

# Green River Area Development District

## 2022 Regional Transportation Asset Inventory



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## CHAPTER 1: INTRODUCTION

### 1.1 History of Program

Kentucky has maintained a statewide transportation planning process since the 1970s through the 15 Area Development Districts (ADDs). In 1995 Kentucky expanded and formalized a public involvement process for the statewide transportation planning process in response to the directives of the Intermodal Transportation Efficiency Act of 1991 (ISTEA). ISTEA and its successor, The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) enacted in 1998, set the policy directions for more comprehensive public participation in federal and state transportation decision-making. The Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) passed in 2005. SAFETEA-LU addressed challenges such as improving safety and reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment. Most recently the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) passed in 2012. MAP-21 builds on and refines many of the highway, transit, bike, and pedestrian programs and policies established in the previous bills (ISTEA, TEA-21 & SAFETEA-LU). These Congressional acts authorize all on-going federal-aid transportation programs. There are critical components of each piece of legislation that require input at the early stages of the planning process from local government, communities, interest groups, regional governments and citizens. Among the most essential provisions are the following:

- Federal reliance on the statewide transportation process, established under ISTEA, as the primary mechanism for cooperative transportation decision making
- Coordination of statewide planning with metropolitan planning
- Opportunity for public involvement provided throughout the planning process
- Emphasis on fiscal constraint and public involvement in the development of a three year Statewide Transportation Improvement Program (STIP)
- Emphasis on involving and considering the concerns of Tribal governments in planning
- State development of statewide transportation plans and programs

The Kentucky Transportation Cabinet's (KYTC) statewide transportation planning process is accomplished through a cooperative program with the KYTC Central Planning Office, the 12 Highway District Offices (HDOs), 15 ADDs, and 9 Metropolitan Planning Organizations (MPO). The ADDs and MPOs are responsible mainly for the analysis of data and transportation systems, identification and evaluation of needs in their planning area, the coordination of public input for the STIP, and the subsequent evaluation and prioritizing of identified needs in the KYTC Unscheduled Needs List (UNL) for possible inclusion in the KYTC Six-Year Highway Plan.

KYTC Policies and Procedures for the Regional Transportation Program outline the policies and guidelines for the program within and in relation to the designated ADD of the Commonwealth of Kentucky. State Legislation was enacted in 1972 creating the ADDs by law in Chapter 147A of the Kentucky Revised Statutes (KRS). The KYTC has historically administered major comprehensive transportation programs at the urban, metropolitan, and statewide levels. The creation of the ADD pursuant to federal legislation established an effective link for the

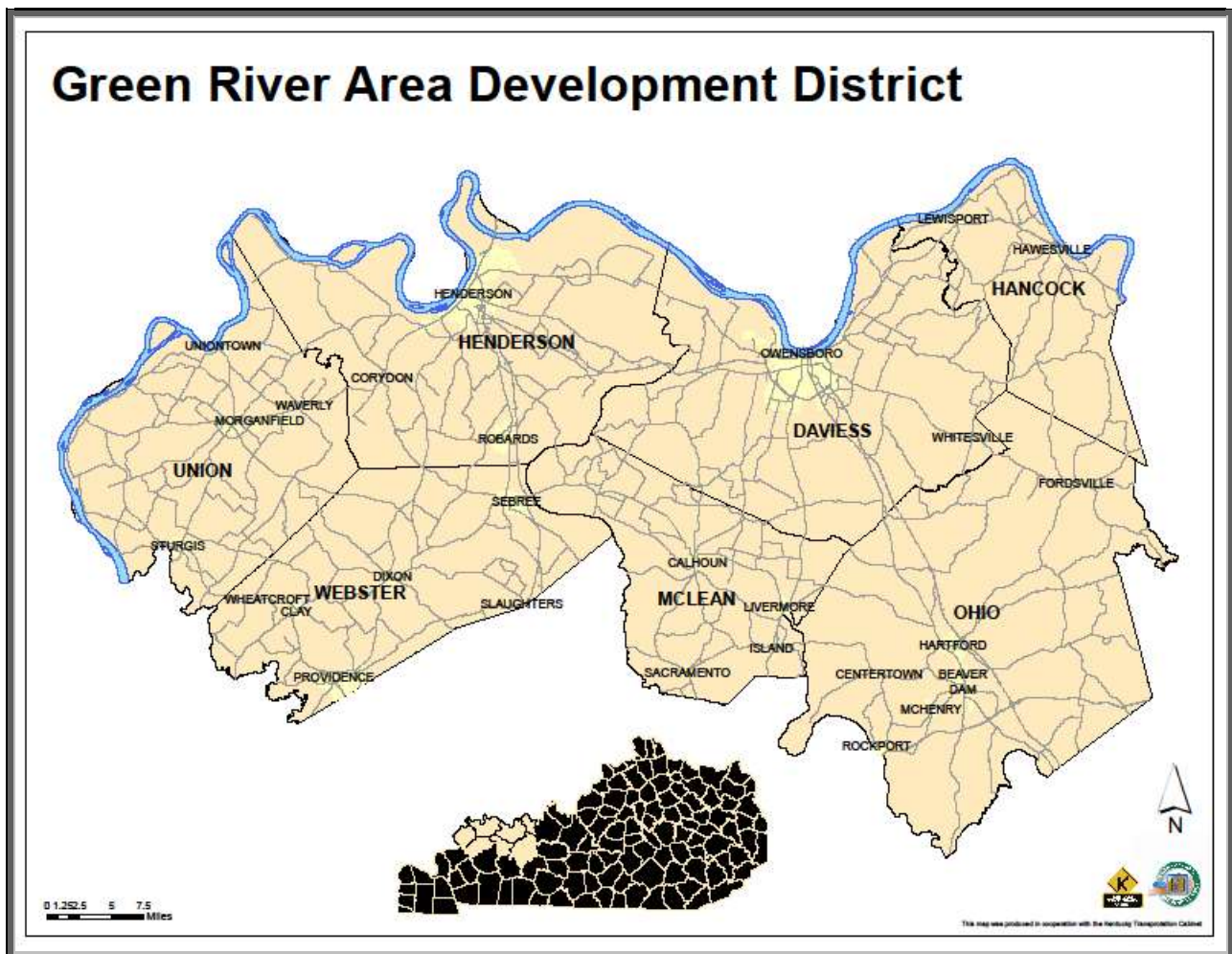


development of a comprehensive transportation program utilizing local, regional, and statewide agencies.

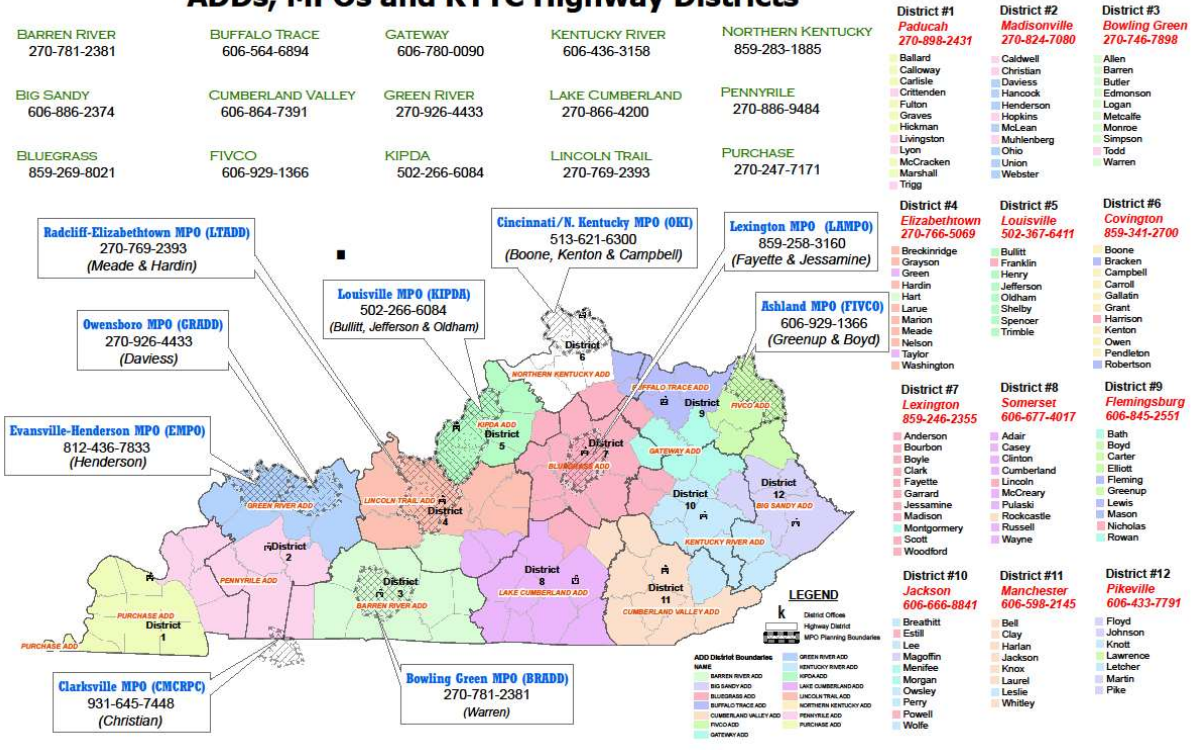
The ADD primarily conducts activities in support of transportation planning for the rural areas of the Commonwealth and our MPO partners are responsible for activities in the nine urbanized areas. The ADDs are concerned with all modes of transportation including: air, water, rail, highway, transit, pedestrian and bicycle. The jurisdiction of the regional program is not necessarily limited within the boundaries of the ADD making it necessary to include coordination between the MPO and our partners in the HDO.

The Green River Area Development District (GRADD) is composed of the seven county region of Daviess, Hancock, Henderson, McLean, Ohio, Union and Webster in western Kentucky.

### 1.2 Map of ADD, MPO, HDO Boundaries



## ADDs, MPOs and KYTC Highway Districts



### 1.3 Purpose of the Regional Transportation Asset Inventory

The major activity conducted by the GRADD Regional Transportation Program is to support the KYTC Statewide Transportation Planning process. The KYTC provides an annual scope of work to define the regional transportation activities to be conducted by the GRADD to support the KYTC. Included in the scope of work is a specific set of resource documents identified for the Regional Transportation Asset Inventory (RTAI) formerly known as the Regional Concept Plan (RCP). The RTAI is utilized as a resource document for the entire region while developing goals and objectives for the transportation system, identifying and evaluating needs, reviewing and documenting projects, and throughout the prioritization/ranking process. The RTAI is the “umbrella” that houses data collection components relevant to regional transportation. The RTAI document consists of an introduction for each component detailing the reason for, location maps and what recommendations if any can be construed from existing data and research. It is designed to be multi-modal in nature and address all forms of transportation in the region to include highways, air, river, rail, transit, pedestrian and bicycle.

The purpose is to involve local leaders, public officials, and the general public in the transportation planning process. It is designed to develop a working relationship between local leaders, transportation officials and planners, and concerned citizens, with the goal of creating an open environment, allowing for open and informed public input, so those transportation plans receive local acceptance and support. The elements collected in the RTAI can be used as a means of generating better input from local officials and citizens concerning transportation issues and projects.

The GRADD is responsible mainly for the analysis of data, identification and evaluation of needs in their region, and the subsequent evaluation and prioritization/ranking of projects in the UNL for possible inclusion in the KYTC Six-Year Highway Plan. The GRADD's role in the statewide transportation planning process is to:

- Work with the Regional Transportation Committee (RTC) to evaluate and prioritize all transportation needs concerned with all modes of transportation in the region
- Identification of new needs
- Prioritization/ranking of unscheduled needs
- Establish a public involvement process that will involve diverse interest groups in the statewide transportation planning process – involving all modes of transportation
- Provide coordination with other planning activities in the region
- Complete the various tasks described in its annual scope of work

The role of the RTC is to provide input into this regional and statewide process. The committee is comprised of a diverse group of interest that impact or are impacted by the transportation system. The committee will work with the GRADD in evaluating and prioritizing needs concerned with all modes of transportation.

Through cooperation with the GRADD, the RTC, local officials, transportation providers and users, and the general public, efforts are made to identify long-range or conceptual transportation needs resulting from the GRADD's efforts to assess the mobility and accessibility for the region. This identification process is considered an on-going activity with the GRADD RTC and the District 2 HDO following the continuous evaluation of the local and regional transportation systems.

## **CHAPTER 2: DEVELOPMENT, REVIEW AND RANKING OF PROJECT IDENTIFICATION FORM**

### **2.1 Introduction**

The development, review and ranking of the Project Identification Forms (PIFs) is a process that involves identification of transportation needs, based on local official and public input. The PIF is used to document available data on each need creating a useful resource for reviewing projects and considering local and regional priorities or rankings. Applicable information stored in the PIFs is used to create the KYTC Unscheduled Needs List (UNL). The project identification and evaluation process through the use of the PIF is an on-going task that is coordinated with the respective HDO planner. This statewide transportation planning identification, prioritization and ranking process complies with federal reauthorization and legislation requirements to inform, solicit input from and consult with transportation users, publicly elected officials, and representatives from all transportation modes and underserved populations.

#### Development, Evaluation & Maintenance

Suggested needs that have been proposed or identified are reviewed for necessity through field visits, analysis available data sources as provided by the KYTC for analytical purposes. If deemed appropriate, a PIF shall be developed in partnership by the ADD and HDO planners. KYTC's Division of Planning (DOP) is consulted prior to final inclusion in the UNL. All information is housed in the KYTC Online PIF application. The ADD and HDO are responsible for maintaining all information in the application. Additionally, the ADD and HDO are responsible for the quality, clarity, and completeness of needs specific to their boundaries. DOP coordinates and oversees the PIF application. The needs identified from this process are recorded in the UNL database until all project phases are advanced into the KYTC Highway Plan with full funding, are completed through other means, or are voted out for lack of RTC and HDO support. The highway plan is the KYTC's programming document submitted to and approved by the Kentucky General Assembly every two years.

The ADD reviews all UNL items in relation to other identified needs or projects and if necessary, make revisions to project descriptions, termini, mile-points, or other information as may be required. Special attention is given to adequately describing the issue to be addressed in the project description, citing the available data to help document the need. Projects which are not data driven, do not appear to have a definite purpose or need and a history of low priorities are considered for removal from the active UNL. If a fully documented need cannot be determined, the ADD in conjunction with the HDO and with concurrence of the RTC can recommend the need be moved to "Inactive" status.

#### Prioritization

In FY 2017 the KYTC introduced a new concept for prioritization of projects being considered for implementation into the proposed highway plan. A model was developed to create a more data-driven, objective and collaborative approach to selecting high priority projects. This model is called the Strategic Highway Investment Formula for Tomorrow (SHIFT). SHIFT uses quantitative data – measures such as crashes, fatalities, traffic volumes, delays, employment – to assess the benefits of planned projects and compare them to each other. Using the SHIFT

formula (developed by transportation engineers) KYTC will score projects and share rankings with local transportation leaders (ADDs, MPOs, and HDOs). KYTC ranks projects with statewide importance and through the local collaboration, priorities are set for regional projects.

The guidelines and schedule for the prioritization and ranking process are established by the DOP. Generally needs are prioritized on a local (respective county/city), regional (ADD), HDO and state (DOP) level. The ADD is responsible for obtaining the local and regional priorities. The prioritization process is documented by the ADD and reported to the KYTC. The documentation report is a record of the public involvement process utilized to prioritize the UNL, including all efforts to educate/inform the RTC and the public and any methods used to build consensus for priorities and rankings.

For a project to be considered, it first must be included on the sponsorship list. The projects that are sponsored at the regional (ADD) and HDO level are submitted to KYTC for scoring in the SHIFT formula. KYTC determines the number of projects that can be sponsored by using a formula that includes the number of counties, population and lane miles in a region and HDO. Once projects have been scored and the statewide selection process completed, regional lists are developed from projects not selected at the state level. The regional lists are reviewed by the ADD RTC and HDO. Both can select 25% of the projects to apply boost points to the scores, creating the regional and HDO priority lists. These projects are considered in the development of the recommended highway plan provided to the governor and ultimately presented to the General Assembly for approval.

## **2.2 UNL List**

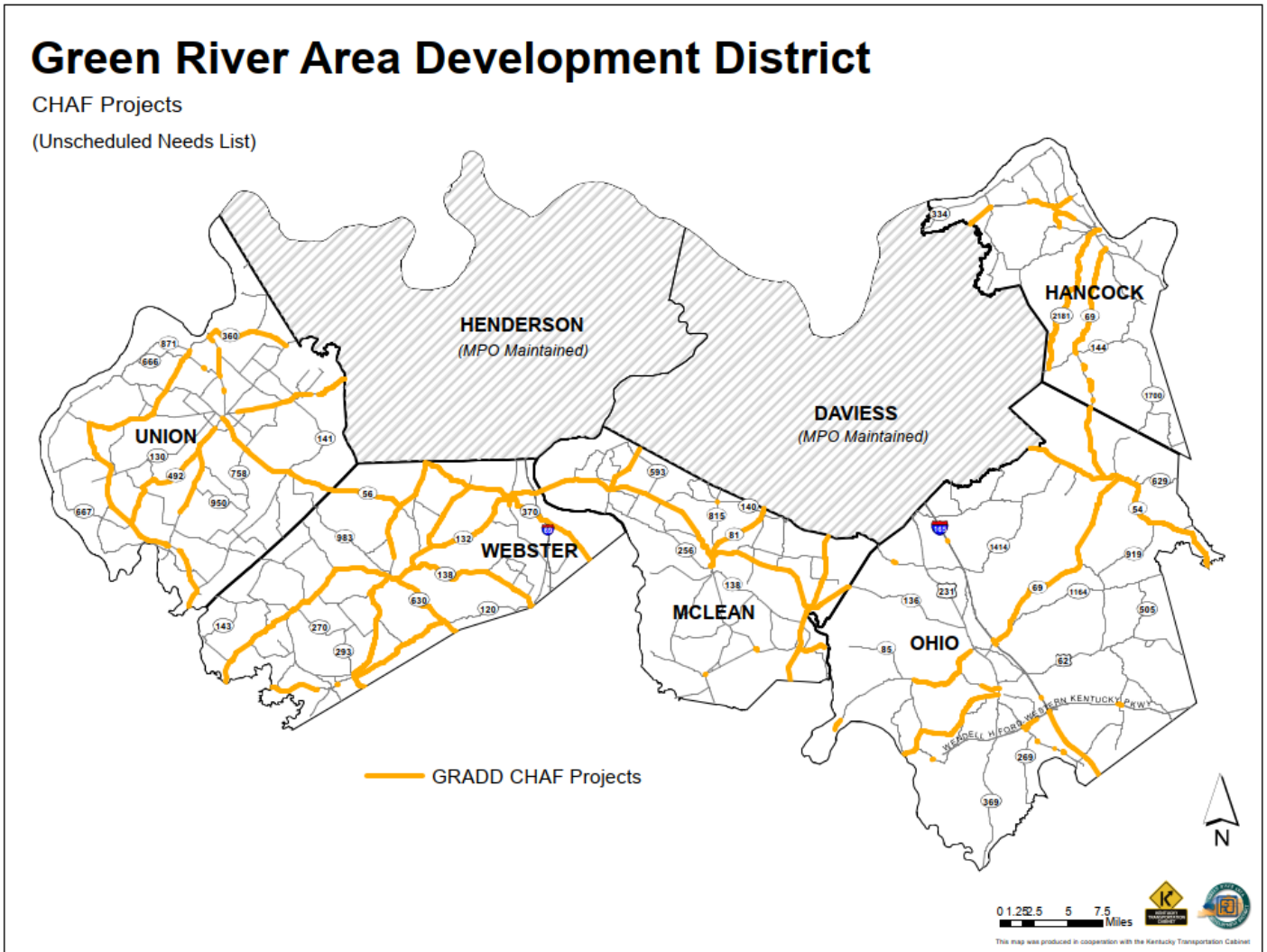
The UNL is the unconstrained list of all potential needs or deficiencies identified or suggested for consideration for future implementation. These projects represent identified needs that may or may not have data supported deficiencies for which conceptual projects may have been developed, but for which there are no current funding commitments.

The UNL is divided into two lists called the active list and inactive list. The active list will contain the needs that are followed and monitored closely and the list from which projects are prioritized and ranked. A need on the inactive list is one that historically had a low priority or no longer is considered a need. These needs are no longer monitored, but they are not deleted from the database in case the respective need once again becomes valid. It is possible, as needs change or new needs are identified, to move from the active list to the inactive list. Likewise, if determined to be a valid need, then there can be movement from the inactive list to the active list.

The following maps show the location of the needs identified on the GRADD active UNL by county excluding Henderson and Evansville MPO Needs:

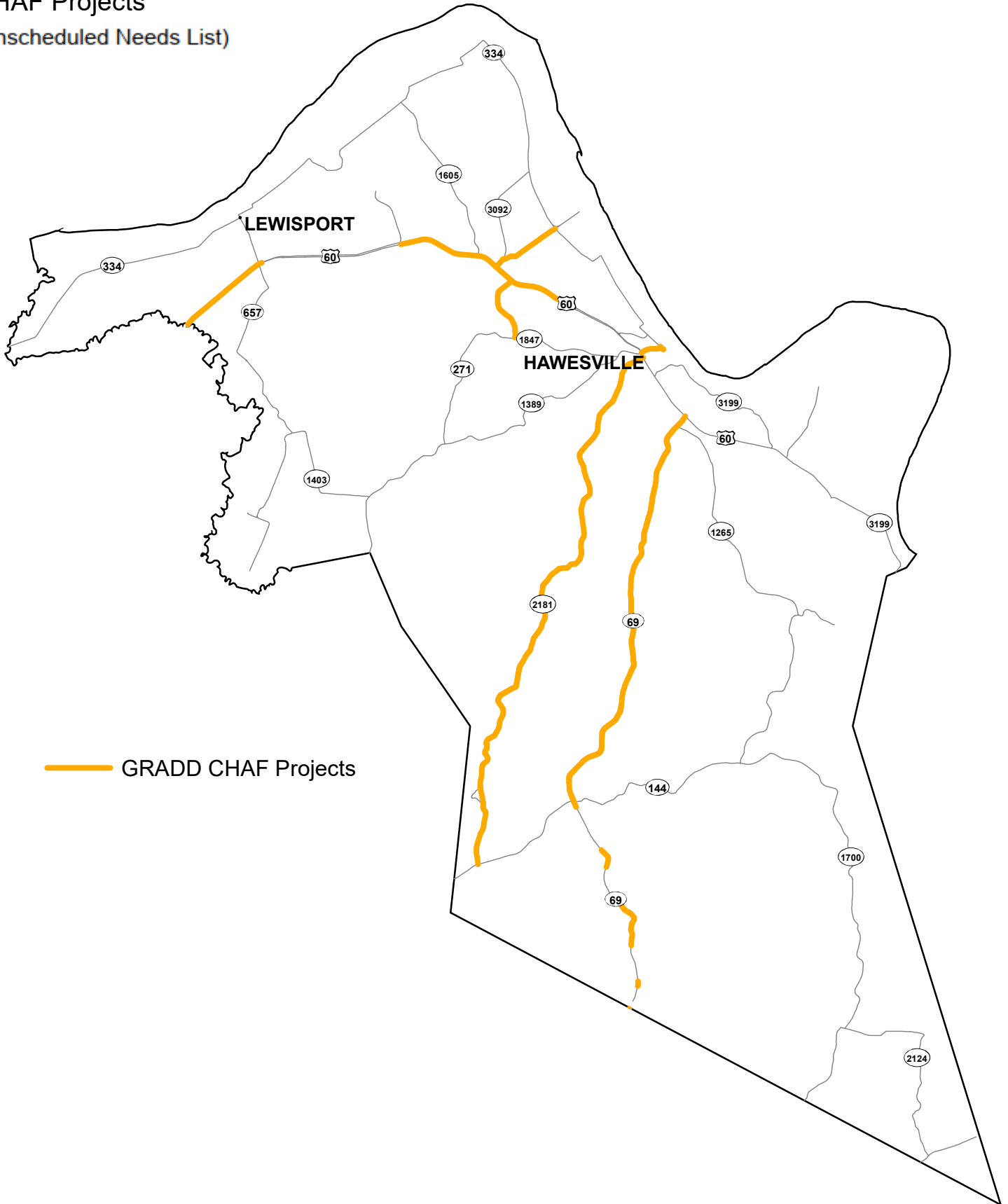


## 2.3 Maps of the UNL Locations by Region and County



# Hancock County

CHAF Projects  
(Unscheduled Needs List)



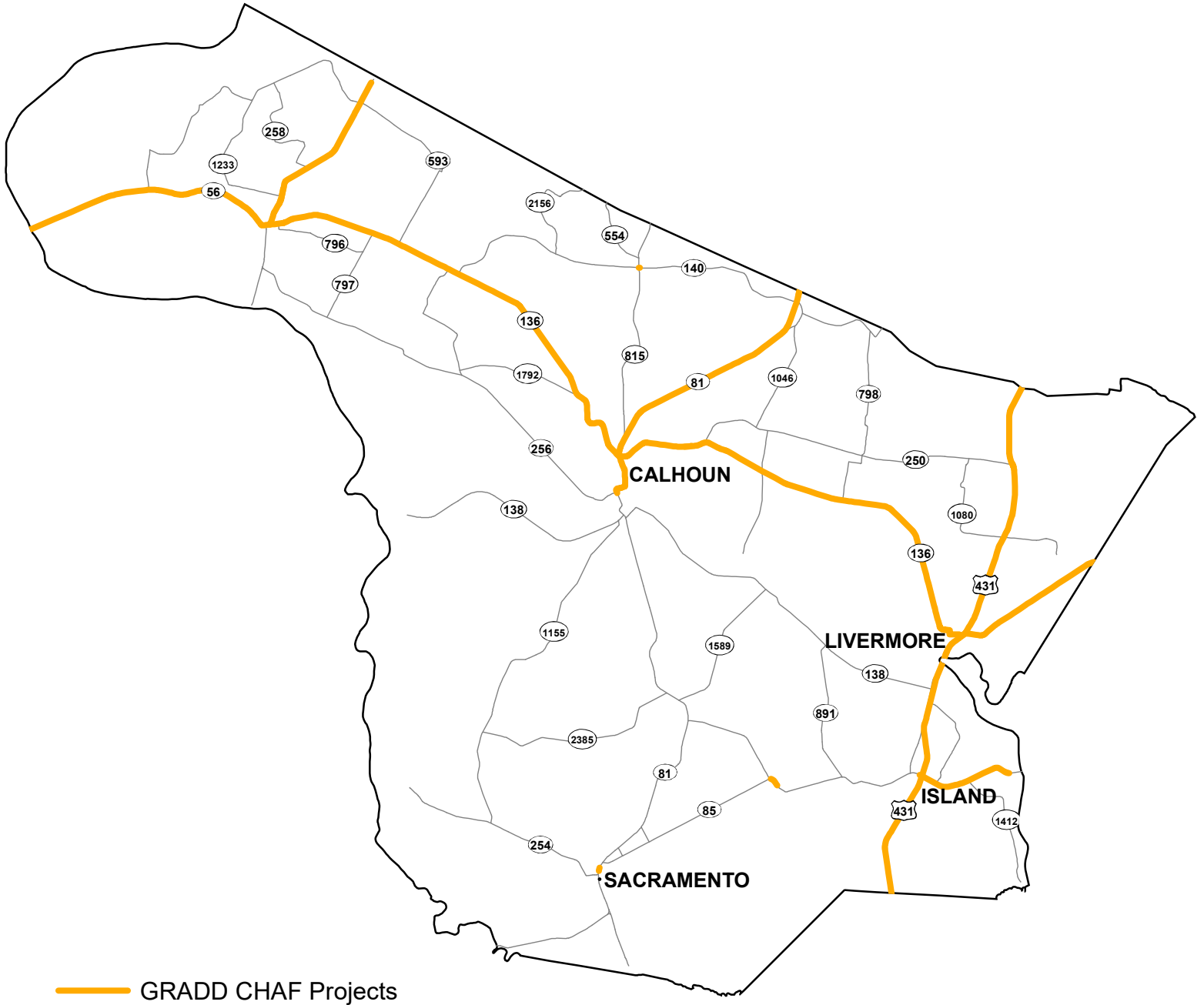
— GRADD CHAF Projects



0 0.4509 1.8 2.7 Miles

# McLean County

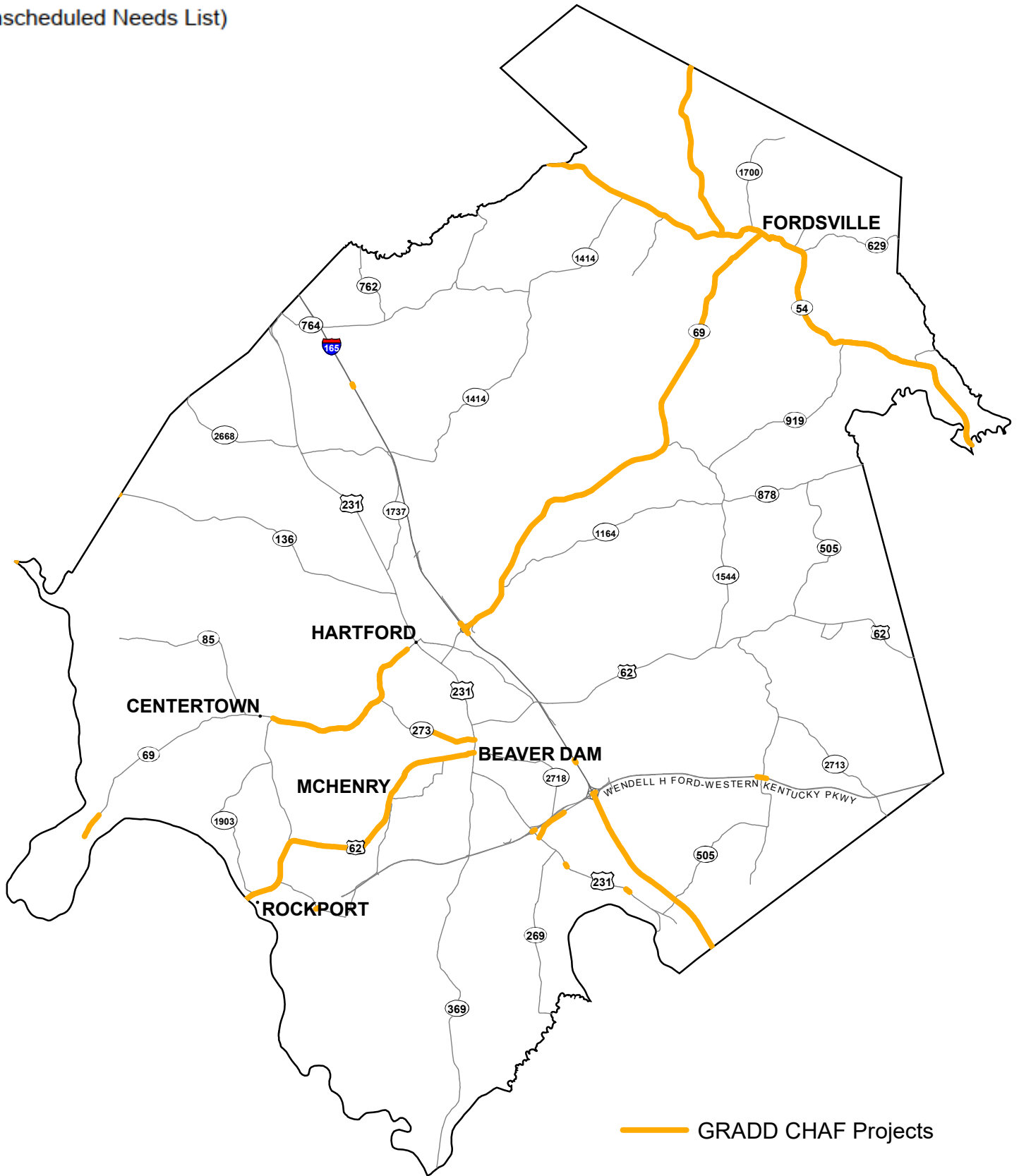
CHAF Projects  
(Unscheduled Needs List)





# Ohio County

CHAF Projects  
(Unscheduled Needs List)



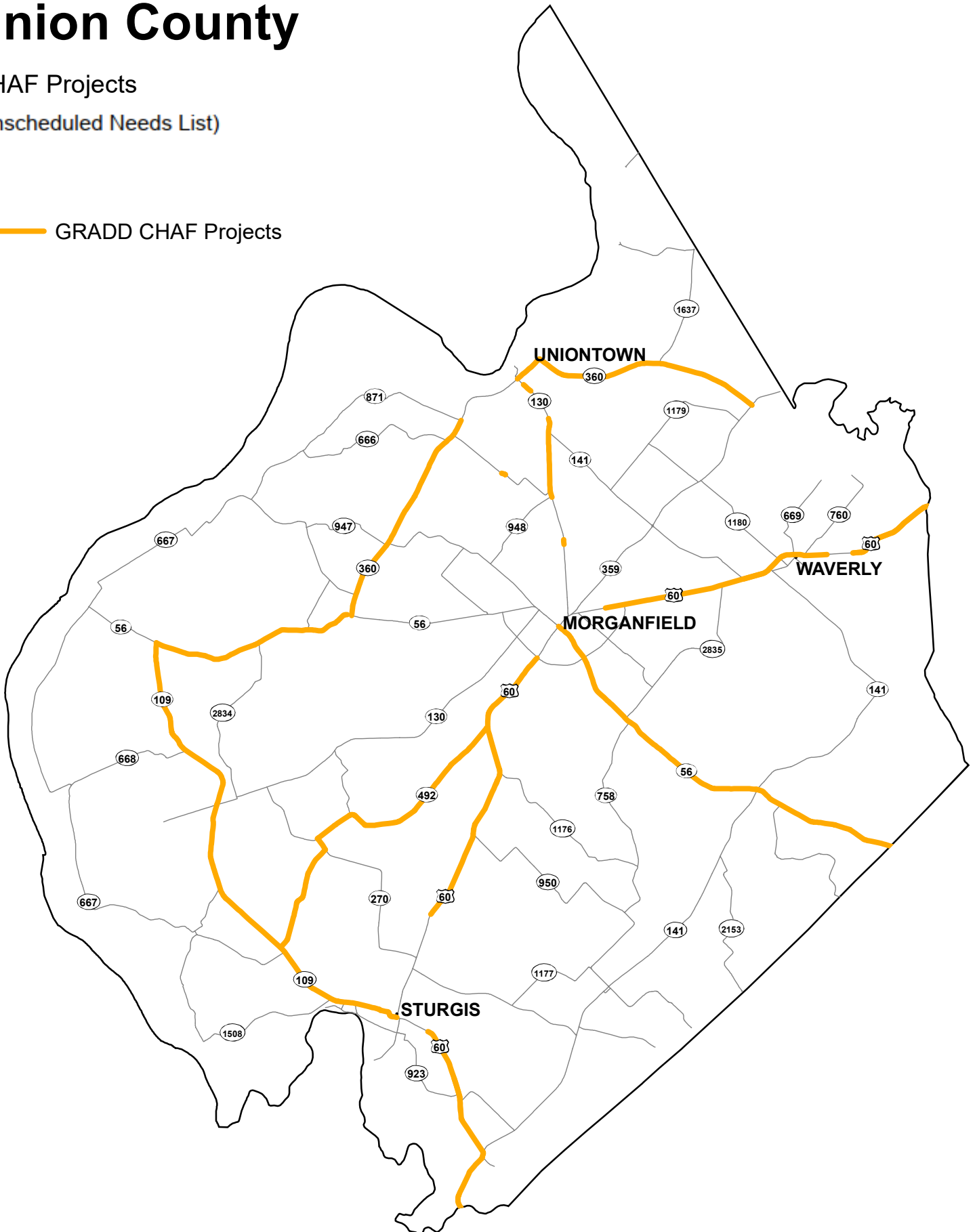
0 0.450.9 1.8 2.7 Miles

# Union County

CHAF Projects

(Unscheduled Needs List)

— GRADD CHAF Projects



0 0.450.9 1.8 2.7 Miles



## CHAPTER 3: MAJOR FREIGHT USER / MAJOR TRAFFIC GENERATOR

### 3.1 Introduction

The Major Freight Users and Major Traffic Generators (MFU/MTG) is a listing of facilities or locations identified throughout the region known for generating high traffic volumes and significant freight movement. The list is very subjective and can be interpreted differently by the regional committee, local officials and other stakeholders for each county/region. Planners, through consultation with RTC and local officials in each county, determine the facilities for each area. Keeping the inventory current is necessary for helping promote the safe and efficient movement of people, goods and services throughout the county, region and state. The inventory is a valuable tool for analyzing transportation systems and data, identification and evaluation of needs in the region and the subsequent evaluation and prioritization of projects.

The inventory identifies land uses that create larger volumes or concentrations of traffic, major manufactures and distribution centers for truck and rail and intermodal facilities. Examples include schools, major shopping centers, parks and recreational facilities, hospitals, industrial parks, business parks or other major commercial areas, airports, riverports, and transit facilities. MFU/MTG can have a profound impact on the operations of the surrounding road network.

In order to understand traffic patterns and volumes in an area, it is important to know about existing MFU/MTG and changes that have occurred such as the addition or closing of a facility. To facilitate this understanding, the ADD maintains this inventory of locations. This data can be made available to transportation planners, designers, the public, and local officials when making transportation decisions such as the highway prioritization process, or corridor improvement study, or development and calibration of traffic models.

The inventory is maintained as part of a Geographic Information System (GIS) and can be displayed on maps with existing traffic data such as traffic counts, unscheduled needs list, highway plan projects, safety data, etc. The GRADD has a current MFU/MTG inventory with 239 locations identified throughout the region. These facilities are identified by one of the following types: commercial, distribution, freight, industry, intermodal, major shopping center, medical, parks & recreation, and school. This inventory is reviewed yearly with the RTC to ensure accuracy and the RTC is encouraged to inform GRADD staff of changes that have occurred in their communities such as the closing or opening of a new facility.

The maps located in section 3.2 illustrate the location of the current GRADD MFU/MTG inventory. County maps, city maps and community maps are used where necessary to provide a visual tool of the inventory within the existing road network. Updates or other changes are submitted each year to the KYTC. For more information on the GRADD MFU/MTG, please contact the ADD.

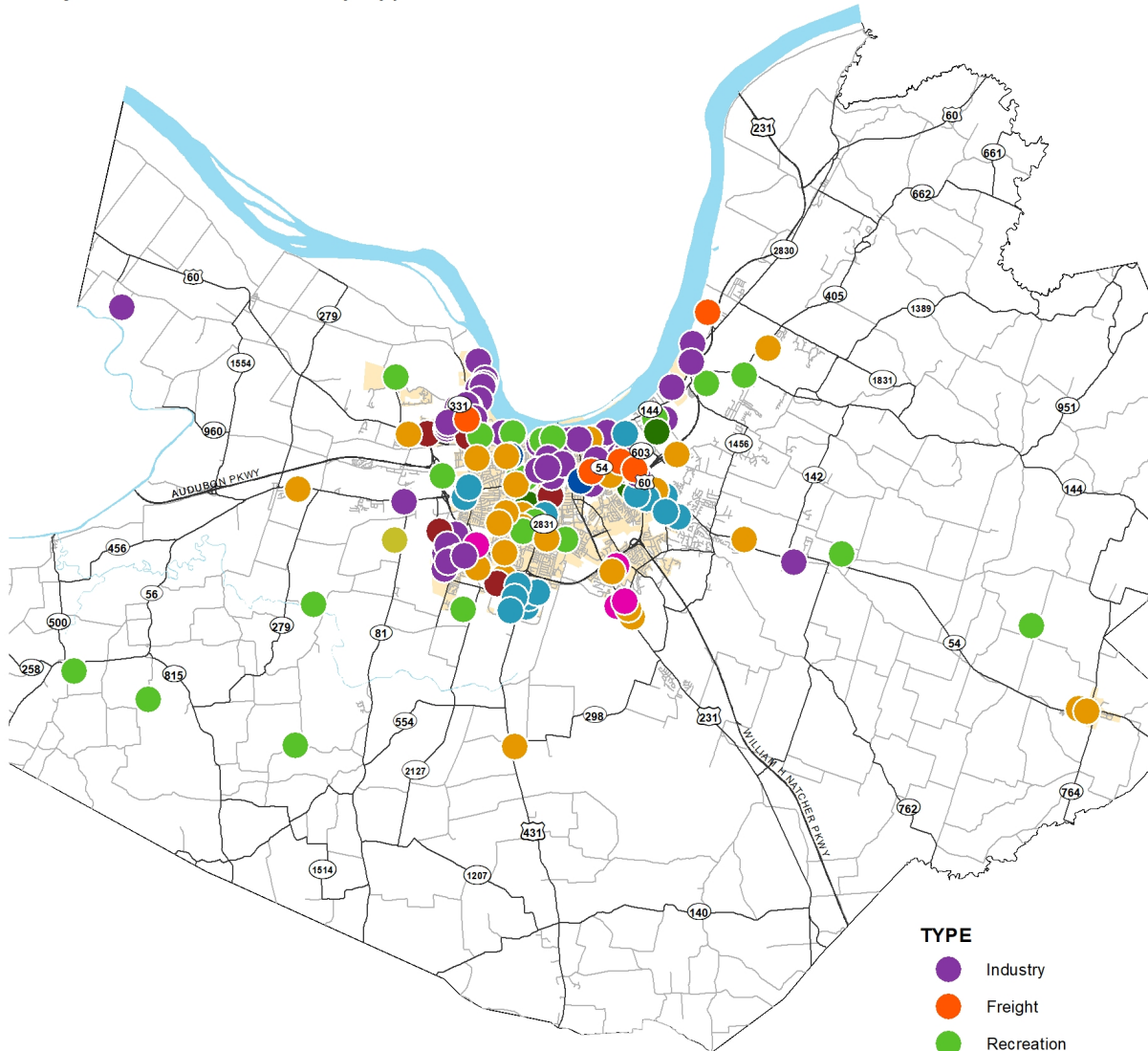
The GRADD annually reviews the MTG inventory along with other analytical traffic data provided by the KYTC. This review (as previously mentioned) ensures the accuracy of the inventory, but also serves as an evaluation of current highway conditions surrounding these locations. This review can help determine if current identified needs accurately address issues or if those needs should be modified or deleted from the UNL.

### **3.2 MFU/MTG Location Maps**

The maps that follow have been created to illustrate the MTG inventory on regional, county, city or community level. Locations are color-coded and identified by type. For the purpose of this illustration the GRADD identifies the following types (with examples given) as commercial (business offices or parks), distribution (warehouse, soft drink or beer distributors), freight (grain facility, trucking companies, FedEx, UPS), industry (industrial parks, manufacturing), intermodal (airport, riverport), major shopping center (mall, strip mall), medical (hospital or multiple doctor offices), parks & recreation (state park, sports arenas), and schools (elementary & high school, college).

# Daviess County

## Major Traffic Generators by Type



### TYPE

- Industry
- Freight
- Recreation
- School
- Retail
- Government
- Medical
- College
- Services
- Other

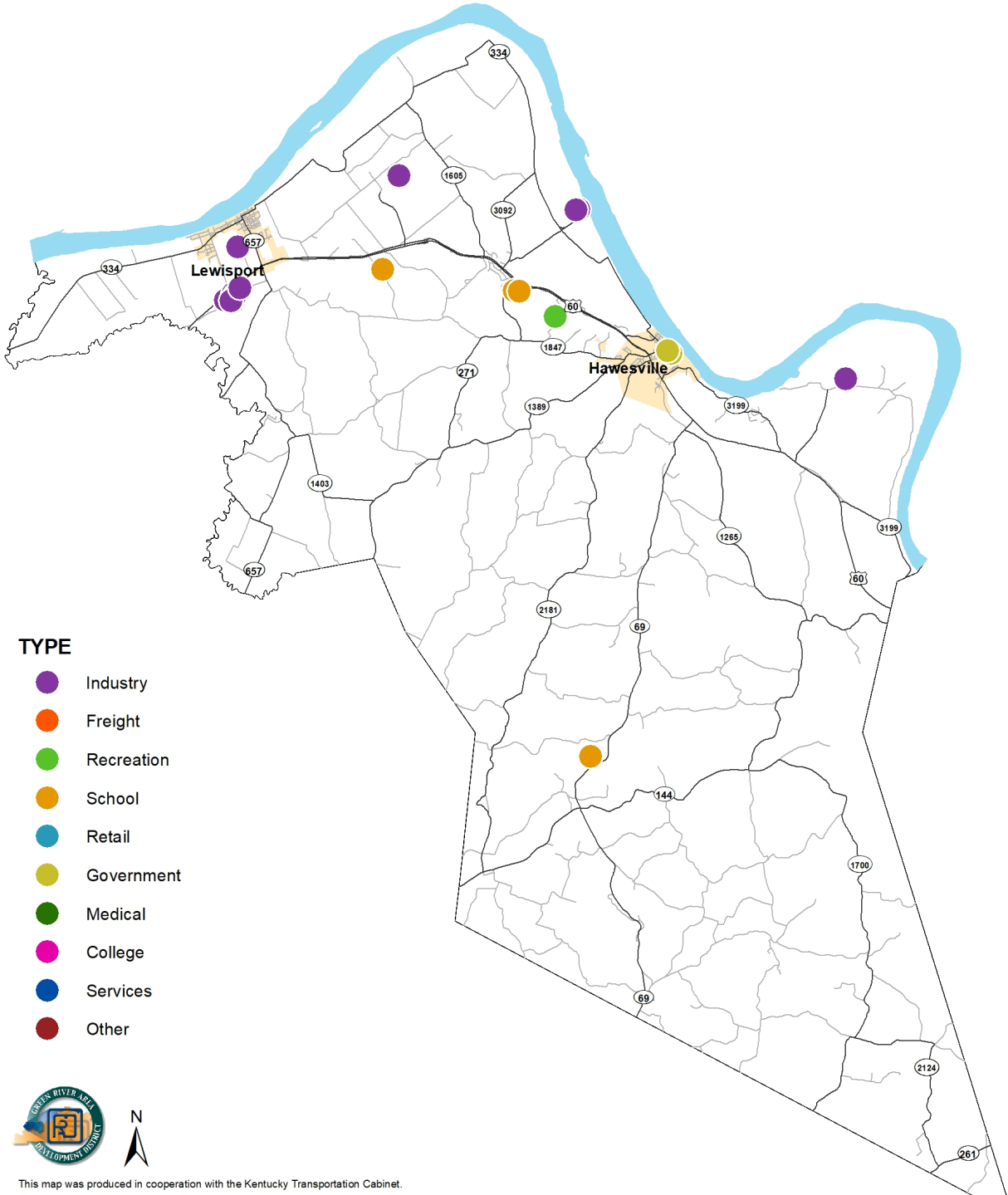


This map was produced in cooperation with the Kentucky Transportation Cabinet.



# Hancock County

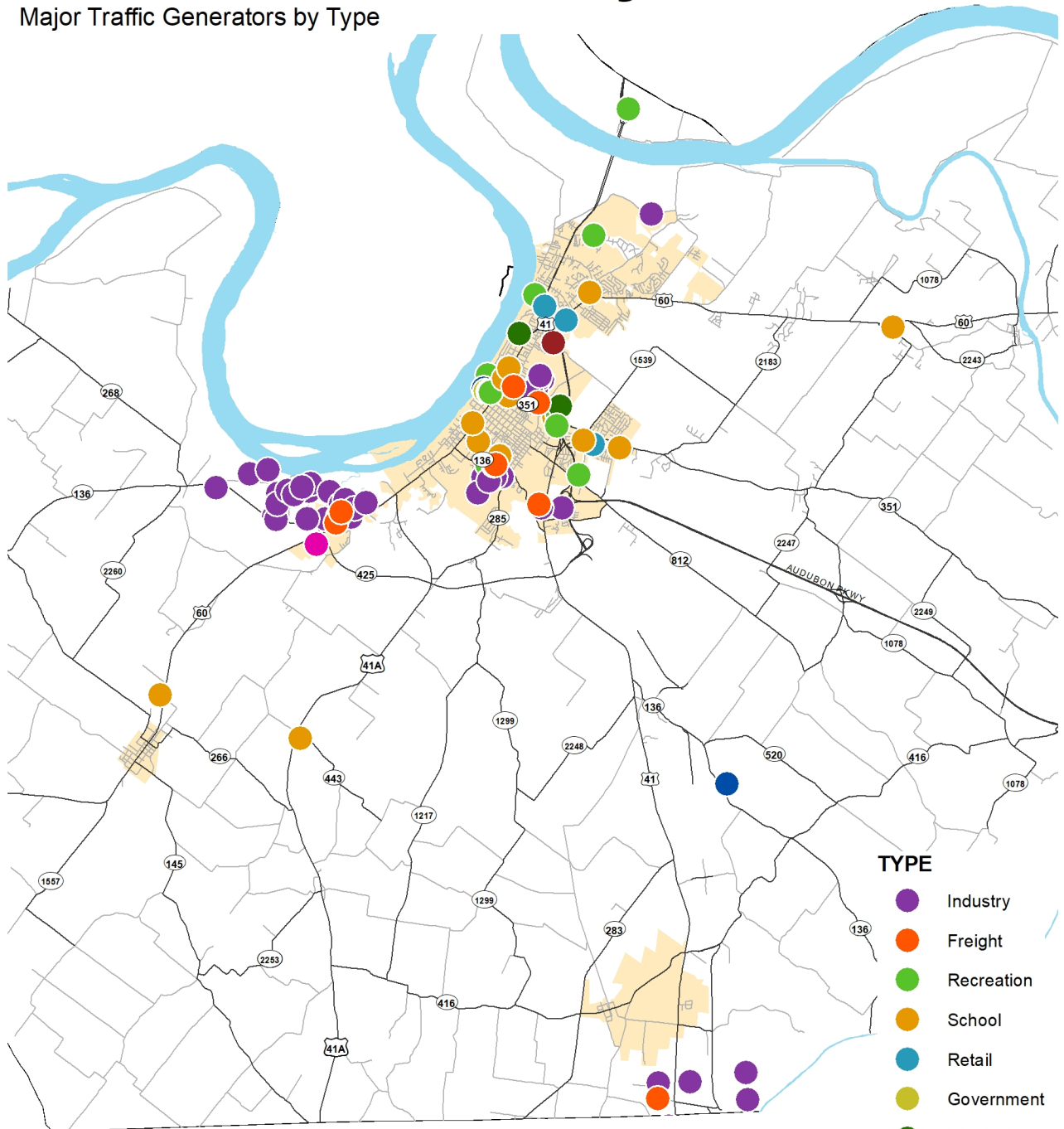
Major Traffic Generators by Type





# Henderson County

Major Traffic Generators by Type



This map was produced in cooperation with the Kentucky Transportation Cabinet.

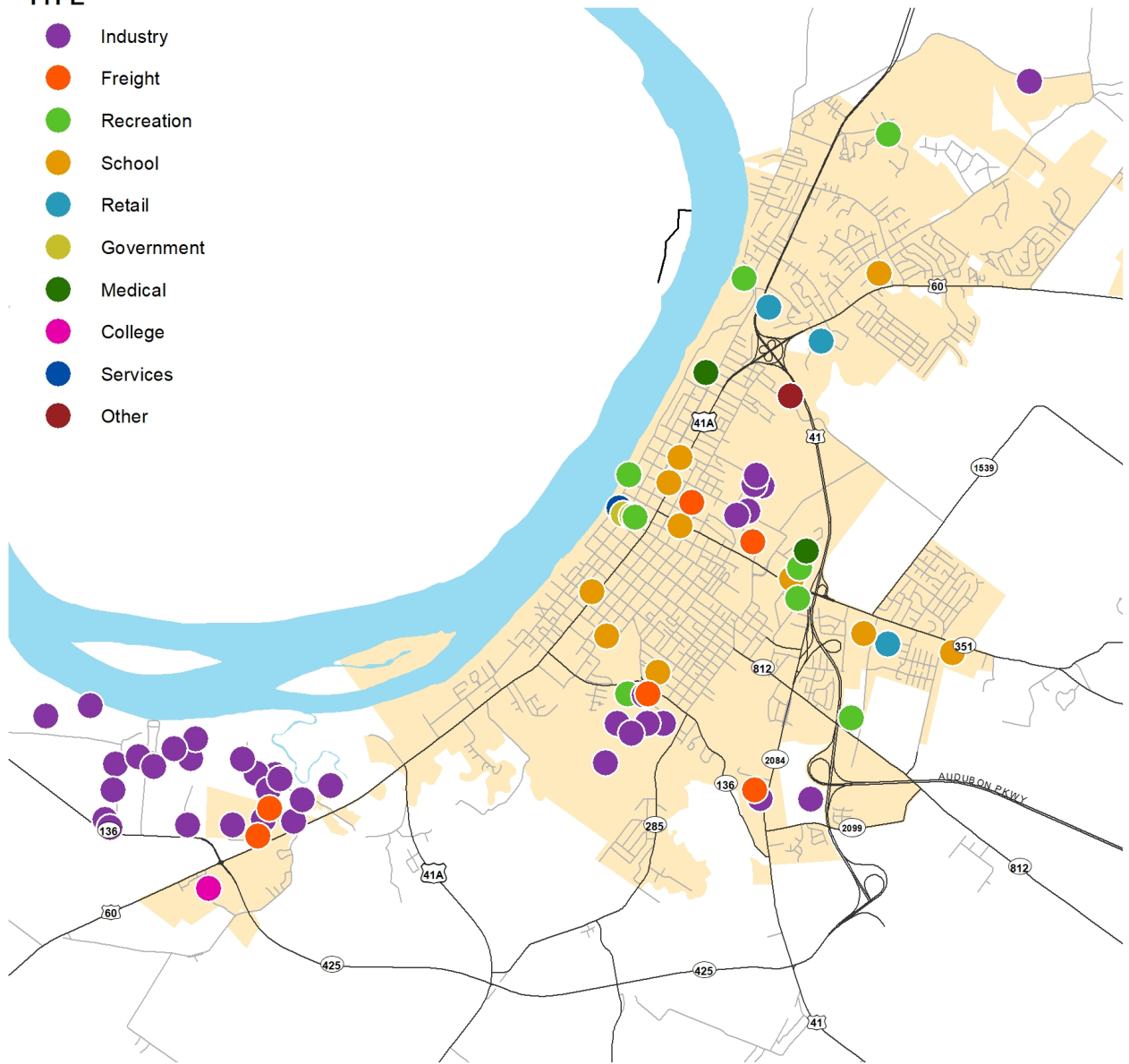
# Henderson (city)

## Henderson County

Major Traffic Generators by Type

### TYPE

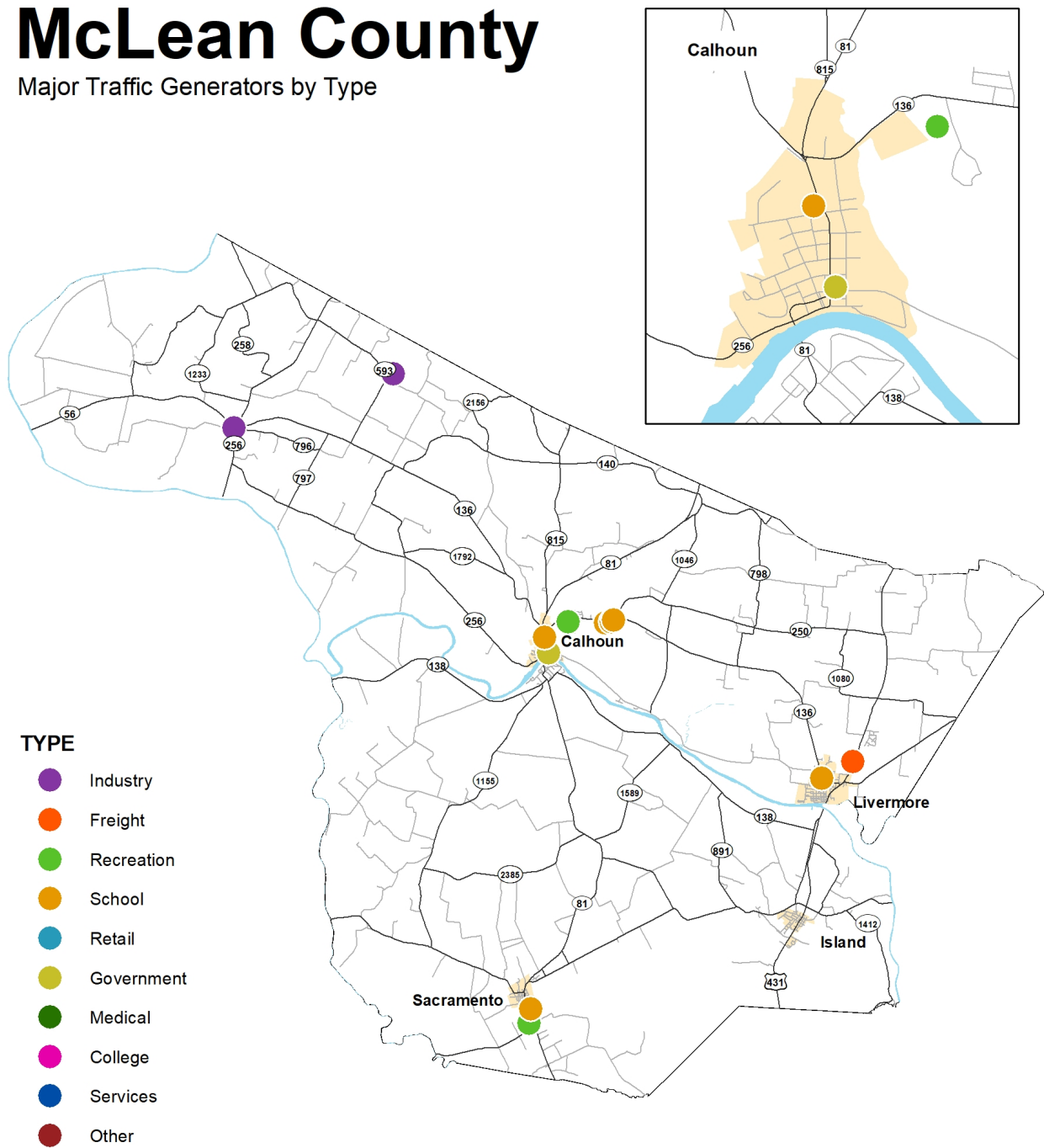
- Industry
- Freight
- Recreation
- School
- Retail
- Government
- Medical
- College
- Services
- Other



This map was produced in cooperation with the Kentucky Transportation Cabinet.

# McLean County

## Major Traffic Generators by Type



This map was produced in cooperation with the Kentucky Transportation Cabinet.









## CHAPTER 4: INTERMODAL CONNECTOR REVIEW

### 4.1 Introduction

An Intermodal Connector is defined as a highway facility providing direct access for a freight generator, shipper or port terminal (rail or river) with a major transportation thoroughfare such as an interstate highway. Currently the FHWA has identified twenty facilities on the National Highway System (NHS) Intermodal Connector listing for Kentucky. The GRADD periodically will review this listing for obvious changes in the region including facilities that have ceased operations or no longer meet FHWA criteria for listing and recommend the facility to be removed from the base list. The GRADD will also identify facilities that are not listed on the NHS Intermodal Connector Listing that meet FHWA criteria and recommend those be added to the base list. This information will be used to help identify projects to be recommended for Kentucky's Six Year Plan, the Statewide Long Range Plan, and the Unscheduled Needs List. Status as an Intermodal Connector produces viable possible funding option for designated roadway segments.

The FHWA has identified guidance criteria (Section 103 (b) of title 23, U.S.C.) for the evaluation of requests for modifications to the NHS Intermodal Connector listing. This criterion indicates how roads get placed on the NHS and how intermodal connectors can be added. There are two basic criteria for adding intermodal connectors, primary and secondary. The NHS Primary criteria are a nationwide set of criteria. Due to this Kentucky does not have many facilities listed as we do not have many Ports that could compare (for example) to the Port of Long Beach or ferries that move 1,000 passengers per day. There may be a few facilities in Kentucky that could be included based on the primary criteria, but most of Kentucky's facilities are going to be eligible under the secondary criteria. The secondary criteria include factors which underscore the importance of an intermodal facility within a specific State.

#### **Primary Criteria**

##### *Commercial Aviation Airports*

1. Passengers--scheduled commercial service with more than 250,000 annual enplanements.
2. Cargo--100 trucks per day in each direction on the principal connecting route, or 100,000 tons per year arriving or departing by highway mode.

##### *Ports*

1. Terminals that handle more than 50,000 TEUs (a volumetric measure of containerized cargo which stands for twenty-foot equivalent units) per year, or other units measured that would convert to more than 100 trucks per day in each direction. (Trucks are defined as large single-unit trucks or combination vehicles handling freight.)
2. Bulk commodity terminals that handle more than 500,000 tons per year by highway or 100 trucks per day in each direction on the principal connecting route. (If no individual terminal handles this amount of freight, but a cluster of terminals in close proximity to each other does, then the cluster of terminals could be considered in meeting the criteria. In such cases, the

handles this amount of freight, but a cluster of terminals in close proximity to each other does, then the cluster of terminals could be considered in meeting the criteria. In such cases, the connecting route might terminate at a point where the traffic to several terminals begins to separate.)

3. Passengers--terminals that handle more than 250,000 passengers per year or 1,000 passengers per day for at least 90 days during the year.

#### *Truck/Rail*

1. 50,000 TEUs per year, or 100 trucks per day, in each direction on the principal connecting route, or other units measured that would convert to more than 100 trucks per day in each direction. (Trucks are defined as large single-unit trucks or combination vehicles carrying freight.)

#### *Intercity Bus*

1. 100,000 passengers per year (boardings and deboardings).

#### *Public Transit*

1. Stations with park and ride lots with more than 500 vehicle parking spaces, or 5,000 daily bus or rail passengers, with significant highway access (i.e., a high percentage of the passengers arrive by cars and buses using a route that connects to another NHS route), or a major hub terminal that provides for the transfer of passengers among several bus routes. (These hubs should have a significant number of buses using a principal route connecting with the NHS.)

#### *Ferries*

1. Interstate/international--1,000 passengers per day for at least 90 days during the year. (A ferry which connects two terminals within the same metropolitan area should be considered as local, not interstate.)
2. Local--see public transit criteria above.

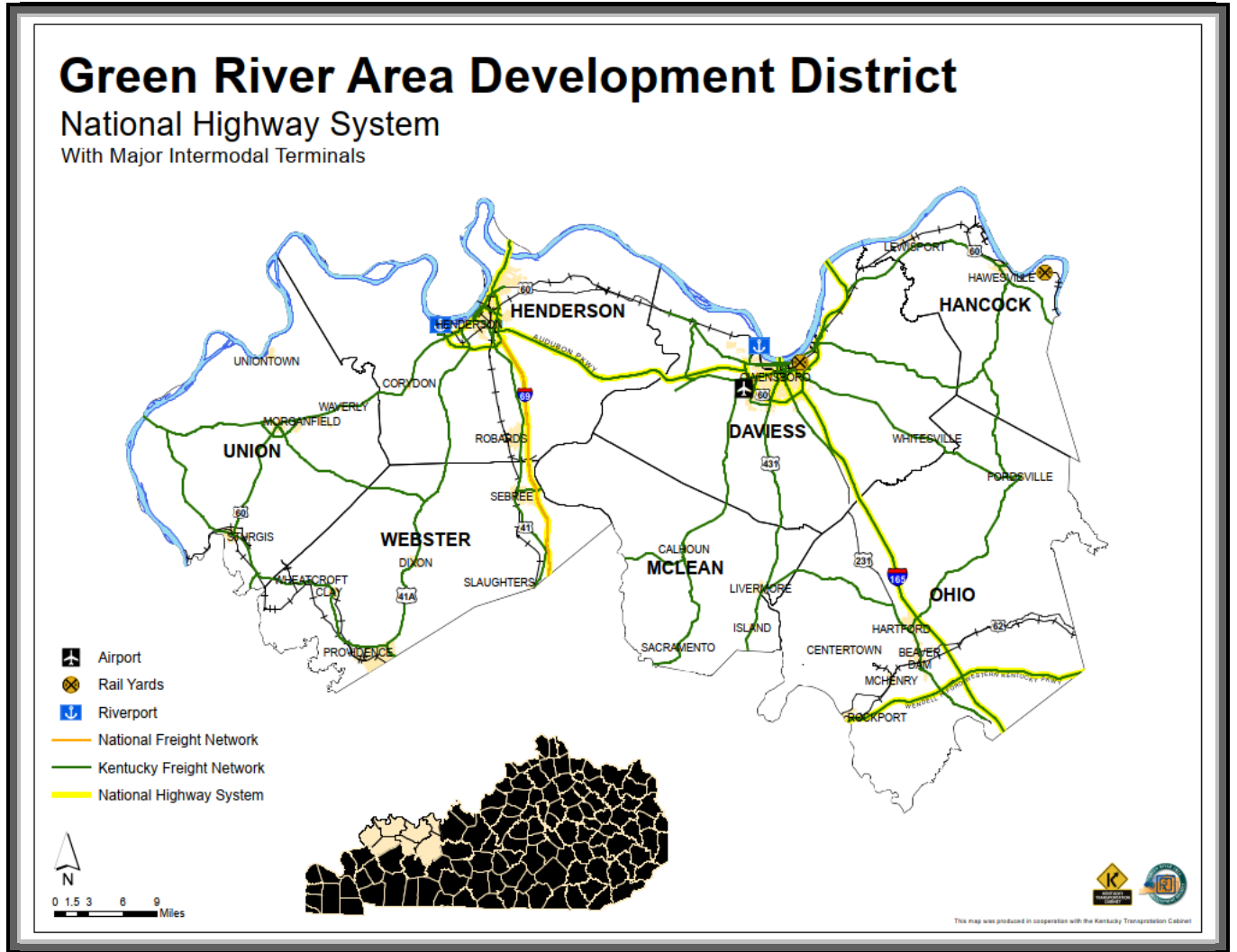
### **Secondary Criteria**

Any of the following criteria could be used to justify an NHS connection to an intermodal terminal where there is a significant highway interface:

1. Intermodal terminals that handle more than 20 percent of passenger or freight volumes by mode within a State;
2. Intermodal terminals identified either in the Intermodal Management System or the State and metropolitan transportation plans as a major facility;
3. Significant investment in, or expansion of, an intermodal terminal; or
4. Connecting routes targeted by the State, MPO, or others for investment to address an existing, or anticipated, deficiency as a result of increased traffic.



## 4.2 Map of Intermodal Connectors for GRADD



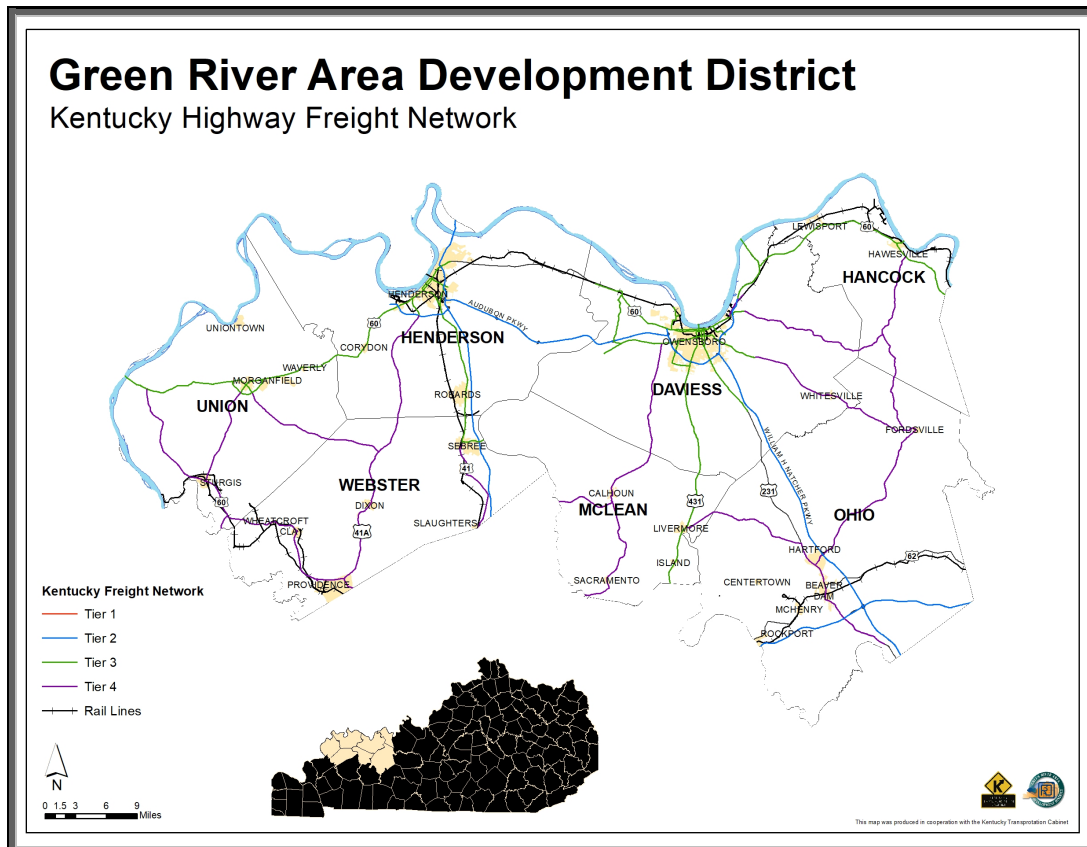
### 4.3 Kentucky Highway Freight Network

A key component for identifying criteria for the performance-based project selection process (also known as SHIFT) was the KYTC development of a state highway freight network that was representative of Kentucky's critical freight corridors. The creation of the KHFN provides the ability to identify and address freight system mobility issues that exist both presently and in the future. KYTC developed a 4-tier structure for the KHFN. The following criteria were used to develop the tier network:

- Tier 1 – National Regional Significance
- Tier 2 – Statewide Significance
- Tier 3 – Statewide Regional Significance
- Tier 4 – Local Access Significance

Each tier includes manual revisions necessary to ensure connectivity and limit to 50 miles between local KHFN access points. KYTC provides the ADD with a map of the KHFN that is used in conjunction with the NHS Intermodal Connector review along with the MFU/MTG review. The ADD utilizes the resource with the RTC to identify missing links between manufactures/distribution centers, the NHS and the KHFN. The input received from this review may be used as suggestion to KYTC for making changes to the KHFN and the KYTC list of intermodal connector needs.

### 4.4 Map of Kentucky Highway Freight Network



## **CHAPTER 5: TRUCK PARKING INVENTORY**

### **5.1 Introduction**

The GRADD maintains an inventory of existing truck parking resources for KYTC. This data allows the KYTC to apply for FHWA Truck Parking Grant Funds. These grant applications require information about available truck parking spaces and demand for said parking spaces.

Once a driver reaches 11 Hours of Service (HOS) they must stop their truck for a 10 hour period of rest. If a driver cannot find a place to park they end up driving over the HOS to get to the next parking area and risk fines if caught. This causes drivers to become very creative in where they park to get the mandatory rest. It can also create a safety issue for tired drivers.

Examples of places that drivers may attempt to use when faced with a lack of appropriate facilities:

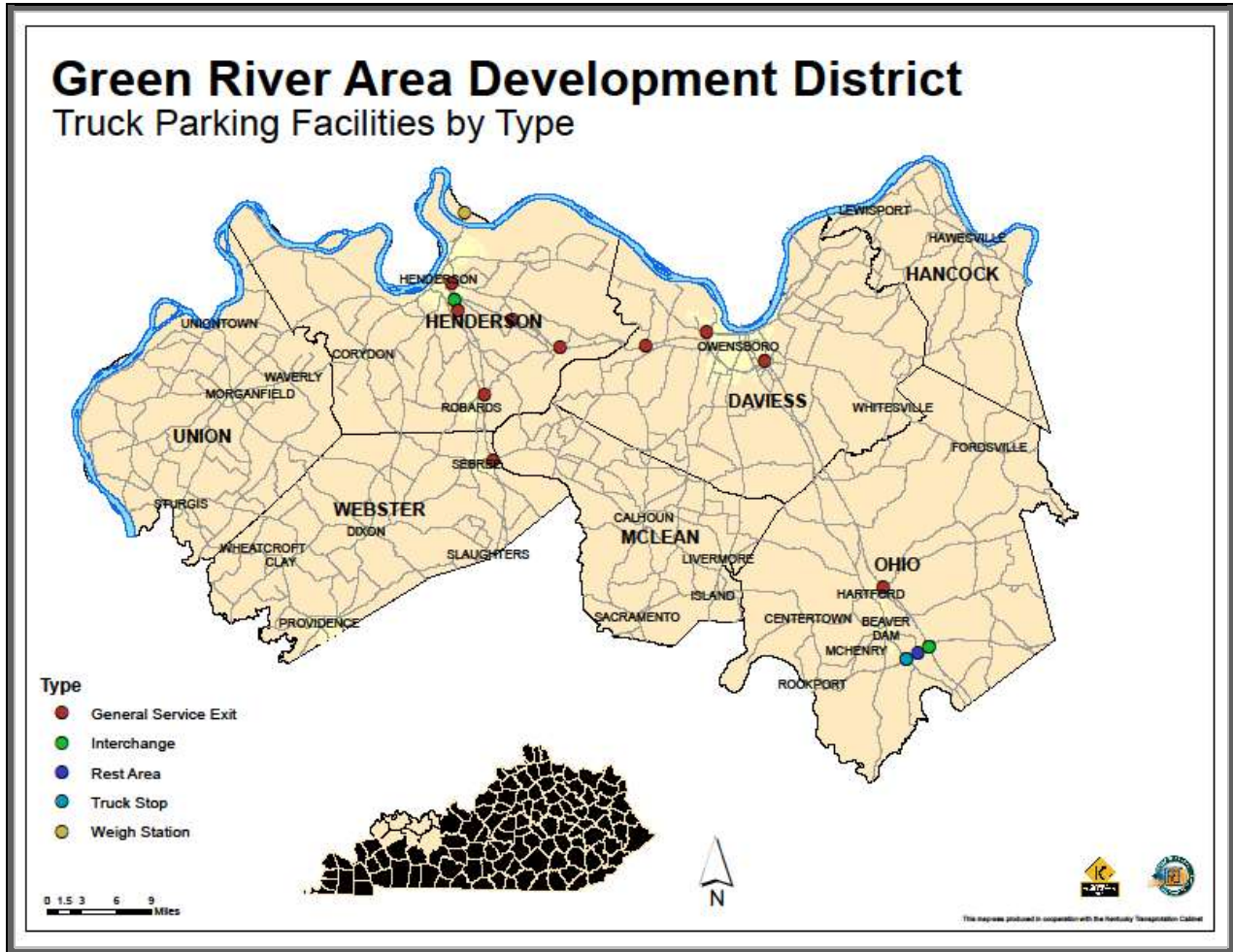
- Business parking lots (often run off by security)
- Along shoulders of roads (which tears up shoulders)
- Along exit / entrance ramps (narrows the ramps for other drivers)

Truck Parking Inventory Includes:

- Locations – Route and Milepoint and/or Landmarks
- Type of Facility – Rest Area, Weigh Station, Welcome Centers, Rest Havens, Commercial Parking Lots, etc.
- Facilities Available (if known) – Rest Rooms, Restaurants, Vending Machines
- Coordinates for latitude and longitude
- Parking Areas with greater than 20 spaces available
- Minimum threshold for number of trucks to be determined by ADD Planners Assistance Coordinators, with approval by the Division of Planning however, the number of trucks and/or spaces will not be specifically identified in this inventory. Indicators may be included as in, less than 10 trucks, more than 10 trucks, greater than 20, etc. The numbers should indicate the number of trucks and not the number of parking spaces available.

The GRADD region currently has 14 truck parking facilities identified.

## 5.2 Map of Truck Parking Inventory

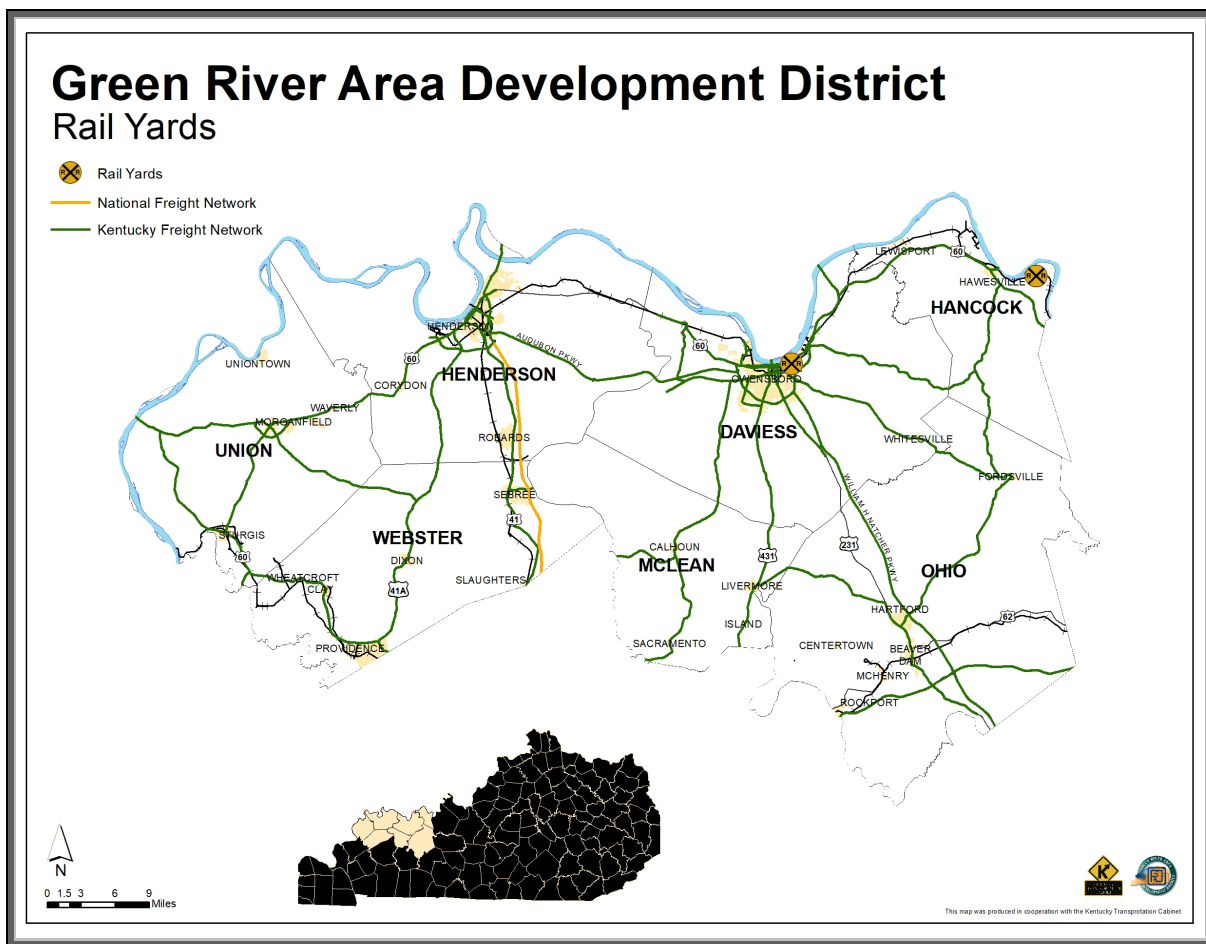


# CHAPTER 6: RAIL FREIGHT LOADING/UNLOADING FACILITIES

## 6.1 Introduction

The purpose of this inventory is to assist the KYTC in identification of rail facility locations, intermodal connectors and providing information for the statewide rail plan. This helps serve the KYTC goal of promoting the safe efficient movement of goods and services throughout the state. KYTC has GIS data on known railyards within in the state. The GRADD maintains this list of rail yards in order to know where improvements to intermodal connections may be warranted in order to promote the safe and efficient movement of goods and services.

## 6.2 Map of Rail Yard Locations



## CHAPTER 7: BICYCLE/PEDESTRIAN ASSETS

### 7.1 Introduction

The ADD works with identified communities to locate any existing bicycle or pedestrian assets or accommodations within the jurisdiction to develop spatial information accordingly. Accommodations or assets may include: location of sidewalks, crosswalks, bike lanes, etc.

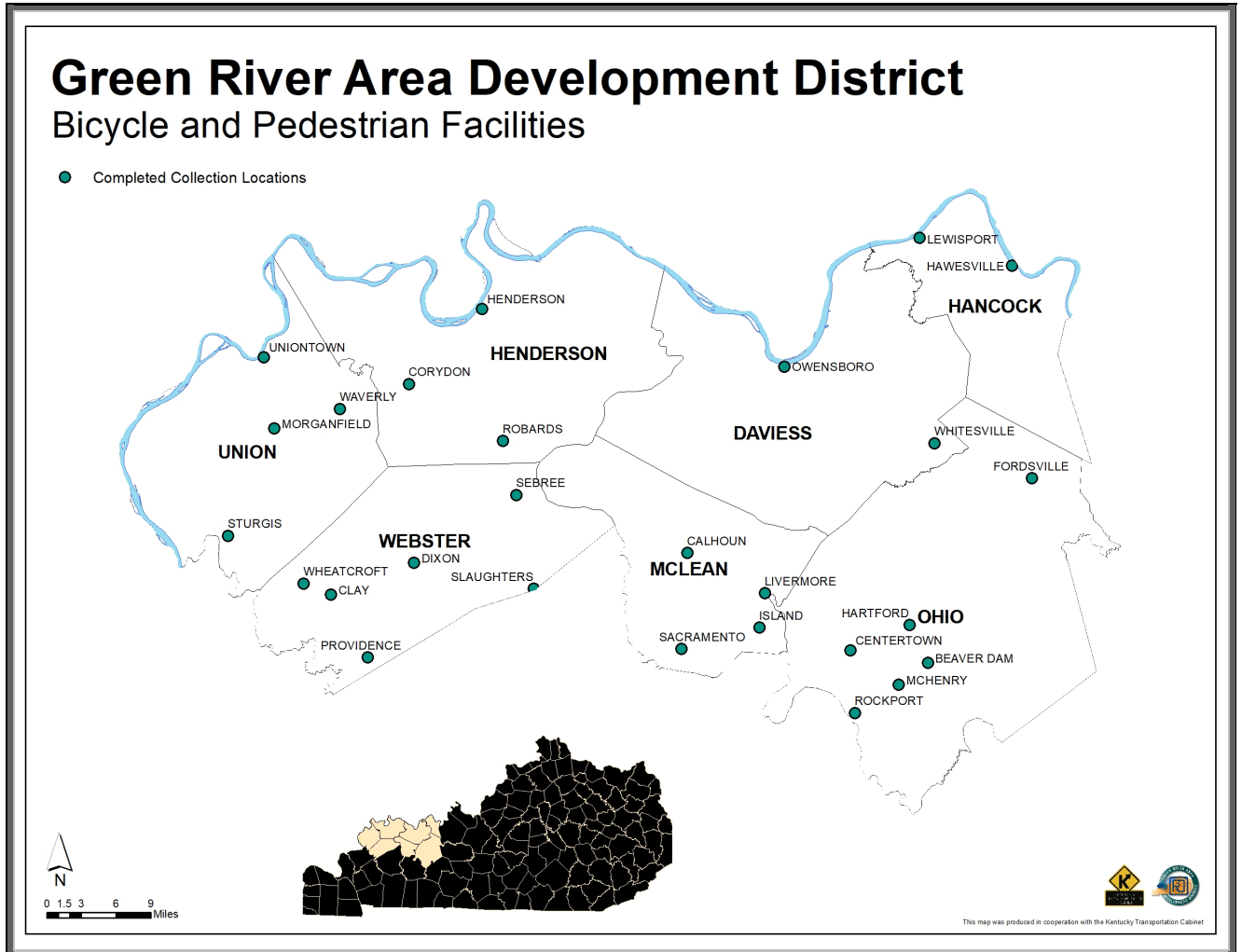
As transportation planners, we are tasked to provide recommendations on the best ways to incorporate design, operational efficiency, and better management of our transportation network. In relationship to bicycle and pedestrian facilities, often time we don't have accurate (if any) data on where current facilities are located. To better consider and recommend the inclusion of future facilities within ALL types of road work, we need to know where logical connections may be located. We need to know where current missing links may be located in a downtown sidewalk network. We need to identify opportunities for connections of bicycle facilities; both locally and regionally.

In 2014 the Cabinet partnered with the ADD agencies to begin the start of a more complete statewide bicycle and pedestrian GIS inventory database of all pedestrian and bicycling facilities/assets. These facilities include anything that the bike/pedestrian public uses for non-motorized transportation in the city or community such as sidewalks, bike lanes, bike paths, or separated multi-use paths.

The main objective is to better serve the non-motorized transportation needs of our public. Our common goals of providing a safer, more efficient, environmentally sound, and fiscally responsible complete transportation system that helps deliver better economic opportunities and enhancing the quality of life in Kentuckians.

The bike/pedestrian assets collected by GRADD is portrayed in figure 7.2.

## 7.2 Map of Completed Collection Locations



## CHAPTER 8: TRANSPORTATION TERMS AND ACRONYMS

### 8.1 Glossary of Terms and Acronyms

#### A

##### **Adequacy Rating**

Adequacy Rating is a numerical score from 0 to 100 evaluating the current condition of a roadway segment based on congestion, safety, and pavement condition.

##### **American Association of State Highway and Transportation Officials (AASHTO)**

AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia and Puerto Rico. It represents all five transportation modes: air, highways, public transportation, rail and water. Its primary goal is to foster the development, operation and maintenance of an integrated national transportation system.

##### **American Public Transit Association (APTA)**

The American Public Transportation Association (APTA) is an international organization that has been representing the transit industry for over 100 years, since 1882. Over 90% percent of passengers using transit in the U.S. and Canada are carried by APTA members. APTA includes bus, rapid transit and commuter rail systems, and the organizations responsible for planning, designing, constructing, financing and operating transit systems. In addition, government agencies, metropolitan planning organizations, state departments of transportation, academic institutions, and trade publications are also part of APTA.

##### **Americans with Disabilities Act of 1990 (ADA)**

A federal law prohibiting discrimination against people with disabilities. Requires public entities and public accommodations to provide accessible accommodations for people with disabilities.

##### **Area Development District (ADD)**

Fifteen regional planning agencies mandated by state legislation. The fifteen ADDs in Kentucky are the regional planning agencies through which various federal and state programs are administrated. The state's rural transportation planning program is administered and facilitated through the fifteen Area Development Districts.

##### **Arterial**

A class of roads serving major traffic movements (high-speed, high volume) for travel between major points.

##### **Association of Metropolitan Planning Organizations (AMPO)**

AMPO is a nonprofit, membership organization established in 1994 to serve the needs and interests of Metropolitan Planning Organizations (MPOs) nationwide. AMPO offers its members MPOs technical assistance and training, conferences and workshops, frequent print and electronic communications, research, a forum for transportation policy development and coalition building, and a variety of other services



## **B**

### **Bicycle Facilities/Amenities**

A general term denoting provisions made to accommodate or encourage bicycling, including parking facilities, shared roadways, bikeways, etc.

### **Bicycle Lane (Bike Lane)**

A portion of a roadway which has been designated by striping, signing and pavement markings for the exclusive use of bicyclists.

### **Bicycle Route (Bike Route)**

A segment of a system of bikeways designated by the jurisdiction having the authority with appropriate directional and informational markers, with or without a specific bicycle route number. See also signed, shared roadway.

### **Bikeway**

A facility designed to accommodate bicycle travel for recreational or commuting purposes. Bikeways are not necessarily separated facilities; they may be designed and operated to be shared with other travel modes.

## **C**

### **Census Defined Urbanized Area (UZA)**

UZA is defined by the Bureau of the Census as being comprised of "... one or more central places/cities, plus the adjacent densely settled surrounding territory (urban fringe) that together has a minimum of 50,000 persons." The urban fringe consists of a contiguous territory having a population density of at least 1,000 per square mile. The UZA provides population totals for transportation-related funding formulas that require an urban/rural population number.

### **Coal Haul**

Coal Haul is those routes over which coal was reported transported by truck during the previous calendar year.

### **Collector**

A roadway linking traffic on local roads to the arterial road network.

### **Continuous Highways Analysis Framework (CHAF)**

CHAF is an application enabling users to collect, track, and analyze identified transportation needs. CHAF also provides a means to sponsor, score and rank projects as part of the Strategic Highway Investment Formula for Tomorrow (SHIFT).

### **Critical Crash Rate Factor (CRF)**

Critical Crash Rate Factor-the quotient showing the ratio of the crash rate for a roadway spot or segment divided by the critical crash rate for that roadway spot or segment based on roadway type, number of lanes, and median type. The critical rate for a roadway type is determined annually by the Kentucky Transportation Center.

## E

### **Environmental Justice (EJ)**

Environmental Justice; a term used to encapsulate the requirements of federal Executive Order 12898 which state, in part, that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations“ and hence to ensure equal environmental protection to all groups potentially impacted by a transportation development project.

### **Extended Weight**

Extended Weight is a designated highway network over which certain vehicular weight limits are relaxed for coal haul vehicles.

## F

### **Federal Highway Administration (FHWA)**

The division of the United States Department of Transportation responsible for funding highway policy and funding.

### **Federal Transit Administration (FTA)**

A Division of the United States Department of Transportation (USDOT) responsible for funding transit planning and programs.

### **Fixing America’s Surface Transportation Act (FAST Act)**

Enacted in December 2015 as Public Law 114-94. The FAST Act maintains a focus on safety, keeps intact the established structure of the various highway-related programs managed by FHWA, continues efforts to streamline project delivery and, for the first time, provides a dedicated source of federal dollars for freight projects.

### **Functional Classification**

A system of classifying rural and urban roadways by use and level of traffic volume: interstates, arterials, collectors, and local roads are the chief classes.

## G

### **Geographic Information System (GIS)**

A GIS is a computerized mapping technology that allows the creation and overlay of various geographic features, commonly linked to socioeconomic and other data.

## H

### **Highway District Office (HDO)**

Kentucky has twelve district highway offices located throughout the state.

### **Highway Information System (HIS)**

Highway Information System: a comprehensive database of highway inventory information maintained by, and in many cases collected by, the KYTC Division of Planning.

## I

### **Intermodal**

The ability to connect and the connections between modes of transportation.

### **Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)**

Legislative initiative by the U.S. Congress that restructured funding for transportation programs. ISTEA authorized increased levels of highway and transportation funding from FY92-97 and increased the role of regional planning commissions/MPO in funding decisions. The Act also required comprehensive regional and statewide long-term transportation plans and places and increased emphasis on public participation and transportation alternatives. Many of the programs that began with ISTEA have been continued through the Transportation Equity Act for the 21st Century (TEA-21), which was signed into law June of 1998.

### **International Roughness Index (IRI)**

International Roughness Index is a measure of pavement roughness.

## K

### **Kentucky Transportation Cabinet (KYTC)**

KYTC is the state agency responsible for transportation funding, planning and programs at the statewide level.

## L

### **Level of Service (LOS)**

This term refers to a standard measurement used by transportation officials which reflects the relative ease of traffic flow in a scale of A to F, with free-flow being rated LOS-A and highly congested conditions rated as LOS-F.

### **Local Roads**

Local roads carry the lowest traffic volumes and typically connect with other local roads and collectors (i.e., internal subdivision roads). This class of roadway is generally excluded from Federal funding.

## M

### **Metropolitan Planning Organization (MPO)**

The organizational entity designated by law with responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more in population. MPOs are established by agreement of the Governor (or Governors) and units of local government which together represent 75% of the affected population of an urbanized area.

### **Metropolitan Transportation Plan (MTP)**

A federally required long-range transportation plan for a minimum period of twenty years. The federal legislation requires that a plan be developed for at least a twenty year period and must be financially balanced. This document, which was first produced in Kentucky in 1995 and updated in 1999, included both policy and projects. The 2006 Plan is a policy only plan.

**Metropolitan Statistical Area (MSA)**

An area defined by the Office of Management and Budget as a Federal statistical standard. An area qualifies for recognition as an MSA if it includes a city of at least 50,000 population or an urbanized area of at least 50,000 with a total metropolitan area population of at least 100,000.

**Mile Point (MP)**

Mile Point; used, along with county and route number, to identify location of a highway segment.

**N****National Highway (NHS)**

A network of interstate and state highways which serve longer distance mobility needs, are important to the nation's economy, defense, and mobility, and are eligible for matching federal funds for capital improvement.

**National Truck Network (NN)**

National Truck Network are those routes on the state maintained road system which have been specifically designated by KYTC and approved by FHWA for use by motor vehicles (trucks) with increased dimensions (e.g., 102 inches wide, 13-6" high, semi trailers up to 53 feet long, trailers 28 feet long-not to exceed two (2) trailers per truck).

**P****Pedestrian**

A person who travels on foot or who uses assistive devices, such as a wheelchair, for mobility.

**Poverty Level**

The minimum level of money income adequate for families of different sizes, in keeping with American consumption patterns. These levels are determined annually by the U.S. government on the basis of an index originated by the U.S. Social Security Administration and released biennially by the U.S. Census Bureau for states and counties.

**Project Identification Form (PIF)**

An identification form developed by KYTC Division of Planning for all transportation projects that contains problem statement, project description, specific geometric and analytical data, cost estimates, and assumptions for the project. The form is prepared when the transportation need is first noted and the information is entered into the Unscheduled Project List database and is updated periodically. Maps and pictures for the project may also be attached.

## **R**

### **Pavement Rideability Index (RI)**

A general measure of pavement conditions. The RI is based on a scale of 0 to 5, with 0 being poor and 5 being very good.

### **Right-of-Way (ROW)**

A ROW is a priority path for the construction and operation of highways, light and heavy rail, railroads, etc. The ROW phase of a project is the time period in which land in the right-of-way will be purchased.

## **S**

### **Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users**

(SAFETEA-LU) The federal transportation reauthorization legislation, enacted August 10, 2005, as Public Law 109-59. SAFETEA-LU authorizes the Federal surface transportation programs for highways, highway safety, and transit for the 5 year period 2005-2009 and continued many of the provisions of TEA-21, but also further emphasized and elevated the importance of safety and security, further coordination of statewide planning with the metropolitan areas, consultation with local elected officials, and continued public involvement.

### **Scenic Byways**

These routes are nominated by local support groups and designated by the Transportation Cabinet because they are deemed to have roadside or view sheds of aesthetic, historical, cultural, natural, archaeological, and/or recreational value worthy of preservation, restoration, protection, and or enhancement.

### **Shared Use Path**

A pathway physically separated from motor vehicle traffic and used by bicyclists and pedestrians. Generally, shared use paths serve corridors not served by streets and highways to minimize conflict with cross-street traffic.

### **Six Year Highway Plan (SYP)**

A short-range highway plan of projects to be implemented by phase and funding levels for a six-year period in Kentucky. This plan is mandated by Kentucky Legislation and is updated and approved by the Kentucky Legislature every two years.

### **Small Urban Area (SUA)**

Small Urban Area; population centers of between 5,000 and 50,000 persons.

### **State Implementation Plan (SIP)**

A plan mandated by the Clean Air Act (CAA) and developed by each state that contains procedures to monitor, control, maintain, and enforce compliance with National Ambient Air Quality Standards (NAAQS).

### **Statewide Transportation Improvements Program (STIP)**

A short term transportation planning document covering at least a three year period and updated at least every two years. STIPs are created in conjunction with MPOs and the MPO's TIP is incorporated into the state's STIP. The STIP includes a priority list of projects to be carried out in each of the three years. Projects included in the STIP must be consistent with the long term transportation plan, must conform to regional air quality implementation plans, and must be financially constrained (achievable within existing or reasonably anticipated funding sources).

### **Strategic Highway Corridor Network (STRAHNET)**

A federal highway designation of selected highways to be used for certain national emergencies.

### **Strategic Highway Investment Formula for Tomorrow (SHIFT)**

SHIFT is a data-driven, objective and collaborative approach to determine the state's transportation funding priorities. It is a prioritization model utilized to bring balance and dependability to Kentucky's Highway Plan. The key elements of SHIFT: it is built on real data, it is objective, it is open and transparent, it is collaborative – engaging the input of local and district leaders in transportation, it is dependable.

### **System Classification/Functional Classification**

The categorization of transportation facilities by their actual or expected use characteristics. The distinction is usually made on the basis of access vs. mobility, where lower order roadways are used primarily for access to individual land uses, while higher order roadways are used primarily for travel between towns or cities.

### **Surface Transportation Program (STP)**

A categorical funding program included under ISTEA and continued under TEA-21 and SAFETEA-LU for transportation roadway projects. Funds may be used for a wide variety of purposes, including: roadway construction, reconstruction, resurfacing, restoration and rehabilitation; roadway operational improvements; capital costs for transit projects; highway and safety.

## **T**

### **Traffic Volume**

Number of vehicles passing a given point over a period of time.

### **Transportation Enhancement Funds (TE)**

A federal funding category for projects that add community or environmental value to any active or completed transportation project. For instance, sidewalk, landscaping and bikeway projects are some of the ways in which a roadway could be enhanced.

### **Transportation Equity Act of the 21st Century (TEA-21)**

A law enacted in 1998, TEA-21 authorized federal funding for transportation investment for the time period spanning fiscal year 1998 to fiscal year 2003. Approximately \$218 billion in funding was authorized, the largest amount in history, and is used for highway, transit, and other surface transportation programs.

### **Transportation Improvement Program (TIP)**

Transportation Improvement Program is a document prepared by the MPO. It contains a prioritized list of projects within the metropolitan area for the next four years. This document identifies the projects for inclusion into the STIP. This document must be financially constrained and must be a direct subset of the area's Metropolitan Transportation Plan.

## **U**

### **Unscheduled Project List (UPL)**

UPL-Unscheduled Project List (formerly Unscheduled Needs List, or UNL); a list, maintained by the KYTC Division of Planning of potential transportation projects, with project data derived from the KYTC Project Identification Form.

### **Urban Area (UA)**

The Census Bureau defines "urban" for the 1990 census as comprising all territory, population, and housing units in urbanized areas and in places of 2,500 or more persons outside urbanized areas. More specifically, "urban" consists of territory, persons, and housing units in: 1.) Places of 2,500 or more persons incorporated as cities, villages, boroughs (except in Alaska and New York), and towns (except in the six New England States, New York, and Wisconsin), but excluding the rural portions of "extended cities;" 2.) Census designated places of 2,500 or more persons; and 3.) Other territory, incorporated or unincorporated, included in urbanized areas. Territory, population, and housing units not classified as urban constitute "rural." This boundary is the line of demarcation for rural/ urban functional classification on roadways.

## **V**

### **Volume to Service Flow Ratio (V/SF)**

Volume to Service Flow ratio; a quotient showing the ratio of a facility's actual vehicular traffic volume to its theoretical maximum potential vehicular traffic volume; a ratio higher than about 0.6 indicates traffic volumes are approaching congested conditions. This is also referred to V/C or Volume to Capacity ratio.