation Statistics.

• **2002 Vehicle Inventory and Use Survey:** U.S. Census data which provides data on the physical and operational characteristics of the nation's private end commercial truck population.
6.0 Needs

As highways continue to become more congested there is a greater need to consider intermodal freight routes; routes in which all modes (water, air, highways, rail, and intermodal connectors) are considered for the most efficient movement of freight. However, to be effective, KYTC needs to know where, when, and how commodities are flowing through and in Kentucky and the surrounding areas. Kentucky also needs the ability to promote other modes through funding and the support of other agencies.

6.1 Data

While some state-to-state information is available through federal sources, there is no recent comprehensive data readily available on how commodities flow within the state. Nor is there public information on the capacity and availability of other modes for freight movements. Coordination with the actual haulers and shippers will be needed to collect, to evaluate, and to use this proprietary data.

In order to effectively analyze and consider freight intermodal opportunities the following data is needed:

- Global Positioning System (GPS) information for mapping. The GPS data will need to be accurate and consistent between modes.

- The following mode data could be shareable with other states/agencies and should include:
  - location of intersecting modes
  - a contact person
  - ownership
  - historic information

- The capacity of each mode and the ability to change modes to increase mobility on another

- Safety history or potential safety problems of each mode

- Accessibility of each mode

- Time of day congestion of each mode

- Internal and external origin/destination information
- Present traffic information will be needed. The information collected will need to be in terms of:
  - Tons
  - Dollars
  - Vehicle trips
  - By commodity
  - Level of Service
    - Present Day
    - Future
    - Time of Day
    - Peak
    - Peak Spreading

- Future traffic information will also be needed. Future is defined as 5 years for short term and 20 years for long term. This information will need to be flexible for implementation.

To increase freight mobility KYTC must also continue to find ways to coordinate with Intelligent Transportation System (ITS) efforts.

### 6.2 Funding

For rail and waterways the predominant deficiency is the lack of a dedicated funding source. Planning and coordination efforts can be strengthened, but KYTC does not have legislative oversight of these modes.
7.0 Proposed Freight Planning Activities

The following are some steps KYTC is taking to including intermodal freight as a proposed solution to KYTC’s transportation mobility needs.

- **Freight Focus Network Limits Defined.** This network was formed to focus limited state resources on the most significant transportation facilities and to eliminate bottlenecks that impede safe, efficient, and reliable transportation. Kentucky’s Freight Focus Network shall be limited to the following facilities:
  - Riverports – The network will include public riverports. KYTC will support studies identifying the needs of public ports that may be addressed if funds become available.
  - Waterways – Navigable waterways with public riverports will be included in the network. These waterways include the Ohio, Mississippi, and Tennessee Rivers.
  - Airports - For airports, the Department of Aviation has proposed a tiered system in the priority selection process:
    - First priority should be placed on the three major commercial airports: Louisville, Northern Kentucky, and Lexington.
    - The second tier would be airports that have a 5,000 foot runway that could accommodate planes that may carry freight.
    - The third tier would be airports that could extend their runways to 5,000 + feet.
    For this plan, KYTC’s focus will be on the first tier.
  - Highways – The Kentucky Backbone Network will be the highway network for the plan.
  - Rail - First priority should be placed on all the Class II and III railroads, the regional and the short lines. The Kentucky Transportation Cabinet will focus on identifying short-line opportunities and opportunities to increase capacity. However, Class I carriers may be considered in future rail diversion studies, particularly those paralleling the interstates.
  - Intermodal Connectors - Intermodal connectors should be evaluated and prioritized. Those considered most important in modal shifts shall be included in the Freight Focus Network.
Figure 7.0.1 is a map of the Freight Focus Network.

<table>
<thead>
<tr>
<th>Intermodal Freight Focus Network</th>
<th>Riverports Status</th>
<th>Railroad Class</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active</td>
<td>Class I</td>
<td>Major City</td>
</tr>
<tr>
<td></td>
<td>Developing</td>
<td>Class II</td>
<td>Air Carrier Airports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class III</td>
<td>Freight Focus Roads</td>
</tr>
</tbody>
</table>

Figure 7.0.1

- **Data Collection.** KYTC has TranSystems commodity flow data from 2000. KYTC also has obtained a database from the Economic Development Cabinet which contains geospatial data and other information on all the manufacturing and distribution centers in the state. A method of data collection for further information will need to be established. It may be collected at the local level by the city or county or by industry. Intense coordination with various modes will be required. The data should be measured consistently and be repeated each year.

- **Data Analysis.** KYTC, Division of Planning has begun to look at connectors to the major distribution and manufacturing centers and their proximity to other modes. KYTC, Division of Planning has also requested that the updated Statewide Traffic Model have a freight component that can be used to identify potential freight projects. There is still a need for additional data to be collected. The collected data can be utilized to identify current and future congestion, bottlenecks, etc., that affect the movement of freight. Accessibility and capacity of other modes can be identified.

- **Identify Freight Intermodal Opportunities.** By analyzing the data and through the establishment of a Freight Focus Network, interaction opportunities between the following modes should be identified:
  - Road to Rail
  - Road to Water
  - Road to Air
  - Air to Road
• Rail to Water
• Water to Rail
• Other

Significant relationships with private industry will need to be developed to make this step a success.

• Legislative Change. Legislative clarification may be needed to give weight to the Cabinet’s goals involving funding transportation modes other than highways. KYTC is responsible for providing oversight on development activities involving riverport authorities (KRS 65.520). KYTC, Division of Planning has also taken over the responsibilities of regulating the railroad formerly held by the Railroad Commission (KRS 174.057), but lacks the staff and resources for regulation and enforcement. KYTC’s involvement, responsibility, and roles with other modes need to be defined.

• Capital and Operational Improvements. Capital and operation improvements that would facilitate freight movement need to be identified. Improving the condition, connectivity and capacity of the existing freight infrastructure as well as enhancing operational performance and safety should be considered.

• Freight Route Modal Comparison. The next step would be a comparison of current freight routes and those utilizing intermodal facilities. For example, if $100 million is invested in highways, or $100 million is invested in another mode, such as rail, water, or air facilities, where would the Commonwealth reap the greatest benefit? A computer model with the ability to compare alternate freight modes in terms of cost effectiveness, increased or decreased volume-to-capacity ratio, trip time, facility system usage, safety, etc., would be useful. The Highway Economic Requirements System (HERS) performs similar analysis for highways, but does not consider other modes.

In addition to the previous steps, efforts need to be made to ensure that intermodal freight projects are weighted appropriately through the Prioritization Schedule of Statewide Projects. The consideration of projects located near intermodal facilities need to be reviewed. The Commerce Cabinet, Economic Development Cabinet and local organizations, such as ADDs and MPOs should also be aware of intermodal freight opportunities during their rating process.

If a city, county, or region of Kentucky is interested in developing a freight plan for their area, then the information from that plan would be incorporated into the Statewide Intermodal Freight Plan. Data quality and accuracy should be defined. Presently, two metropolitan areas, Louisville and Northern Kentucky, are developing a freight component to their long range transportation plans. They have started by identifying truck percentages and large shippers in their areas. The Area Development Districts seek to include freight interests as part of their regional transportation committees. KYTC could assist other agencies wishing to develop a plan.
8.0 Project Prioritization

The current prioritization schedule of statewide projects includes freight as a decision point. However, more detail is defined through the Intermodal Freight Plan process of comparing and prioritizing projects involving different modes to move freight, should a separate prioritization of freight projects occur. Eligible projects should meet certain criteria including that listed below to be considered:

- The project needs to be located on the Kentucky Freight Focus Network.
- The project needs to relieve congestion, improve transportation safety, and/or include projects for the development and construction of intermodal freight distribution and transfer facilities. It should aim at increasing the mobility of freight.
- The project should have a benefit/cost ratio > 1.

Other criteria to be considered during project prioritization:

- Capacity, now and in the future
- Environmental Impacts, such as air quality, noise, and vibration
- Freight volumes
9.0 Freight Funding

Freight Planning is an eligible activity for Federal SPR funds. However, Kentucky does not have a separate funding source for freight or intermodal projects. Actual freight projects have to compete with all other transportation projects, with a few exceptions:

- SAFETEA-LU Section 1306 is a Freight Intermodal Distribution Pilot Grant Program.
- SAFETEA-LU Section 9002 is a Capital Grants program for Rail Line Relocation Projects.
- SAFETEA-LU Section 9003 is for Rehabilitation and Improvement Financing.

Other applicable special programs include:

- Transportation Infrastructure Finance and Innovation Act (TIFA- Sect 1601)
- State Infrastructure Bank (SIB-Sect 1602)
- Bonds (Sect 11-1143)
10.0 Summary

The Intermodal Freight Plan recognizes the importance of all modes in the safe and efficient movement of freight. Division of Planning’s Modal Activity Center has identified a scope of work and recommendations for the first steps of an intermodal freight plan. We seek concurrence and advice on the following issues:

- Establishing a Freight Focus Network
- Collecting the necessary data to know where, when, and how commodities are flowing through and in the Commonwealth
- Identifying intermodal opportunities for freight movement
- Analyzing and comparing current freight routes with those utilizing intermodal facilities

We have also identified areas where we need direction:

- Legislative change
- Funding of transportation modes other than highways

Enhancing and preserving Kentucky’s freight system is essential for the economic growth of the Commonwealth. By establishing the Intermodal Freight Plan, significant freight system trends, needs and issues can be identified which can aide in the to understanding of the goods movement issues, constraints, and opportunities facing the state now and in the future. If the plan is approved, the next step will be to develop strategies for data collection and identification of studies that need to be performed.
Appendix A - Kentucky’s Backbone Network

Kentucky’s Backbone Network (KBN) is a 5000-mile system of highways. KBN has been defined by building upon previous federal and state designations of various routes and then expanding these previous designations to provide geographic coverage across the Commonwealth.

The first component of the KBN is nearly the entire Kentucky portion of the National Highway System (NHS). Designed in response to ISTEA legislation in the early 1990’s, the NHS is intended to allow each state to designate a portion of the transportation network as important to the nation’s economy, defense, and mobility. Included in the NHS are:

- Interstate Highways (and, in Kentucky, the Parkway System)
- Other highways which provide access between an arterial highway and a major port, airport, public transportation facility, or other intermodal transportation facility
- Highways important to the United States' strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes including highways which provide access between major military installations

This portion of the KBN encompasses more than 2900 miles in Kentucky.

An additional component of the KBN is other principal arterial highway routes within the Commonwealth. A principal arterial route is one that carries substantial statewide or interstate travel. These routes provide service to areas with a population in excess of 25,000. Most principal arterial routes are included in the NHS designation discussed above. However, approximately 550 miles of principal arterial routes over and above NHS routes have been included in the KBN. Typical among these routes are urban and rural routes whose function is significant within Kentucky but whose national significance does not rise to the level of NHS designation.

The third component of the KBN is segments of the Kentucky portion of the National Truck Network (NTN). These are routes, designated in response to federal transportation legislation in the 1980’s, over which motor vehicles with increased dimensions may operate. These vehicles with increased dimensions are often referred to as “STAA vehicles” (after the Surface Transportation Assistance Act of 1982) and include single-unit trucks up to 45 feet in length and tractor-single trailer combination trucks up to 58 feet in length. More than 3600 miles of such routes have been
designated in Kentucky. Many of these designated routes are included in one of the two highway systems (NHS or other principal arterial routes) discussed above. However, the KBN includes more than 730 miles of highways which are on the Kentucky portion of the KBN but not a part of the NHS or are not otherwise designated as principal arterial routes.

The final component of the KBN is nearly 900 other highway miles. These miles have been included to enhance statewide geographic coverage within the KBN. Several major corridors are also included for this reason, including:

- Heartland Parkway between Nunn/Cumberland Parkway and Collins/Bluegrass Parkway
- KY 19/22 from AA Highway to Louisville
- KY 101/259/79 from I-65 at Smiths Grove to US 60 at Harned
- London to Grayson (“London to Ashland”)
- KY 645 Extension from Ulysses to Morehead/Olive Hill

Taken together, the KBN is less than 20% of the state-maintained highway network and less than 7% of all the streets and roads in the Commonwealth. Yet the KBN carries 58% of the total statewide vehicle miles of travel.
## Appendix B - Kentucky’s NHS Intermodal Connector Listing

<table>
<thead>
<tr>
<th>FACILITY TYPE</th>
<th>CONNECTOR DESCRIPTION</th>
<th>FACILITY ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bells Lane Petroleum/Chemical Pipeline Truck/Pipeline Terminal</td>
<td>KY 2056 from I-264 W to the Louisville-Ohio river Floodwall</td>
<td>KY6L</td>
</tr>
<tr>
<td>Bells Lane Petroleum/Chemical Port Port Terminal</td>
<td>KY 2056 - Louisville-Ohio Floodwall to I-264 - Same as KY 6L</td>
<td>KY24P</td>
</tr>
<tr>
<td>Campground Rd Petroleum Pipeline Truck/Pipeline Terminal</td>
<td>Campground Rd (Cane Run to Ralph), Kramers Ln (Cane Run to Campground), Ralph ave (Cane Run to Campground Rd)</td>
<td>KY5L</td>
</tr>
<tr>
<td>Campground Rd Petroleum Port Port Terminal</td>
<td>Same as 5L</td>
<td>KY23P</td>
</tr>
<tr>
<td>Cincinnati/N KY International Airport Airport</td>
<td>KY 212 from I-275 S to the Airport Roadway System</td>
<td>KY10A</td>
</tr>
<tr>
<td>Clark Elkhorn Coal Tipple Truck/Rail Facility</td>
<td>KY 1441 (US 460 to Clark Elkhorn Tipple #1 Ent), KY 1789 (US 460 to KY 1441)</td>
<td>KY22R</td>
</tr>
<tr>
<td>Golden Oak Mining CO. Truck/Rail Facility</td>
<td>KY 7 (KY 15 to KY 931), KY 931 (KY 7 to Facility)</td>
<td>KY16R</td>
</tr>
<tr>
<td>Ivel Coal Tipple Truck/Rail Facility</td>
<td>County Rd 1020 - US 23 to Facility</td>
<td>KY20R</td>
</tr>
<tr>
<td>Lexington Bluegrass Field Airport</td>
<td>FS 8550 - US 60 to Facility</td>
<td>KY13A</td>
</tr>
<tr>
<td>Louisville International Airport Airport</td>
<td>Grade Ln (I-264 to UPS Feeder Truck Entrance), FS 8879 (I-264 to Facility)</td>
<td>KY8A</td>
</tr>
<tr>
<td>Louisville/Ashland Oil/Chevron Dist. Center Truck/Pipeline Terminal</td>
<td>KY 1681 - KY 4 Interchange to Facility</td>
<td>KY12L</td>
</tr>
<tr>
<td>McCoy Elkhorn Coal Corp Truck/Rail Facility</td>
<td>KY 194 - US 119 to Facility</td>
<td>KY18R</td>
</tr>
<tr>
<td>Norfolk Southern Intermodal - Georgetown Truck/Rail Facility</td>
<td>KY 620 - Facility to I-75 Interchange</td>
<td>KY11R</td>
</tr>
<tr>
<td>Facility Type</td>
<td>Location</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
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<tr>
<td>Norfolk Southern Intermodal - Louisville</td>
<td>Truck/Rail Facility</td>
<td>Newburg Rd (I-264 to Bishop), Bishop Ln (Newburg to Jennings), Jennings Ln (Bishop to Facility)</td>
</tr>
<tr>
<td>Owensboro Riverport</td>
<td>Port Terminal</td>
<td>KY 331 (US 60 to Harbor Rd), Harbor Rd (KY 331 to Facility)</td>
</tr>
<tr>
<td>Praise Dock Coal Tipple</td>
<td>Truck/Rail Facility</td>
<td>KY 80 from US 460 to Facility</td>
</tr>
<tr>
<td>Truck to Barge Coal Dock Cluster, Boyd County</td>
<td>Port Terminal</td>
<td>KY 757 from US 23 near Lockwood to 2.3 Miles North</td>
</tr>
</tbody>
</table>
Appendix C – SAFETEA-LU Provisions

The following are several SAFETEA-LU provisions which establish programs directly related to freight:

- Section 1305. Truck parking facilities.
- Section 1306. Freight intermodal distribution pilot grant program. Eligible projects under Section 1306 of SAFETEA-LU help relieve congestion, improve transportation safety, facilitate international trade and encourage public-private partnership and may include projects for the development and construction of intermodal freight distribution and transfer facilities at inland ports.
- Section 5204. Training and education.
- Section 5209. National cooperative freight transportation research program

The following are several other SAFETEA-LU freight-related provisions:

- Section 6001: Transportation Planning
- Section 5512: TRANSIMS
- Section 4118: Roadability
- Section 4101/4126: CVISN
- Size and Weight Technical Amendments
- Real-Time Systems Management Information Program