

RADCLIFF/ELIZABETHTOWN
METROPOLITAN PLANNING ORGANIZATION

2045
METROPOLITAN TRANSPORTATION PLAN



Planning for the transportation
needs of the region.

January 2020



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Radcliff/Elizabethtown Metropolitan Transportation Plan

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2045 METROPOLITAN TRANSPORTATION PLAN TABLE OF CONTENTS

Chapter 1. Introduction

Purpose of the Metropolitan Transportation Plan (MTP)	1
The Metropolitan Planning Organization	1
• Figure 1 – MPO Planning Boundary	3
Metropolitan Planning Process	4
Federal Requirements	4
Goals and Objectives	5
Development and Content of the MTP	7
Air Quality Attainment	8
Performance-Based Planning	8
Consistency with Other Plans and Programs	9

Chapter 2. Public Involvement and Agency Consultation

Technical Advisory Committee (TAC)	10
Public Survey	10
Agency Consultation	11
Public Review & Comment on Draft MTP	11

Chapter 3. Existing Transportation System

Roadways and Bridges	12
• Map 1 – National Highway System	16
• Map 2 – Average Daily Traffic	19
• Map 3 – Trucks as a Percentage of Daily Traffic	21
• Map 4 – Crash Density	23
Public Transportation	24
Airports	25
Waterways	26
Railroads	26
Overview of Performance Measures	27

Chapter 4. Socioeconomic, Land Use, and Environmental Issues

Demographics	30
Title VI Analysis	32
Land Use and Development	33
Environmental and Cultural Resource Features	34
Environmental Mitigation Measures	35

Chapter 5. Model Technical Document Summary

Overview	37
Model Description	37
Traffic Model Results	39

Chapter 6. Plan Development

Goals and Objectives	40
KYTC Highway Plan	40
KYTC Continuous Highway Analysis Framework (CHAF)	40
Evaluation & Scoring Process for Highway Projects	41
Public Feedback	42
Past MPO Studies	42

Chapter 7. 2045 Metropolitan Transportation Plan

Financial Constraint Analysis	46
2045 Transportation Plan	47
Highway Improvements	47
• Table 1. Highway Improvements, 2018-2024	48
• Table 2. Highway Improvements, 2025-2045	50
• Highway Maps	54
Transportation System Operations and Maintenance	59
Grouped Projects	59
• Table 3. Grouped Projects	61
Pedestrian & Bicycle Facility Improvements	62
• Table 4 – Elizabethtown Bicycle Facility Improvements	63
• Elizabethtown Proposed Bikeway Connections Map	64
• Table 5 – Radcliff/Vine Grove Bicycle Facility Improvements	65
• Radcliff/Vine Grove Proposed Bikeway Connections Map	67
• Table 6 – Meade County Bicycle Facility Improvements	68
• Meade County Proposed Bikeway Connections	69
• Table 7 – Elizabethtown Pedestrian Facility Improvements	70
• Elizabethtown Proposed Pedestrian Facilities Map	71
• Table 8 – Radcliff/Vine Grove Pedestrian Facility Improvements	71
• Radcliff/Vine Grove Proposed Pedestrian Facilities Map	72
• Table 9 – Brandenburg/Meade County Pedestrian Facility Improvements	72
• Brandenburg/Meade County Propose Pedestrian Facilities Map	73
Public Transportation Improvements	73
• Propose Bus Routing Map	75
• Table 10 – Proposed Annual Operating Costs – Public Transportation System	78
Airport	78
• Table 11 – Airport Improvements	78
Rail	78
Riverport	79
Freight	79
Transportation Alternatives Program (TAP)	80
• Table 12 – TAP Projects	80

APPENDICES

Appendix A – Policy Committee & Technical Advisory Committee Membership Lists	
Appendix B – Socioeconomic Data	
Appendix C – MPO Public Survey Results	



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**RESOLUTION OF THE POLICY COMMITTEE OF THE
RADCLIFF/ELIZABETHTOWN METROPOLITAN PLANNING ORGANIZATION
APPROVING THE
2020-2045 METROPOLITAN TRANSPORTATION PLAN**

WHEREAS, Section 134, Title 23, USC requires a continuing comprehensive transportation planning process be carried on cooperatively in areas of more than 50,000 population and that the urban transportation planning process shall include development of a 20 year, fiscally balanced plan of transportation improvement projects; and

WHEREAS, the Policy Committee is the official decision-making body of the Radcliff/Elizabethtown Metropolitan Planning Organization (MPO) for the Radcliff/Elizabethtown Urbanized Area, and is responsible for developing a Transportation Plan; and

WHEREAS, the 2020-2045 Metropolitan Transportation Plan was developed by the Radcliff/Elizabethtown MPO and reviewed by the Kentucky Transportation Cabinet and appropriate federal, state and local officials; and

WHEREAS, the transportation planning process is being carried on in conformance with all Federal requirements and has been so certified; and

WHEREAS, the Radcliff/Elizabethtown Urbanized Area has been found to be in attainment of national air quality standards;

THEREFORE BE IT RESOLVED, that the MPO Policy Committee, at its regular public meeting of January 9, 2020, approves the 2020-2045 Metropolitan Transportation Plan for the Radcliff/Elizabethtown Urbanized Area.

Harry L. Berry, Chairperson
Hardin County Judge/Executive

January 9, 2020

Date



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Chapter 1

Introduction



1. Introduction

Purpose of the Metropolitan Transportation Plan (MTP)

The Metropolitan Transportation Plan, hereafter referred to as the MTP, is the cornerstone document of the metropolitan transportation planning process. Transportation legislation lists the development and maintenance of the MTP as a core function of a Metropolitan Planning Organization (MPO). The legislation directs the MPOs to develop and update a multimodal MTP for the metropolitan area covering a planning horizon of at least 20 years. The MTP presents a focused approach for regional transportation planning. Goals and objectives are defined for the development of the transportation system. These provide an avenue for transportation policies, projects, and solutions. Components of the MTP include identification of existing regional transportation issues, projections of future transportation demand for regional transportation systems, and long-term, fiscally constrained transportation planning strategies for the year 2045. Projects are analyzed and prioritized based reasonably available funding estimates. The MTP is multimodal, and it includes an analysis of the transportation network as a whole with chapters dedicated to roadways, public transportation, and bicycle and pedestrian facilities. Overall, the MTP is a regional document that defines the course for transportation investment over the next 25 years.

Metropolitan Transportation Planning Process

The Metropolitan Planning Organization

A Metropolitan Planning Organization (MPO) is a federally mandated transportation policy-making body that is made up of representatives from local governments and transportation agencies who have authority and responsibility within the metropolitan planning area (MPA).

With the passage of the Federal-Aid Highway Act of 1962, Congress made metropolitan transportation planning a condition for the receipt of federal funds for transportation projects in urban areas with a population of 50,000 or greater. The Radcliff/Elizabethtown MPO was established in 2003. Following the 2000 Census, the Census Bureau designated the Radcliff/Elizabethtown area as an urbanized area, thus, requiring the formation of an MPO for the following communities:

- Elizabethtown
- Radcliff
- Vine Grove
- Fort Knox
- Portions of Unincorporated Hardin and Meade Counties

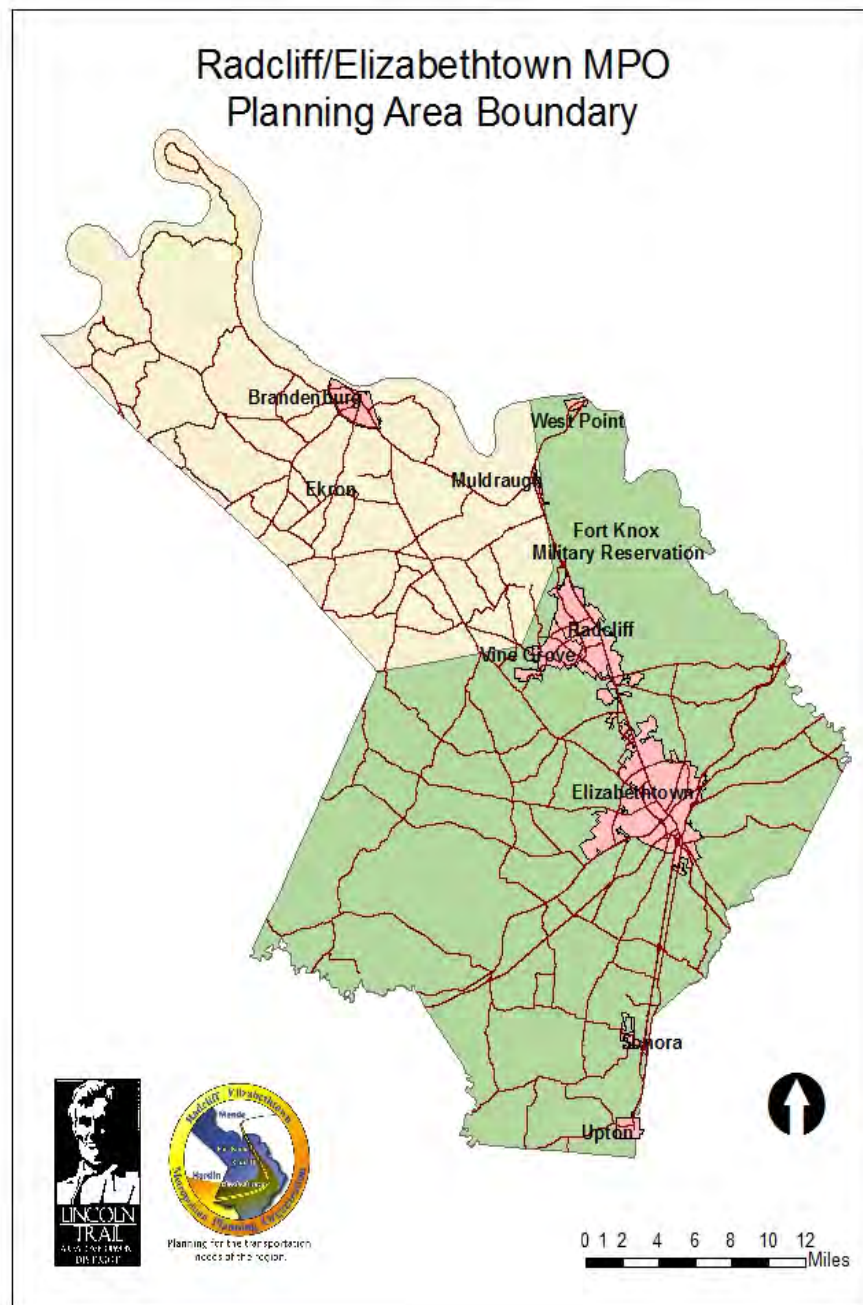


The Lincoln Trail Area Development District (LTADD) was designated as the administrative agency for the Radcliff/Elizabethtown MPO in 2003 by the Commonwealth of Kentucky, with approval by the United States Department of Transportation.

For simplification purposes, once established, the Radcliff/Elizabethtown MPO set its metropolitan planning area (MPA) to include all of Hardin and Meade counties. Hardin County includes the urbanized areas of Radcliff and Elizabethtown, and the incorporated cities of Sonora, Upton, West Point, and Vine Grove. Meade County includes the county seat of Brandenburg, and the incorporated cities of Ekron and Muldraugh. The MPO planning area also includes the Fort Knox Military Reservation. See Figure 1 below.



Figure 1. MPO Planning Boundary



**Metropolitan Planning Process**

Metropolitan transportation planning is the process of examining travel and transportation issues and needs in metropolitan areas. It explores connections between mobility, multi-modal transportation systems, environmental conditions, land use, and safety. It includes a demographic analysis of the metropolitan planning area, as well as travel patterns and trends. The planning process includes an analysis of alternatives to meet projected future demands, and for providing a safe and efficient transportation system that meets mobility needs while not creating adverse impacts to the physical environment.

The Federal-Aid Highway Act of 1962, and those that have followed, encouraged a continuing, cooperative, and comprehensive (3-C) transportation planning process. This 3-C process is conducted between MPOs, states, and public transit providers in these urban areas. The MTP specifically incorporates the 3-C planning process because it evaluates all transportation modes (Comprehensive), coordinates with local, state, federal, and private agencies and individuals (Cooperative), and anticipates future needs with the long-range (25 year) approach (Continuing).

In addition to conducting the 3-C planning process and maintaining the MTP, MPOs are responsible for carrying out additional provisions of the current federal transportation legislation. These responsibilities include: regional transportation planning involving the public, project selection, and alternative evaluation within the planning area, soliciting, prioritizing, and developing a 4-year Transportation Improvement Program (TIP), and developing an annual Unified Planning Work Program (UPWP).

Federal Requirements

As required by federal law, the MPO must prepare and update a Metropolitan Transportation Plan (MTP) for the transportation planning area. Aside from ensuring that the metropolitan transportation planning process is a 3-C process, the MTP must consider and implement projects, strategies, and services that will address the following ten (10) planning factors:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and nonmotorized users.
3. Increase the security of the transportation system for motorized and nonmotorized users.
4. Increase accessibility and mobility for people and freight.



5. Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system for all modes.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
10. Enhance travel and tourism.

Goals and Objectives

The MPO's Goals and Objectives are based on the eight (8) planning factors in the federal transportation legislation, Fixing America's Surface Transportation (FAST) Act. The goals and objectives provide focus and direction for the MPO's decision-making process. The goals and objectives have served as a guide throughout the process of updating the MTP. They were most importantly utilized to evaluate and rank projects to determine the projects to be included in the 2040 MTP. The listing of goals and objectives follows below.

Radcliff/Elizabethtown Metropolitan Transportation Plan Goals and Objectives

Vision

The vision of the Radcliff/Elizabethtown Metropolitan Planning Organization is to provide a safe and efficient transportation system that is inclusive of all modes of transportation and enhances the quality of life of the citizens of this region.

Transportation Goals & Objectives

1. Promote Transportation Safety

- Reduce the number and severity of traffic accidents by improving existing and potential high crash locations
- Improve substandard roadway geometrics where necessary
- Support and/or undertake public education programs to emphasize safety and promote safe driving practices
- Provide improved conditions to enhance emergency services

2. Preserve Existing Transportation Facilities & Systems



- Consider costs and benefits of improvements in the MPO planning process
- Emphasize reconstruction and upgrades to existing highway systems
- Apply access management principles to aid in preserving the existing highway network
- Identify and implement minor construction and traffic operational improvements to improve traffic flow and safety

3. Provide an Efficient Transportation System

- Reduce traffic congestion and improve travel times in the region
- Plan for both existing and future travel demand
- Promote cost efficiency in the implementation and/or operation of transportation facilities and/or improvements
- Encourage the implementation of access management policies to improve the overall efficiency of the transportation system
- Improve the overall capacity of the highway network

4. Enhance Connections Between Transportation Systems

- Provide for frequent and convenient transfer between all modes of transportation
- Where justified, provide new highway connections to provide improved access and mobility for the overall transportation system in the area
- Promote improved access to intermodal transportation facilities

5. Support Community Development & Economic Growth

- Provide transportation service for areas of new growth and potential development
- Provide transportation service to aid in preserving existing communities and developments
- Where possible, provide transportation improvements to areas experiencing economic decline

6. Increase access and mobility for the movement of freight

- Provide new or improved transportation options and/or connections for economic centers that depend on freight

7. Provide a Balance Between Development and Quality of Life

- Recognize the need for transportation improvements, but be sensitive to environmental, social, and cultural resources in doing so

8. Enhance alternatives to traditional automobile/highway travel, such as transit, bicycle, and/or pedestrian travel

- Where possible and warranted, encourage the incorporation of bicycle/pedestrian facilities into major improvement projects



- Continue to pursue the need and possible implementation of a public transportation system in the Elizabethtown/Fort Knox/Radcliff/ Vine Grove area
- Coordinate MPO planning efforts with the expansion efforts of the local airport board

9. Promote the security of the transportation system

- Where and when possible, utilize Intelligent Transportation Systems (ITS) to enhance the security, safety, and efficiency of the transportation network
- Support and encourage the utilization of TRIMARC's Notify Every Truck program along the Interstate 65 corridor
- Coordinate MPO planning efforts with the District 4 Incident Management Team

Development and Content of the Metropolitan Transportation Plan (MTP)

The MTP must utilize the most up-to-date available, valid information and data to provide long- and short-range strategies and actions for the MPO planning area. The MTP must preserve and enhance the multimodal transportation system, and facilitate the safe and efficient movement of people and goods. The MTP must also address no less than a 20-year planning horizon. The Radcliff/Elizabethtown MTP follows the requirements established in 23 CFR 450.324.

- Projections of future demand of people and goods over the period of the plan (25 years);
- Inventory of existing and proposed transportation facilities, with emphasis on nationally and regionally significant facilities;
- Operational and management strategies that improve the efficiency and safety of the existing transportation system;
- Capital investment and other strategies that preserve the existing and future transportation system and improve multimodal capacity based on regional priorities and needs;
- Evaluation of environmental impacts and potential mitigation activities;
- Pedestrian and bicycle facilities;
- Transportation and transit enhancement activities;
- A financial plan that demonstrates that the plan is fiscally constrained;
- Comparison of the MTP with state and local conservation plans and maps and natural and historic resource inventories, if available;



- A safety element that incorporates or summarizes the priorities, goals, and countermeasures, or projects for the MPO planning area contained in the state's Strategic Highway Safety Plan;
- Reasonable opportunity for the public and all relevant parties to review the MTP and to provide comments;
- Current and projected transportation demand for people and goods; and
- A system performance report evaluating the condition and performance of the transportation system.

Air Quality Attainment

Currently, the Radcliff/Elizabethtown MPO Planning Area is in attainment with all Federal air quality regulations. An attainment area is an area considered to have air quality that meets or exceeds the U.S. Environmental Protection Agency (EPA) National Ambient Air Quality Standards as defined in the Clean Air Act Amendments.

However, the EPA periodically updates the air quality standards. In the future, the MPO could become a non-attainment area if standards are made more stringent or pollution increases in the region. In particular, the MPO must monitor 8-hour ozone.

Performance-Based Planning

Performance-based planning was mandated for all MPOs in the Moving Ahead for Progress in the 21st Century (MAP-21) transportation legislation. The performance-based planning requirements were carried over into the most recent transportation bill, Fixing America's Surface Transportation (FAST) Act. The National Performance Goals laid out in transportation legislation are:

- Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Infrastructure Condition – To maintain the highway infrastructure asset system in a state of good repair.
- Congestion Reduction – To improve the efficiency of the surface transportation system.



- Freight Movement and Economic Vitality – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Environmental Sustainability – To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- Reduced Project Delivery Delays – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

Performance-based planning and programming (PBPP) refers to the application of performance management within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system. PBPP attempts to ensure that transportation investment decisions are made - both in long-term planning and short-term programming of projects - based on their ability to meet established goals.

The Radcliff/Elizabethtown MPO is working with its regional, state, and Federal partners in order to meet the Federal requirements. This plan integrates the performance measure required by the FAST Act.

Consistency with Other Plans and Programs

Federal law requires that the MTP is consistent with other plans, including:

- Statewide Transportation Planning Process
- Kentucky's Strategic Highway Safety Plan
- Other Safety and Security Plans
- Kentucky Freight Plan
- Statewide Transportation Improvement Program
- MPO's Transportation Improvement Program
- Coordinated Public Transit Human Services Transportation Plan (Section 5310 Program of the FTA)
- Intelligent Transportation Systems (ITS) Architecture
- Locally Adopted Planning Documents

The MTP was developed by reviewing relevant plans and including projects and recommendations from them, where possible. Roadway projects included in the Transportation Improvement Program (TIP) and state plans were analyzed during the MTP development process.



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Chapter 2

Public Involvement and Agency Consultation



2. Public Involvement and Agency Consultation

This chapter provides a brief overview of the community involvement activities undertaken for the 2045 Radcliff/Elizabethtown Metropolitan Transportation Plan (MTP). One aspect of the community involvement process was to obtain local input through the MPO Technical Advisory Committee (TAC). Through a series of TAC meetings, agency consultation, and a public survey, local citizens and representatives of local agencies and interests were able to provide input into the study process and ultimately into the development of the 2045 MTP. The public involvement process helped provide a study process and transportation plan that is responsive to local transportation needs, thus fostering a sense of local ownership of both the process and the plan.

Technical Advisory Committee

The Radcliff-Elizabethtown MPO Technical Advisory Committee (TAC) serves as the advisory group on technical decisions for the MPO. The TAC is responsible for recommendations regarding the type and extent of transportation improvements for the MPO. The transportation improvements are then submitted to the MPO Policy Committee for review and approval. Representatives from local planning agencies, city and county governments, Fort Knox, the Elizabethtown/Hardin County Airport Board, the Transit Authority of Central Kentucky (TACK), and the trucking industry currently serve on the TAC. A list of TAC members is shown in **Appendix A**.

This committee provided oversight and guidance for the *Metropolitan Transportation Plan* update by providing technical input and different local perspectives throughout the duration of the project. Six (6) meetings were held with the TAC on the following dates during 2019: April 10, July 11, August 7, September 13, October 29, and December 4.

Public Survey

Citizen involvement is of utmost importance to the MPO transportation planning process. The public was provided a couple of opportunities to provide feedback into the development of the Metropolitan Transportation Plan (MTP). First, the MPO conducted a public survey from June 14, 2019 through July 19, 2019 via the online survey tool, Survey Monkey.

The survey was distributed via social media on the MPO's Facebook page and the MPO website. The survey was also shared through social media sites of several local agencies, including: KYTC District 4, Hardin County Public Library, Meade County Public Library, Hardin County Chamber of Commerce, Meade County Chamber of Commerce, The News-Enterprise, and Kentucky's Heartland. Paper copies of the survey were also distributed throughout the MPO planning area at Radcliff, Elizabethtown, and Brandenburg city halls, Hardin County Government Building, Meade County Courthouse, Hardin County Planning office, Hardin



County Public Library, and Meade County Public Library. A press release concerning the survey was also sent to local media outlets throughout the area, with an article concerning the survey placed in The News-Enterprise.

The MPO received 171 responses to the survey, 151 online and 20 paper. The survey results can be reviewed in **Appendix C**.

The second opportunity for public involvement in the MTP process was the open public review and comment period outlined below.

Agency Consultation

The MPO Participation Plan contains a list of agencies that the MPO consults with concerning major developments in the transportation planning process. During the update of the MTP, the MPO consulted with these local, state, and federal agencies through an email message requesting feedback into the plan update. As required by Federal law, the MPO requested any available plans, maps, or inventories from local, state and federal agencies that the MPO should consider during the MTP update process. No comments were received.

Public Review and Comment of the Metropolitan Transportation Plan (MTP)

The 2045 Metropolitan Transportation Plan (MTP) was made available for public review and comment between November 4 and December 4. The MTP was available for review at the Lincoln Trail Area Development District office and online via the Radcliff/Elizabethtown MPO webpage, www.radcliff-elizabethtown-mpo.org. No public comments were received.



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Chapter 3

Existing Transportation System



3. Existing Transportation System

Planning for the future transportation network and improvements to the system starts with evaluating what currently exists. This chapter provides an overview of the conditions and characteristics of the existing transportation system.

Roadways and Bridges

The roadway network and bridges are the backbone of the transportation system in the Radcliff/Elizabethtown urbanized area. The state-maintained roadway mileage in the planning area is 1,677.4 miles with 168 state-maintained bridges.

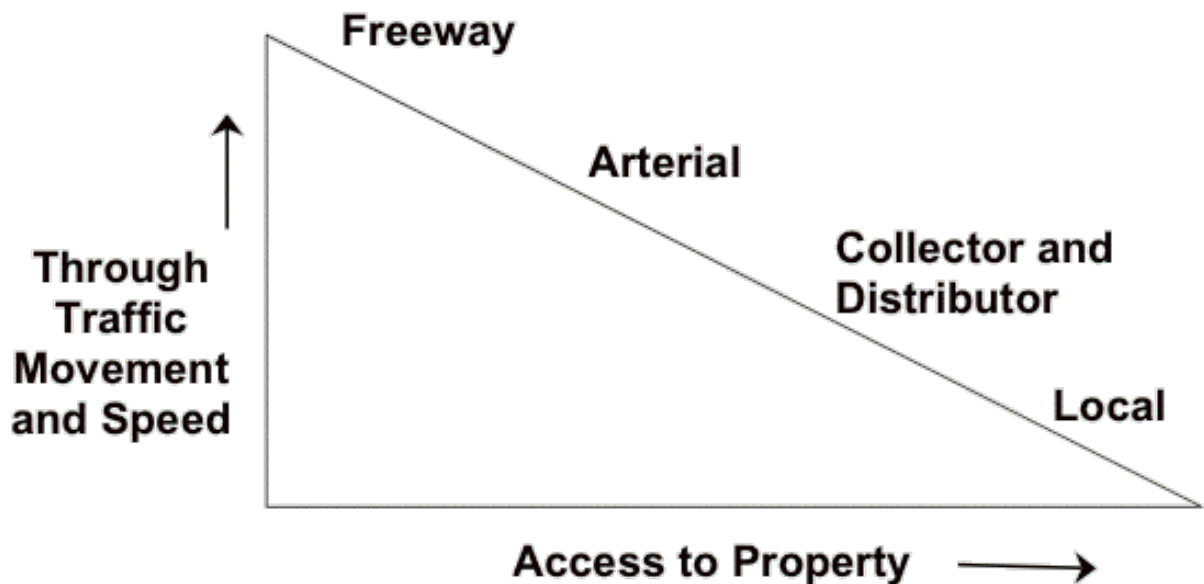
Major Roadways

Route	Description
I-65	I-65 runs north-south from the Indiana state line to the Tennessee state line intersecting the MPO Planning Area.
Bluegrass Parkway	The BG Parkway begins in Elizabethtown at I-65 and runs east terminating at US 60 in Woodford County.
Western Kentucky Parkway	The WK Parkway begins in Elizabethtown at its connection with I-65 and extends west through Hardin County terminating at I-69 in western Kentucky.
US 31W	US 31W is a major north-south route extending from Nashville to Louisville. The route runs directly through the heart of the MPO planning area, providing access to many important locations including Elizabethtown, Radcliff, and Fort Knox.
US 60	US 60 is a major east-west route through the United States extending from Virginia Beach at its eastern most terminus to its western terminus at I-10 in Arizona. In the MPO planning area, US 60 extends from the Meade/Breckinridge county line to US 31W near Fort Knox.
US 62	US 62 runs from southwest to northeast from the U.S./Mexico border at El Paso, TX to Niagara Falls, NY. In the planning area, US 62 traverses Hardin County from the Grayson County line to the Nelson County line.
KY 313	KY 313 is approximately 34 miles in length and extends from I-65 in the southern portion of Fort Knox in Hardin County and extends to the Matthew E. Welsh Bridge near Brandenburg. I-64 crosses about 18 miles north of Brandenburg in Corydon, IN, therefore, KY 313 provides a connection between I-64 and I-65, making it a major freight route through the MPO planning area. The route also intersects US 31W in Radcliff.
KY 361	KY 361 is an approximate 16.5 mile route that extends from US 31W in Elizabethtown to the Bullion Boulevard entrance into Fort Knox. The route was constructed as an alternative north-south route on the west side of US 31W to help alleviate traffic congestion along US 31W.
KY 3005	KY 3005 (Ring Road) is a route in Elizabethtown that extends from the Western Kentucky Parkway on the west side to US 62 on the east side of the city. The route also intersects with US 31W and provides access to numerous commercial areas in Elizabethtown.



Highway Functional Classification

Each type of roadway serves a specific function in the highway network. Roadways are divided into functional classes based on their intended balance of mobility (speed) and access to adjacent land. Their designs vary in accordance with this functional classification. The diagram below demonstrates the hierarchy and function of each roadway type from Interstates/Freeways down to Local Streets.



Interstates

Interstates are the highest classification of Arterials and were designed and constructed with mobility and long-distance travel in mind. Since their inception in the 1950's, the Interstate System has provided a superior network of limited access, divided highways offering high levels of mobility while linking the major urban areas of the United States.

Determining the functional classification designation of many roadways can be somewhat subjective, but with the Interstate category of Arterials, there is no ambiguity. Roadways in this functional classification category are officially designated as Interstates by the Secretary of Transportation, and all routes that comprise the Dwight D. Eisenhower National System of Interstate and Defense Highways belong to the Interstate functional classification category and are considered Principal Arterials.

Other Freeways/Expressways

Roadways in this functional classification category look very similar to Interstates. While there can be regional differences in the use of the terms 'freeway' and 'expressway', for the purpose of functional classification the roads in this classification have directional travel lanes are usually separated by some type of physical barrier, and their access and egress points are



limited to on- and off-ramp locations or a very limited number of at-grade intersections. Like Interstates, these roadways are designed and constructed to maximize their mobility function, and abutting land uses are not directly served by them.

Arterials

These facilities are important components of the overall transportation system. They serve as feeders to interstates and expressways, and as principal travel routes between major land use concentrations within the MPO planning area. Arterials are typically divided facilities (undivided where right-of-way limitations exist) with relatively high volumes of traffic and traffic signals at major intersections. The primary function of arterials is to move traffic; they are the main means of local travel. A secondary function of arterials is land access. Principal arterials often serve major centers of metropolitan areas and longer trips. Minor arterials provide service for trips of moderate length and are often smaller facilities. Minor arterials also offer connectivity to the higher arterial system.

Collectors

These facilities provide both land service and traffic movement functions. Collectors serve as intermediate feeders between arterials and local streets. They accommodate short distance trips. Since collector streets are not intended for long through trips, they are generally not continuous for any great length. Major Collector routes are normally longer, have lower driveway densities, higher speed limits, and larger traffic volumes than Minor Collectors.

Local Streets/Roads

Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long distance travel, except at the origin or destination end of the trip, due to their provision of direct access to adjacent land. They are often designed to discourage through traffic. Local Roads are often classified by default. In other words, once all Arterial and Collector roadways have been identified, all remaining roadways are classified as Local Roads.

Highway Systems

All highways are classified in the State System and the Functional Highways Classification System. Many area roadways are also part of the National Truck Network (NN) and the National Highway System. Below is a synopsis of the highway systems:

- Under KRS 177.020 the **State Primary Road System** classifies state-maintained roadways by the type of service and function they provide. 603 KAR 3:030 designates the following classes:
 - **State Primary System:** Interstates, Parkways, and other long distance, high volume intrastate routes of statewide significance that generally link major urban areas within the state.



- **State Secondary System:** Regionally significant routes of shorter distance which provide mobility and access to land use activity, generally serving smaller cities and county seats within a region.
- **Rural Secondary System:** Routes of sub-regional significance which might include urban arterial streets and other collectors, often with access to land use activity such as farm-to-market routes as their main function.
- **Supplemental Roads:** All other state-maintained routes such as frontage roads, cross roads and local access roads such as farm-to-market routes as their main function.
- The **National Highway System** consists of roadways important to the nation's economy, defense, and mobility. The National Highway System (NHS) includes the following subsystems of roadways (note that a specific highway route may be on more than one subsystem):
 - **Interstate:** The Eisenhower Interstate System of highways retains its separate identity within the NHS.
 - **Other Principal Arterials:** These are highways in rural and urban areas which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility.
 - **Strategic Highway Network (STRAHNET):** This is a network of highways which are important to the United States' strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes.
 - **Major Strategic Highway Network Connectors:** These are highways which provide access between major military installations and highways which are part of the Strategic Highway Network.
 - **Intermodal Connectors:** These highways provide access between major intermodal facilities and the other four subsystems making up the National Highway System.

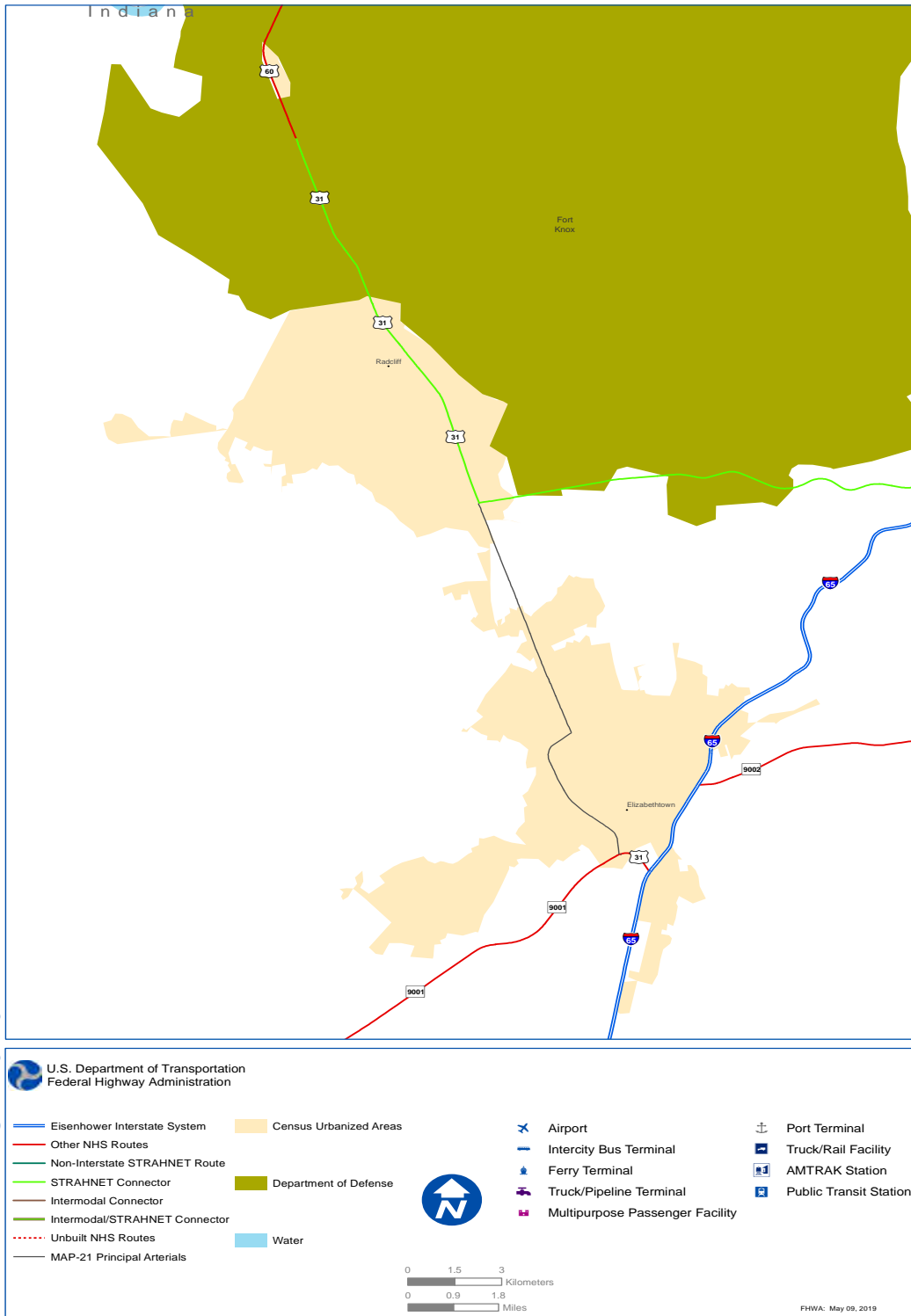
The National Highway System (NHS) includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. The NHS was developed by the Department of Transportation (DOT) in cooperation with the states, local officials, and metropolitan planning organizations (MPOs).

The following routes are located on the National Highway System in the MPO planning area: I-65, Bluegrass Parkway, Western Kentucky Parkway, US 31W, US 31W Bypass, and KY 313.



Map 1 – National Highway System

National Highway System: Elizabethtown--Radcliff, KY





- **National Highway Freight Network (NHFN)**

The **Fixing America's Surface Transportation Act (FAST Act)** repealed both the Primary Freight Network and National Freight Network from Moving Ahead for Progress in the 21st Century Act (MAP-21), and directed the FHWA Administrator to establish a National Highway Freight Network (NHFN) to strategically direct Federal resources and policies toward improved performance of highway portions of the U.S. freight transportation system.

The NHFN includes the following subsystems of roadways:

- **Primary Highway Freight System (PHFS):** This is a network of highways identified as the most critical highway portions of the U.S. freight transportation system determined by measurable and objective national data. The network consists of 41,518 centerline miles, including 37,436 centerline miles of Interstate and 4,082 centerline miles of non-Interstate roads.
- **Other Interstate portions not on the PHFS:** These highways consist of the remaining portion of Interstate roads not included in the PHFS. These routes provide important continuity and access to freight transportation facilities. These portions amount to an estimated 9,511 centerline miles of Interstate, nationwide, and will fluctuate with additions and deletions to the Interstate Highway System.
- **Critical Rural Freight Corridors (CRFCs):** These are public roads not in an urbanized area which provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities.
- **Critical Urban Freight Corridors (CUFCs):** These are public roads in urbanized areas which provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities.

Prior to designation of CRFCs and CUFCs, the NHFN consists of the PHFS and other Interstate portions not on the PHFS, for an estimated total of 51,029 centerline miles.

States and in certain cases, Metropolitan Planning Organizations (MPOs), are responsible for designating public roads for the CRFCs and CUFCs in accordance with section 1116 of the FAST Act. State designation of the CRFCs is limited to a maximum of 150 miles of highway or 20 percent of the PHFS mileage in the State, whichever is greater. State and MPO designation of the CUFC is limited to a maximum of 75 miles of highway or 10 percent of the PHFS mileage in the State, whichever is greater. Guidance in accordance with the FAST Act section 1116 will be developed to provide information on the identification, designation, and certification of these corridors.

I-65 is the only route in the MPO planning area on the NHFN.



- Kentucky Revised Statutes require weight limit restrictions on the state's highway system. There are three weight classification limits: 1) AAA – 80,000 lbs. gross vehicle weight; 2) AA – 62,000 lbs. gross vehicle weight; and 3) A – 44,000 lbs. gross vehicle weight. The majority of study area routes evaluated in the planning study process are classified as AAA.

Geometric Characteristics

Geometric characteristics for major routes in the study area include the number of lanes, lane widths, shoulder widths, route speed limits, roadway type, terrain, and pavement condition.

This information is summarized below:

- The majority of study routes have lanes between 9 and 12 feet in width.
- Shoulder widths vary between 0 and 12 feet throughout the metropolitan planning area.
- Posted Speed limits range from a low of 25 mph in some parts of the "urban" areas to 70 mph on interstates and parkways in the study area.
- The majority of area routes is undivided roadways.
- Terrain in the metropolitan planning area is mostly rolling, with some flat areas.

A variety of pavement types exist in the metropolitan planning area, including bituminous penetration, composite, high flexible, high rigid, and mixed bituminous.

Traffic and Operational Conditions

The traffic counts utilized for the purpose of this transportation plan update reflect 2019 data from the Kentucky Transportation Cabinet's (KYTC) Highway Information System (HIS) database. The traffic volumes, shown on the **Average Daily Traffic map on page 8**, represent the average daily traffic (ADT) along roadway segments for each of the highways analyzed for this plan. The greatest traffic volumes in the Radcliff/Elizabethtown MPO planning area occur along Interstate 65 and US 31W. The highest volume along I-65 is approximately 57,000 near the interchange with the Bluegrass Parkway. The intersection of US 31W and Ring Road has an ADT of near 40,000.

The traffic along I-65 is monitored continuously through the use of Automated Traffic Recorder (ATR) stations. On other routes, the KYTC conducts traffic volume counts along state roadways in Kentucky on a two-to-four-year cycle, depending on the roadway classification. Traffic volumes are estimated for routes when counts are not conducted in a particular year.

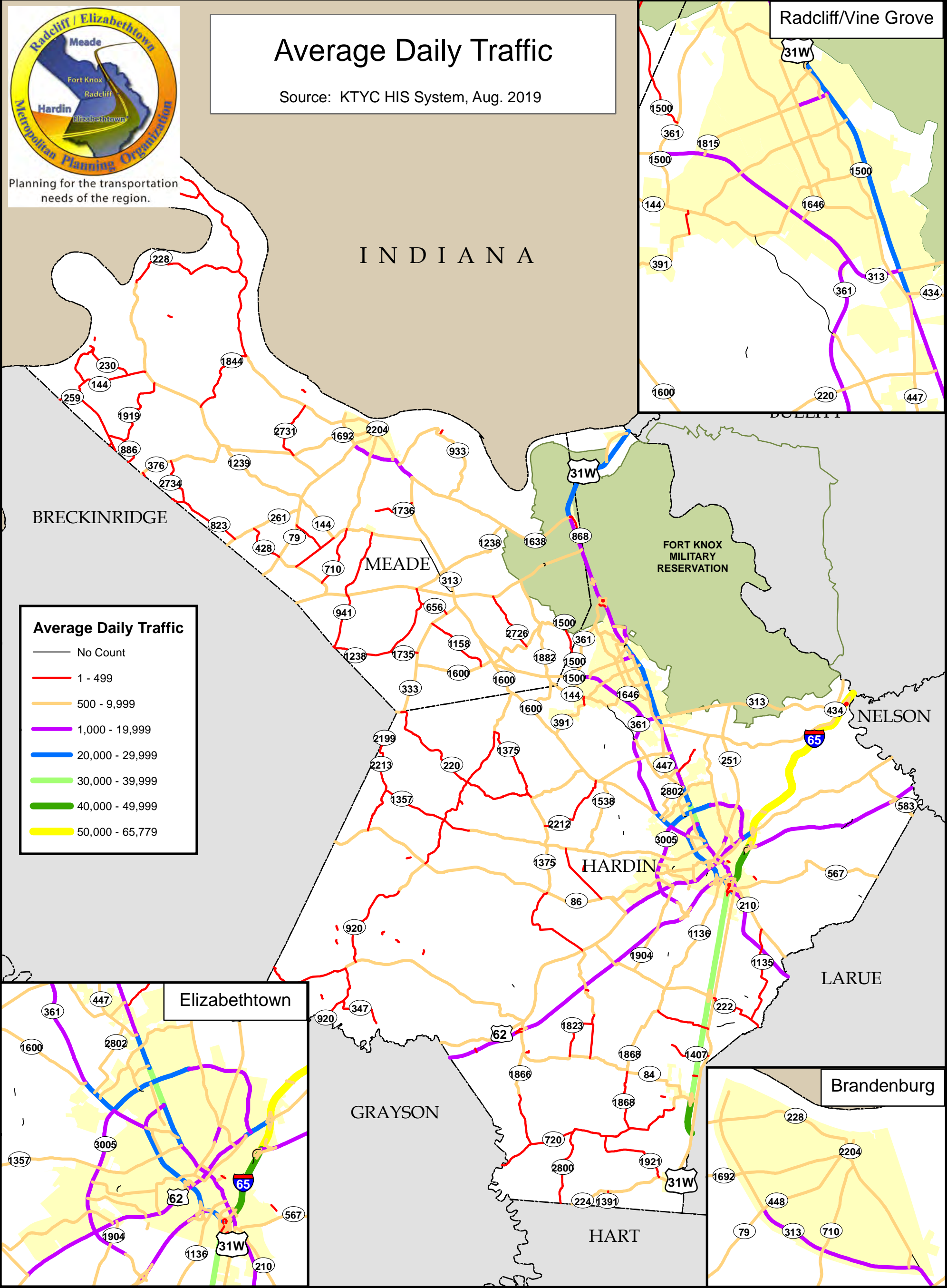
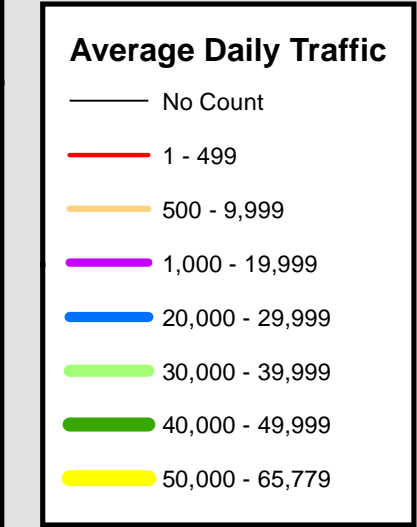
A new Travel Demand Forecasting Model (model) was developed in August 2019 for the Radcliff/Elizabethtown MPO planning area, which includes the Fort Knox military post. The model is calibrated to the 2018 base year and provides forecasts for future year 2045. The model incorporates the basic model structure of other small area models used by KYTC, including KYTC's preferred standard user interface (TransCAD) for managing scenarios.



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Average Daily Traffic

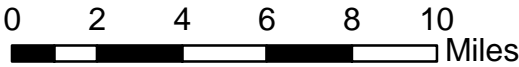
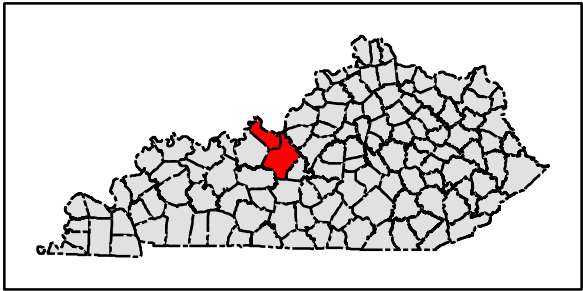
Source: KTYC HIS System, Aug. 2019



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Freight

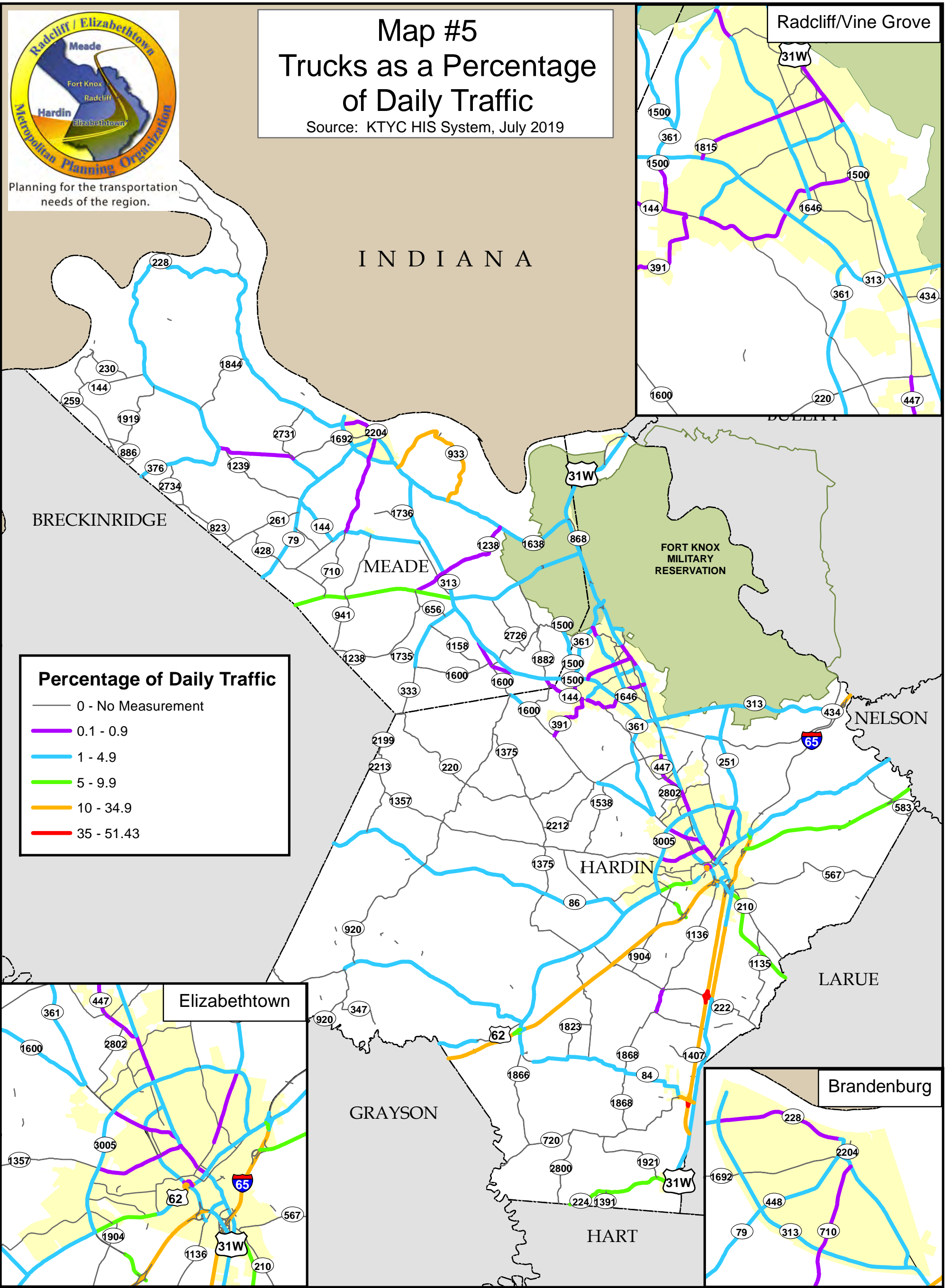
The movement of goods is an important component of the transportation system. As discussed below, the air, water, and rail modes play an important role in the movement of freight through the Radcliff/Elizabethtown area. According to the Federal Highway Administration's Freight Analysis Framework (FAF), almost three quarters (73%) of the shipments by weight within Kentucky were shipped via truck in 2017 (*FHWA Freight Analysis Framework, Version 4, 2019*). It is estimated that as much as 98% of freight movement in the MPO planning area is transported by truck. These figures are expected to remain steady over the next 30 years. This fact places tremendous importance on a highway network that can handle this level of freight movement. It also expresses the importance of improving these other modes of transportation to help take the strain off of the highway system. The MPO will promote projects that enhance freight movement by emphasizing both facility type and the percent of truck traffic in the project scoring process. An example of a project that may enhance the movement of freight in the MPO planning area is the KY 313 improvements from KY 361 to KY 1638 in Meade County. With the new steel company, Nucor, locating in Brandenburg, truck traffic is expected to increase significantly along this route because it is a major connector between I-65 and I-64.

According to the Freight Analysis Framework Commodity Flows by State, the top commodities, by weight, transported in Kentucky include: coal, gravel, waste, scrap, and gasoline (*FHWA Freight Analysis Framework, Version 4, 2019*). The top products by value that are transported through the state include: motor vehicles, machinery, and transportation equipment. **Truck percentages are shown on the map on page 10.**



Map #5 Trucks as a Percentage of Daily Traffic

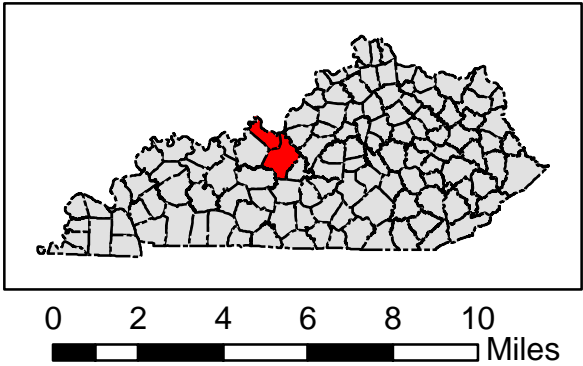
Source: KTYC HIS System, July 2019



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Safety Analysis

The **Crash Density map on page 12** provides a snapshot of crash densities with the two-county planning area based on data from the Kentucky State Police (KSP). As expected, the majority of crashes occur within the most heavily populated areas and those areas with the highest amount of traffic. Particular routes of concern include: I-65, US 31W, US 62, KY 3005 (Ring Road), KY 313, and KY 1051.

Based on 2015-2017 data from the Kentucky Office of Highway Safety Strategic Highway Safety Plan (SHSP 2015-2019), both Hardin and Meade counties rank in the top 40 counties for crashes involving serious injuries. Specifically, Hardin County ranks #3 and Meade County is #37. Likewise, both counties are in top 40 for traffic crashes involving fatalities. Hardin County is in the top 5 in this category also at #4. Meade County ranks #24 in terms of fatal crashes (*Kentucky Strategic Highway Safety Plan, 2015-2019*).

The table below details the past four years of crash data, from the KSP Traffic Collision Facts, for Hardin and Meade Counties:

2014-2017 Crash Data, Hardin & Meade Counties						
	Hardin County			Meade County		
Year	Total	Fatal	Injury	Total	Fatal	Injury
2014	2,843	16	485	404	6	104
2015	2,914	20	483	472	8	139
2016	2,934	15	512	487	8	129
2017	3,095	12	487	472	10	138

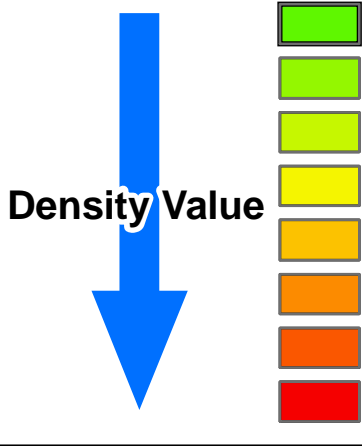
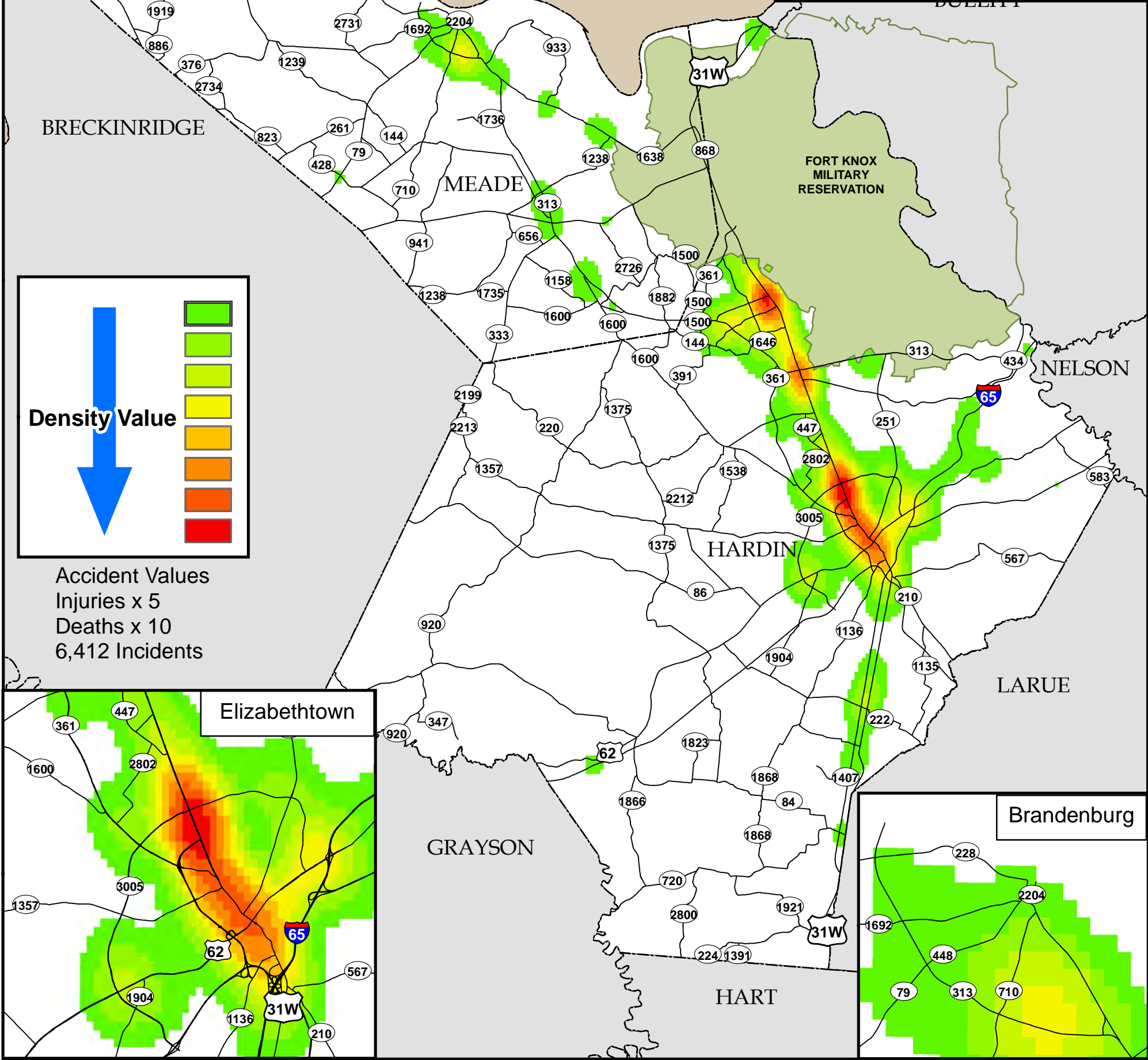
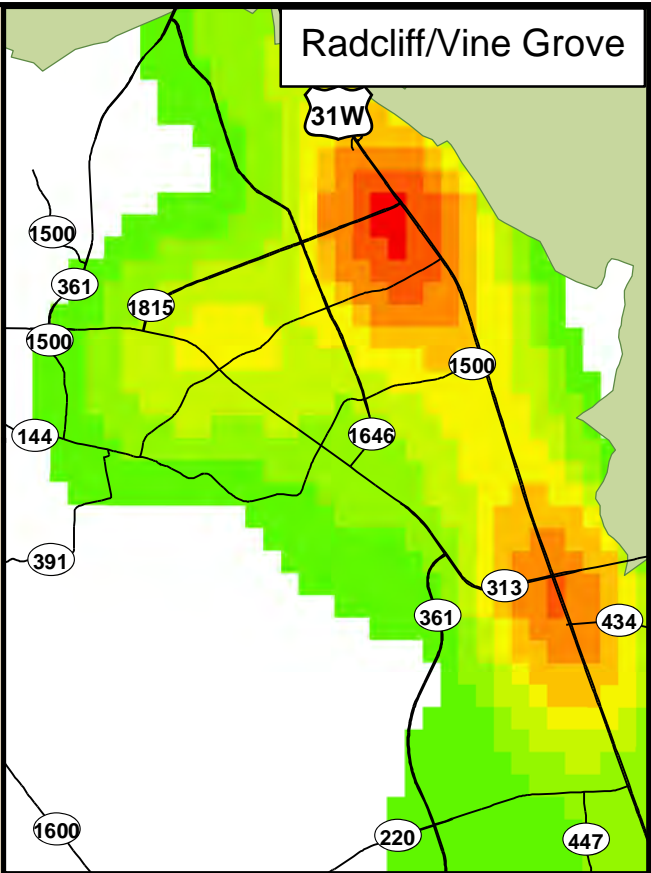
Kentucky State Police Traffic Collision Facts, 2014-2018



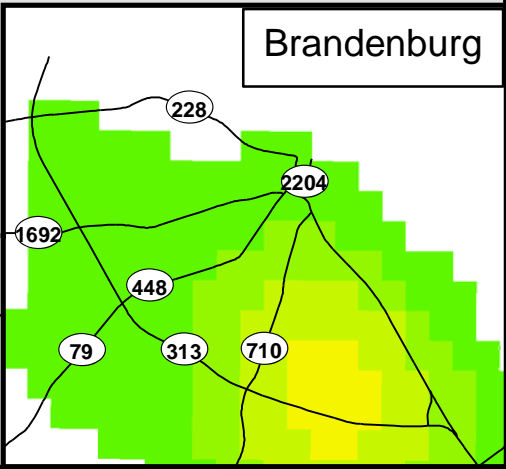
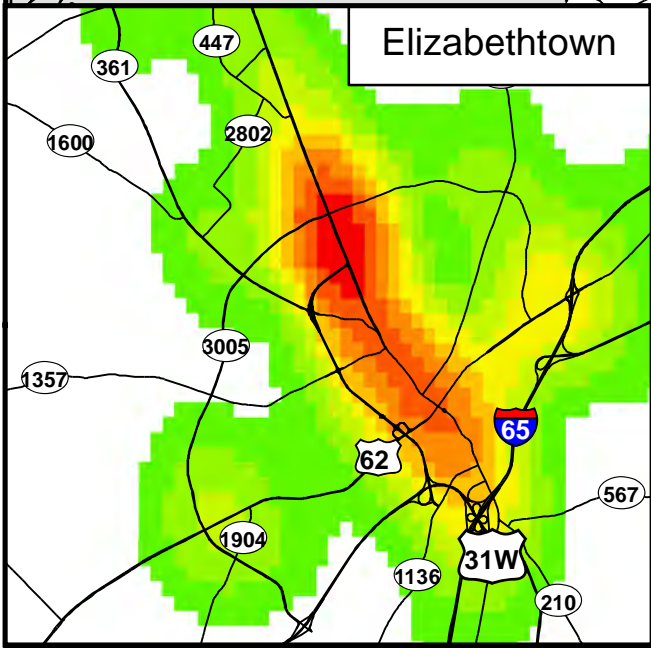
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Crash Density Jan 2018 - Aug 2019

Source: KSP Crash Data, Aug. 2019



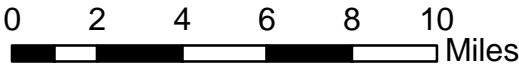
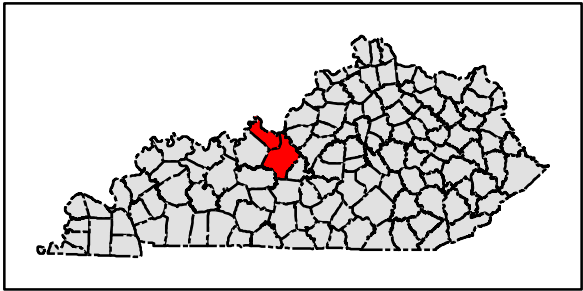
Accident Values
Injuries x 5
Deaths x 10
6,412 Incidents



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**Public Transportation**

The Transit Authority of Central Kentucky (TACK) is the primary public transportation provider in the Radcliff/Elizabethtown MPO planning area. TACK has authorization to operate an urban public transit system under the Federal Transit Act of 1991.

CKCAC (Central Kentucky Community Action Council) began d.b.a. Transit Authority of Central Kentucky (TACK) in April 1994, at the request of the Kentucky Transportation Cabinet.

Effective 1 July 2003, the Elizabethtown/Radcliff area was determined to be an urbanized area and has a Metropolitan Planning Organization Designation. Due to this designation, Hardin and Meade counties are now within the urbanized area and TACK offers public transportation services to these areas under funding provided for by the US Code Title 49, Section 5307. In April 2012, TACK reorganized as a separate entity from CKCAC and is now organized as a public transit authority.

TACK currently offers the following public transportation services within the Radcliff/Elizabethtown urbanized area: Medicaid Transportation Services, Senior Transportation Services, Veteran Transportation Services, Vanpool Services, Park and Ride Services, and transportation options for the general public and employees at Fort Knox. TACK's services are also available to persons with disabilities.

There were several comments in the MPO Public Survey concerning the need for public transportation. The MPO has studied the need for a fixed-route public transit system a couple of different times over the past several years. The most recent study (Public Transportation Implementation Study) was completed in 2013 through a contract with The Corradino Group. This study proposed a three-route fixed-route public transportation system with circulator routes in Elizabethtown and Radcliff/Vine Grove with a connector route running north south along US 31W between the two circulator routes. To date, implementation of such a system has not been viewed as feasible based on cost and proposed ridership.

Bicycle/Pedestrian

Bicycle signage exists in several Elizabethtown neighborhoods; however, minimal system continuity or connectivity exists between neighborhood routes. A state-designated bicycle-touring route exists in southern Hardin County along KY 84 and portions of KY 567, KY 1136, KY 1868, and some local roads. Since the development of the previous plan, KY 361 (Patriot Parkway) was constructed with a striped bicycle lane.

Since the early 1970's, Greenspace, Inc. has been developing a trail system in the Elizabethtown area with the ultimate goal of developing a complete greenbelt around the city. Saunders Springs is a 26-acre wooded area in Radcliff that includes hiking and walking trails.



Meade County has trails along the Ohio River and Buttermilk Falls. Otter Creek Park also has trails for hiking, horseback riding, and mountain biking. Otter Creek Park is a recreation area of the Kentucky Department of Fish and Wildlife and a fee is required for entering the park.

Existing sidewalks are available on many local streets and roads throughout the MPO planning area to encourage pedestrian travel, but they are not provided on many of the major study routes.

In 2016 and 2018, respectively, the MPO developed a Bicycle Facilities Plan and a Pedestrian Facilities Plan. These two plans provide recommendations for improvements to the Bicycle/Pedestrian system. The improvements are outlined in Chapter 7.

Airports

The Elizabethtown Regional Airport at Addington Field is a Class C2 general aviation airport. The airport has an 18,000 square foot general aviation terminal with maintenance and shops facilities. The Elizabethtown Regional Airport has a 15,000 square foot hangar for corporate aircraft storage. T-hangars are also provided for aircraft. The airport's runway is currently 6,001 feet long by 100 feet wide with a parallel taxiway.

The Elizabethtown Regional Airport is a very busy general aviation airport that supports business and industry locally and in surrounding communities. Business and industry jet aircraft utilizing the airport facilities currently exceeds 1,500 jet aircraft operations. The airport is also home to the aircraft and crews of Life Net Air Medical Services, a 24-hour emergency regional air medical evacuation service.

In recent years, the Elizabethtown Airport Board (EAB), in response to numerous inquiries and in recognition of the substantial growth that is occurring throughout Central Kentucky, has embarked on a project to restore passenger airline service at the Elizabethtown Regional Airport. To accomplish this initiative, the EAB contracted with a consultant in 2006 to conduct a market feasibility study. A 24-county market area with a population of approximately 610,000 was identified.

Other phases of this project have included regional outreach, airline recruitment, airport infrastructure issues, and passenger recruitment. The infrastructure needs identified include: completion of the Instrument Landing System, which has been partially completed; a rework and expansion of the safety area on Runway 23; necessary weight bearing loads for the runway, taxiway, and ramp areas; and the construction of a passenger terminal facility, which has been designed by a local architectural firm.

The other airport in within the Radcliff/Elizabethtown urbanized area is Godman Army Airfield on the Fort Knox Military Reservation. Godman is utilized primarily for military purposes. The Louisville International Airport is located approximately 40 miles from the



Radcliff/Elizabethtown area and has numerous options for passenger air service. It is also the central hub for United Parcel Service's (UPS) national and international airfreight shipments.

Chapter 7 contains more information on proposed airport facility improvements.

Waterways

Kentucky is second to only Alaska in the number of miles of navigable waterways (*Kentucky Water Transportation Corridors, Public Riverport Development and Intermodal Access, 2000*). Kentucky has 1,090 miles of navigable waterways with the Ohio River making up the largest portion as it provides the entire northern boundary of the Commonwealth, including Meade County. The Meade County Riverport Authority was established in 2001 to begin the process of developing a riverport along the Ohio River near Brandenburg. The Meade County Riverport Board currently owns a 50-acre site just east of Brandenburg next to Arch Chemicals, Inc. In 2014, ground was broken for the construction of the regional port facility for area producers to market their grain, including specialty grain crops. The completed terminal will provide the agriculture community with a more economical way of processing and storing multiple commodities, separating specialty grains for export and loading commodities onto barges. The project will include grain handling facilities and related equipment, including scale and sampling capabilities. The facility will be designed so that future upgrades and expansion will be economical.

Railroads

Two major rail lines extend through the Radcliff/Elizabethtown urbanized area. CSX Transportation (CSX) is a Class I carrier that operates approximately 23,000 miles serving every major market east of the Mississippi River. Within Kentucky, CSX operates approximately 1,700 route miles, making it Kentucky's largest railroad company. One CSX rail line runs east-west through Meade County and provides connection between Louisville and Henderson, KY. The other CSX rail line runs through Hardin County and provides connection between Louisville and Nashville. This rail line is also a part of the Strategic Rail Corridor Network (STRACNET) providing a connection between national military facilities.

The Paducah and Louisville (PAL) Railroad is classified as a regional carrier and operates approximately 270 miles of rail line within Kentucky between Paducah and Louisville. In Paducah, the PAL connects to the Burlington Northern Santa Fe and Illinois Central. Connections to Norfolk Southern Railway, CSX, and Canadian Pacific are provided in Louisville. Within the study area, the PAL passes through Hardin County in close proximity to Meade County along portions of the route. The PAL serves local industries, as well as Fort Knox. A portion of the line between Fort Knox and Louisville is designated as a STRACNET connector.

There are no major truck-rail intermodal transfer facilities within the Radcliff/Elizabethtown



urbanized area. However, existing rail lines and highways provide connection to a variety of intermodal facilities in the Louisville area. In addition, it is anticipated that the proposed Meade County Riverport would have a rail connection and be served by CSX Transportation.

Overview of Performance Measures

The Moving Ahead for Progress in the 21st Century Act (MAP-21) signed into law in 2012 and the Fixing American's Surface Transportation Act (FAST ACT) signed into law in 2015 requires that all state departments of transportation and metropolitan planning organizations use a performance-based planning and programming approach as part of a Transportation Performance Management (TPM) program, transforming transportation decision making into a performance-driven and outcome-based process.

These Acts established national performance goals in several key areas: Safety, Pavement Condition, Bridge Condition, System Reliability, and Transit Asset Management. Within each of these broad performance management categories, state departments of transportation and metropolitan planning organizations (MPOs) are required to set specific performance targets. The targets for highway-related measures have been set by the Kentucky Transportation Cabinet (KYTC). The Radcliff/Elizabethtown MPO has approved the support of KYTC's performance targets by agreeing to plan and program projects that will help toward the achievement of these targets. The Transit Asset Management (TAM) targets were established by the Transit Authority of Central Kentucky (TACK) and, subsequently, adopted by the Radcliff/Elizabethtown MPO. The detailed performance measure targets for each of the specific areas are outlined below.

Safety

The Kentucky Transportation Cabinet (KYTC) developed performance targets for the following five areas of safety performance. KYTC utilized data from 2013-2017 to establish the targets for 2019. The MPO has approved a Resolution stating that the MPO concurs with and supports KYTC's safety performance measure targets by agreeing to plan and program projects, through the KYTC Strategic Highway Investment Formula for Tomorrow (SHIFT) and MPO Metropolitan Transportation Planning processes, so that they contribute toward the accomplishment of the safety targets.

FY 2019 Safety Targets				
	Baseline (2012-16)	FY 2018 Targets	Baseline (2013-17)	FY 2019 Targets
Number of Fatalities	730.2	730	737.4	737
Number of Serious Injuries	3288.6	2800	3124.8	2991
Fatality Rate/100 M VMT	1.52	1.5	1.521	1.5
Serious Injury Rate/100 M VMT	6.852	5.76	6.451	6.07
Total # Non-Motorized Fatalities and Serious Injuries	269.6	293	277.8	276

Kentucky Transportation Cabinet, 2019



Asset Management and System Performance

The Asset Management performance measures established by KYTC monitor both pavement and bridge performance. Pavement performance targets have been set for both interstate and non-interstate National Highway System (NHS) roadways and track the percentage of good and poor conditions for both. The bridge performance targets track the percentage of good and poor bridge conditions based on the deck area of the bridge. The System Performance targets analyze travel time reliability for the both passenger and commercial vehicles on interstate highways and non-interstate National Highway System (NHS) routes. For commercial vehicles, the Travel Time Reliability (TTTR) Index measures the reliability of roadways for commercial vehicle travel. For instance, a high TTTR might indicate that traffic congestion could cause a delay for on-time deliveries.

Just as with the Safety Performance Targets, the MPO has concurred with the Asset Management and System Performance targets established by KYTC. The MPO will plan for and program project improvements, through the KYTC Strategic Highway Investment Formula for Tomorrow (SHIFT) and MPO Metropolitan Transportation Planning processes, that contribute toward the accomplishment of these performance targets.

Asset Management and System Performance Targets		
	Target	
	2 Year	4 Year
Asset Management		
Pavement Performance		
% Good Interstate	NA	50.0%
% Poor Interstate	NA	3.0%
% Good Non-Interstate	35.0%	35.0%
% Poor Non-Interstate	6.0%	6.0%
NHS Bridge Performance		
% Good Condition by Deck Area	35.0%	35.0%
% Poor Condition by Deck Area	3.7%	3.2%
System Performance		
Level of Travel Time Reliability (LOTTR)		
% Reliable Interstates	93.0%	93.0%
% Reliable Non-Interstate NHS	NA	82.5
Truck Travel Time Reliability (TTTR)	1.250	1.250



Transit Asset Management

The Transit Authority of Central Kentucky (TACK) is the primary public transportation provider for the Radcliff/Elizabethtown metropolitan planning area, which includes Hardin and Meade Counties in Kentucky.

TACK established Transit Asset Management (TAM) Plan targets in accordance with Federal regulations enacted through the Moving Ahead for Progress in the 21st Century Act (MAP-21) for performance measures and target setting. It is the intent of these targets to improve transparency and accountability throughout the transportation planning processes. In July 2016, the Federal Transit Administration (FTA) issued a final rule requiring recipients of FTA funds to maintain and document minimum Transit Asset Management (TAM) standards. The targets below will be updated annually for each asset category in order to achieve compliance with the federal regulations for State of Good Repair (SGR) targets.

The MPO established the TAM targets listed below from TACK's TAM Plan 4-year targets. The following table shows the targets and actual for fiscal year 2018, and sets the fiscal year 2019 MPO TAM Target. The MPO will continue to consult with the local transit provider, through the MPO Transportation Planning Process, to establish MPO TAM Targets on an annual basis.

FY 2019 MPO Transit Asset Management (TAM) Targets				
Asset Category	Asset Class	2018 Count for Class Past Useful Life Benchmark (ULB)	2018 % Met or Exceed ULB	2019 Target
Rolling Stock	25' Bus	0 of 4	0%	0%
	27' Bus	0 of 3	0%	0%
	Cutaway	2 of 3	67%	67%
	Cutaway Wheelchair	3 of 13	23%	23%
	High Top	18 of 18	100%	100%
	High Top Wheelchair	8 of 8	100%	100%
	Minivan	8 of 14	57%	50%
	Minivan Wheelchair	0 of 8	0%	0%
Equipment	Support Vehicle	2 of 2	100%	100%
	Transit Wagon	0 of 1	0%	0%
Facilities	Transit Facility		0%	0%



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Chapter 4

Socioeconomic, Land Use, and Environmental Issues



4. Socioeconomic, Land Use, and Environmental Issues

The development of a long-range vision for the regional transportation system requires an accurate view of the socioeconomic and environmental conditions of the planning area. This chapter provides an overview of the current and projected socioeconomic data for the MPO planning area. A Title VI analysis, a discussion of land use conditions, environmental and cultural resources, and environmental mitigation measures are also included in this chapter.

Demographics

The population in the MPO planning area has increased about 3.7% between the 2010 Census and the 2018 estimates developed by the U. S. Census Bureau. The Kentucky State Data Center projects the population to grow to nearly 159,000 by 2040 (**Table 2**). Considering the population is expected to grow by approximately 20,000 people over the planning horizon, the impact on the transportation network will be significant. When development occurs at the Glendale mega-site, the population growth could be even more impactful on the transportation, especially considering the amount of traffic that will likely commute into the area from surrounding areas.

Further, the population growth in Meade County is likely to significantly outpace what has been projected. Nucor, a steel manufacturer, recently announced locating a plant in Brandenburg along the Ohio River, near the Meade County Riverport. This expansion will have both an impact on population growth as well as increases in vehicular and truck traffic along KY 313 and other routes between Interstate 65 and Brandenburg. The MPO will be further analyzing these impacts and determining proper improvements to the transportation network.

Population will play a key role in the transportation planning process over the planning horizon of this MTP. Population characteristics for the MPO area are outlined in **Tables 1** through **3** below. The socioeconomic data in these tables was originally based on Census estimates and estimates developed by the Kentucky State Data Center. However, based on expected changes mentioned above, these estimates and projections will need to be revisited in the near future.



Chapter 4 Socioeconomic, Land Use, and Environment

**Table 1 - Annual Estimates of the Resident Population for Kentucky and Counties:
2010 to 2018**

	April 1, 2010		Population Estimates (as of July 1)			
	Census	Estimate Base	2015	2016	2017	2018
Kentucky	4,339,367	4,339,357	4,422,057	4,436,113	4,454,189	4,468,402
Counties						
Hardin	105,543	105,549	106,223	107,041	108,226	110,356
Meade	28,602	28,597	27,924	27,985	28,094	28,715
TOTAL	134,145	134,146	134,147	135,026	136,320	139,071
Source:						
U.S. Census Bureau, Population Division						
Release Date: April 18, 2019						

**Table 2 - Total Population, Census 2000 and 2010, Projections 2015-2050
Kentucky and Counties**

	Census 2010	Estimate 2015	Projections				
			2020	2025	2030	2035	2040
Kentucky	4,339,367	4,425,092	4,533,464	4,634,415	4,726,382	4,808,682	4,886,381
Counties							
Hardin	105,543	106,223	112,494	118,413	124,137	129,638	134,901
Meade	28,602	27,924	27,395	26,780	26,025	25,127	24,068
TOTAL	134,145	134,147	139,889	145,193	150,162	154,765	158,969

Kentucky State Data Center, University of Louisville

Table 3 - Annual Estimates of the Resident Population for Incorporated Places in Kentucky:

April 1, 2010 to July 1, 2013						Population Change	
	Census	Population Estimates (as of July 1)				Census 2010 - July 1, 2013	
	2010	2015	2016	2017	2018	Number	Percent
Kentucky	4,339,367	4,425,999	4,438,229	4,453,874	4,468,402	129,035	2.97%
Brandenburg city	2,643	2,805	2,827	2,828	2,878	235	8.89%
Ekron city	135	144	144	144	146	11	8.15%
Elizabethtown city	28,531	29,024	29,205	29,545	30,157	1,626	5.70%
Muldraugh city	947	976	980	976	993	46	4.86%
Raddliff city	21,688	22,399	22,482	22,615	22,952	1,264	5.83%
Sonora city	513	502	506	510	519	6	1.17%
Upton city	683	676	677	682	691	8	1.17%
Vine Grove city	4,520	5,767	5,888	6,102	6,310	1,790	39.60%
West Point city	797	865	866	868	877	80	10.04%

Source: U.S. Census Bureau, Population Division
Release Date: April 18, 2019



Title VI Analysis

In 1994, President Clinton issued an Executive Order to address Environmental Justice in minority and low-income populations. The Executive Order focused attention on Title VI of the Civil Rights Act of 1964, which states, "No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The Executive Order provided 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." In support of the Executive Order, the United States Department of Transportation (DOT) issued an Order on Environmental Justice in 1997, followed by a Federal Highway Administration (FHWA) Order on Environmental Justice in 1998.

Over the years, US DOT and FHWA have encouraged a proactive approach to the implementation of Title VI, aimed at preventing discrimination in its programs, policies, and activities. This proactive approach can reduce conflicts and also reinforce compliance with other related requirements; such as, the National Environmental Policy Act (NEPA) of 1969 (which addresses social and economic impacts), and public involvement in statewide and metropolitan planning and project development. The Socioeconomic Data related to Title VI can be found in **Appendix B**.

The total population of the Radcliff/Elizabethtown MPO "Urbanized Area" is 73,467 based on the 2010 Census. The MPO "Planning Area" is comprised of Hardin and Meade counties, which have 2017 population estimates of 108,071 and 28,154 respectively for a total MPO planning area population of 136,225.

An analysis of the population shows that nearly 79% of the population in the MPO planning area is white. Hardin County has an African-American population at 12.08%. The African-American population in the MPO planning area is a little over 10%. All other races in the planning area represent around 5% of the total population. The male-female breakdown in the MPO area is nearly 50/50.

The evaluation of language skills within the Radcliff/Elizabethtown MPO planning area shows less than one (1%) percent of the population speaks English less than well. Likewise, the analysis of literacy skills illustrates that less than 5% of the population has less than a 9th grade education. According to Census 2010 figures, 17.72% percent of the population in the MPO area is disabled. This amounts to 16,459 persons, 12,666 in Hardin County and 3,793 in Meade County. The poverty level of persons age 18 and over in the MPO planning area is 12.45%, a total of 12,106 persons. The percentage of persons below the poverty level in Meade County is 15.46%,



while Hardin County is 11.6 percent. These numbers are lower than the state and national averages.

Finally, the assessment of occupied housing units with no vehicle shows that 2,391, or 4.81%, of occupied housing units do not have a vehicle. This compares to 7.80% for the state overall and over 9% in the United States.

The data from the Title VI analysis gives the MPO a snapshot of the populations that should be considered from targeted outreach for public involvement and consultation. While the majority of the figures in this analysis show that the MPO area falls below state and national averages, the MPO will make efforts to be sure that everyone in the community is given ample opportunity to comment on MPO plans and programs. The tables in **Appendix B** highlight these figures.

Land Use and Development

Land use patterns vary widely across the MPO planning area. While population and development densities are centered around the cities of Elizabethtown, Radcliff, Vine Grove, Fort Knox, and Brandenburg, there are areas within both Hardin and Meade counties that are very rural in nature. Residential, commercial, and industrial development is sprawling throughout the planning area, which requires most citizens to drive their personal vehicles to reach their desired destinations, whether it be their job, shopping, medical facilities, etc. This demonstrates the interconnectedness of land use and transportation.

Transportation and land use are interwoven in a continuous cycle. The construction or improvement of roadways improves accessibility, which leads to development, which increases traffic demand, and so on. Land use development plays a prominent role in the development of the Metropolitan Transportation Plan (MTP). Local development patterns were discussed and documented as part of the update of the travel demand model. Discussions with local planning officials have taken place throughout the development of the MTP through the MPO's Technical Advisory Committee (TAC). This has helped to ensure that the transportation plan was sensitive to current land use, current and foreseen development trends, and desired future land use of the area. Beyond the travel demand model, local land use officials played prominent roles in the development of the following elements of the MTP, including the identification and prioritization of proposed improvement projects and development of the recommendations.

One of the critical issues discussed in the original MTP for the Radcliff/Elizabethtown MPO was communication between transportation and land use decision-makers. Throughout the years, the MPO has fostered this communication which is demonstrated in memorandum of understandings that have been developed for US 31W and KY 361 (Patriot Parkway). As



Chapter 4 Socioeconomic, Land Use, and Environment
development occurs, the MPO will continue to play a prominent role in the coordination of the transportation and land use discussions.

Environmental and Cultural Resource Features

The study area for this Metropolitan Transportation Plan is rich with historic landmarks and natural resources.

Elizabethtown, the county seat of Hardin County, features Freeman Lake Park, Swope's Cars of Yesteryear Museum, the Hardin County History Museum, the Brown-Pusey House, the Lincoln Heritage House, Sarah Bush Johnston Lincoln Memorial, and the One-Room Schoolhouse, to name a few.

Just four miles south of Elizabethtown is the Glendale historic district, which has developed into a tourist attraction with its antique shops and unique dining establishments.

Fort Knox is home to the U.S. Bullion Depository, which stores 100 billion dollars' worth of gold bullion, and the General George Patton Museum and Center of Leadership, which contains personal artifacts of General George S. Patton and one of the most extensive collections of tanks and armored vehicles in the world.

West Point, in northern Hardin County, is home to Tioga Falls and Bridges to the Past, two historic walking trails. West Point is also the home of Civil War Fort Duffield.

The City of Brandenburg, the county seat of Meade County, is located on the Ohio River, and the downtown area is the only one in Kentucky to have a Main Street that leads directly to the River. The historic downtown area, located between two high cliffs, hosted General John Hunt Morgan and his troops as they crossed the Ohio River into Indiana in 1863. General Morgan's home, which overlooks the Ohio, was almost completely destroyed by the 1974 tornado that devastated Meade County, but was rebuilt to its original state and is now a private home. Brandenburg City Park spans the width of the downtown area.

These are only a few of the many significant environmental and cultural features in Hardin and Meade County. To identify other environmental features and cultural resources in the study area, a local area Geographic Information System (GIS) data set and map were developed using environmental resource information data collected from numerous sources, including: federal, state, and local databases; agency contacts; field investigations; and existing in-house data provided by the consultant.



Environmental Mitigation Measures

The implementation of transportation improvements is the responsibility of the Kentucky Transportation Cabinet. As projects advance into the preliminary engineering and environmental stage, KYTC will determine proper environmental mitigation measures to reduce the impact of a transportation project on the surrounding natural and human environment. The following is an overview of mitigation measures employed by KYTC.

Transportation projects may impact elements of the natural and human environment. Kentucky incorporates measures to minimize or mitigate those impacts that cannot otherwise be avoided. Mitigation measures vary depending upon resource affected, severity of impact, and other factors.

Kentucky has successfully created advance wetland mitigation sites across the Commonwealth. The objective to develop a "wetland bank" within each major watershed to offset wetland impacts within that region has been achieved. Approximately 300 acres of wetlands have been restored by KYTC through this mitigation initiative. Credits generated from these activities are used by KYTC to offset impacts authorized under 404 permits issued by the US Army Corps of Engineers and 401 Water Quality Certifications issued by the Kentucky Division of Water. A similar program for mitigation of stream impacts related to Transportation projects is currently being implemented by KYTC. Furthermore, Best Management Practices (BMP) are applied to construction projects in order to minimize the impacts of erosion and sedimentation on streams.

KYTC follows its established Noise Policy in assessing the noise impacts of its projects on adjacent properties. When impacts are determined to exceed established threshold criteria and when economically justifiable, mitigation measures are incorporated within developing projects. These measures may include the construction of noise walls, installation of insulating materials in affected buildings, or minimization techniques such as alignment adjustment, lowering of grades into cut sections, construction of berms, etc.

Evaluation of historic properties in accordance with the National Historic Preservation Act is conducted for developing projects. When impacts are unavoidable, mitigation and minimization measures including, but not limited to, documentation of affected structures, enhancement and/or preservation initiatives, etc., are undertaken. Concerns for the loss of historic bridges have prompted KYTC to initiate an update of the statewide Historic Bridge Inventory. Important archaeological resources, eligible for the National Register for their data content, are investigated for the furtherance of our understanding of past cultures. Such investigations routinely include a public education component to disseminate the information gathered to the general public.



Chapter 4 Socioeconomic, Land Use, and Environment

The KYTC and US Fish and Wildlife Service have worked cooperatively to address impacts to the Indiana bat that may result from KYTC projects. The Indiana Bat Conservation Fund has been established for the advancement of meaningful preservation or protective measures, research, etc. for this species. Funds are deposited within the fund based upon summer habitat loss resulting from transportation projects. KYTC also routinely consults with Federal, State, and local agencies concerning the impacts of transportation projects on their conservation plans or maps. An example of such a plan is the “Kentucky Comprehensive Wildlife Conservation Strategy” developed by the Kentucky Department of Fish and Wildlife Resources.

KYTC also utilizes Geographic Information Systems (GIS) to evaluate the impacts of proposed projects on the human and natural environment. Information in the GIS layers includes wetlands, hazardous materials, archaeology, historical sites, Outstanding Resource Waters, Special Waters, designated critical habitat, etc. Many of these GIS layers or data sources are directly obtained from the responsible agencies. This allows KYTC to evaluate project areas and minimize or avoid impacts early in project or corridor planning efforts. This information is also shared with the public as well as Federal, State, and local agencies to gain their input on the importance of and how best to minimize impacts to the resource. These efforts are documented, shared, and carried forward through the remainder of project development to more closely link Planning and National Environmental Policy Act (NEPA) activities.

Summary

As projects progress, environmental justice issues will be evaluated based on proximity to the proposed improvement(s). There are many sensitive social, community, environmental, and cultural resources in the study area that have special significance for the region. These issues will also need to be addressed in any future project development phases resulting from the 2045 Metropolitan Transportation Plan.



Planning for the transportation
needs of the region.

Chapter 5

Travel Demand Model



5. Traffic Model Technical Document Summary

Overview

A new Travel Demand Forecasting Model (model) was developed in 2018 for the Radcliff/Elizabethtown MPO planning area, which includes the Fort Knox military post. The model is calibrated to the 2017 base year and provides forecasts for future year 2045. The model incorporates the basic model structure of other small area models used by KYTC, including KYTC's preferred standard user interface (TransCAD) for managing scenarios.

The traffic model is referred to as the Hardin/Meade model. Hardin County is broken down into 691 traffic analysis zones (TAZs), while Meade County has 156 TAZs for a total of 847 zones. In order to capture potential diversion due to congestion in the model, external TAZs, outside of Hardin and Meade Counties, were evaluated as a buffer area around the two MPO counties. These external zones are in Breckinridge, Bullitt, Grayson, Hart, Jefferson, Larue, and Nelson Counties.

The US Census Bureau is the main data source for the Hardin/Meade model. Census data from 2010 was utilized to obtain critical population and household characteristics for the traffic model. For the Hardin/Meade model, census block information was obtained from the US Census Bureau and the TAZs were developed from the most recent Census Block geography. The data utilized includes: population, household units (total), housing units (occupied), and housing units (empty). Other data utilized in the development of the traffic model includes: American Community Survey (ACS), Woods and Poole Data, Employment Data (KY Workforce Cabinet), and School Data.

Model Description

The Hardin/Meade travel demand model that utilizes TransCAD standard user interface to complete a model run, or a particular step during the modeling process. There traffic modeling process stages are as follows:

- Initialization
- Trip Generation
- Distribution to Assignment (including feedback loop)

Initialization

The initialization stage calculates highway speeds and capacities on a link-by-link basis, and updates the network database. TransCAD then builds the binary network file required for subsequent steps. All output files for the model are placed in the output folder defined in the



graphical user interface (GUI). The initialization stage should be run for a new alternative, and each time that a change is made to any portion of the network.

Trip Generation

Trip generation is step one in the traditional 4-step model approach. A trip generation model estimates the number of trip-ends generated for each zone in the model. Only trips with both ends in the modeled area are counted. A separate external model is used to account for trips external to and through the modeled area. The number of trips estimated is based on socioeconomic characteristics such as the number of persons, households, autos, and the employment for each zone. The estimate is based on an average weekday number of trips. A trip rate is applied to these socioeconomic values to calculate trip ends by trip purpose.

Trip Distribution/Time of Day

The trip distribution model pairs, or connects, estimated productions and attractions by TAZ to each other. The resulting output is a trip table or matrix of trips from every zone to every other zone for each of the trip purposes specified in the model. In addition to productions and attractions by zone, the trip distribution model uses a travel time impedance for the distribution of trips.

The trip distribution model structure applied for the Hardin-Meade MPO model is the standard gravity model. In general, the "gravity" model suggests that the number of trips from one TAZ to another is proportional to attractions at the attraction TAZ and inversely proportional to the travel impedance between the two TAZs.

For the truck model, the trip distribution model was applied using gamma coefficients. The average travel time for each truck purpose was considered reasonable with respect to truck type and expected relationships between truck type. Comparisons to secondary sources show a reasonable comparison for light trucks. The average travel time for medium trucks shows a high variation in comparison to secondary sources, and the average travel time for heavy trucks is slightly high in comparison. As with trip generation, final validation was conducted by comparing model estimated truck trips to observed truck counts in the Hardin-Meade network. Based on this comparison, further modifications were not made to the medium and heavy truck trip distributions.

Feedback

To account for feedback and congestion, in the first iteration, time is simply the free-flow (unloaded) travel time from the network based on distance and free-flow speed. In subsequent iterations, MSA (method of successive averages) time is used. The MSA time is calculated



inside Caliper's highway assignment macros and is the result of the MSA flow, the roadway link capacity, and the volume delay function.

The MSA process nearly guarantees convergence of the travel time matrices within a reasonable number of iterations. For use in the gravity model, intrazonal travel times and terminal times are added to the impedance.

Trip Assignment

The final step in the travel demand model is trip assignment. This is the process of assigning the zone to zone trips to the individual links in the highway network. This step is performed iteratively with overall model calibration and validation. When overall model calibration and validation is achieved, as measured by established performance measures, the trip assignment step provides the data needed for:

- Testing alternative transportation plans
- Establishing priorities between different transportation investment strategies
- Analyzing alternative locations for roadway improvements
- Forecasting design volumes needed to adequately design and construct new roadway facilities.

The dependability of the output from this step is dependent upon the reliability of all the proceeding steps.

Highway trip assignment was performed separately for the AM peak (6:00 am – 9:00 am), Midday period (9:00 am – 3:00 pm), the PM peak period (3:00 pm – 6:00 pm), and the Night period (6:00 pm – 6:00 am). Trucks are assigned in one "all or nothing" assignment and are essentially preloaded on the network. The passenger car equivalents included in the model are used to account for the trucks during the auto assignment (which is capacity constrained). At the end of the assignment procedure, the time period assignments are assumed to produce a daily traffic assignment.

Traffic Model Results

The Radcliff/Elizabethtown traffic model shows 3,914,936 vehicle miles of travel in the MPO planning area in 2017. The VMT is expected to grow to 5,406,781 by the end of the planning cycle of this plan. This represents a 38.1% increase in VMT and demonstrates the importance of investing in the transportation system in this Radcliff/Elizabethtown area. The projects identified in **Chapter 7** will have a tremendous impact on the safety and efficiency of the highway network over the next 25-year period, therefore, it will be very important for the MPO to continue to focus on moving these projects forward over the next several years.



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Chapter 6

Metropolitan Transportation Plan Development



6. PLAN DEVELOPMENT

This Plan Development chapter provides an overview of all of the elements that have gone into the development of the *2040 Radcliff/Elizabethtown Metropolitan Transportation Plan* (MTP). The process includes the development of MPO goals and objectives, a review of projects in the current KYTC Highway Plan, the development of highway improvement alternatives, past studies conducted by the MPO, public feedback, evaluation and ranking of projects, and the process for selecting recommended improvements for the MTP.

A. Goals and Objectives

The MPO's Goals and Objectives are outlined on pages 5-7 in Chapter 1 – Introduction of the MTP. The goals and objectives are based on the ten (10) planning factors in the federal transportation legislation, Fixing America's Surface Transportation (FAST) Act. The goals and objectives provide focus and direction for the MPO's decision-making process. The goals and objectives have served as a guide throughout the process of developing the 2045 MTP. They were most importantly utilized to evaluate and rank projects for the 2045 MTP.

B. KYTC Highway Plan

To address needs on the state and federal highway systems, the development of the Radcliff/Elizabethtown MTP included a review of the KYTC Highway Plan, which was approved by the Kentucky General Assembly in 2018. The Highway Plan is KYTC's official programming document and is part of the state budget. The Plan is updated by the legislature every two years and is therefore a constantly changing document. Project funds are scheduled and set aside for improvements listed in the first two years of the Plan and estimated, subject to change, for the latter years of the Plan.

C. KYTC Continuous Highway Analysis Framework (CHAF)

The remainder of the projects considered for the 2045 MTP are found on KYTC's Continuous Highway Analysis Framework (CHAF) database. The CHAF database is a compilation of highway project needs for all counties in Kentucky. The CHAF database contains project descriptions, cost estimates, and local/regional/Highway District priorities. The list of projects in CHAF are the basis for the Statewide Transportation Planning process and projects are prioritized every two years by local entities, Area Development Districts (ADDs) and MPOs, and the KYTC Highway Districts through the KYTC Strategic Highway Investment Formula for Tomorrow (SHIFT) process. The prioritization of UNL projects occurs the year prior to the development of the new Highway Plan that was discussed in the section above. Based on the number of projects identified in the Radcliff/Elizabethtown MPO planning area and the projected funding



over the next 25 years for the planning area, all MPO projects were included in this version of the MTP. These projects are found in Table 2 in **Chapter 7** of the MTP.

D. Evaluation and Scoring Process for Highway Projects

The Radcliff/Elizabethtown MPO Technical Advisory Committee (TAC) developed an evaluation and scoring process to assist in the ranking and scheduling of projects in the 2045 Radcliff/Elizabethtown Metropolitan Transportation Plan (MTP). The evaluation and scoring process is based on the MPO goals and objectives with some additional criteria added for project priority, feasibility, and benefit versus cost. The values in the table below comprise a composite score for all projects evaluated for the 2045 Metropolitan Transportation Plan.

Project Prioritization Criteria				
Criteria	Rationale		Maximum Points	MPO Goal Addressed
Traffic / Facility Type	Prioritize projects that reduce congestion.	30k+ or Interstate/Parkway = 15 20k+ or Principal Arterial = 12 10k+ or Minor Arterial = 9 5k+ or Collector = 6 Less than 5k or Local = 3	15	3
Improve Safety	Encourage projects that improve the safety of the highway network. Either project has been specifically identified as a Safety improvement project or qualitative assessment based on crash data.	Safety Improvement Project = 20 Considerable Safety Benefits = 20 Moderate Safety Benefits = 15 Mild Safety Benefits = 10 Minimal Safety Benefits = 5 No Safety Benefits = 0	20	1 & 9
Improve Freight Movement	Encourage and prioritize projects the benefit the movement of freight.	Truck Traffic 25% or Greater = 10 20-25% = 8 15-20% = 6 10-15% = 4 <10% = 2 Data = 0 No	10	5 & 6
Local Priority	Prioritize projects that have received local support through the KYTC SHIFT process.	Project Boosted in SHIFT = 15 Project Sponsored in SHIFT = 10 Project Not Sponsored = 0	15	-
Impact on Minority & Low-Income Population - Title VI & Environmental Justice	Emphasis on projects that either enhance minority and low-income populations or avoid adverse impacts on these populations.	Positive = 10 Neutral = 5 Negative = 0	10	7
Alternative Modes of Transportation - Bike/Ped & Public Transportation	Encourage projects that have the potential to improve bicycle/pedestrian conditions and/or improves access and/or mobility for public transportation services.	10 Points or 0 based on expected impact on one or both of these modes of transportation	10	4 & 8
System Preservation	Emphasize projects that focus on the preservation of the transportation network over expansion and new routes.	100% Replacement = 10 75% Replacement/25% Expansion = 8 50% Replacement/50% Expansion = 6 25% Replacement/75% Expansion = 4 100% Expansion = 2	10	2
Benefit/Cost	Benefits of projects should exceed the costs to complete them. (Subtotal Points/Cost in Millions)	>1000 = 10 >100 = 8 >10 = 6 >5 = 4 = 2 >1	10	-
			100	



E. Public Feedback

Public participation and feedback are a critical element to the 2045 Metropolitan Transportation Plan (MTP) update. A public information survey was developed in the summer of 2019 and was open from June 14 through July 19. The survey developed online through Survey Monkey and was shared through numerous social media outlets and on the MPO website. Paper copies were also placed at various locations throughout the planning area, including city halls, courthouses, and public libraries. A press release was developed and sent to the media outlets identified in the MPO Participation Plan to inform the public about the survey.

The MPO received 171 responses to the survey with 151 completed through the online version and 20 paper copies received. The results of the survey are found in **Appendix C** of the MTP.

This MTP takes all public comments into account and strives to address as many issues as possible within available funding constraints. **Chapter 7** outlines the plan for improving the transportation system in the Radcliff/Elizabethtown MPO Planning Area. Projects identified are outlined within the projected funding for the next 25-year period. Projects identified in the plan are not guaranteed for completion. The MTP is updated every five years and priorities are subject to change. Other issues that may cause a project to be delayed or removed from the plan include: lack of available funding, environmental concerns, a project is no longer needed or cannot be addressed by other means of implementation.

F. Past MPO Studies

Over the past several years, the MPO has conducted several studies regarding relevant issues in the Radcliff/Elizabethtown MPO planning area. Each of these studies has played an important role in the development of the 2045 Metropolitan Transportation Plan (MTP). The public transportation study has more details in **Chapter 7**, while the other four studies have identified important highway improvements that are included with the projects that have been evaluated for inclusion in the MTP.

Radcliff/Elizabethtown Public Transportation Study

The MPO contracted with Wilbur Smith Associates in 2004 to conduct a public transportation study to determine the feasibility for public transportation services and to determine the best method for meeting the need for transit services in the MPO area. To determine the feasibility and need for transit in the region, the following questions were to be answered:

- What transportation services are currently available in the MPO area?



- Is there a need for public transportation?
- What types of public transportation services should be offered?
- How would public transportation be operated and administered?
- What are the cost requirements of a transit system?
- What transit facilities are needed?

US 31W Access Management Study

The US 31W Access Management Study was conducted for the purpose of improving safety and mobility along US 31W in Hardin and Meade counties. US 31W, locally referred to as “Dixie Highway,” is an economic lifeline through the communities of Elizabethtown, Radcliff, Fort Knox, Muldraugh, Sonora and Upton. The highway not only serves as a connection between Louisville and Bowling Green, but it also provides access to businesses, industries, public buildings, homes and farms.

The study was needed because traffic and congestion have increased steadily over the years and land use changes throughout the corridor ensure that this trend will continue. Along the 41-mile study section, from West Point at the Hardin/Jefferson county line to Upton in southern Hardin County, nearly 1,000 vehicle crashes occur every year. Many of these are related to an overabundance of driveways, intersections and median openings.

The study was undertaken with its objective to seek feasible strategies to more effectively manage access along US 31W and, in doing so, improve the safety and efficiency of the highway. It was conducted through a collaborative effort between the Radcliff/Elizabethtown Metropolitan Planning Organization (MPO), the Kentucky Transportation Cabinet, local government agencies, and the public. The MPO Technical Advisory Committee served as an advisory group to the study.

The desired outcome of the study was two-fold. First, a list of access management retrofit projects was desired that could be implemented by the Kentucky Transportation Cabinet or local governments. Second, it was desired to have an overall access management plan that would provide tools for implementation and an overall framework for applying access management practices in the corridor.

Fort Knox Highway Access Study

The Fort Knox Highway Access Study was conducted to identify and address anticipated traffic problems relating to the U.S. Department of Defense 2005 Base Realignment and Closure (BRAC) Report. The BRAC Report included a number of changes that will take place on the Fort Knox Military Reservation that will affect the post and the surrounding region. The study is needed because the Radcliff-Fort Knox area has experienced significant growth in recent years. With existing roadways already experiencing capacity issues, particularly US 31W (“Dixie Highway”), the BRAC changes will only compound



the issue. The study was conducted to determine projected traffic impacts that the BRAC will have on the community and to recommend improvements that will mitigate these impacts.

The study area was centered on US 31W from just south of Lincoln Trail Boulevard (KY 1815) to north of Brandenburg Station Road. Other key roads included in the analysis were North Wilson Road, Bullion Boulevard, and Logsdon Parkway (KY 1646). The study also included the three existing access gates to the post at North Wilson Road, Chaffee Gate at Bullion Boulevard, and Brandenburg Station Road.

Glendale Area Transportation Study

Looming large adjacent to historic Glendale is the Glendale Economic Development Site; one of the primary economic development sites in the Commonwealth. Identified as site 093-005 by the Kentucky Economic Development Cabinet, this 1,551-acre parcel of land is zoned for Heavy Industrial District (I-2) use.

With the proper roadway infrastructure and buffers in place, the site can blend into the surrounding rural area without compromising area mobility. This report sets forth short, medium and long-range projects that can be constructed over time to distribute costs, making the plan both fiscally responsible and scalable to grow as development occurs.

Fort Knox Regional Highway Capacity Study

The Radcliff/Elizabethtown Metropolitan Planning Organization (MPO) and the Lincoln Trail Area Development District (LTADD) conducted the Fort Knox Regional Highway Capacity Study in order to focus on the growth at Fort Knox and the resultant impacts on corridor capacity surrounding the installation. Primarily, the study was to identify potential improvements to aid in traffic flow and provide better connections to major roadways on a regional level.

The Lincoln Trail region has experienced higher-than-average growth in recent years. This increase has had an effect on the current roadway system. The 2005 Base Realignment and Closure (BRAC) Report included a number of considerable changes that took place on the Fort Knox military post that will further affect the surrounding region.

This study broadened the study area to analyze the impact of BRAC on the region surrounding the immediate impact area of Fort Knox. It focused on land use impacts as well as those to the transportation system. The regional study confirmed the needs previously identified in the previous Fort Knox study and other BRAC-related planning activities but also identified additional projects that will have an impact on the movement of traffic, including a new Fort Knox access road along South Boundary Road.



Public Transportation Implementation Study

In 2013, the Radcliff/Elizabethtown Metropolitan Planning Organization (MPO) contracted with The Corradino Group to complete a study on the potential implementation of a public transportation system. The purpose of this study was to develop a plan for a fixed-route public transportation system that will connect Elizabethtown, Radcliff, and Fort Knox. The system would also include routes that circulate within each city. The study included: refining the routes for the transit system, determining locations for stops along the routes, establishing the cost for shelters at the stops, determining the capital and operating costs for the system, determining the match required for each local government, and any other elements necessary to complete the study.

Bicycle Facilities/Pedestrian Facilities Studies

In two separate studies, the MPO analyzed needs for bicycle and pedestrian facilities. The Bicycle Facilities Study was completed in 2016 and the Pedestrian Facilities Study was completed in 2019. The intent of these studies was to improve connections between on-road bicycle facilities and sidewalks with the local trail systems to better enhance the bicycle/pedestrian environment in the planning area. Numerous improvements have been identified and are outlined in **Chapter 7** of the MTP.



Planning for the transportation
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Chapter 7

2045 Metropolitan Transportation Plan



7. 2045 Metropolitan Transportation Plan

This chapter presents the 2040 Radcliff/Elizabethtown Metropolitan Transportation Plan, as well as the fiscal constraints under which it was developed. It is intended to guide the development and updates of the Transportation Improvement Program (TIP) for the MPO, as required by the Federal Highway Administration, and can be revised at any time with approval from the MPO Policy Committee.

A. Fiscal Constraint Analysis

In Kentucky, there is no distribution of allocated funds to MPO areas with a population of less than 200,000. Therefore, these MPOs, including Radcliff/Elizabethtown, must compete for project funding with all other parts of the state, both urban and rural. For this reason, historical records of spending have been reviewed and considered in helping to determine future funding levels for the Radcliff/Elizabethtown planning area.

The revenue projections for the 2019-2045 planning horizon of the Radcliff/Elizabethtown MTP are found in the table at the top of **page 47**. During the first six years (2019-2025), it is assumed that all current projects in the Kentucky Transportation Cabinet (KYTC) Highway Plan will be completed (or have funding programmed). Therefore, the funding amounts for the 2019-2025 period reflect the costs to complete the projects currently in the KYTC Highway Plan.

For years 2026-2045, revenue assumptions were based on an analysis of historical expenditures for highway improvement projects. Data for past expenditures of federal and state funding were available for the 25-year period from 1993 to 2017. An analysis revealed that the relative percentage of funding expended annually on projects within the Radcliff/Elizabethtown planning area (Hardin and Meade counties) ranged from a low of 1.07% to a high of 4.35% - with an average of 2.20%. This average percentage of statewide funding was assumed to be a reasonable estimate of future funding allocations (or revenues) for the 2026-2045 planning period.

Also, as part of the fiscal analysis, federal regulations require that all projects costs be shown in Year of Expenditure (YOE) dollars. In order to accomplish YOE, the Radcliff/Elizabethtown MTP followed KYTC guidance and used a 4% escalation per year in all project phases, except the right-of-way phase, which is escalated at 5% per year. Project revenues are escalated at 4% per year. To calculate YOE costs, current project costs were inflated to the mid-point of the 5-year period in which projects are scheduled. Therefore, for a project scheduled between 2021-2025, the cost was increased to the mid-year 2023. The figures in the **2019-2045 Revenue Projections Table**, at the top of **page 47**, reflect revenues that have been estimated as described above and adjusted for YOE over the planning horizon.



Radcliff/Elizabethtown MPO 2019-2045 Revenue Projections	
5-Year Periods	Cumulative Total Revenues
2019-2025	\$362,571,635
2026-2030	\$394,471,940
2031-2035	\$484,567,977
2036-2040	\$595,241,641
2041-2045	\$731,192,789
	\$2,568,045,982

B. 2045 Transportation Plan

The 2045 Radcliff/Elizabethtown Metropolitan Transportation Plan (MTP) covers improvement considerations for all modes of transportation, including Highways, Bicycle/Pedestrian, Public Transportation, Aviation, Rail, Riverport, Freight, and Transportation Alternative Program (TAP) projects.

Highway Improvements

The Highway Recommendations of the 2045 Metropolitan Transportation Plan (MTP) are summarized in the tables on the following pages. **Table 1** represents the projects that are expected to be constructed between 2018-2024. These projects are currently scheduled in the Kentucky Transportation Cabinet Highway Plan. The projects listed in **Table 1** are depicted just as they are in the KYTC Highway Plan. Therefore, some years may not have projects listed. However, it is expected that it will take the first six years (2018-2024) to complete the projects in the current KYTC Highway Plan. **Table 2** shows the projects the Radcliff/Elizabethtown MPO has recommended for the fiscally constrained portion of the MTP. These projects were evaluated and scored based on the criteria described in **Chapter 6**. Some projects were moved either up or down in 5-year priority grouping based on available funding as determined by the fiscal analysis and year of expenditure dollar amounts. The maps on **pages 54-58** of this chapter depict the location of projects listed in **Table 2**. The map identification letters are found in **columns 1 and 2** of **Table 2**.

The priorities and scheduling of highway projects reflect the current conditions of the Radcliff/Elizabethtown MPO. They are subject to change as necessary and conditions warrant.

TABLE 1
RADCLIFF/ELIZABETHTOWN METROPOLITAN TRANSPORTATION PLAN
HIGHWAY IMPROVEMENTS, 2018-2024

COUNTY	ITEM ID	ROUTE	BEGIN MILEPOINT	END MILEPOINT	TYPE OF WORK	DESCRIPTION	PHASE	TYPE OF FUND	FISCAL YEAR	TOTAL PHASE COST	TOTAL PROJECT COST
HARDIN	153.01	KY 251	2.681	6.288	PHASE I DESIGN	KY 251 IMPROVEMENTS FROM KY 3005 TO KY 434	UTILITIES CONSTRUCTION	BR2	2019	\$4,200,000	\$12,900,000
							CONSTRUCTION	BR2	2021	\$8,700,000	
HARDIN	154	US 31W	18.827	28.355	CONGESTION MITIGATION	IMPROVE MOBILITY AND REDUCE CONGESTION ON US 31W FROM US 31W BYPASS TO CS 2255 (WILSON ROAD)	DESIGN	SPP	2021	\$500,000	\$11,500,000
							RIGHT-OF-WAY	SPP	2024	\$1,000,000	
							UTILITIES	SPP	2024	\$1,000,000	
							CONSTRUCTION	SPP	2024	\$9,000,000	
HARDIN	199	US 31W	36.4	36.8	ASSET MANAGEMENT-BRIDGE	ADDRESS DEFICIENCIES OF BRIDGE OVER P&L AND CSX RAILROADS IN WEST POINT	CONSTRUCTION	BR	2019	\$10,500,000	\$10,500,000
HARDIN	442	US 62	20.104	23.351	RECONSTRUCTION	IMPROVE SAFETY, MOBILITY, AND GEOMETRICS ON US 62 FROM I 65 TO UPPER COLESBURG ROAD	DESIGN	STP	2022	\$1,500,000	\$1,500,000
HARDIN	1098	US 62	28.157	29.194	ASSET MANAGEMENT-BRIDGE	ADDRESS DEFICIENCIES OF BRIDGE ON US 62 OVER ROLLING FORK AT HARDIN-NELSON COUNTY LINE	CONSTRUCTION	BR	2020	\$3,381,000	\$3,381,000
HARDIN	7020	KY 361	0	0.5	SAFETY	RELOCATE INTERSECTION OF WOODLAND DRIVE AT US 31W	CONSTRUCTION	BR2	2020	\$2,500,000	\$2,500,000
HARDIN	8801	KY 1357	14.614	16.292	SAFETY	IMPROVE SAFETY, GEOMETRICS, DRAINAGE, AND MAINTENANCE ISSUES ALONG KY 1357 (ST. JOHN ROAD) FROM US 31W BYPASS TO KY 3005 (RING ROAD)	RIGHT-OF-WAY	SPP	2020	\$3,000,000	\$14,500,000
							UTILITIES	SPP	2021	\$2,500,000	
							CONSTRUCTION	SPP	2024	\$9,000,000	
HARDIN	20011	US 31W	17.677	19.5	ASSET MANAGEMENT-PAVEMENT	ADDRESS PAVEMENT CONDITION	DESIGN	PM	2019	\$550,000	\$6,050,000
							CONSTRUCTION	PM	2019	\$5,500,000	
HARDIN	20012	US 31W	19.5	20.432	ASSET MANAGEMENT-PAVEMENT	ADDRESS PAVEMENT CONDITION	DESIGN	PM	2019	\$250,000	\$2,750,000
							CONSTRUCTION	PM	2019	\$2,500,000	
HARDIN	20013	US 31W	27.732	29.5	ASSET MANAGEMENT-PAVEMENT	ADDRESS PAVEMENT CONDITION	DESIGN	PM	2021	\$325,000	\$3,575,000
							CONSTRUCTION	PM	2021	\$3,250,000	
HARDIN	20014	US 31W	0	0.25	ASSET MANAGEMENT-PAVEMENT	ADDRESS PAVEMENT CONDITION	DESIGN	PM	2020	\$25,000	\$275,000
							CONSTRUCTION	PM	2020	\$250,000	
HARDIN	20015	WK 9001	119.65	120.65	ASSET MANAGEMENT-PAVEMENT	ADDRESS PAVEMENT CONDITION OF WENDELL H. FORD WESTERN KY PARKWAY BOTH DIRECTIONS FROM MILEPOINT 119.649 TO MILEPOINT 120.649	DESIGN	PM	2024	\$100,000	\$1,100,000
							CONSTRUCTION	PM	2024	\$1,000,000	

TABLE 1
RADCLIFF/ELIZABETHTOWN METROPOLITAN TRANSPORTATION PLAN
HIGHWAY IMPROVEMENTS, 2018-2024

COUNTY	ITEM ID	ROUTE	BEGIN MILEPOINT	END MILEPOINT	TYPE OF WORK	DESCRIPTION	PHASE	TYPE OF FUND	FISCAL YEAR	TOTAL PHASE COST	TOTAL PROJECT COST
HARDIN	20015	WK 9001	120.93	132.4	ASSET MANAGEMENT- PAVEMENT	ADDRESS PAVEMENT CONDITION OF WENDELL H. FORD WESTERN KY PARKWAY BOTH DIRECTIONS FROM MILEPOINT 120.93 (120.65 NON- CARDINAL) TO MILEPOINT 132.4 (130.95 NON-CARDINAL)	DESIGN	PM	2021	\$920,000	\$10,120,000
							CONSTRUCTION	PM	2024	\$9,200,000	
HARDIN	20028	US 62	9.57	13.77	ASSET MANAGEMENT- PAVEMENT	ADDRESS PAVEMENT CONDITION ON US 62 FROM MILEPOINT 9.57 TO MILEPOINT 13.77	CONSTRUCTION	PM	2022	\$689,000	\$689,000
MEADE	8702	KY 79	1.263	4.411	RECONSTRUCTION	RECONSTRUCT KY 79 FROM KY 428 TO KY 144	DESIGN	SPP	2021	\$1,040,000	\$17,470,000
							RIGHT-OF-WAY	SPP	2023	\$3,250,000	
							UTILITIES	SPP	2024	\$1,770,000	
MEADE	8705	KY 79	4.411	8.237	RECONSTRUCTION	RECONSTRUCT KY 79 FROM KY 144 TO KY 1051	CONSTRUCTION	SPP	2024	\$11,410,000	\$15,560,000
							UTILITIES	SPP	2021	\$2,030,000	
							CONSTRUCTION	SPP	2023	\$13,530,000	

TABLE 2
RADCLIFF/ELIZABETHTOWN METROPOLITAN TRANSPORTATION PLAN
HIGHWAY IMPROVEMENTS, 2025-2045

MAP #	MAP ID #	Total Score	Project ID (CHAF)	KYTC Item #	County	Route	Description	Planning Cost	Planning Year of Expenditure	Design Cost	Design Year of Expenditure	Right-of-Way Cost	Right-of-Way Expenditure	Utilities Cost	Utilities Year of Expenditure	Construction Cost	Construction Year of Expenditure	TOTAL COST	Total Year of Expenditure Cost	Planning
2025-2030																				
1	16	73	IP20150340	4-154	Hardin	US 31W	IMPROVE MOBILITY AND REDUCE CONGESTION ON US-31W FROM VETERANS WAY TO CS-2255 (WILSON ROAD). (10CCR)(12CCR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,014,000	\$13,704,850	\$10,014,000	\$13,704,850	
1	26	66	IP20150448	4-153.01	Hardin	KY 251	KY 251 IMPROVEMENTS FROM KY 3005 TO KY 434.	\$0	\$0	\$0	\$0	\$3,912,000	\$5,779,806	\$2,527,000	\$3,458,374	\$16,081,000	\$22,007,959	\$22,520,000	\$31,246,139	
3	21	65	IP20070175		Hardin	KY 1136	EXTENSION OF NEW GLENDALE ROAD FROM US 31W TO COMMERCE DRIVE IN ELIZABETHTOWN.	\$0	\$0	\$1,082,000	\$1,480,792	\$2,431,000	\$3,591,694	\$2,340,000	\$3,202,452	\$11,135,000	\$15,239,016	\$16,988,000	\$23,513,954	
1	20	64	IP20070167	4-442	Hardin	US 62	IMPROVE SAFETY, MOBILITY AND GEOMETRICS ON US-62 FROM I-65 TO UPPER COLESBURG ROAD (CR-1038)	\$0	\$0	\$1,974,000	\$2,701,555	\$4,221,000	\$6,236,339	\$2,632,000	\$3,602,074	\$19,213,000	\$26,294,317	\$28,040,000	\$38,834,286	
4	14	59	IP20090011		Hardin	CS 2440	REALIGNMENT OF SOUTH WILSON ROAD IN RADCLIFF TO CREATE A NEW INTERSECTION WITH THE NORTH WILSON ROAD REALIGNMENT AT WEST LINCOLN TRAIL BLVD	\$0	\$0	\$649,000	\$888,201	\$2,188,000	\$3,232,673	\$1,462,000	\$2,000,848	\$3,165,000	\$4,328,784	\$7,462,000	\$10,450,506	
1	22	59	IP20140011		Hardin Meade	KY 313	ADDRESS SAFETY AND TRAVEL TIME RELIABILITY ALONG KY 313 FROM THE KY 361/KY 1500 INTERSECTION IN VINE GROVE TO KY 1638 IN BRANDENBURG..	\$0	\$0	\$1,082,000	\$1,480,792	\$116,000	\$171,385	\$1,125,000	\$1,539,640	\$18,250,000	\$24,976,385	\$20,573,000	\$28,168,202	
2	5	58	IP20150360	4-8705	Meade	KY 79	RECONSTRUCT KY 79 FROM KY 144 TO KY 1051. (12CCN)(14CCR)(18CCN)	\$0	\$0	\$0	\$0	\$3,560,000	\$5,259,741	\$2,671,000	\$3,655,448	\$17,805,000	\$24,367,372	\$24,036,000	\$33,282,561	
2	1	49	IP20050005		Meade	KY 710	CONSTRUCT A RIGHT TURN LANE ON KY 710 AT KY 448 IN BRANDENBURG	\$0	\$0	\$92,000	\$125,908	\$67,000	\$98,990	\$105,000	\$143,700	\$696,000	\$952,524	\$960,000	\$1,321,122	
3	25	47	IP20150339	4-198	Hardin	KY 3005	EXTEND RING ROAD FROM THE WESTERN KENTUCKY PARKWAY TO I-65. "2 LANE INITIAL/4 LANE ULTIMATE." (12CCR)(14CCR)	\$0	\$0	\$0	\$0	\$7,908,000	\$11,683,718	\$1,566,000	\$2,143,179	\$34,741,000	\$47,545,457	\$44,215,000	\$61,372,354	
3	27	40	IP20170082		Hardin	CS 1297	RECONSTRUCT INTERSECTION OF US 31W AT PEAR ORCHARD ROAD NW AND VETERANS WAY	\$0	\$0	\$270,000	\$369,514	\$608,000	\$898,293	\$585,000	\$800,613	\$2,531,000	\$3,463,848	\$3,994,000	\$5,532,268	
2	6	38	IP20150432	4-8702	Meade	KY 79	RECONSTRUCT KY 79 FROM KY 428 TO KY 144. (12CCN)(14CCR)(18CCN)	\$0	\$0	\$921,000	\$1,260,452	\$4,573,000	\$6,756,404	\$4,277,000	\$5,853,370	\$15,015,000	\$20,549,064	\$24,786,000	\$34,419,290	
1	40	35	IP20070165		Hardin	US 31WX	IMPROVE ROADWAY DRAINAGE ALONG US 31WX IN WEST POINT FROM RAILROAD TRACKS TO 14TH STREET.	\$0	\$0	\$290,000	\$396,885	\$464,000	\$685,539	\$434,000	\$593,959	\$1,158,000	\$1,584,803	\$2,346,000	\$3,261,186	
2	7	26	IP20160086	4-8919	Meade	CS 1004	CONSTRUCT A ROUNDABOUT AT NORTHERN END OF MAIN STREET (CS 1004) IN BRANDENBURG. (16CCN)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,000	\$150,543	\$110,000	\$150,543	
TOTAL 2025-2030																		TOTAL 2025-2030		
																		COSTS	REVENUES	
																		\$285,257,260	\$394,471,940	

TABLE 2
RADCLIFF/ELIZABETHTOWN METROPOLITAN TRANSPORTATION PLAN
HIGHWAY IMPROVEMENTS, 2023-2045

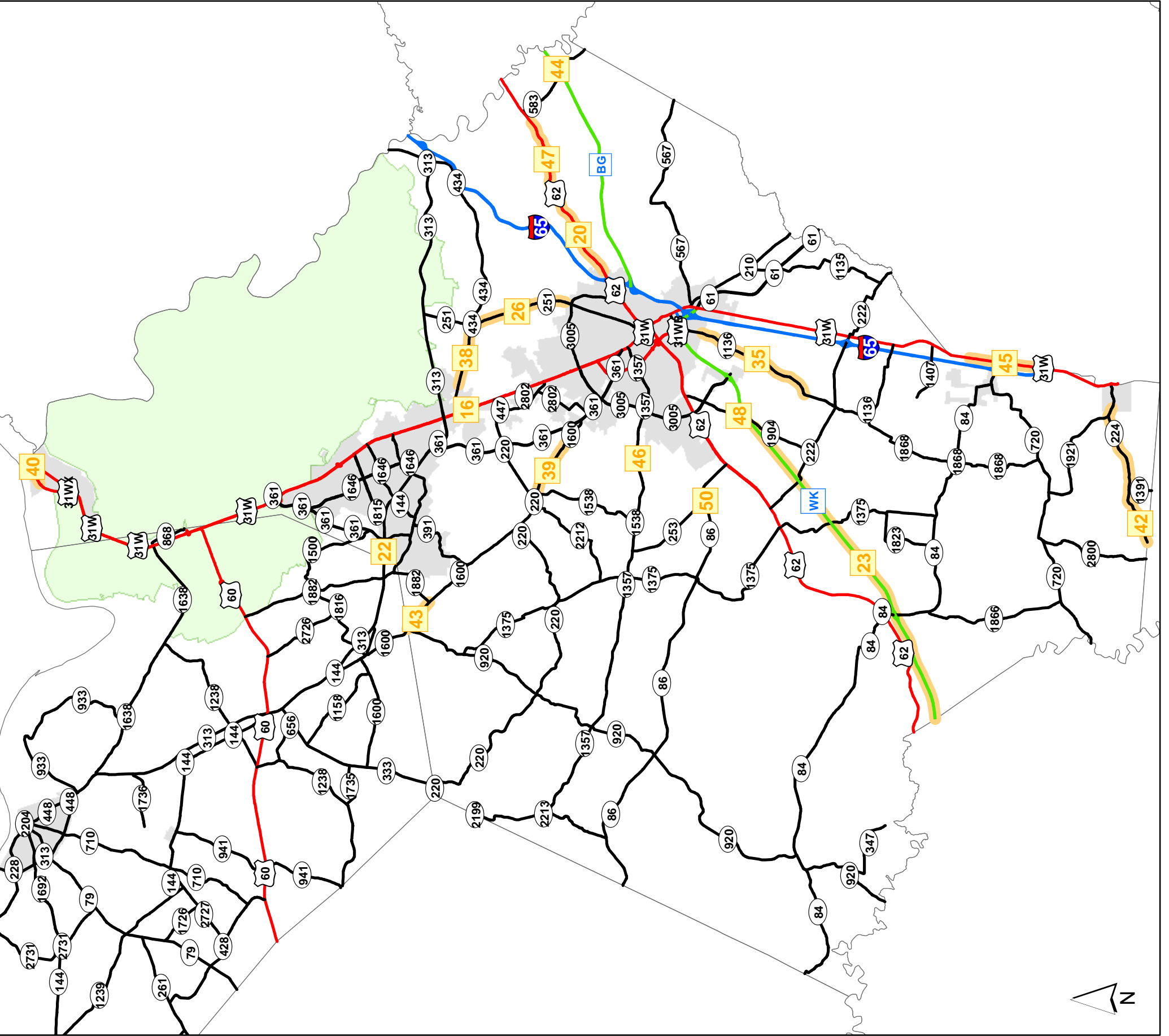
MAP #	MAP ID #	Total Score	Project ID (CHAF)	KYTC Item #	County	Route	Description	Planning Cost	Planning Year of Expenditure	Design Cost	Design Year of Expenditure	Right-of-Way Cost	Right-of-Way Year of Expenditure	Utilities Cost	Utilities Year of Expenditure	Construction Cost	Construction Year of Expenditure	TOTAL COST	Total Year of Expenditure Cost	Planning
2031-2035																				
4	10	67	IP20070169		Hardin	KY 144	SAFETY IMPROVEMENTS ALONG KY 144 IN RADCLIFF FROM KY 1646 TO US 31W INCLUDING RECONSTRUCTING THE INTERSECTIONS AT WOODLAND DRIVE AND AT KY 1646.	\$0	\$0	\$270,000	\$449,570	\$608,000	\$1,146,475	\$1,170,000	\$1,948,136	\$2,531,000	\$4,214,301	\$4,579,000	\$7,758,482	Fort Knox Highway Access Study
1	39	60	IP20060223		Hardin	KY 1600	ADDRESS SAFETY AND GEOMETRIC DEFICIENCIES ALONG KY 1600 FROM KY 361 TO THE ROUNDABOUT AT KY 220 IN RINEWILLE	\$0	\$0	\$541,000	\$900,805	\$1,216,000	\$2,292,949	\$1,170,000	\$1,948,136	\$5,061,000	\$8,426,937	\$7,988,000	\$13,568,827	
3	8	59	IP20070159		Hardin	US 31W	WIDEN US 31W FROM BISHOP LANE TO VALLEY CREEK BRIDGE IN ELIZABETHTOWN. (EXTENSION OF 6TP ITEM 04-189.00)	\$0	\$0	\$592,000	\$985,724	\$1,689,000	\$3,184,861	\$1,974,000	\$3,286,855	\$3,816,000	\$6,353,921	\$8,071,000	\$13,811,361	
1	38	55	IP20060222		Hardin	KY 434	ADDRESS LANE WIDTH, SHOULDERS, AND MAINTENANCE ISSUES ALONG KY 434 BETWEEN US 31W AND KY 251	\$0	\$0	\$270,000	\$449,570	\$608,000	\$1,146,475	\$409,000	\$681,015	\$3,163,000	\$5,266,628	\$4,450,000	\$7,543,687	
1	48	55	IP20090010		Hardin	KY 1904	INTERSECTION IMPROVEMENTS AT KY 1904 (BACON CREEK ROAD) AND CECILIA SMITH MILL ROAD JUST NORTH OF THE BRIDGE OVER WK PARKWAY TO INCREASE SIGHT DISTANCE AND IMPROVE SAFETY.	\$0	\$0	\$270,000	\$449,570	\$152,000	\$286,619	\$146,000	\$243,101	\$1,265,000	\$2,106,318	\$1,833,000	\$3,085,607	
1	46	55	IP20090008		Hardin	KY 1357	RECONSTRUCT THE INTERSECTION OF KY 1357 (ST. JOHN ROAD) AND CECILIA ROAD WEST OF ELIZABETHTOWN TO INCREASE SIGHT DISTANCE AND IMPROVE SAFETY.	\$0	\$0	\$108,000	\$179,828	\$304,000	\$573,237	\$146,000	\$243,101	\$633,000	\$1,053,992	\$1,191,000	\$2,050,158	
1	45	52	IP20120068		Hardin	US 31W	IMPROVE THE INTERSECTION OF US 31W AND KY 84 AT SONORA TO INCREASE SAFETY	\$0	\$0	\$324,000	\$539,484	\$608,000	\$1,146,475	\$585,000	\$974,068	\$1,898,000	\$3,160,310	\$3,415,000	\$5,820,336	
1	50	47	IP20100008		Hardin	KY 86	RECONSTRUCT THE INTERSECTION OF KY 86 (HARDINSBURG ROAD) AND SOUTH BLACK BRANCH ROAD WEST OF CECILIA.	\$0	\$0	\$132,000	\$219,790	\$106,000	\$199,879	\$99,000	\$164,842	\$395,000	\$657,704	\$732,000	\$1,242,215	
1	44	44	IP20070179		Hardin	BG 9002	CONSTRUCT EASTBOUND ON AND WESTBOUND OFF RAMP ON THE BLUEGRASS PARKWAY AT KY 583.	\$0	\$0	\$541,000	\$900,805	\$912,000	\$1,719,712	\$526,000	\$875,829	\$2,404,000	\$4,002,837	\$4,383,000	\$7,499,182	
2	2	41	IP20130136		Meade	CR 1002	ADDRESS SAFETY AND GEOMETRIC DEFICIENCIES ALONG OLD EKRON ROAD BETWEEN KY 448 AND KY 1051.	\$0	\$0	\$757,000	\$1,260,461	\$1,618,000	\$3,050,980	\$1,513,000	\$2,519,256	\$6,053,000	\$10,078,690	\$9,941,000	\$16,909,387	
2	3	41	IP20130137		Meade	CR 1002	ADDRESS SAFETY AND GEOMETRIC DEFICIENCIES ALONG OLD EKRON ROAD BETWEEN KY 1051 AND KY 1736.	\$0	\$0	\$1,053,000	\$1,753,322	\$2,617,000	\$4,934,744	\$1,395,000	\$2,322,778	\$8,369,000	\$13,935,000	\$13,434,000	\$22,945,844	
2	4	38	IP20150276	4 8703	Meade	KY 79	RECONSTRUCT KY 79 FROM KY 477 TO KY 428 (12CON)(14CCR)	\$13,000	\$21,646	\$1,645,000	\$2,739,046	\$4,967,000	\$9,366,019	\$2,632,000	\$4,382,473	\$13,159,000	\$21,910,702	\$22,416,000	\$38,419,887	
4	11	38	IP20070170		Hardin	KY 144	CONSTRUCT CURBS, GUTTERS & SIDEWALKS ALONG KY 144 IN VINE GROVE FROM KY 313 TO KY 1500	\$0	\$0	\$1,053,000	\$1,753,322	\$422,000	\$795,744	\$790,000	\$1,315,408	\$5,790,000	\$9,640,776	\$8,055,000	\$13,505,250	
4	18	36	IP20190207		Hardin	CS 2136	EXTENSION OF GATEWAY CROSSING BLVD BETWEEN US 31W AND SOUTH WILSON ROAD TO CONNECT WITH SKYLINE DRIVE		\$0				\$0							
4	15	32	IP20100003		Hardin	CS 2405	EXTEND KNOX BOULEVARD IN RADCLIFF FROM ITS CURRENT TERMINUS AT US 31W TO KY 361 (BULLION BLVD).	\$0	\$0	\$987,000	\$1,643,428	\$4,925,000	\$9,286,822	\$2,632,000	\$4,382,473	\$10,264,000	\$17,090,314	\$18,808,000	\$32,403,038	
4	13	26	IP20090006		Hardin	CR 1529	CONSTRUCT A NEW APPROACH TO BOONE ROAD FROM KY 447 AT W.A. JENKINS ROAD.	\$0	\$0	\$263,000	\$437,914	\$141,000	\$265,877	\$132,000	\$219,790	\$1,316,000	\$2,191,237	\$1,852,000	\$3,114,817	
TOTAL 2031-2035																			\$0	
																			COSTS	REVENUES
																			\$189,678,077	\$484,567,977

TABLE 2
RADCLIFF/ELIZABETHTOWN METROPOLITAN TRANSPORTATION PLAN
HIGHWAY IMPROVEMENTS, 2025-2045

MAP #	MAP ID #	Total Score	Project ID (CHAF)	KYTC Item #	County	Route	Description	Planning Cost	Planning Year of Expenditure	Design Cost	Design Year of Expenditure	Right-of-Way Cost	Right-of-Way Year of Expenditure	Utilities Cost	Utilities Year of Expenditure	Construction Cost	Construction Year of Expenditure	TOTAL COST	Total Year of Expenditure Cost	Planning
2036-2040																				
		83	IP20150149	4-20.01	Hardin	I - 65	IMPROVE THE SAFETY AND INCREASE THE CAPACITY OF THE I-65/KY-222 INTERCHANGE BASED ON EXISTING AND FUTURE NEEDS OF THE AREA. (2006BOPC)(08CCR)(10CCR)(14CCR)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,478,000	\$79,975,184	\$39,478,000	\$79,975,184	
3	49	53	IP20070161		Hardin	US 31W	CONVERT FROM 4-LANE UNDIVIDED TO 3-LANE DIVIDED FROM NEW GLENDALE ROAD (KY 1136) TO THE ELIZABETHTOWN SQUARE	\$0	\$0	\$329,000	\$666,494	\$4,503,000	\$10,837,006	\$1,974,000	\$3,998,962	\$3,290,000	\$6,664,936	\$10,096,000	\$22,167,398	
4	9	50	IP20060225		Hardin	KY 1815	ACCESS IMPROVEMENTS ALONG KY 1815 (WEST LINCOLN TRAIL BLVD) IN RADCLIFF FROM US 31W TO KY 313	\$132,000	\$267,408	\$230,000	\$465,938	\$774,000	\$1,862,723	\$625,000	\$1,266,135	\$1,184,000	\$2,398,567	\$2,945,000	\$6,260,771	Fort Knox Highway Access Study
3	19	46	IP20070166		Hardin	US 62	CONSTRUCT CURB AND GUTTER ALONG US 62 FROM NEAR BROOKS STREET TO I-65 IN ELIZABETHTOWN. CONNECTS TWO EXISTING CURB AND GUTTER SECTIONS (DRAINAGE IMPROVEMENT).	\$0	\$0	\$869,000	\$1,760,435	\$1,548,000	\$3,725,447	\$1,316,000	\$2,665,975	\$4,343,000	\$8,798,121	\$8,076,000	\$16,949,977	
1	43	46	IP20070177		Hardin/ Meade	KY 1600	ADDRESS SAFETY, GEOMETRIC DEFICIENCIES AND MAINTENANCE ISSUES ALONG KY 1600 FROM KY 1882 TO KY 144 AT FLAHERTY (mp 1.705 MEADE)	\$0	\$0	\$1,579,000	\$3,198,764	\$2,814,000	\$6,772,227	\$1,974,000	\$3,998,962	\$15,265,000	\$30,924,089	\$21,632,000	\$44,894,042	
1	47	43	IP20090009		Hardin	US 62	ADDRESS SAFETY, GEOMETRIC DEFICIENCIES AND MAINTENANCE ISSUES ALONG US 62 EAST OF ELIZABETHTOWN FROM UPPER COLESBURG ROAD TO STOVALL ROAD.	\$0	\$0	\$1,082,000	\$2,191,933	\$2,127,000	\$5,118,879	\$1,287,000	\$2,607,226	\$12,653,000	\$25,632,656	\$17,149,000	\$35,550,695	
4	12	40	IP20070174		Hardin	KY 434	EXTEND KY 434 FROM US 31W TO KY 361	\$0	\$0	\$1,579,000	\$3,198,764	\$2,955,000	\$7,111,560	\$1,974,000	\$3,998,962	\$15,791,000	\$31,988,669	\$22,299,000	\$46,298,955	
1	23	35	IP20100007		Hardin	WK 9001	CONSTRUCT A TRUCK PARKING FACILITY FOR OVERNIGHT PARKING OF SEMI TRACTOR TRAILERS (LOCATION TO BE DETERMINED)	\$0	\$0	\$658,000	\$1,332,987	\$141,000	\$339,333	\$658,000	\$1,332,987	\$6,580,000	\$13,329,873	\$8,037,000	\$16,335,181	
1	42	33	IP20070173		Hardin	KY 224	ADDRESS SAFETY, GEOMETRIC DEFICIENCIES AND MAINTENANCE ISSUES ALONG KY 224 FROM HART CVL TO PLEASANT HILL-UPTON RD	\$658,000	\$1,332,987	\$5,264,000	\$10,663,898	\$4,925,000	\$11,852,600	\$2,632,000	\$5,331,949	\$26,319,000	\$53,317,465	\$39,798,000	\$82,498,899	
4	17	27	IP20100006		Hardin	KY 144	EXTEND KY 144 (VINE STREET) FROM ITS TERMINUS AT US 31W IN RADCLIFF, EAST TO THE PROPOSED EAST LINCOLN TRAIL EXTENSION TO CONNECT WITH THE PROPOSED FORT KNOX ACCESS ROAD.	\$0	\$0	\$461,000	\$933,901	\$774,000	\$1,862,723	\$263,000	\$532,790	\$5,264,000	\$10,663,898	\$6,762,000	\$13,993,313	
TOTAL 2036-2040																				
																			COSTS	REVENUES
																			\$364,924,413	\$595,241,641

TABLE 2
RADCLIFF/ELIZABETHTOWN METROPOLITAN TRANSPORTATION PLAN
HIGHWAY IMPROVEMENTS, 2025-2045

MAP #	MAP ID #	Total Score	Project ID (CHAF)	KYTC Item #	County	Route	Description	Planning Cost	Planning Year of Expenditure	Design Cost	Design Year of Expenditure	Right-of-Way Cost	Right-of-Way Year of Expenditure	Utilities Cost	Utilities Year of Expenditure	Construction Cost	Construction Year of Expenditure	TOTAL COST	Total Year of Expenditure Cost	Planning
2041-2045																				
5	35	46	IP20080747		Hardin	KY 1136	ADDRESS CAPACITY AND SAFETY ALONG KY 1136 FROM THE PROPOSED PARTIAL GLENDALE BYPASS TO THE US 31W BYPASS IN ELIZABETHTOWN. SEE 2008 GLENDALE AREA TRANSPORTATION STUDY.	\$0	\$0	\$2,632,000	\$6,487,131	\$6,332,000	\$19,448,888	\$3,685,000	\$9,082,477	\$19,739,000	\$48,651,020	\$32,388,000	\$83,669,517	Glendale Area Transportation Study
5	41	41	IP20080746		Hardin	KY 1136	ADDRESS CAPACITY AND SAFETY ALONG KY 1136, SOUTH OF GLENDALE FROM US 31W TO JAGGERS ROAD INCLUDING RECONSTRUCTION OR REPLACEMENT OF THE BRIDGE OVER I-65. SEE 2008 GLENDALE AREA TRANSPORTATION STUDY.	\$0	\$0	\$658,000	\$1,621,783	\$1,407,000	\$4,321,634	\$869,000	\$2,141,838	\$6,843,000	\$16,866,048	\$9,777,000	\$24,951,303	Glendale Area Transportation Study
5	34	39	IP20080745		Hardin	US 31W	ADD SHOULDERS AND TURN LANES TO US 31W BETWEEN KY 1136 AND KY 222 EAST OF GLENDALE. SEE GLENDALE AREA TRANSPORTATION STUDY.	\$0	\$0	\$362,000	\$892,227	\$929,000	\$2,853,446	\$724,000	\$1,784,454	\$5,790,000	\$14,270,703	\$7,805,000	\$19,800,830	Glendale Area Transportation Study
5	31	37	IP20080742		Hardin	KY 222	CONSTRUCT A NORTHWEST BYPASS AROUND GLENDALE FROM KY 222 TO KY 1136. SEE GLENDALE AREA TRANSPORTATION STUDY.	\$0	\$0	\$329,000	\$810,891	\$704,000	\$2,162,353	\$790,000	\$1,947,125	\$3,421,000	\$8,431,792	\$5,244,000	\$13,352,161	Glendale Area Transportation Study
5	33	35	IP2008744		Hardin	KY 222	CONSTRUCT A NORTHEAST BYPASS OF GLENDALE FROM KY 1136 TO KY 222. SEE GLENDALE AREA TRANSPORTATION STUDY.	\$0	\$0	\$329,000	\$810,891	\$704,000	\$2,162,353	\$329,000	\$810,891	\$2,632,000	\$6,487,131	\$3,994,000	\$10,271,267	Glendale Area Transportation Study
5	32	35	IP20080743		Hardin	KY 222	INTERSECTION IMPROVEMENTS TO ADDRESS SAFETY AT KY 222/KY 1136 IN GLENDALE. SEE GLENDALE AREA TRANSPORTATION STUDY.	\$0	\$0	\$132,000	\$325,342	\$211,000	\$648,092	\$99,000	\$244,007	\$724,000	\$1,784,454	\$1,166,000	\$3,001,895	Glendale Area Transportation Study
5	30	32	IP20070176		Hardin	KY 1136	EXTENSION FROM KY 1868 S OF GLENDALE TO KY 220 AT KY 1600 N OF ELIZABETHTOWN. ADD CURB AND GUTTER TO IMPROVE DRAINAGE ALONG KY 222 IN GLENDALE FROM KY 1136 TO RAILROAD TRACKS.	\$1,316,000	\$3,243,566	\$26,319,000	\$64,848,848	\$28,142,000	\$86,438,822	\$26,319,000	\$64,868,848	\$75,005,000	\$184,865,989	\$157,101,000	\$404,286,073	Glendale Area Transportation Study
5	29	25	IP20080749		Hardin	KY 222	CONSTRUCT A NEW CONNECTOR FROM EXISTING JAGGERS ROAD TO KY 222 EAST OF GLENDALE.	\$0	\$0	\$526,000	\$1,296,440	\$422,000	\$1,296,183	\$329,000	\$810,891	\$2,500,000	\$6,161,789	\$3,777,000	\$9,565,304	Glendale Area Transportation Study
5	37	20	IP20070172		Hardin	KY 222		\$0	\$0	\$132,000	\$325,342	\$352,000	\$1,081,176	\$197,000	\$485,549	\$592,000	\$1,459,112	1,273,000.00	\$3,351,179	Glendale Area Transportation Study
																			TOTAL 2041-2045	
																			COSTS	REVENUES
																			\$572,249,529	\$731,192,789

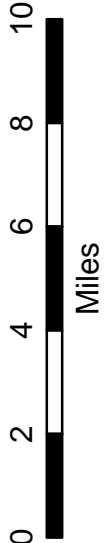


MPO CHAF PROJECTS

HARDIN COUNTY

Map #1

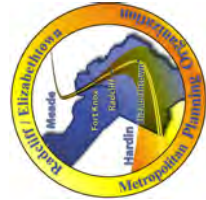
MAP_NUM	CHAF_ID	Pri_RT	RD_NAME	Description
16	IP20150340	US 31W	N DIXIE HWY	IMPROVE MOBILITY AND REDUCE CONGESTION ON US-31W FROM US-31WB TO CS-2255 (WILSON ROAD). (10CCR)(12CCR)
20	IP20070167	US 62	BARDSTOWN RD	IMPROVE SAFETY, MOBILITY AND GEOMETRICS ON US-62 FROM I-65 TO UPPER COLESBURG ROAD (CR-1038)
22	IP20140011	KY 313	JOE PRATHER HWY	Address safety and travel time reliability along KY 313 from the KY 361/1500 intersection in Vine Grove to KY 1638 in Brandenburg.
23	IP20100007	WK 9001	WK PKWY	CONSTRUCT A TRUCK PARKING FACILITY FOR OVERNIGHT PARKING OF SEMI-TRACTOR TRAILERS (LOCATION TO BE DETERMINED)
26	IP20150448	KY 251	SHEPHERDSVILLE RD	KY 251 IMPROVEMENTS FROM KY 3005 TO KY 434.
35	IP20080747	KY 1136	NEW GLENDALE RD	ADDRESS CAPACITY AND SAFETY ALONG KY 1136 FROM THE PROPOSED PARTIAL GLENDALE BYPASS TO THE US 31W BYPASS IN ELIZABETHTOWN. SEE 2008 GLENDALE AREA TRANSPORTATION STUDY.
38	IP20060222	KY 434	BATTLE TRAINING RD	Address lane width, shoulders, and maintenance issues along KY 434 between US 31W and KY 251.
39	IP20060223	KY 1600	RINEVILLE RD	ADDRESS SAFETY AND GEOMETRIC DEFICIENCIES ALONG KY 1600 FROM KY 361 TO THE ROUNDABOUT AT KY 220 IN RINEYVILLE
40	IP20070165	US 31WX	MAIN ST	IMPROVE ROADWAY DRAINAGE ALONG US 31WX IN WEST POINT FROM RAILROAD TRACKS TO 14TH STREET.
42	IP20070173	KY 224	GRAYSON ST	ADDRESS SAFETY, GEOMETRIC DEFICIENCIES AND MAINTENANCE ISSUES ALONG KY 224 FROM HART C/L TO PLEASANT HILL-UPTON RD
43	IP20070177	KY 1600	RINEVILLE RD	ADDRESS SAFETY, GEOMETRIC DEFICIENCIES AND MAINTENANCE ISSUES ALONG KY 1600 FROM KY 1882 TO KY 144 AT FLAHERTY (mp 1.705 MEADE)
44	IP20070179	BG 9002	BG PKWY RAMP from KY 583	CONSTRUCT EASTBOUND ON AND WESTBOUND OFF RAMPs ON THE BLUEGRASS PARKWAY AT KY 583.
45	IP20120068	US 31W	S DIXIE HWY	IMPROVE THE INTERSECTION OF US 31W AND KY 84 AT SONORA TO INCREASE SAFETY
46	IP20090008	KY 1357	SAINT JOHN RD	RECONSTRUCT THE INTERSECTION OF KY 1357 (ST. JOHN ROAD) AND CECILIA ROAD WEST OF ELIZABETHTOWN TO INCREASE SIGHT DISTANCE AND IMPROVE SAFETY.
47	IP20090009	US 62	BARDSTOWN RD	ADDRESS SAFETY, GEOMETRIC DEFICIENCIES AND MAINTENANCE ISSUES ALONG US 62 EAST OF ELIZABETHTOWN FROM UPPER COLESBURG ROAD TO STOVALL ROAD.
48	IP20090010	KY 1904	BACON CRK RD	INTERSECTION IMPROVEMENTS AT KY 1904 (BACON CREEK ROAD) AND CECILIA SMITH MILL ROAD JUST NORTH OF THE BRIDGE OVER WK PARKWAY TO INCREASE SIGHT DISTANCE AND IMPROVE SAFETY.
50	IP20100008	KY 86	HARDINSBURG RD	RECONSTRUCT THE INTERSECTION OF KY 86 (HARDINSBURG ROAD) AND SOUTH BLACK BRANCH ROAD WEST OF CECILIA

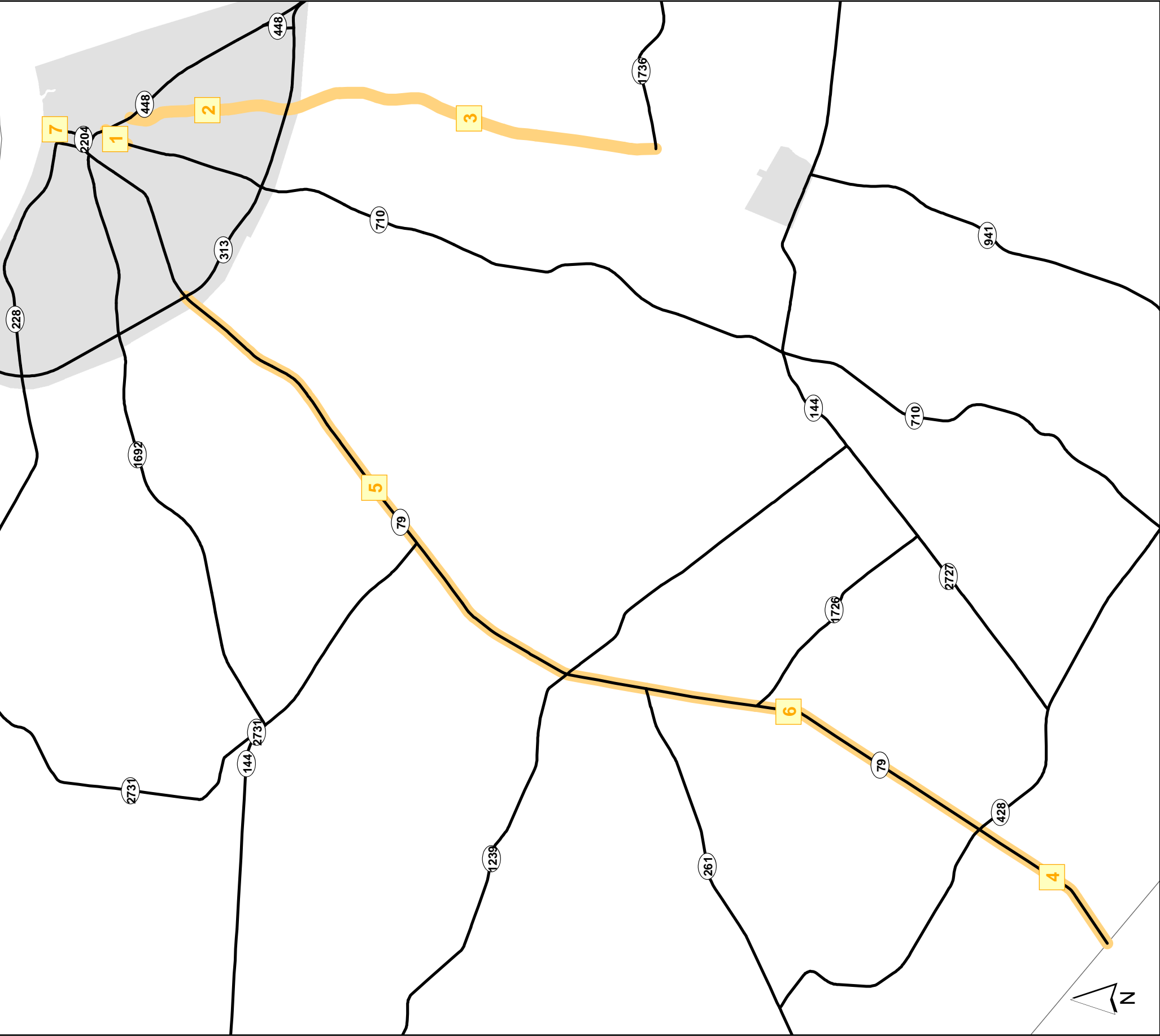


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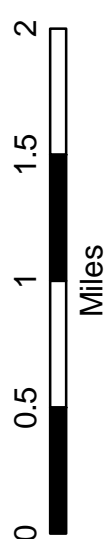


MPO CHAF PROJECTS

MEADE COUNTY

Map #2

MAP_NUM	CHAF_ID	Pri_RT	RD_NAME	Description
1	IP20050005	KY 710	OLD STATE RD	CONSTRUCT A RIGHT TURN LANE ON KY 710 AT KY 448 IN BRANDENBURG
2	IP20130136	CR 1002	OLD EKRON RD	ADDRESS SAFETY AND GEOMETRIC DEFICIENCIES ALONG OLD EKRON ROAD BETWEEN KY 448 AND KY 1051.
3	IP20130137	CR 1002	OLD EKRON RD	ADDRESS SAFETY AND GEOMETRIC DEFICIENCIES ALONG OLD EKRON ROAD BETWEEN KY 1051 AND KY 1736.
4	IP20150276	KY 79	KY 79	RECONSTRUCT KY 79 FROM KY 477 TO KY 428.(12CCN)(14CCR)
5	IP20150360	KY 79	KY 79	RECONSTRUCT KY 79 FROM KY 144 TO KY 1051. (12CCN)(14CCR)(18CCN)
6	IP20150432	KY 79	KY 79	RECONSTRUCT KY 79 FROM KY 428 TO KY 144.(12CCN)(14CCR)(18CCN)
7	IP20160086	CS 1004	MAIN ST	CONSTRUCT A ROUNDABOUT AT NORTHERN END OF MAIN STREET (CS 1004) IN BRANDENBURG. (16CCN)



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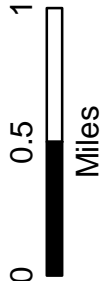
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MPO CHAF PROJECTS
ELIZABETHTOWN
Map #3

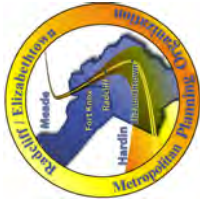
MAP_NUM	CHAF_ID	Prt_RT	RD_NAME	Description
8	IP20070159	US 31W	E DIXIE AVE	WIDEN US 31W FROM BISHOP LANE TO VALLEY CREEK BRIDGE IN ELIZABETHTOWN. (EXTENSION OF 6/P ITEM 04-189.00)
19	IP20070166	US 62	NORTH MULBERRY ST	CONSTRUCT CURB AND GUTTER ALONG US 62 FROM NEAR BROOKS STREET TO I-65 IN ELIZABETHTOWN. CONNECTS TWO EXISTING CURB AND GUTTER SECTIONS (DRAINAGE IMPROVEMENT).
20	IP20070167	US 62	NORTH MULBERRY ST	IMPROVE SAFETY, MOBILITY AND GEOMETRICS ON US-62 FROM I-65 TO UPPER COLESBURG ROAD (CR-1038)
21	IP20070175	KY 1136	NEW GLENDALE RD EXT	EXTENSION OF NEW GLENDALE ROAD FROM US 31W TO COMMERCE DRIVE IN ELIZABETHTOWN. .
23	IP20100007	WK 9001	WK PKWY	CONSTRUCT A TRUCK PARKING FACILITY FOR OVERNIGHT PARKING OF SEMI TRACTOR TRAILERS (LOCATION TO BE DETERMINED)
24	IP20150297	KY 1357	SAINT JOHN RD	IMPROVE SAFETY, GEOMETRICS, DRAINAGE AND MAINTENANCE ISSUES ALONG KY-1357 (ST. JOHNS RD) FROM US-31W BYPASS TO KY-3005 (RING ROAD). (14CCN)
25	IP20150339	KY 3005	RING RD	EXTEND RING ROAD FROM THE WESTERN KENTUCKY PARKWAY TO I-65. "2 LANE INITIAL/4 LANE ULTIMATE" (12CCR)(14CCR)
26	IP20150448	KY 251	SHEPHERDSVILLE RD	KY 251 IMPROVEMENTS FROM KY 3005 TO KY 434.
27	IP20170082	CS 1297	PEAR ORCHARD RD NW	RECONSTRUCT INTERSECTION OF US 31W AT PEAR ORCHARD ROAD NW AND VETERANS WAY
28	IP20190034	KY 3005	RING RD	Transportation Study for connectivity along the east side of Elizabethtown.
35	IP20080747	KY 1136	NEW GLENDALE RD	ADDRESS CAPACITY AND SAFETY ALONG KY 1136 FROM THE PROPOSED PARTIAL GLENDALE BYPASS TO THE US 31W BYPASS IN ELIZABETHTOWN. SEE 2008 GLENDALE AREA TRANSPORTATION STUDY. .
39	IP20060223	KY 1600	HWY 1600	ADDRESS SAFETY AND GEOMETRIC DEFICIENCIES ALONG KY 1600 FROM KY 361 TO THE ROUNDABOUT AT KY 220 IN RINEYVILLE
49	IP20070161	US 31W	E DIXIE AVE	Convert from 4-lane undivided to 3-lane divided from New Glendale Road (KY 1136) to the Elizabethtown square



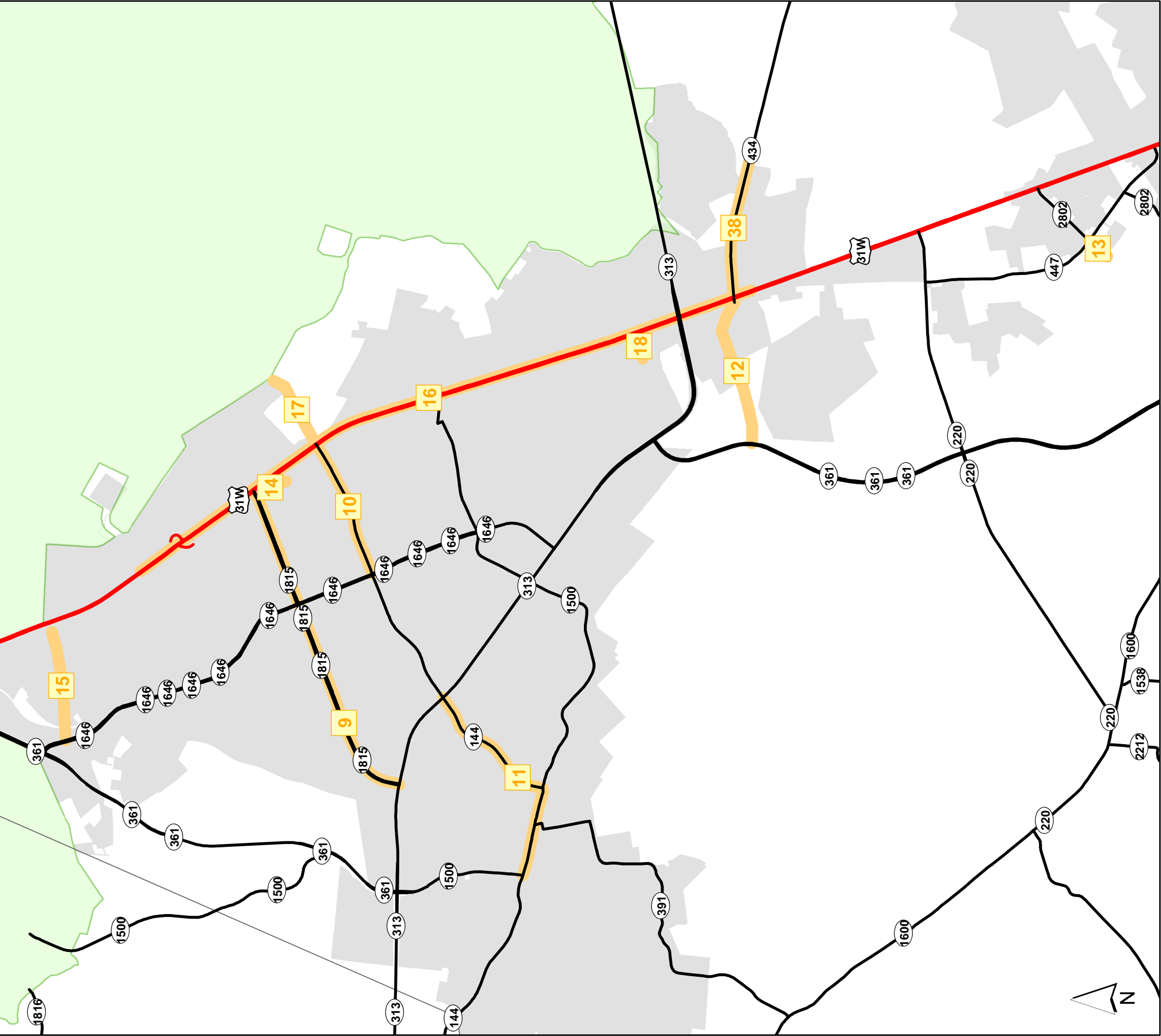
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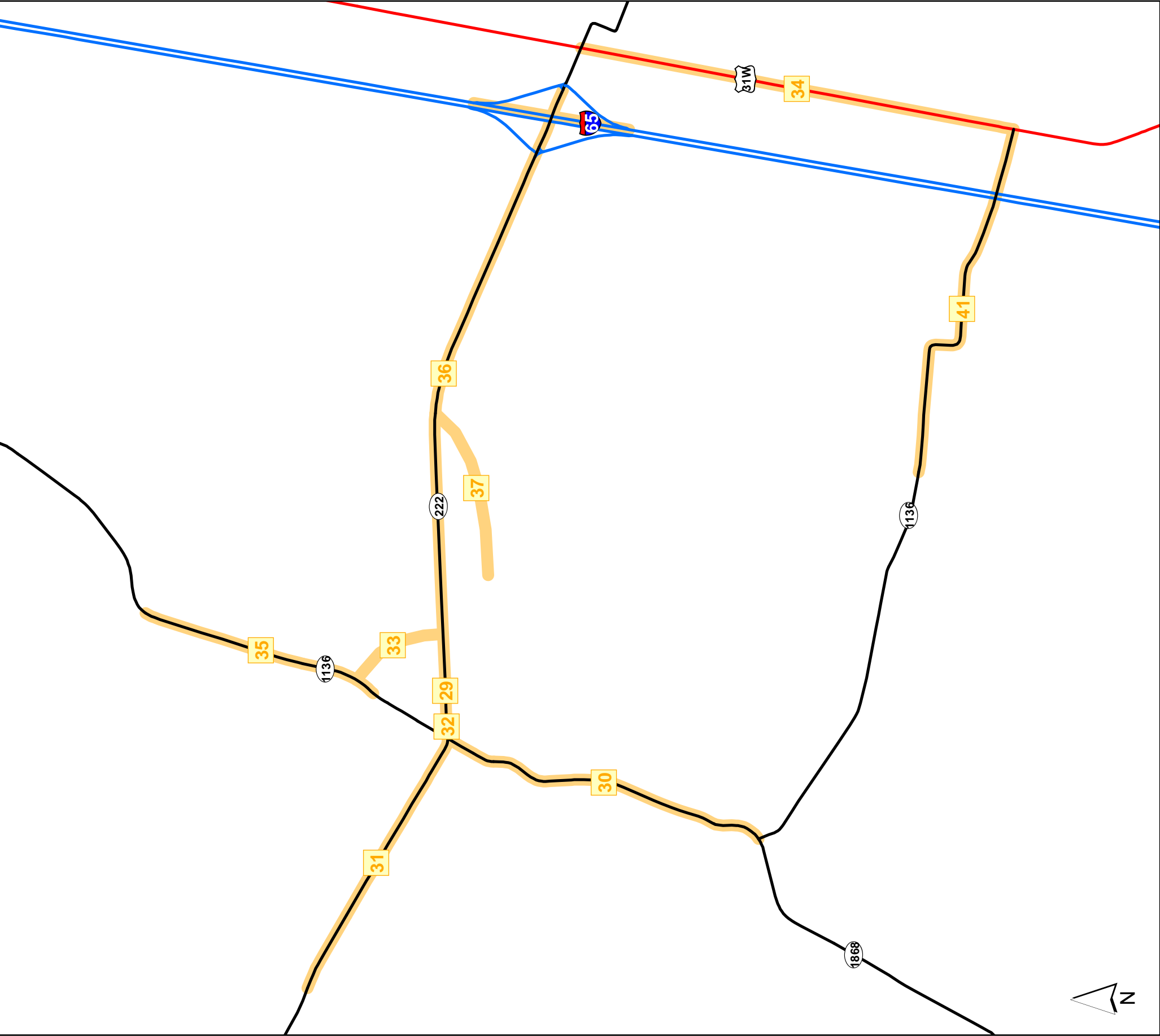
**MPO CHAF PROJECTS
RADCLIFF / VINE GROVE
Map #4**



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MPO CHAF PROJECTS
GLENDALE
Map #5

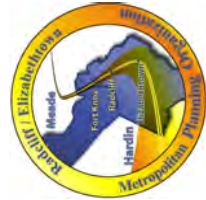
MAP_NUM	CHAF_ID	PLRT	RD_NAME	Description
29	IP20070172	KY 222	W GLENDALE-HODGENVILLE RD	ADD CURB AND GUTTER TO IMPROVE DRAINAGE ALONG KY 222 IN GLENDALE FROM KY 1136 TO RAILROAD TRACKS
30	IP20070176	KY 1136	NEW GLENDALE RD	EXTENSION FROM KY 1868 S OF GLENDALE TO KY 220 AT KY 1600 N OF ELIZABETHTOWN
31	IP20080742	KY 222	W GLENDALE-HODGENVILLE RD	CONSTRUCT A NORTHWEST BYPASS AROUND GLENDALE FROM KY 222 TO KY 1136. SEE GLENDALE AREA TRANSPORTATION STUDY.
32	IP20080743	KY 222	W GLENDALE-HODGENVILLE RD	INTERSECTION IMPROVEMENTS TO ADDRESS SAFETY AT KY 222/KY 1136 IN GLENDALE. SEE GLENDALE AREA TRANSPORTATION STUDY
33	IP20080744	KY 222	W GLENDALE-HODGENVILLE RD BYPASS	CONSTRUCT A NORTHEAST BYPASS OF GLENDALE FROM KY 1136 TO KY 222. SEE GLENDALE AREA TRANSPORTATION STUDY.
34	IP20080745	US 31W	S DIXIE HWY	ADD SHOULDERS AND TURN LANES TO US 31W BETWEEN KY 1136 AND KY 222 EAST OF GLENDALE. SEE GLENDALE AREA TRANSPORTATION STUDY.
35	IP20080747	KY 1136	NEW GLENDALE RD	ADDRESS CAPACITY AND SAFETY ALONG KY 1136 FROM THE PROPOSED PARTIAL GLENDALE BYPASS TO THE US 31W BYPASS IN ELIZABETHTOWN. SEE 2008 GLENDALE AREA TRANSPORTATION STUDY.
36	IP20080748	KY 222	W GLENDALE-HODGENVILLE RD	ADDRESS SAFETY AND CAPACITY ALONG KY 222 FROM THE PROPOSED PARTIAL GLENDALE BYPASS TO THE KY 222/65 INTERCHANGE PROJECT LIMITS (4-20.00). SEE 2008 GLENDALE AREA TRANSPORTATION STUDY
37	IP20080749	KY 222	JAGGERS RD CONNECTOR KY 222	CONSTRUCT A NEW CONNECTOR FROM EXISTING JAGGERS ROAD TO KY 222 EAST OF GLENDALE
41	IP20080746	KY 1136	GILEAD CHURCH RD	ADDRESS CAPACITY AND SAFETY ALONG KY 1136, SOUTH OF GLENDALE FROM US 31W TO JAGGERS ROAD INCLUDING RECONSTRUCTION OR REPLACEMENT OF THE BRIDGE OVER I65. SEE 2008 GLENDALE AREA TRANSPORTATION STUDY.



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Transportation System Operations and Maintenance

The nature of the metropolitan transportation planning process does not lend itself to specifically identifying future system operations and maintenance needs or projects over the period covered by the plan. Nevertheless, it is required that the MTP include system-level estimates of resources that are expected to be available to operate and maintain the transportation system.

Routine maintenance and operation of the state-maintained roadway network in the MPO area is accomplished by KYTC through the Highway District Office in Elizabethtown. Example activities include maintenance of pavement, guardrails and median cable barriers, drainage channels, and landscaping. Traffic operations are also a significant function of KYTC District Offices. Example activities include roadway lighting, traffic signals, signing and roadway striping. Over the last 10 years KYTC annual expenditures for operation and maintenance activities in Hardin and Meade Counties have ranged from a low of \$9,300,000 to a high of \$16,700,000. Approximately 65% of these amounts are applied toward the federal-aid system. For planning purposes, it should be reasonable to assume KYTC expenditures of approximately \$12,000,000 per year over the foreseeable future.

In addition to the KYTC operation and maintenance programs, the local governments within the MPO planning area also expend significant resources for the operation and maintenance of local streets and roadways. Based on information provided by these entities, it is estimated that approximately \$8,900,000 is spent annually. Approximately 40% of this total amount is provided by the KYTC through revenue sharing programs.

Combining KYTC and local government programs results in an annual expenditure of approximately \$20,900,000 for operation and maintenance of the transportation system.

Grouped Projects

Transportation planning regulations applicable to the development and content of Metropolitan Transportation Plan (MTP) allow that projects that are not considered to be of appropriate scale for individual identification in a given program year may be grouped by function, work type, and/or geographic area. Such projects are usually non-controversial and produce negligible impacts - other than positive benefits for safety, traffic operations, or preservation. Typically, these types of projects are not generated by the planning process; they are usually initiated by traffic operations or maintenance functions to correct existing problems or deficiencies, or they are the result of successful grant applications by local governments or entities. KYTC identifies many of these types of projects as "Z-Various" in the Statewide Transportation Improvement Program. For the reasons noted above, KYTC and FHWA have developed streamlined procedures for incorporating such projects into the MTP



and the MPO's Transportation Improvement Program (TIP). Individual projects from grouped project categories will be incorporated into the MTP and TIP by Administrative Modification as they are defined (in terms of project description, scope, and cost) and approved. Allowing such MTP and TIP changes to be made by Administrative Modification, rather than Amendment (and the corresponding requirement for public review and demonstration of fiscal constraint), simplifies and streamlines MTP and TIP maintenance and project approval processes.

Grouped project categories utilized by the Radcliff-Elizabethtown MPO are shown in Table 3. The list of grouped projects utilized here is a combination and simplification of two lists recommended by the "KYTC and MPO Coordination – Final Recommendations of the Consolidated Planning Guidance Process Team", July 20, 2007. This was done for applicability to the Radcliff-Elizabethtown area and to facilitate understanding by MPO committee members and the public. By listing these project types in the MTP and TIP, planning process stakeholders and the general public are informed of the types of potential projects that may be added to the TIP in the future via streamlined procedures. TIP actions for these projects will not require additional public review, demonstration of fiscal constraint, or a conformity determination (if applicable).

The dollar amounts shown in the Grouped Projects Table are illustrative (and minimal) project cost amounts based on past experience and reasonableness. These numbers are included per recommended guidance and should not be interpreted as expected project awards or expenditures for any particular year. Rather than future commitments of funding, these numbers are illustrative of a reasonable level of total funding for the various types of grouped projects that, potentially, could be approved within a particular year. When projects are identified, with estimated costs, and funding decisions (type of funds and year) are made by the Transportation Cabinet (on an annual or ongoing basis), the Cabinet will forward the project to the MPO for inclusion in the MTP and TIP - with a commitment of additional funding within fiscally constrained balances available on a statewide level. It should be expected that the costs of some individual projects may significantly exceed the amounts in the Grouped Projects Table. Fiscal constraint for grouped projects is maintained by KYTC on a statewide level and is demonstrated on an annual basis for the Statewide Transportation Improvement Program.



Table 3						
Grouped Projects						
	2017	2018	2019	2020	2021	2022
HSIP - High Cost Safety Improvements	\$100,000*	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
HSIP - Low Cost Safety Improvements	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
HSIP - Roadway Departure	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
HSIP - Intersections	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
HSIP - Commercial Motor Vehicles	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
HSIP - Non-Motorized Users	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Guardrail/Median Cable Projects	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Rail Crossing Protection	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Rail Crossing Separation	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Intersection Improvements for Safety or Efficiency	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Other Highway Safety Improvements	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Intelligent Transportation System (ITS) Projects	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Traffic Signal System Improvements	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Highway Signing	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Pavement Resurfacing, Restoration, and Rehabilitation	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Pavement Markers and Striping	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Bridge Replacement	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Bridge Rehabilitation	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Bridge Inspection	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Bridge Painting	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Recreational Trails Program	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Surface Transportation Block Grant Set-Aside (formerly Trans. Alternatives Program - TAP)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Commuter Ridesharing Programs	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Bicycle and Pedestrian Facilities**	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Park & Ride Facilities	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Purchase of New Buses (to replace existing vehicles or for minor expansion)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Rehabilitation of Transit Vehicles	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Transit Operating Assistance	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Transit Operating Equipment	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Transit Passenger Shelters and Information Kiosks	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Construction or Renovation of Transit Facilities	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
*Illustrative Costs Only - Please refer to text for explanation.						
**Including pedestrian facility improvements identified in Local Public Agency Transition Plans to meet requirements of the Americans With Disabilities Act (ADA).						



Bicycle/Pedestrian Improvements

Bicycle and Pedestrian Facilities have grown in interest among the citizens of the MPO planning area over the past several years. In response to this interest, the MPO developed a Bicycle Facilities Plan in 2016 and Pedestrian Facilities Plan in 2019. These separate documents outline proposed improvements that will enhance on- and off-road bicycle facilities, improve connections of both bicycle and pedestrian facilities to local trail facilities, and new and improved sidewalks at various locations throughout the planning area.

Bicycle Facilities Improvements

The Bicycle Facilities Plan for the Radcliff/Elizabethtown urbanized area provides an outline for developing a connected system of on-road and off-road facilities in Hardin and Meade counties. The Radcliff/Elizabethtown Metropolitan Planning Organization (MPO) was established in 2003 with the planning area that includes these two counties. The MPO is the transportation planning and decision-making organization responsible for ensuring that the process is carried out in a comprehensive, cooperative, and continuing manner.

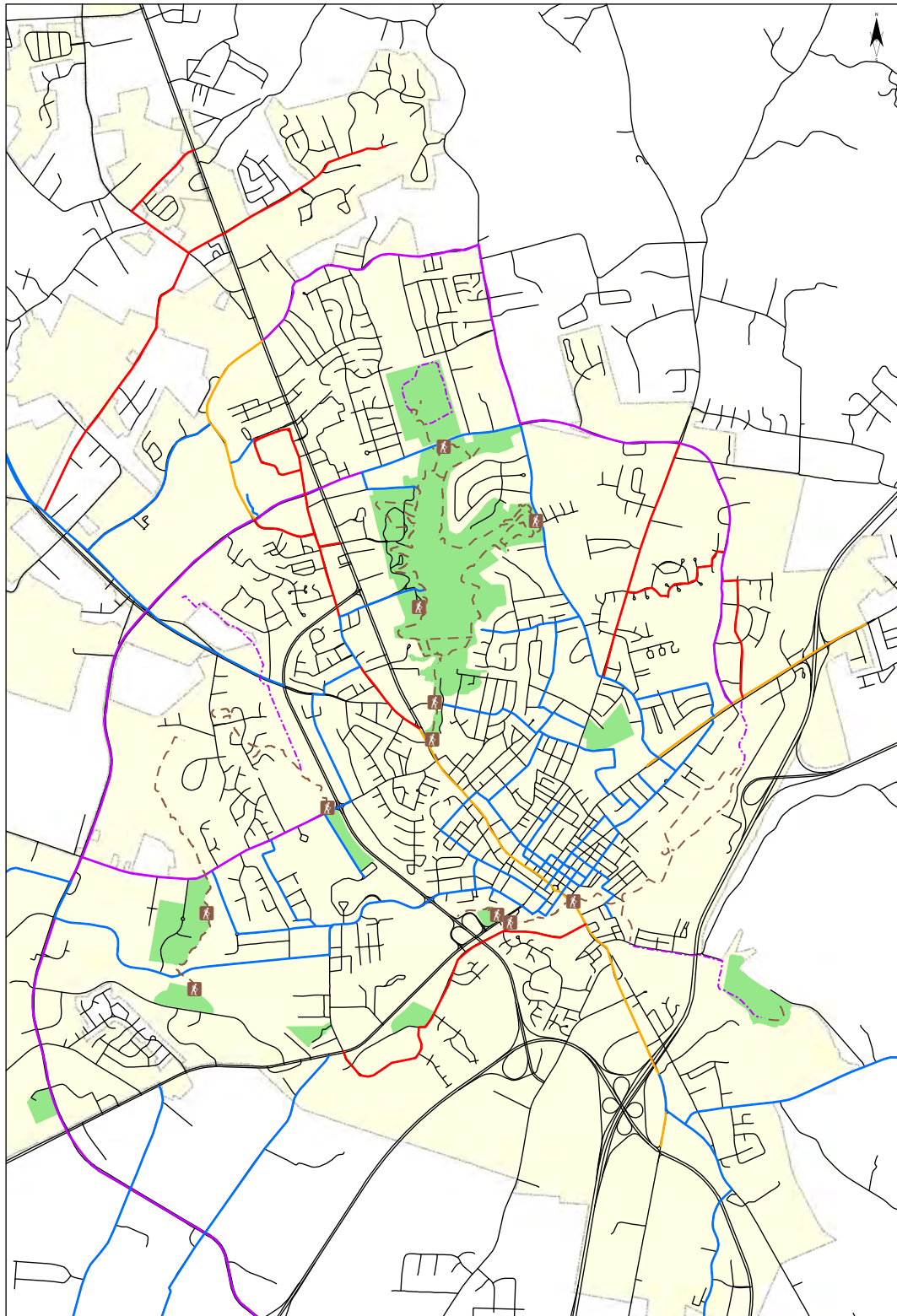
Since the early 1970's, Greenspace, Inc. has been developing a trail system in the Elizabethtown area with the ultimate goal of developing a complete greenbelt around the city. Saunders Springs is a 26-acre wooded area in Radcliff that includes hiking and walking trails. Meade County has trails along the Ohio River and Buttermilk Falls. Otter Creek Park also has trails for hiking, horseback riding, and mountain biking. Otter Creek Park is a recreation area of the Kentucky Department of Fish and Wildlife and a fee is required for entering the park.

While the cities and counties have developed trail systems over the years, an on-road system of bicycle facilities has been lacking. In 2013, Patriot Parkway (KY 361) opened to traffic and is the first roadway facility in either Hardin or Meade county to include a bike lane. The goals of this plan are to build upon these past successes and develop a fully integrated bicycle facility network in the MPO planning area.

The tables and maps below outline the proposed improvements for bicycle facilities in the MPO planning area:


Table 4 – Elizabethtown Bicycle Facility Improvements

<u>Elizabethtown</u>	<u>Starting Point</u>	<u>End Point</u>	<u>Key Connection</u>	<u>Proposal</u>
<u>Short-Term</u>				
St. John Road (KY 1357)	Ring Rd	US 31W Bypass	E'town Sports Park	Bike Lane/Shared Use Path
South Wilson Road (KY 447)	WA Jenkins Rd	Hutcherson Ln	Residential/Connector	Sharrows and/or Signage
Hutcherson Lane (KY 2802)	S. Wilson Rd	Ceciliana Drive	Residential/Connector	Sharrows and/or Signage
Ceciliana Drive	Hutcherson Ln	Patriot Pkwy	Patriot Pkwy	Sharrows and/or Signage
Pine Valley Drive	US 31W	End	Residential	Sharrows and/or Signage
Pear Orchard Road NW	US 31W	Pear Orchard Rd	Residential/Connector	Sharrows and/or Signage
Pear Orchard Road	Ring Rd	Pear Orchard Rd NW	Residential/Connector	Sharrows and/or Signage
Veteran's Way	US 31W	Ring Road	Mall/Other Shopping	Sharrows and/or Signage
Buford Lane	Ring Rd	Woodland Dr	Residential/Connector	Sharrows and/or Signage
Towne Drive	Ring Rd	Around Towne Mall	Mall	Sharrows and/or Signage
Woodland Drive	Ring Rd	US 31W	Medical	Sharrows and/or Signage
<u>Mid-Term</u>				
North Miles Street (KY 251)	Ring Rd	Pear Orchard Rd	Residential	Sharrows and/or Signage
Winchester Blvd	N Miles St	Yorkshire Dr	Residential	Sharrows and/or Signage
Yorkshire Drive	Winchester Blvd	Colony Dr	Residential	Sharrows and/or Signage
Colony Drive	Yorkshire Dr	Ring Road	Residential	Sharrows and/or Signage
Northridge Drive	Ring Rd	Dolphin Dr	Residential	Sharrows and/or Signage
Dolphin Drive	N Mulberry St	Northridge Dr	Shopping/Residential	Sharrows and/or Signage
North Mulberry Street (US 62)	Brook St	McCormack Ave	Business	Sharrows and/or Signage
<u>Long-Term</u>				
Pear Orchard Road	Ring Rd	Pear Orchard Rd NW	Residential/Connector	Shared Use Path
Dixie Highway (US 31W)	Woodland Dr	Lincoln Pkwy	Downtown	Bike Lane
Ring Road (KY 3005)	Entire>>>	<<<Length	Freeman Lake & Nature Park Trails	Bike Lane/Shared Use Path



City of Elizabethtown
Proposed Bikeway Connections

0 2,200 4,400 6,600 8,800 Feet

- Legend**
- Trailhead
 - Potential Trails
 - Local Trail
 - Existing Bikeway
 - Roads
 - LocalPark
 - Corporate Boundary
 - County Boundary
 - Potential Bikeroute TYPE**
 - BIKE LANE
 - SHARED-USE PATH
 - SIGNAGE/SHARROWS



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For questions contact us at (770) 765-2553.
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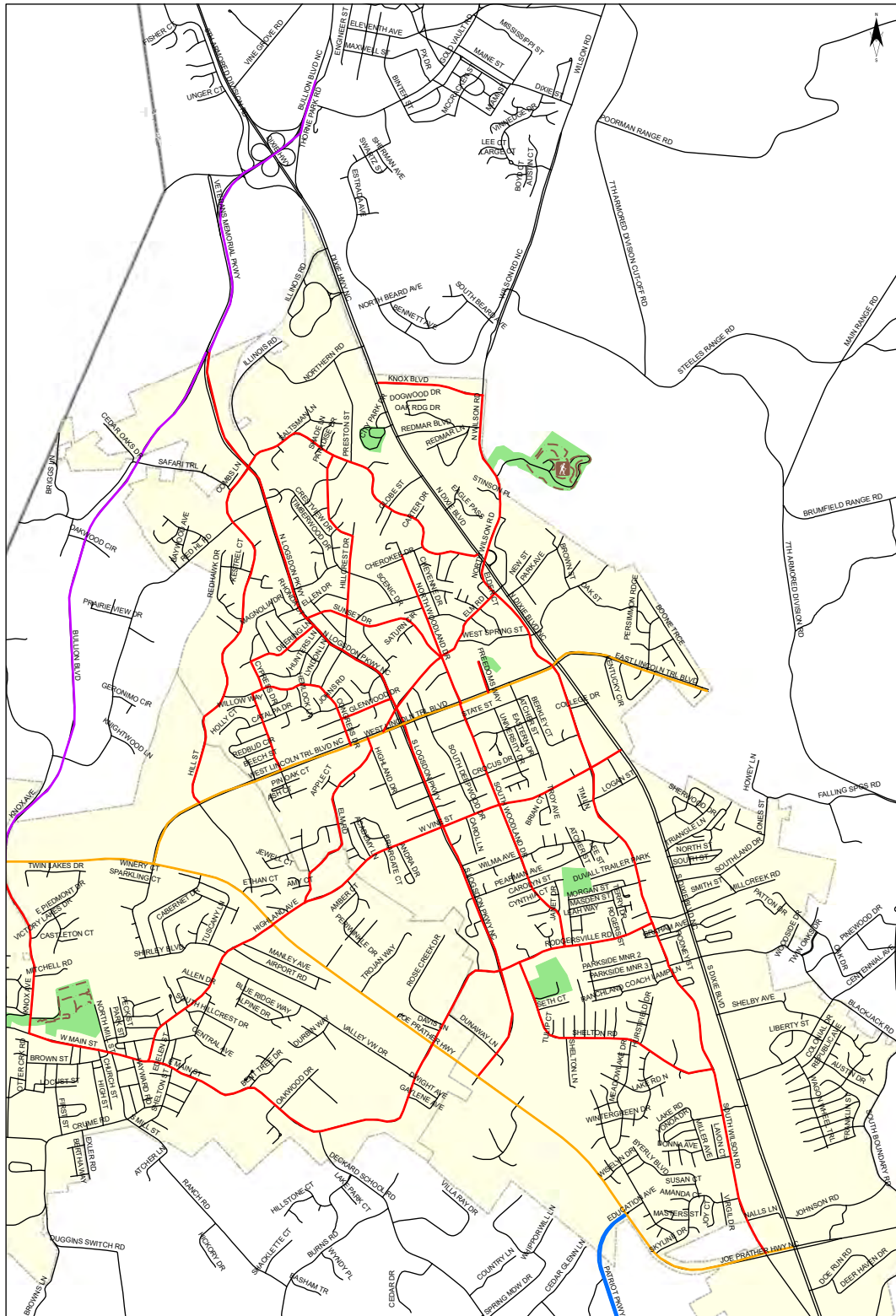


Table 5 – Radcliff/Vine Grove Bicycle Facility Improvements

Radcliff	Starting Point	End Point	Key Connection	Proposal
Short-Term				
Veterans Memorial Highway (KY 1646)	Bullion Blvd	N Logsdon Pkwy	Fort Knox	Sharrows and/or Signage
North Logsdon Parkway (KY 1646)	Veterans Mem Hwy	W Lincoln Trail	Fort Knox	Sharrows and/or Signage
South Logsdon Parkway (KY 1646)	W Lincoln Trail	Rodgersville Rd	Residential	Sharrows and/or Signage
Knox Blvd	US 31W	N Wilson Rd	Fort Knox Wilson Gate	Sharrows and/or Signage
North Wilson Road	Knox Blvd	W Lincoln Trail	Saunders Springs/ Business	Sharrows and/or Signage
South Wilson Road	W Lincoln Trail	Joe Prather Hwy	Business	Sharrows and/or Signage
Elm Road	N Wilson Rd	W Vine St	Residential	Sharrows and/or Signage
Sunset Drive	N Logsdon Pkwy	Elm Rd	Residential	Sharrows and/or Signage
Hillcrest Drive	Congress Dr	Kingswood Way	Residential	Sharrows and/or Signage
Hill Street	US 31W	W Lincoln Trail	Residential	Sharrows and/or Signage
North Woodland Drive	Cherokee Dr	W Lincoln Trail	Residential	Sharrows and/or Signage
South Woodland Drive	W Lincoln Trail	Joe Prather Hwy	Residential	Sharrows and/or Signage
Deering Lane	N Logsdon Pkwy	Cypress Dr	Residential	Sharrows and/or Signage
Cypress Drive	Deering Ln	Congress Dr	Residential	Sharrows and/or Signage
Congress Drive	Hill St	W Lincoln Trail	Residential	Sharrows and/or Signage
North Lorraine Street	W Lincoln Trail	Congress Dr	Residential	Sharrows and/or Signage
Freedoms Way	W Lincoln Trail	End	City Hall/Community Center	Sharrows and/or Signage
West Vine Street (KY 144)	US 31W	Joe Prather Hwy	Residential	Sharrows and/or Signage
Rogersville Road (KY 1500)	S Wilson Rd	Joe Prather Hwy	Residential	Sharrows and/or Signage
Shelton Road	S Wilson Rd	Rogersville Rd	Residential	Sharrows and/or Signage
W. A. Jenkins Road (KY 2802)	US 31W	S. Wilson Rd	Schools ?	Sharrows and/or Signage
Mid-Term				
West Lincoln Trail Blvd	US 31W	Joe Prather Hwy	Business	Bike Lane
East Lincoln Trail Blvd	US 31W	End	Business	Bike Lane
Joe Prather Highway (KY 313)	US 31W	Bullion Blvd	Connector	Bike Lane
Long-Term				
Bullion Blvd (KY 361)	Joe Prather Hwy	Fort Knox Main Gate	Fort Knox	Bike Lane/Shared Use Path

**Table 5 Cont'd – Radcliff/Vine Grove Bicycle Facility Improvements**

<u>Vine Grove</u>	<u>Starting Point</u>	<u>End Point</u>	<u>Key Connection</u>	<u>Proposal</u>
<u>Short-Term</u>				
Knox Avenue (KY 1500)	Bullion Blvd	W Main St	Residential	Sharrows and/or Signage
West Main Street (KY 144)	Knox Ave	Highland Ave	Downtown Area	Sharrows and/or Signage
East Main Street (KY 144)	Highland Ave	Joe Prather Hwy	Business	Sharrows and/or Signage
Highland Avenue (KY 144)	W Main St	Joe Prather Hwy	Business	Sharrows and/or Signage



City of Radcliff
Proposed Bikeway Connections

0 1,900 3,800 5,700 7,600 Feet

- Legend**
- TrailHead
 - Local Trail
 - Existing Bikeroute
 - Roads
 - Local Park
 - Corporate Boundary
 - County Boundary
- Potential Bikeroute**
- TYPE**
- BIKE LANE
 - SHARED-USE PATH
 - SIGNAGE/SHARROWS



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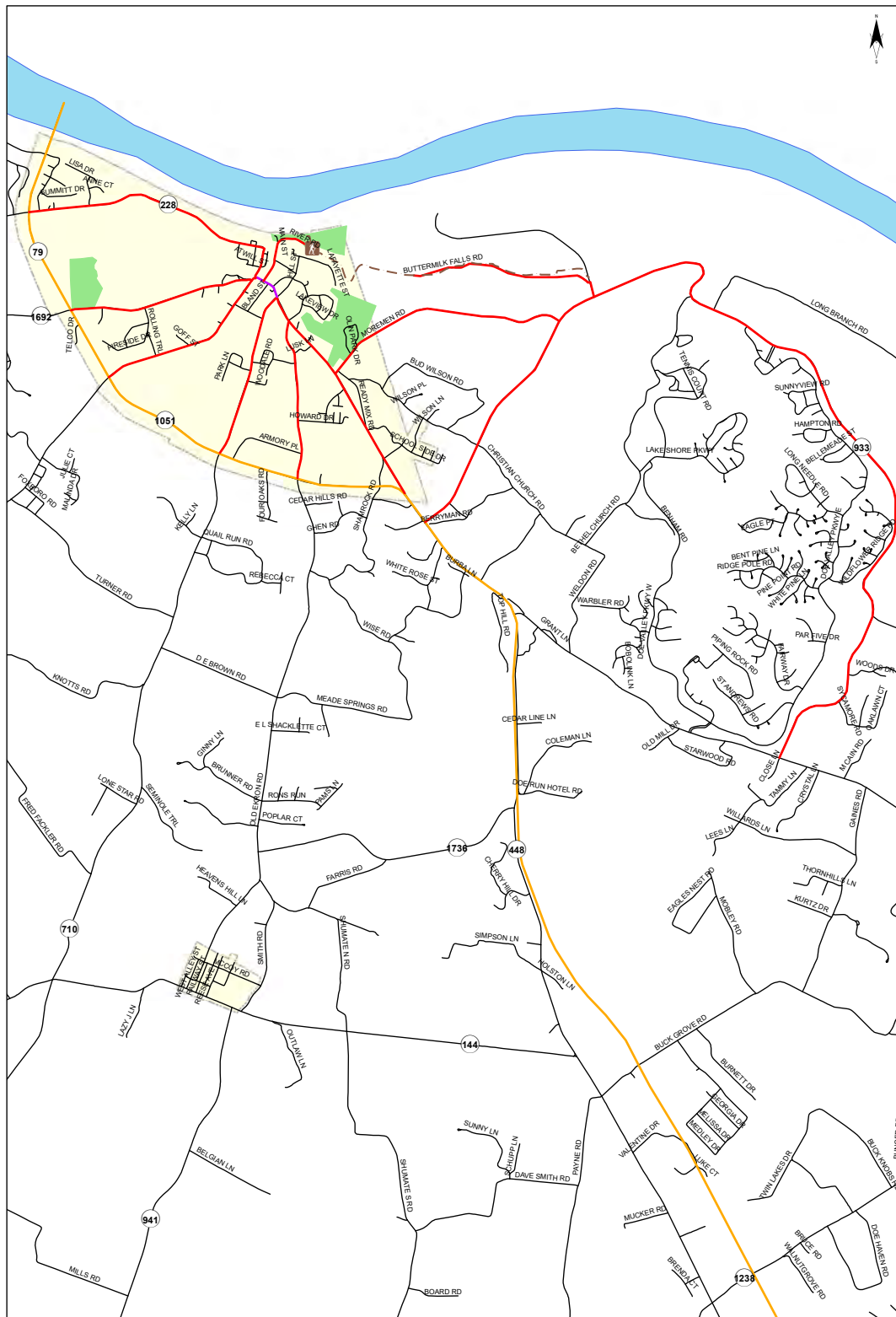
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Table 6 – Meade County Bicycle Facility Improvements

Meade County	Starting Point	End Point	Key Connection	Proposal
<u>Short-Term</u>				
KY 710	E Broadway	KY 1051	Schools	Sharrows and/or Signage
KY 448	W Broadway	KY 1051	Schools/Post Office	Sharrows and/or Signage
KY 1692	Hillcrest Drive	KY 1051	Government Offices	Sharrows and/or Signage
KY 228	High Street	KY 79	Residential	Sharrows and/or Signage
East Broadway	KY 1051	Lakeview Drive	Business	Sharrows and/or Signage
West Broadway	Lakeview Drive	High Street	Business	Sharrows and/or Signage
Main Street	W Broadway	Lawrence St	Riverfront Park	Sharrows and/or Signage
Old Ekron Road	E Broadway	KY 1051	Library	Sharrows and/or Signage
Olin Road	E Broadway	KY 933	Park	Sharrows and/or Signage
Buttermilk Falls Road	Olin Rd	End	Trails	Sharrows and/or Signage
<u>Mid-Term</u>				
KY 933	Entire>>>	<<<Length	Trails	Sharrows and/or Signage
<u>Long-Term</u>				
KY 313	Entire>>>	<<<Length	Connector/Business	Bike Lane
KY 1051	Entire>>>	<<<Length	Business	Bike Lane



Meade County
Proposed Bikeway Connections

0 2,500 5,000 7,500 10,000 Feet

Legend

TrailHead
Local Trail
Existing Bikeroute
Roads
Ohio River
Local Park
Corporate Boundary

Potential Bikeroute
TYPE
BIKE LANE
SHARED-USE PATH
SIGNAGE/SHARROWS



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Pedestrian Facilities Improvements

The Radcliff/Elizabethtown MPO's focus on planning and implementing pedestrian facilities will offer transportation and recreation opportunities for residents by providing a connected system of sidewalks and making key connections to area trails. The MPO Pedestrian Plan serves as a blueprint for implementation and funding of pedestrian facilities in the MPO planning area. The proposed improvements are outlined in the tables and maps below:

Table 7 – Elizabethtown Pedestrian Facility Improvements

<u>Elizabethtown</u>	<u>Starting Point</u>	<u>End Point</u>	<u>Key Connection</u>	<u>Proposal</u>
US 31W Bypass	College Street Rd.		ECTC	Pedestrian Signal
US 31W	Veteran's Way	Pear Orchard Road		Pedestrian Crossing
US 31W	Towne Mall	Walmart	Businesses	Pedestrian Crossing
US 62	West Poplar		Residential/ Downtown Businesses	Crosswalk Improvements
KY 1357 - St. John Road	US 31W		Residential/ Local Businesses	Crosswalk Improvements
KY 1357 - St. John Road	US 31W Bypass	Ring Road	Residential/Sports Park/Elem School	Multi-Use Path
US 31W	Downtown	Lincoln Parkway	Local Businesses	Sidewalks/Pedestrian Crossings
KY 361 - Patriot Parkway	US 31W Bypass	KY 313		Bike Lane Improvements
University Drive	KY 1357 - St. John Road	ECTC	EC3/ECTC	Sidewalks
Westport Road	KY 361 - Patriot Parkway	KY 1357 - St. John Road	Residential	Sidewalks
College Street Road	US 31W Bypass	ECTC	Residential/ECTC	Sidewalks
Pear Orchard Road	North Miles	Ring Road	Existing Sidewalks on N. Miles & Ring Rd.	Sidewalks
Pear Orchard Road NW	US 31W	Pear Orchard Road	Residential	Sidewalks
KY 3005 - Ring Road	US 31W	US 62	Completion - All of Ring Road	Sidewalks
KY 3005 - Ring Road	Entire>>>	<<<Length	Numerous - Including Greenspace Trails/Sports Park	Multi-Use Path
Main Street	Poplar Street	US 62	Residential/ Downtown	Sidewalks
US 62 - North Mulberry	French Street	Ring Road	Local Businesses	Sidewalks
Dolphin Drive	Kroger Shopping Center	Northridge Drive	Residential/ Businesses	Sidewalks

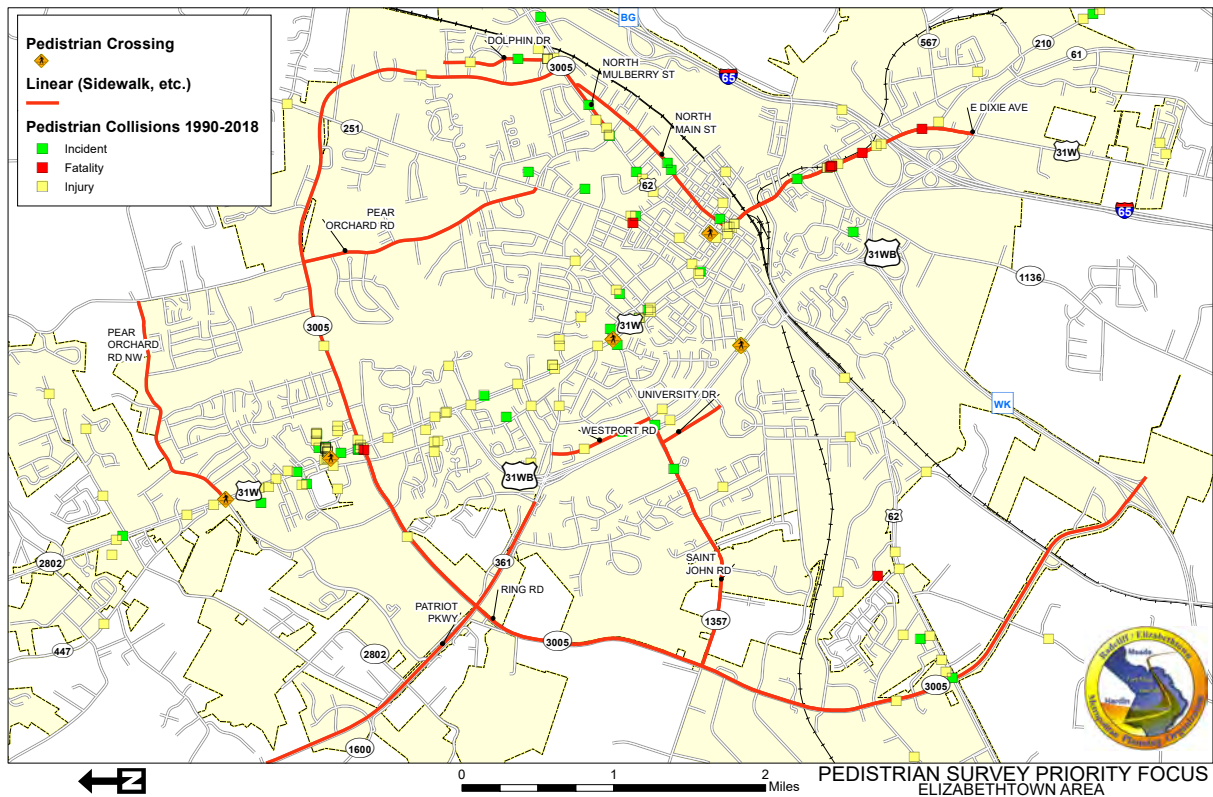


Table 8 – Radcliff/Vine Grove Pedestrian Facility Improvements

Radcliff	Starting Point	End Point	Key Connection	Proposal
KY 144 - West Vine Street	US 31W	KY 313	Residential	
KY 1646 - North Logsdon Pky	KY 1815 - W. Lincoln Trail Blvd	Bullion Blvd		Sidewalks
KY 1646 - South Logsdon Pky	KY 1815 - W. Lincoln Trail Blvd	KY 313		Sidewalks
Hill Street	US 31W	W. Lincoln Trail Blvd		Sidewalks
KY 1500 - Rogersville Road	S. Wilson Road	KY 1646 - S. Logsdon Pky		Sidewalks
KY 1500 - Rogersville Road	KY 1646 - S. Logsdon Pky	KY 313		Sidewalks
KY 1500 - Rogersville Road	S. Wilson Road			Pedestrian Signal
Vine Grove	Starting Point	End Point	Key Connection	Proposal
KY 144 - Main Street			Residential/Downtown	Sidewalks
KY 1500 - East Main Street			Residential/Downtown	Sidewalks/Bike Lanes
KY 1500 - Knox Avenue	KY 144	KY 313	Residential	Sidewalks

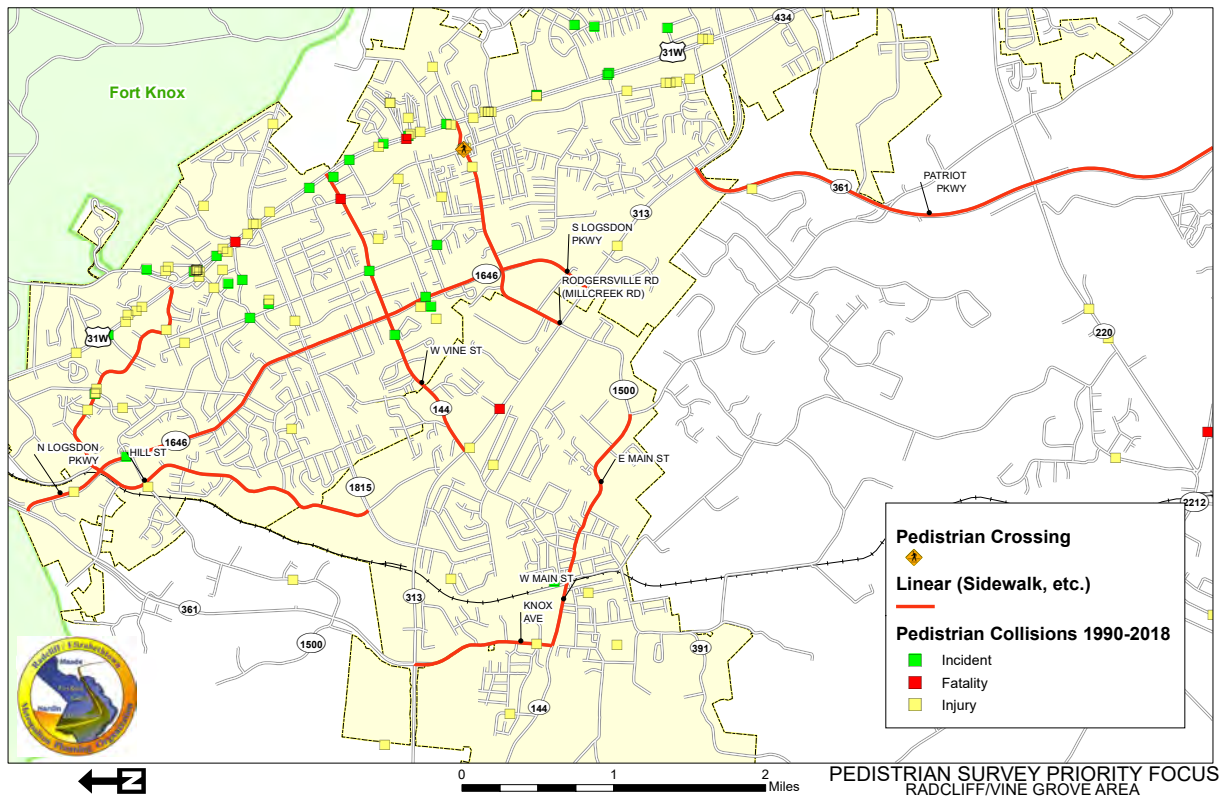
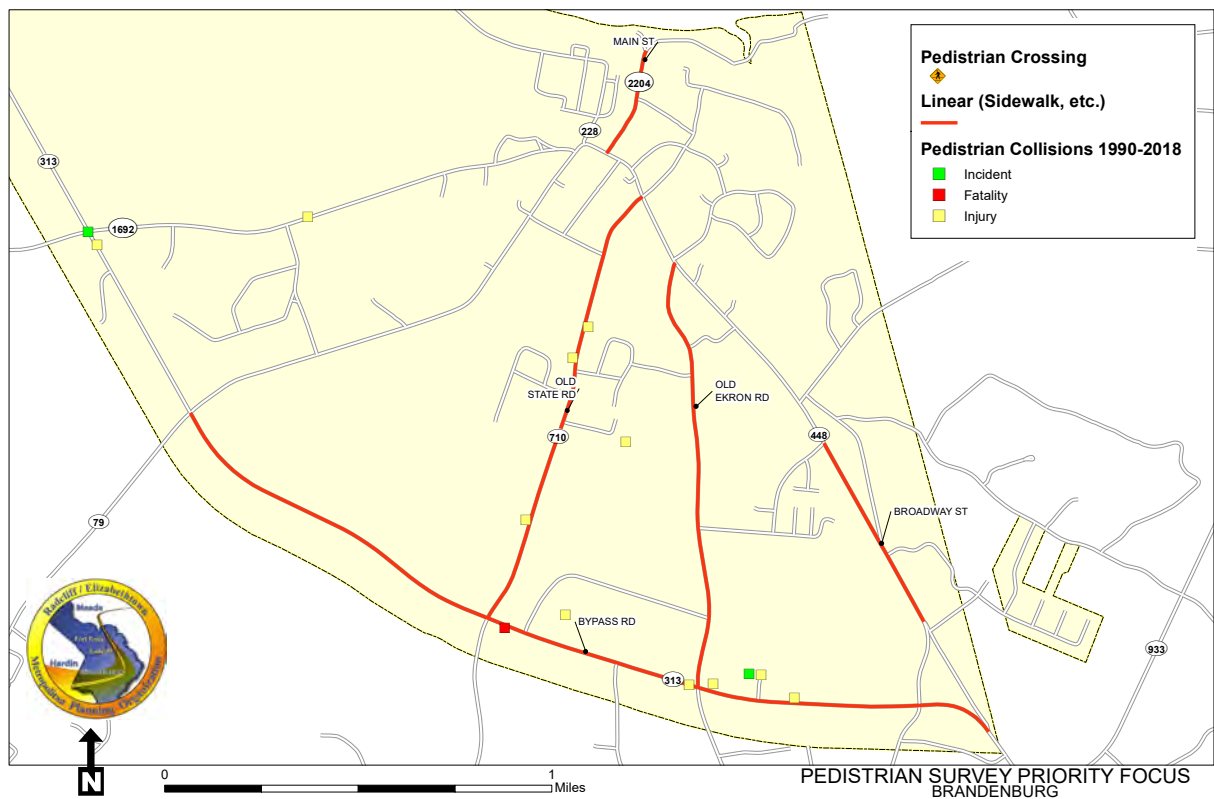


Table 9 – Brandenburg/Meade County Pedestrian Facility Improvements

Brandenburg/Meade County	Starting Point	End Point	Key Connection	Proposal
Broadway Street	Area of Brandenburg Primary School		Schools	Sidewalks
KY 1051 - Brandenburg Bypass	Broadway	High Street	Businesses	Sidewalks
Main Street	W. Broadway	Riverfront	Residential/Business	Sidewalks
KY 710	W. Broadway	KY 1051 - Brandenburg Bypass	Schools/Businesses	Sidewalks
Old Ekron Road	W. Broadway	KY 1051 - Brandenburg Bypass	Schools/Library	Sidewalks



Public Transportation Improvements

The Radcliff/Elizabethtown Metropolitan Planning Organization (MPO) completed a Public Transportation Implementation Study in 2013. The purpose of this study was to develop a plan for a fixed-route public transportation system that will connect Elizabethtown, Radcliff, and Fort Knox. The proposed routes and improvements listed below remain a long-range proposal for the area. If implemented, the system may look different than what is proposed below due the changes in future conditions. The implementation of this type of system will also depend on future need and available federal, state, and local funding.

ROUTING AND STOPS

Three routes have been proposed to address the goals of the study. These are the Elizabethtown-Radcliff-Fort Knox Connector, Elizabethtown Circulator, and the Radcliff Circulator.

Elizabethtown-Radcliff-Fort Knox Connector

The purpose of the connector route is to connect Elizabethtown, Radcliff and Fort Knox. As noted under existing transportation resources, TACK currently provides a park-and-ride service that fills this function. The TACK service is targeted to the needs of those working at Fort Knox,

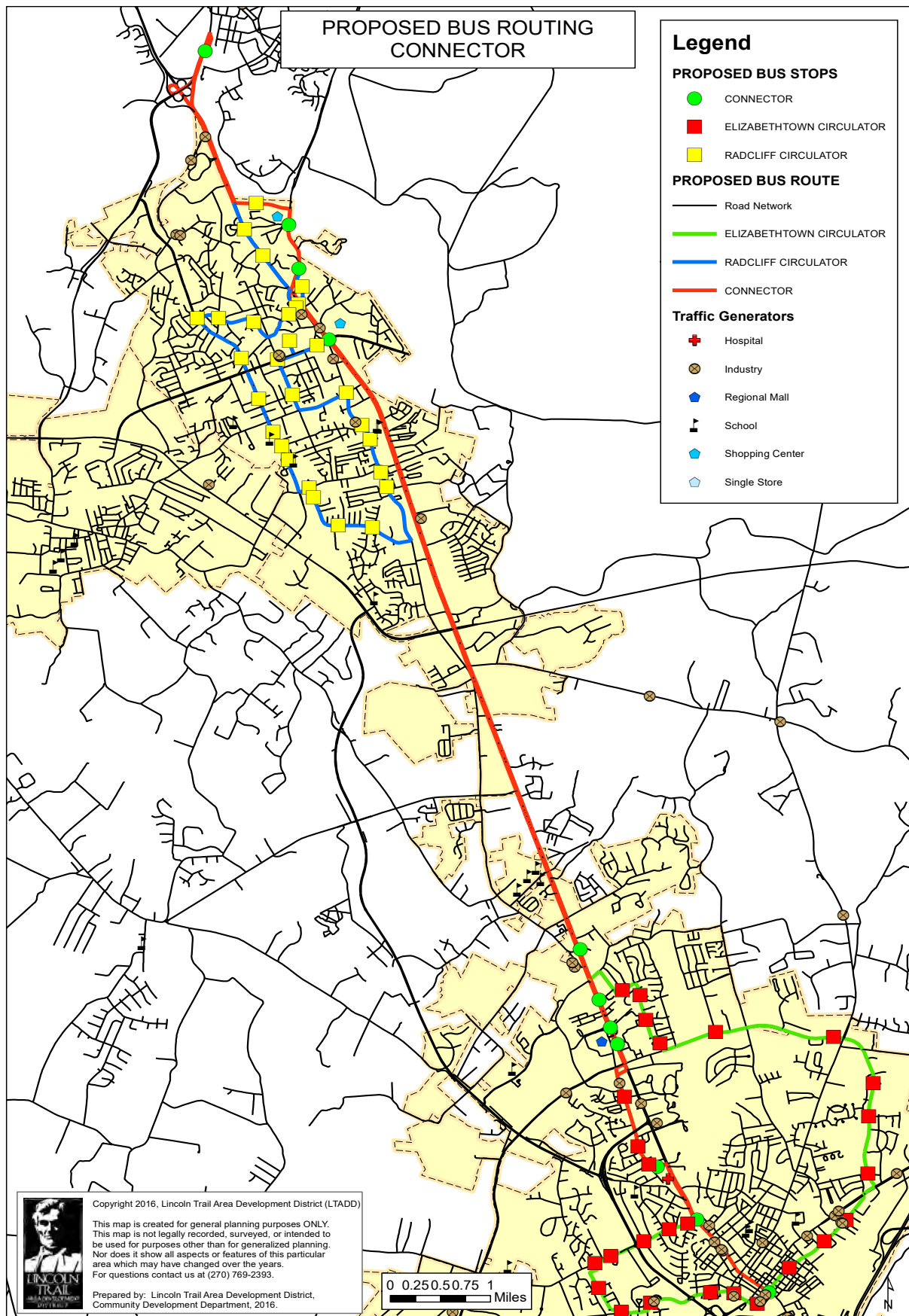


operates only 6 trips per weekday and has only a few stops. The proposed connector route has more stops, somewhat different routing and includes connections to local circulator services in Elizabethtown and Radcliff.

As shown in the map on the following page, the Elizabethtown-Radcliff-Fort Knox Connector (connector) routing generally runs up and down US 31 W, but does make some deviations to accommodate additional key stops. Proposed stops along the corridor for both northbound and southbound service are in the general vicinity of the following:

- Hardin County Court House;
- Roses and Walgreen's;
- Hardin Memorial Health from Woodland Drive;
- Walmart Drive both north and southbound;
- Kmart Center and Towne Center Drive (near Kmart for northbound and Kroger for southbound);
- Childers Court at the entrance to the Mall Park Center
- Kohl's department store;
- Orscheln Farm & Home;
- Radcliff Walmart;
- Hardin County Health Center – Radcliff location; and, Fort Knox.

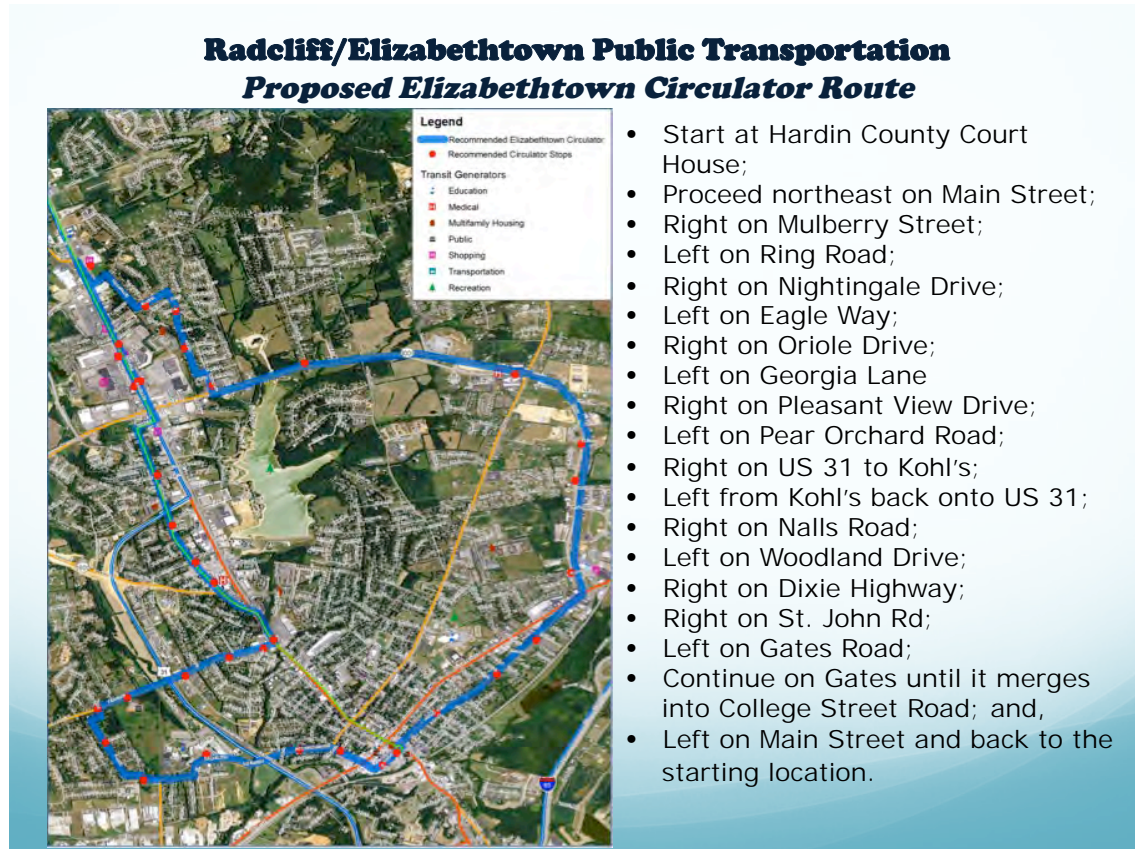
These stops have been identified to provide access to key transit generators and facilitate transfers to and from the local circulator routes. Passengers with Fort Knox as a destination will exit the vehicle at the gate and then may access the internal Fort Knox shuttle to get to their final destination.





Elizabethtown Circulator

The following map shows a preliminary circulator route for Elizabethtown. Starting downtown near city offices and numerous local businesses, the route would leave downtown with the proposed routing:



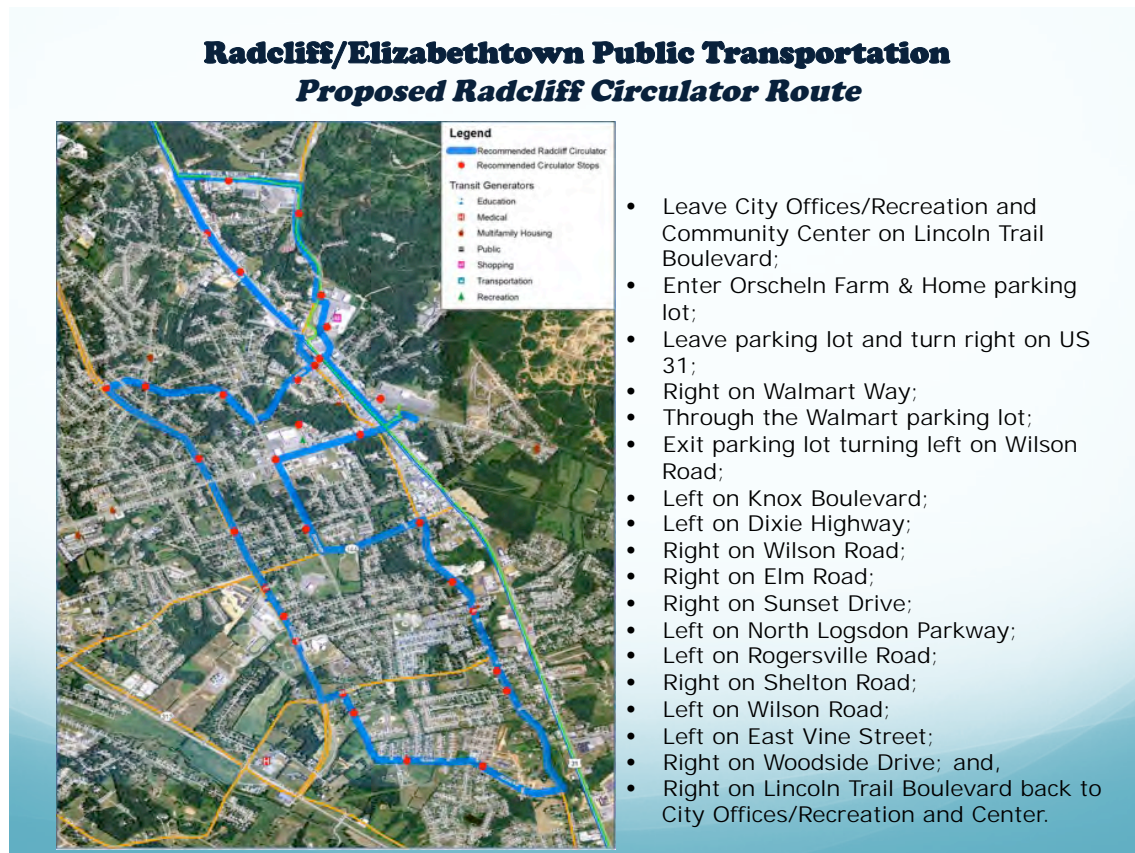
Transfers to the Connector can be made at the Hardin County Court House, Walgreen's, Hardin County Memorial Hospital, Old Towne Mall, Kroger and Kohl's.

This routing provides access to and from residential areas and also city and county offices, Kohl's department store, the shopping destinations in and around the Old Towne Mall, Hardin County Memorial Hospital, the Library and the campus area of Elizabethtown Community and Technical College and the Western Kentucky University satellite campus. The route is approximately 13.5 miles long and 32 preliminary bus stop locations have been identified.



Radcliff Circulator

A preliminary Radcliff circulator is shown in the map below. Assuming a starting location of Orscheln's on Lincoln Trail just off of US 31. This is the location of the TACK park-and-ride stop in Radcliff. Preliminary routing is proposed as follows:



This routing provides access to transit from residential areas and also serves shopping areas such as Orscheln's and Walmart; the library; city offices; the recreation and community center; and, the post office. The route is approximately 12.5 miles in length. Transfers to and from the connector can take place at Orscheln Farm and Home, Walmart and the Hardin County Health Center. There are approximately 30 preliminary bus stop locations along the route.

Operating and Capital Costs



The study shows a total cost estimate of \$585,000 in annual operating costs. These costs would be eligible for federal funding assistance with a required local match (50% Federal/50% Local). There will also be initial and subsequent capital costs associated with the fixed-route public transportation system. All capital costs are eligible for 80% in federal funding with a required 20% for local match.

Table 10 - Proposed Annual Operating Costs			
Service	Daily Hours of Service	Annual Operating Costs	Assumptions
Elizabethtown-Radcliff-Fort Knox Connector	8	\$156,000	One vehicle, one roundtrip per hour
Elizabethtown Circulator	11	\$214,500	One vehicle, one roundtrip per hour
Radcliff Circulator	11	\$214,500	One vehicle, one roundtrip per hour

Airport

The Elizabethtown Regional Airport (ERA) is a class III regional general aviation airport that lies just west of the City of Elizabethtown. Currently, the ERA has a 6,001-foot runway and serves both commercial and industrial uses.

The recent extension of Ring Road (KY 3005) to the Western Kentucky Parkway and, ultimately, to Interstate 65 will provide direct highway access from the ERA to the state's major expressway system.

Over the past few years, the ERA has been exploring opportunities to restore passenger airline service to the Elizabethtown/Central Kentucky area. The Radcliff/Elizabethtown MPO fully supports these efforts and will continue to work with the ERA and its board to fully implement its goals for growth and expansion. The table below details the future improvements currently proposed for the Elizabethtown Regional Airport.

Table 11 - Airport Improvements	
Radcliff-Elizabethtown Metropolitan Transportation Plan	
Project Description	Total Cost
Purchase of Snow Removal Equipment	\$150,000
Construct Complete Perimeter Fencing	\$685,000
TOTAL	\$835,000

Rail

CSX, a Class I Carrier, and Paducah and Louisville, a Class II Carrier provides rail service to the MPO planning area. More detailed information on both of these companies can be found in Chapter 3.



Some of the major rail issues in the Radcliff/Elizabethtown area include: impacts on rail crossings, such as safety and highway traffic; providing rail access to the Meade County Riverport; and rail needs of the military at Fort Knox.

Currently, the MPO supports providing a railroad spur extension to the Meade County Riverport, east of Brandenburg. The MPO will also explore opportunities for railroad crossing closings and/or upgrades in the future as a means of ensuring a safer flow of both rail and vehicular traffic.

Riverport

The Meade County Riverport is the only riverport located within the MPO planning area. It is a 50-acre site east of Brandenburg, next to Arch Chemicals, Inc. The site is accessed via KY 933. The riverport's business plan shows operations concentrated on grain-loading, light cargo loading and off-loading. The service area includes Meade, Hardin, Breckinridge, and Larue counties.

The recently completed highway improvements to KY 933 and KY 313 have been crucial to the Meade County Riverport. The other major transportation issue related to the riverport is the CSX railroad spur extension.

Nucor, a state-of-the-art steel company, recently announced that it will construct a \$1.35 billion facility near the riverport in Meade County. Nucor will provide over 400 jobs to the area in the coming years. These jobs will pay an average of \$45 per hour and have a tremendous economic impact on not only Brandenburg and Meade County but surrounding counties as well. The riverport played an important role in the location of Nucor and will continue to play an important role in future economic development in the area.

Freight

Interstate 65 is a major interstate route for regional and national truck movements. The Radcliff/Elizabethtown planning area is fortunate to have a transportation system that consists of Interstate 65, the Bluegrass Parkway, the Western Kentucky Parkway, US 31W, US 62, KY 61, KY 313, KY 361, etc. While the majority of freight traverses the area on I-65, these other major routes play a significant role in the movement of freight in and through the area. There are numerous businesses and industries in the region that rely on trucks for shipping and delivery.

Freight is a major consideration for the MPO when prioritizing projects for inclusion in the MTP. First, increasing access and mobility for the movement of freight is one of the nine goals of the MPO. The MPO also evaluates all highway projects based on the percentage of truck



traffic a particular segment of highway carries on a daily basis. The higher the volume of truck traffic the higher score the project will receive in the freight movement category.

While, it is a blessing to the area, it is also a concern. The movement of truck traffic through the cities has been an issue in recent years. It may become important for the MPO conduct a truck access study in the future to better define current and future trucking issues and needs, including better signage to direct trucks to major routes to keep them out of downtown areas.

Future planned improvements including the I-65 interchange in Glendale, US 62, KY 313, KY 3005, and the rail spur to the Meade County Riverport all have major impacts on freight movement in the MPO area. Freight considerations will continue to be a priority for the MPO in the future. The Glendale Industrial Site will become a major consideration for freight movement in the future and new projects will have to be considered to support any new industry that moves onto the Glendale site.

Surface Transportation Block Grant – Transportation Alternatives (STBG-TA)

The Surface Transportation Block Grant – Transportation Alternatives (STBG-TA) program provides funding for surface transportation projects such as on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhancement mobility, community improvement activities, and environmental mitigation; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

The following table details the current list of funded TAP projects in the Radcliff/Elizabethtown planning area:

Table 12 - Transportation Alternatives Program (TAP) Projects			
Radcliff-Elizabethtown Metropolitan Transportation Plan			
Project Description	TAP Award	Local Match	Total Cost
Brandenburg Downtown Pedestrian Safety Project	\$160,000	\$39,936	\$199,936
TOTAL			\$199,936

Appendix A
MPO Committee
Membership

MPO Policy Committee

Member	Representing	Title	Appointment		
			Elected	Member	Voting
Harry L. Berry	Hardin County	County Judge/Executive	X		X
Jeff Gregory	City of Elizabethtown	Mayor	X		X
J. J. Duvall	City of Radcliff	Mayor	X		X
Pam Ogden	City of Vine Grove	Mayor	X		X
Gerry Lynn	Meade County	County Judge/Executive	X		X
Ronnie Joyner	City of Brandenburg	Mayor	X		X
Paul Sanders	KYTC District 4	Chief District Engineer		X	X
Emmet Holley	Fort Knox Garrison	Garrison Manager		X	
Joe Redmon	Transit Authority of Central Kentucky	Executive Director		X	
Todd Jeter	Federal Highway Administration	KY Division Administrator		X	
Yvette Taylor	Federal Transit Administration	Regional Administrator		X	

MPO Technical Advisory Committee

Member	Representing	Title	Appointment	
			Member	Voting
Vicki Meredith	Hardin County	County Engineer	X	X
Adam King	Hardin County	Planning & Development Director	X	X
Murray Wanner	City of Radcliff	Planning Official	X	X
Toby Spalding	City of Radcliff	City Engineer	X	X
Jim Shaw	City of Elizabethtown	Planning & Development Director	X	X
Michael Page	City of Elizabethtown	City Engineer	X	X
Chris Mayhew	City of Vine Grove		X	X
Mark Richerson	Fort Knox	Engineer	X	X
Joe Redmon	Transit Authority of Central Kentucky	Executive Director	X	X
Mike Hall	Transportation Management Systems	Owner	X	X
Maridely Loyselle	Kentucky Transportation Cabinet (KYTC)	Transportation Engineering Specialist	X	X
Charlie Allen	KYTC District 4	Transportation Engineer Supervisor (Planning)	X	
Kevin Young	KYTC District 4	Transportation Engineering Technologist III (Planning)	X	
Bernadette Dupont	Federal Highway Administration (KY-Div.)	Transportation Specialist	X	
Aviance Webb	Federal Transit Administration	Community Planner	X	
Eric Perez	KYTC Office of Transportation Delivery	Director	X	

Appendix B
Socioeconomic Data
Title VI

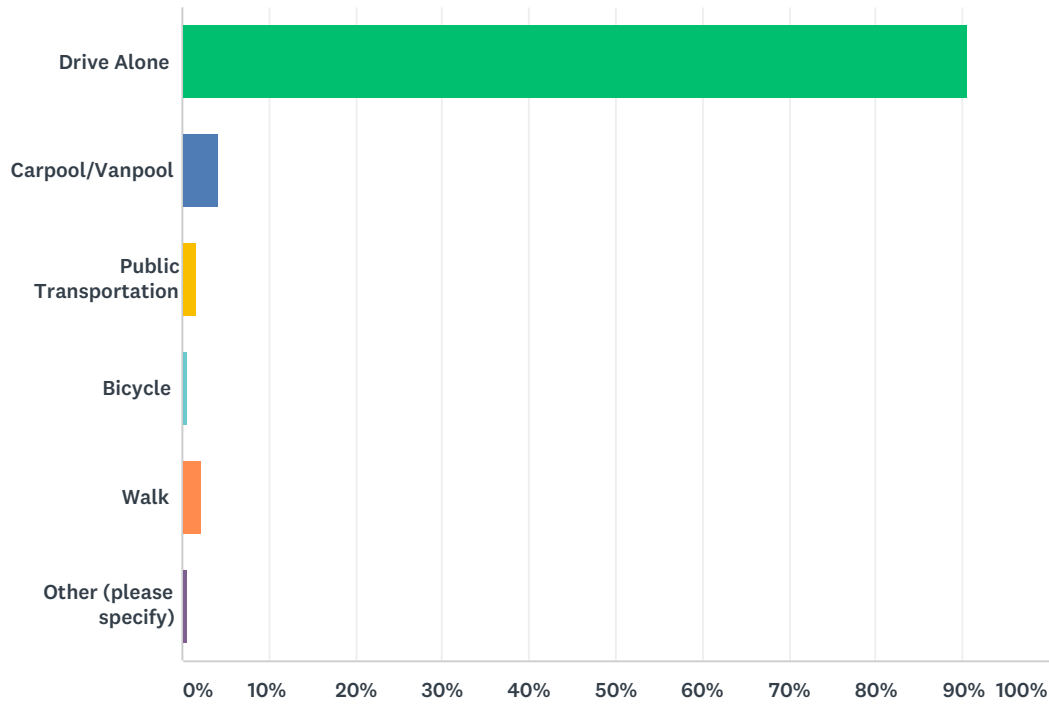
Source: 2017 Kentucky Population Research, Kentucky State Data Center	Hardin	Meade	Radcliff/ Elizabethtown MPO	KENTUCKY	UNITED STATES
Total Population	108,071	28,154	136,225	4,454,189	321,004,407
By Race					
White alone	82,081	25,235	107,316	3,768,891	197,277,789
% White Population	75.95%	89.63%	78.78%	84.61%	61.46%
Black or African American	13,054	961	14,015	362,466	39,445,495
% African American Pop.	12.08%	3.41%	10.29%	8.14%	12.29%
Asian	2,384	211	2,595	68,090	16,989,540
% Asian	2.21%	0.75%	1.90%	1.53%	5.29%
Other	4,302	736	5,038	91,253	8,682,249
% Some other race alone	3.98%	2.61%	3.70%	2.05%	2.70%
Persons of Hispanic or Latino origin	6,250	1,011	7,261	163,489	56,510,571
% Persons of Hispanic or Latino origin	5.78%	3.59%	5.33%	3.67%	17.60%
Total Minority Population	19,740	1,908	21,648	521,809	65,117,284
% Minority Population	18.27%	6.78%	15.89%	11.72%	20.29%
By Female					
Total Population age 16 Years +	86,217	23,051	109,268	3,573,777	242,933,996
Total Female age 16 Years +	43,658	11,468	55,126	1,830,309	124,278,833
% Female	50.64%	49.75%	50.45%	51.21%	51.16%
Limited English Proficiency: Speak English less than "well" for population 18 years + (Table P19)					
Total Population 18 Years and Over	77,619	21,078	98,697	3,261,942	217,428,980
% Speak English less than "Very Well"	1.50%	0.40%	0.95%	0.80%	4.50%
Low Literacy: Less than 9th Grade Education for Population 25 Years + (Table P37)					
Total	68,878	18,760	87,638	2,922,675	206,597,203
% Less than 9th Grade Education	4.50%	5.30%	4.90%	7.20%	6.00%

Source: 2017 Kentucky Population Research, Kentucky State Data Center	Hardin	Meade	Radcliff/ Elizabethtown MPO	KENTUCKY	UNITED STATES
Total Population	108,071	28,154	136,225	4,454,189	321,004,407
Persons with Disabilities for Civilian Noninstitutionalized Population 18 Years + (Table P42)					
Total Population age 18 Years +	72,325	20,554	92,879	3,256,892	232,817,331
Total Disabilities for age 18 Years +	12,666	3,793	16,459	662,065	34,025,487
% with Disabilities	17.51%	18.45%	17.72%	20.33%	14.61%
Low-Income: Less than Poverty Level in 1999 for Population 18 Years + (Table P87)					
Total (18 Years +)	76,097	21,179	97,276	3,231,458	230,998,971
Income in 1999 Below Poverty Level (18 Years +)	8,831	3,275	12,106	544,331	31,587,028
% Income in 1999 Below Poverty Level	11.60%	15.46%	12.45%	16.84%	13.67%
Occupied Housing Units with No Vehicle					
Total Occupied Housing Units	39,426	10,282	49,708	1,690,132	115,241,776
Occupied Housing Units with No Vehicle	1,889	502	2,391	131,822	10,575,654
% Occupied Housing Units with No Vehicle	4.79%	4.88%	4.81%	7.80%	9.18%

Appendix C
MPO Public
Survey Results

Q1 What is your primary mode of transportation?

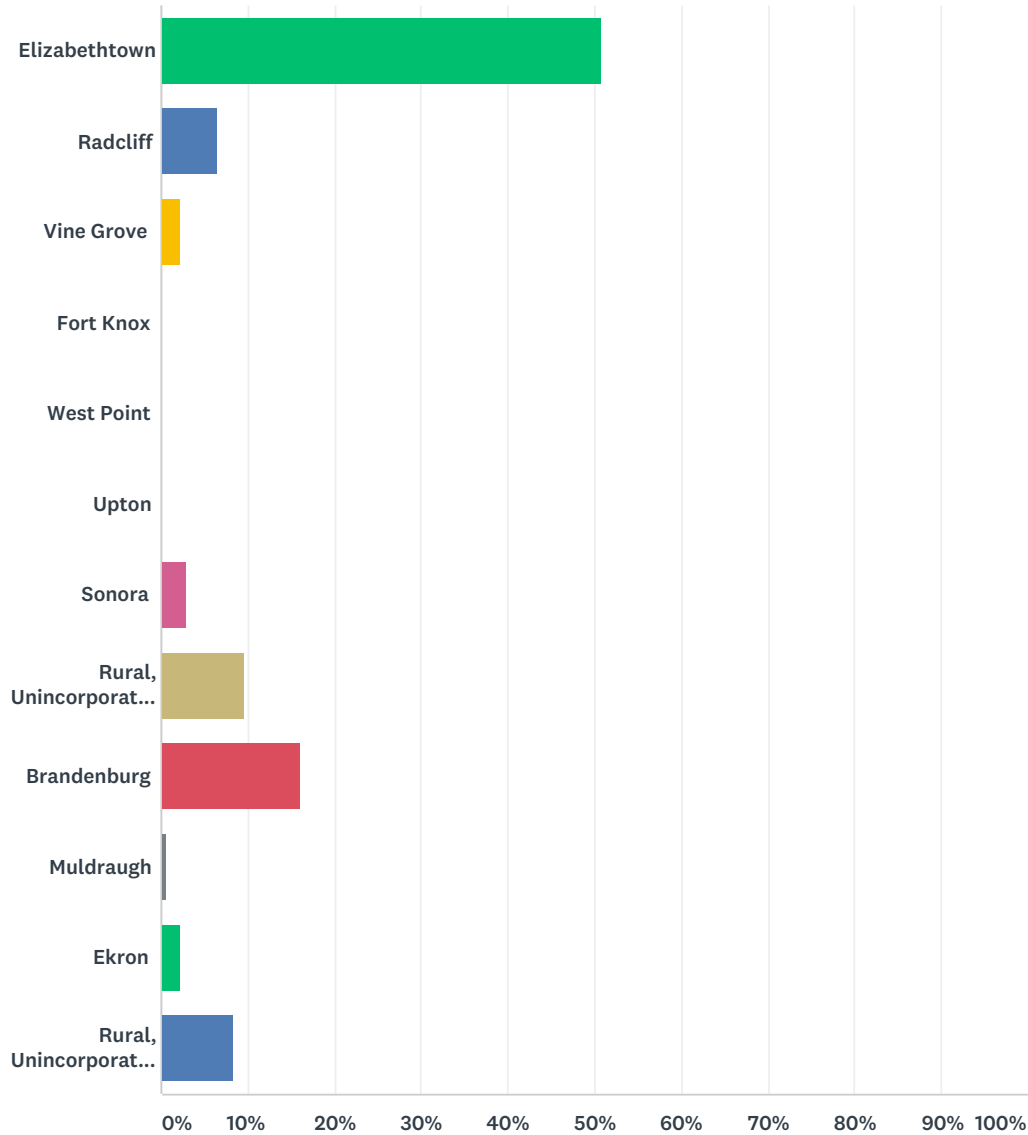
Answered: 169 Skipped: 2



ANSWER CHOICES	RESPONSES	
Drive Alone	90.53%	153
Carpool/Vanpool	4.14%	7
Public Transportation	1.78%	3
Bicycle	0.59%	1
Walk	2.37%	4
Other (please specify)	0.59%	1
TOTAL		169

Q2 What is your primary place of residence?

Answered: 167 Skipped: 4



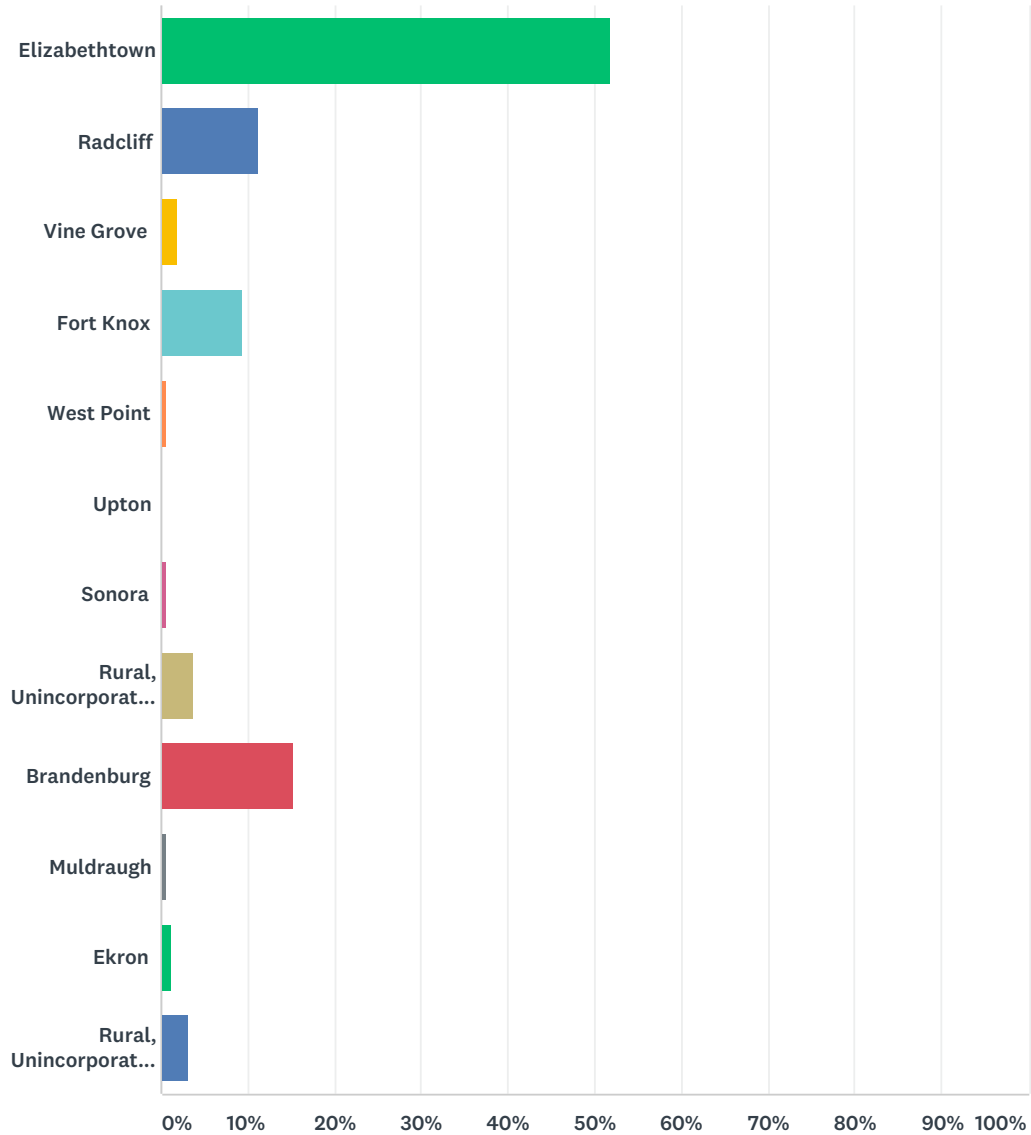
ANSWER CHOICES	RESPONSES	
Elizabethtown	50.90%	85
Radcliff	6.59%	11
Vine Grove	2.40%	4
Fort Knox	0.00%	0
West Point	0.00%	0
Upton	0.00%	0
Sonora	2.99%	5
Rural, Unincorporated Hardin County	9.58%	16

2045 Metropolitan Transportation Plan Public Survey

Brandenburg	16.17%	27
Muldraugh	0.60%	1
Ekron	2.40%	4
Rural, Unincorporated Meade County	8.38%	14
TOTAL		167

Q3 What is your primary place of work?

Answered: 158 Skipped: 13



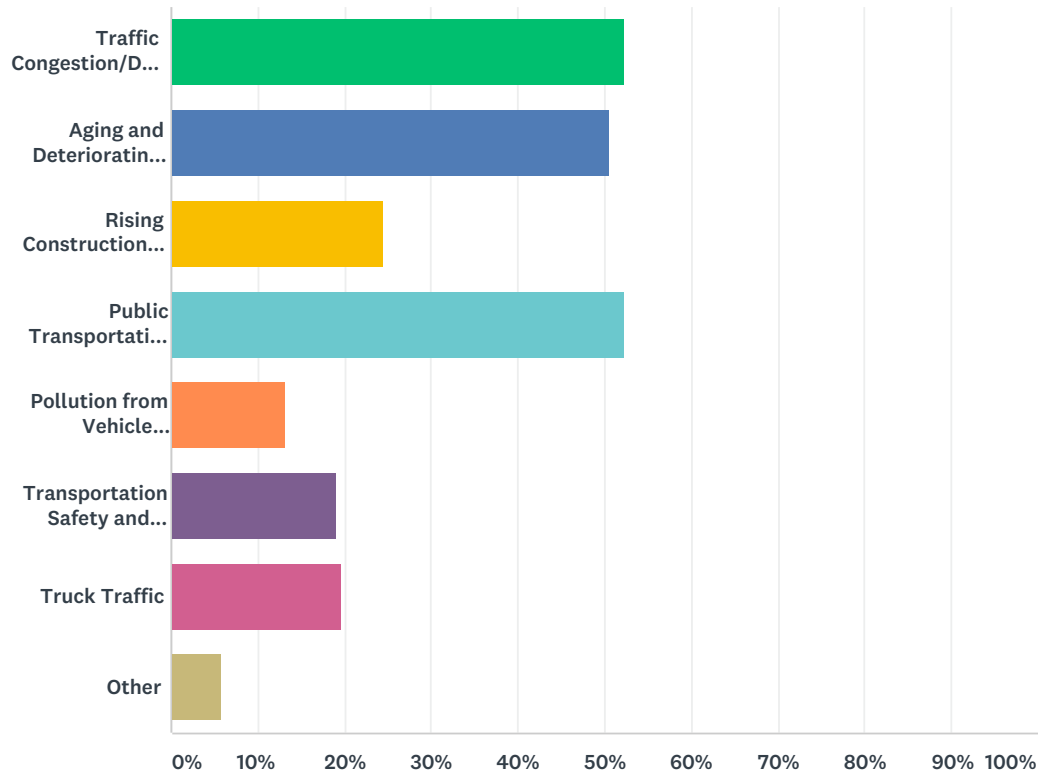
ANSWER CHOICES	RESPONSES	
Elizabethtown	51.90%	82
Radcliff	11.39%	18
Vine Grove	1.90%	3
Fort Knox	9.49%	15
West Point	0.63%	1
Upton	0.00%	0
Sonora	0.63%	1
Rural, Unincorporated Hardin County	3.80%	6

2045 Metropolitan Transportation Plan Public Survey

Brandenburg	15.19%	24
Muldraugh	0.63%	1
Ekron	1.27%	2
Rural, Unincorporated Meade County	3.16%	5
TOTAL		158

Q4 What do you see as the MOST important transportation challenges facing our area in the next 25 years? (Choose Your Top 3)

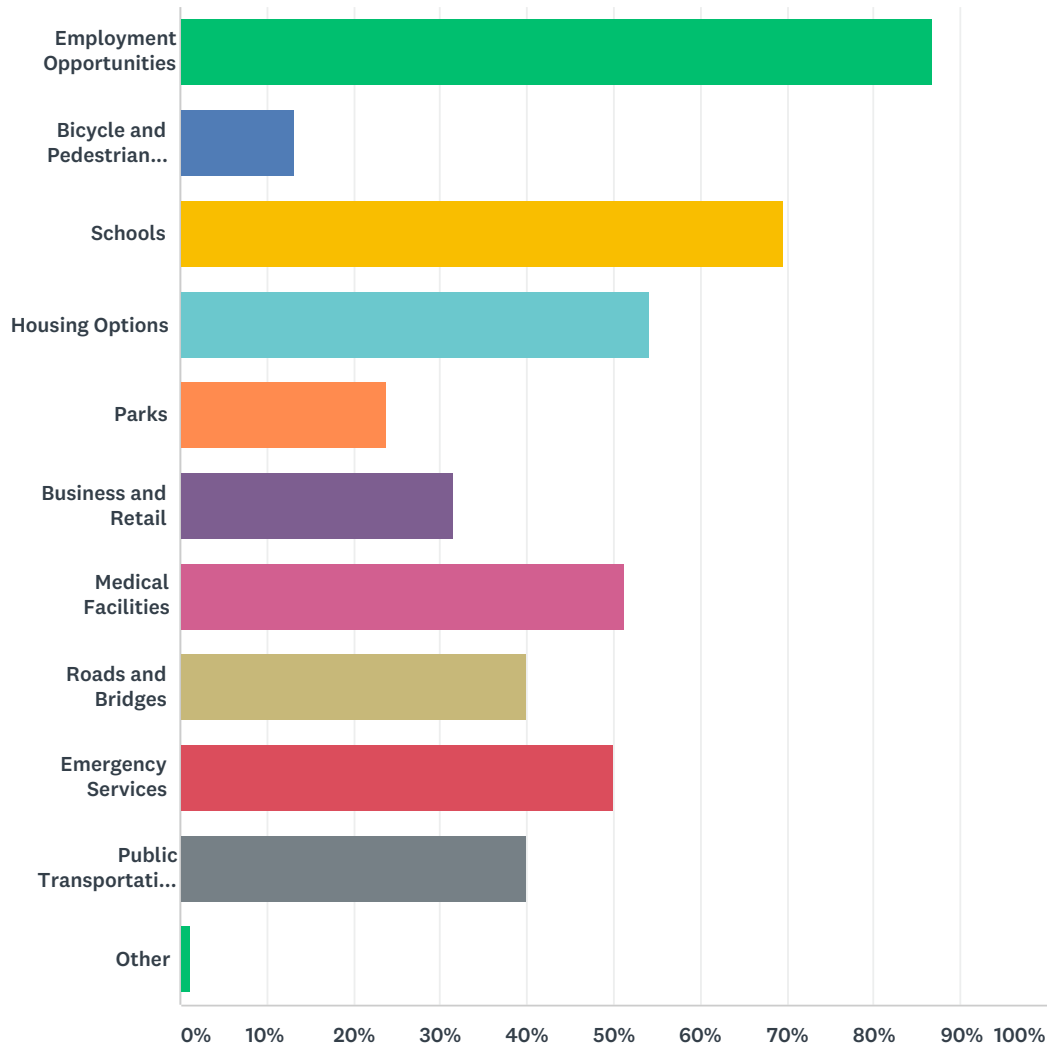
Answered: 168 Skipped: 3



ANSWER CHOICES	RESPONSES	
Traffic Congestion/Delays	52.38%	88
Aging and Deteriorating Transportation System	50.60%	85
Rising Construction Costs and Lack of Funding	24.40%	41
Public Transportation Needs	52.38%	88
Pollution from Vehicle Emissions	13.10%	22
Transportation Safety and Security	19.05%	32
Truck Traffic	19.64%	33
Other	5.95%	10
Total Respondents: 168		

Q5 What elements are most important for a LIVABLE community and region? (Choose Up To 5)

Answered: 168 Skipped: 3



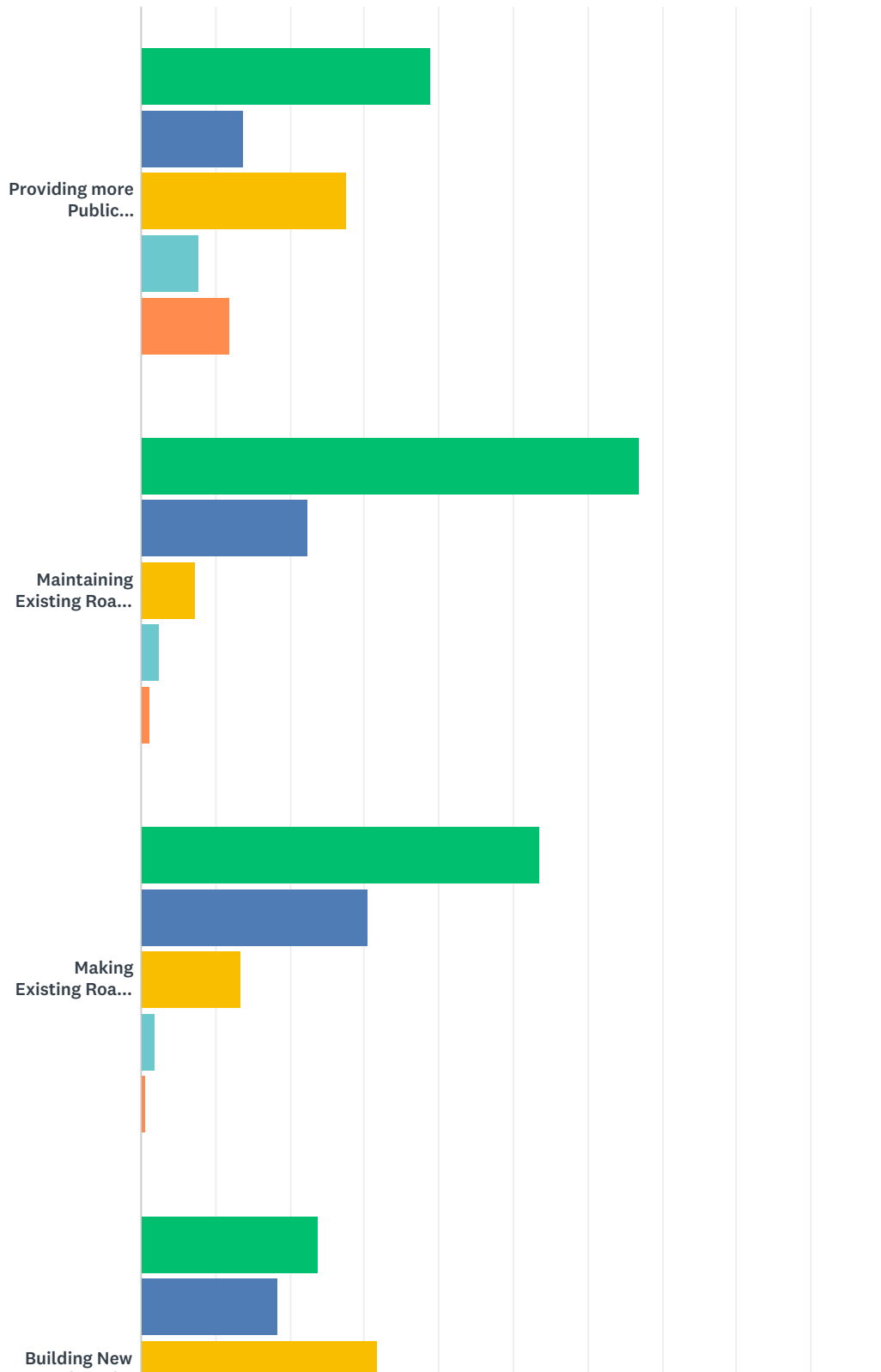
ANSWER CHOICES	RESPONSES	
Employment Opportunities	86.90%	146
Bicycle and Pedestrian Facilities	13.10%	22
Schools	69.64%	117
Housing Options	54.17%	91
Parks	23.81%	40
Business and Retail	31.55%	53
Medical Facilities	51.19%	86
Roads and Bridges	39.88%	67
Emergency Services	50.00%	84

2045 Metropolitan Transportation Plan Public Survey

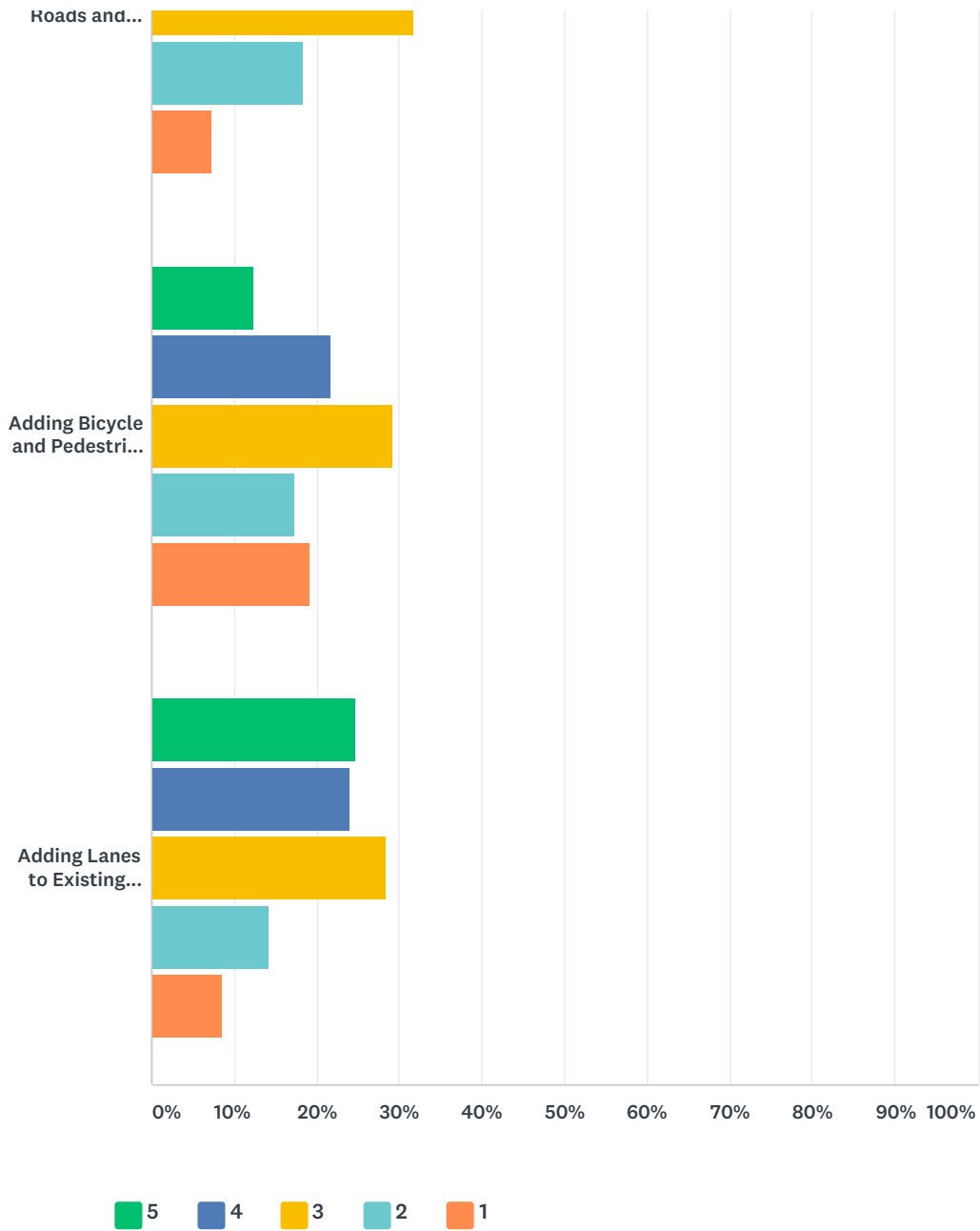
Public Transportation Services	39.88%	67
Other	1.19%	2
Total Respondents: 168		

Q6 What are the top transportation priorities for Hardin and Meade counties from now until 2045? Please rank each item from 5 (Very Important) to 1 (Not Important)

Answered: 168 Skipped: 3



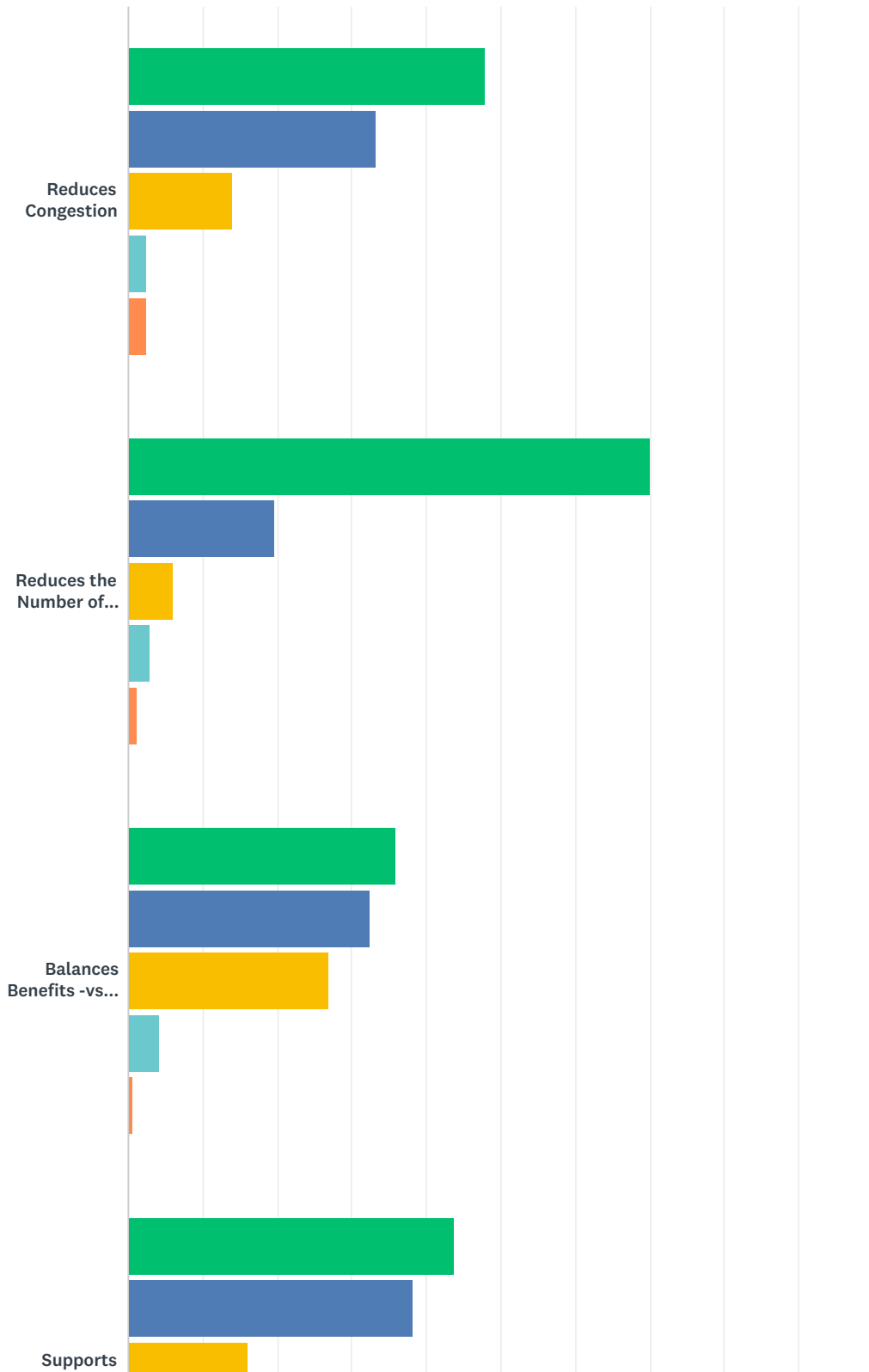
2045 Metropolitan Transportation Plan Public Survey



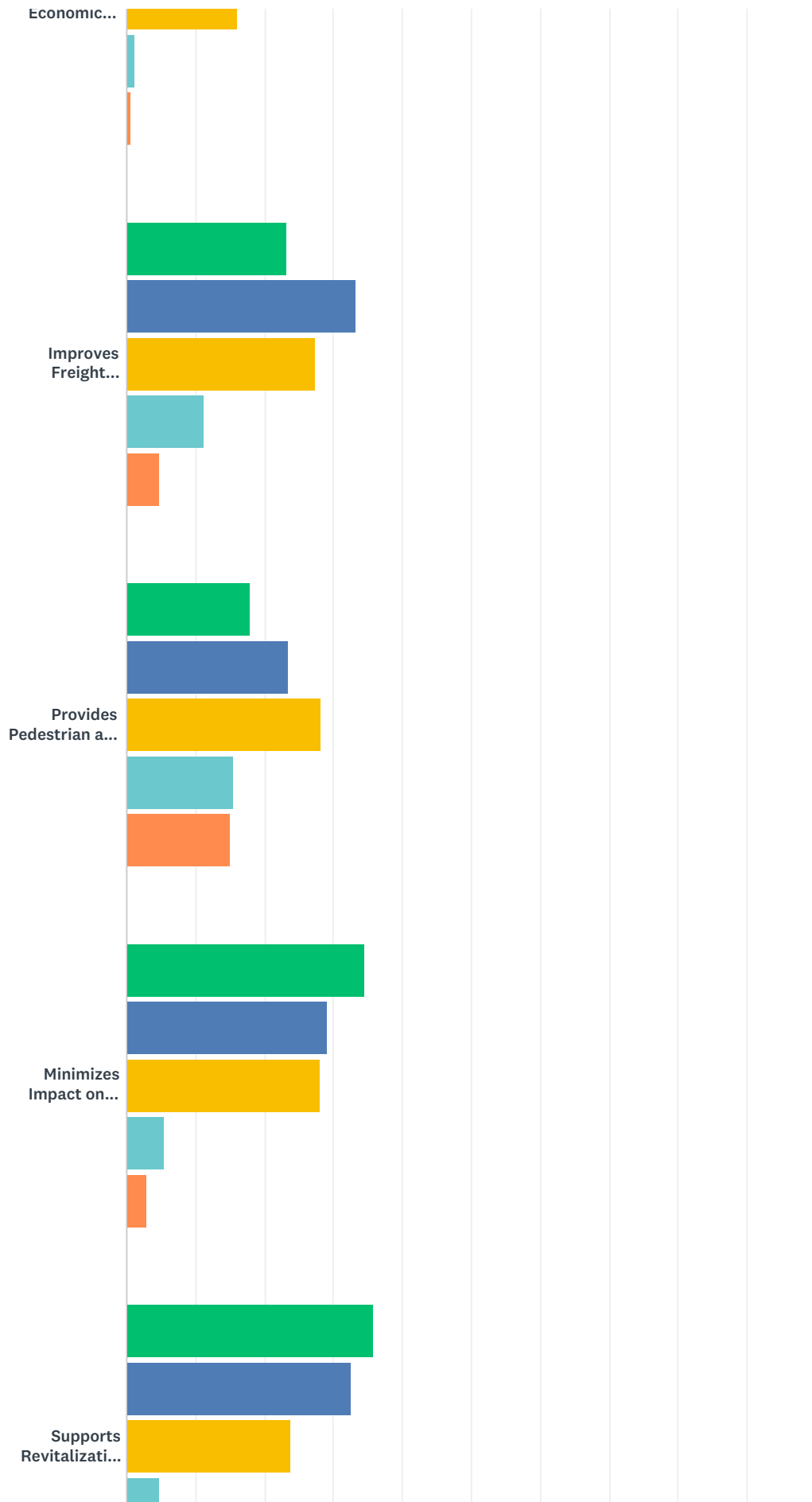
	5	4	3	2	1	TOTAL	WEIGHTED AVERAGE
Providing more Public Transportation Services	38.92% 65	13.77% 23	27.54% 46	7.78% 13	11.98% 20	167	2.40
Maintaining Existing Road and Bridges	66.87% 111	22.29% 37	7.23% 12	2.41% 4	1.20% 2	166	1.49
Making Existing Roads and Bridges Safer	53.66% 88	30.49% 50	13.41% 22	1.83% 3	0.61% 1	164	1.65
Building New Roads and Bridges	23.93% 39	18.40% 30	31.90% 52	18.40% 30	7.36% 12	163	2.67
Adding Bicycle and Pedestrian Facilities	12.42% 20	21.74% 35	29.19% 47	17.39% 28	19.25% 31	161	3.09
Adding Lanes to Existing Roads and Bridges	24.69% 40	24.07% 39	28.40% 46	14.20% 23	8.64% 14	162	2.58

Q7 How important are these factors to be considered in the priority of transportation projects? Please rank each item from 5 (Very Important) to 1 (Not Important)

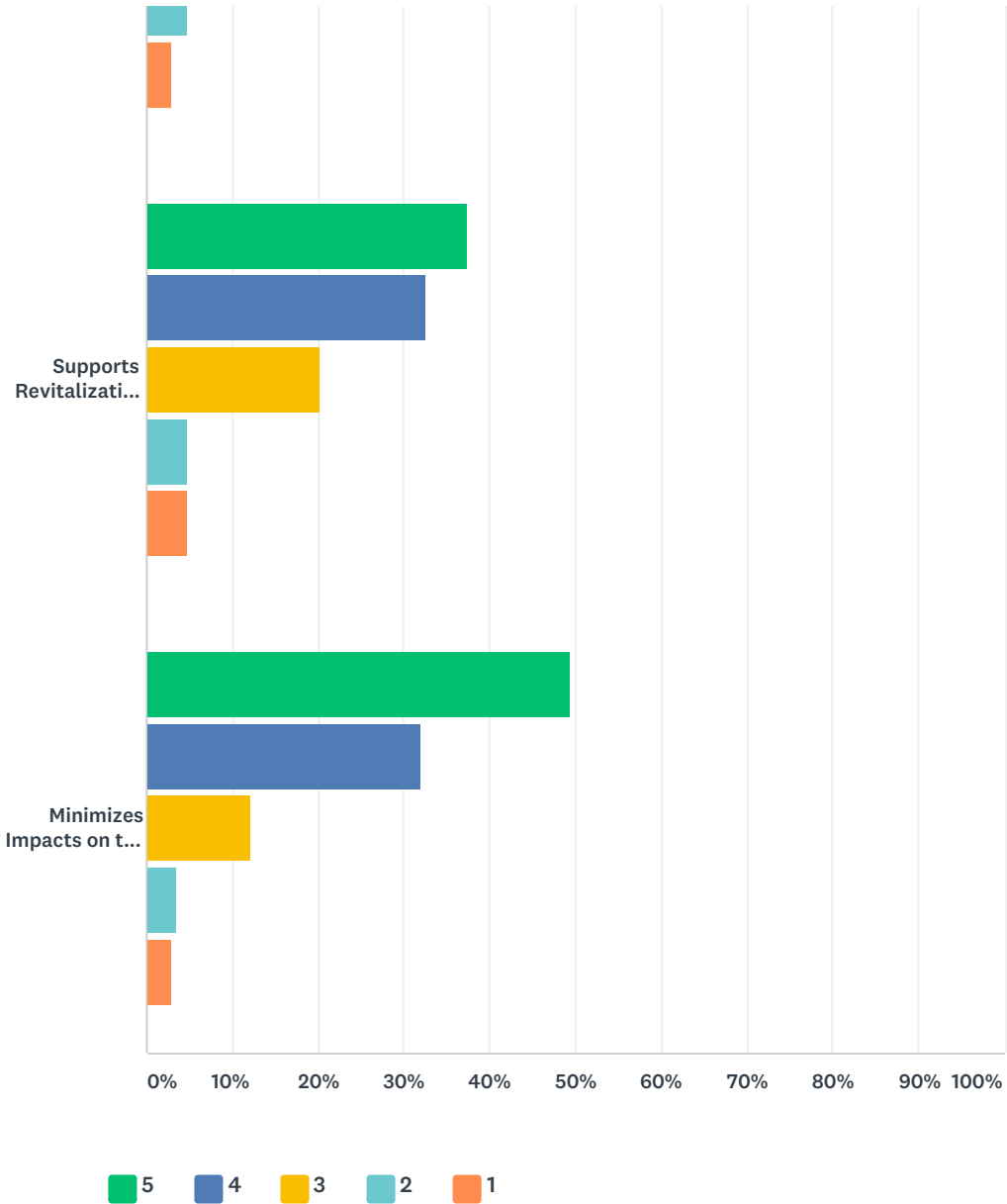
Answered: 168 Skipped: 3



2045 Metropolitan Transportation Plan Public Survey



2045 Metropolitan Transportation Plan Public Survey



	5	4	3	2	1	TOTAL	WEIGHTED AVERAGE
Reduces Congestion	47.88% 79	33.33% 55	13.94% 23	2.42% 4	2.42% 4	165	1.78
Reduces the Number of Vehicle Crashes	70.06% 117	19.76% 33	5.99% 10	2.99% 5	1.20% 2	167	1.46
Balances Benefits -vs- Costs	35.93% 60	32.34% 54	26.95% 45	4.19% 7	0.60% 1	167	2.01
Supports Economic Development	43.71% 73	38.32% 64	16.17% 27	1.20% 2	0.60% 1	167	1.77
Improves Freight Movement	23.21% 39	33.33% 56	27.38% 46	11.31% 19	4.76% 8	168	2.41
Provides Pedestrian and Bicycle Facilities	17.96% 30	23.35% 39	28.14% 47	15.57% 26	14.97% 25	167	2.86
Minimizes Impact on Existing Neighborhoods	34.52% 58	29.17% 49	27.98% 47	5.36% 9	2.98% 5	168	2.13

2045 Metropolitan Transportation Plan Public Survey

Supports Revitalization of Existing Neighborhoods	35.71% 60	32.74% 55	23.81% 40	4.76% 8	2.98% 5	168	2.07
Supports Revitalization of Downtowns or Other Historic Areas	37.50% 63	32.74% 55	20.24% 34	4.76% 8	4.76% 8	168	2.07
Minimizes Impacts on the Natural Environment	49.40% 82	31.93% 53	12.05% 20	3.61% 6	3.01% 5	166	1.79

Q8 When you travel to work, school, or shopping, what is the most congested roadway or intersection that you experience in your community?

Elizabethtown front mall Hwy Brandenburg bypass St John south US 31W
near mall Brandenburg Rd Dixie Hwy KY
Dixie Highway Bypass 31W around
Ring Road area Dixie 1638 intersection near
Ring Rd mall Patriot Parkway hospital downtown Parkway
Joe
Prather w Road Highway

Q8 When you travel to work, school, or shopping, what is the most congested roadway or intersection that you experience in your community?

Answered: 164 Skipped: 7

#	RESPONSES	DATE
1	Dixie from downtown to north side.	8/1/2019 11:03 AM
2	31W & Ring Road Intersection	8/1/2019 11:00 AM
3	Dixie Hwy from Ring Rd traveling south in front of the hospital to St. John Rd intersection. AND also Ring Rd & Dixie Hwy intersection from Lowe's Dr traveling W to Veterans Way	8/1/2019 10:58 AM
4	I-65 to WK Pkwy exit/merge Tunnel Hill to 62 Intersection	8/1/2019 10:50 AM
5	N. Dixie Ave	8/1/2019 10:47 AM
6	Dixie & Ring Road	8/1/2019 10:44 AM
7	31W - North & South	8/1/2019 10:42 AM
8	Ring Road	8/1/2019 10:40 AM
9	Dixie and Ring Road	8/1/2019 10:34 AM
10	Intersection at Ring Road and Patriot Pkwy; St. John Road	7/31/2019 2:53 PM
11	Ring Road and Patriot Parkway	7/31/2019 2:51 PM
12	Dixie Hwy Dixie Hwy & St. John Intersection Ring Road	7/31/2019 2:46 PM
13	US 31W - Dixie Highway	7/31/2019 2:43 PM
14	US 31W & Ring Road	7/31/2019 2:40 PM
15	Interstate 65	7/31/2019 2:31 PM
16	Ring Road and Patriot Parkway	7/31/2019 2:28 PM
17	Dixie Hwy (31W) between Hardin Memorial Hospital and downtown E'town	7/31/2019 2:22 PM
18	US 31W by the mall until you reach Kohl's - IHOP	7/31/2019 2:17 PM
19	US 31W Intersection by Aldi - Walmart (Redlight)	7/31/2019 2:09 PM
20	Current construction on hwy 313	7/20/2019 7:54 AM
21	31W-North (Dixie Highway from Downtown E-town to edge of E-town City Limits)	7/19/2019 11:44 AM
22	Ring Rd and 31W	7/17/2019 2:54 PM
23	Dixie Highway	7/17/2019 9:48 AM
24	College Street/31W Bypass	7/17/2019 8:21 AM
25	Dixie Hwy	7/16/2019 1:07 PM
26	Dixie Hwy	7/16/2019 1:03 PM
27	Us 31 and Ring Road	7/16/2019 12:56 PM
28	31 W - Lincolntrail Blvd 31W	7/15/2019 11:13 AM
29	Us 31w	7/12/2019 10:02 PM
30	Joe Prather, but it's getting expanded so hopefully that will help. The Brandenburg bypass at RiverRidge plaza is also awful.	7/11/2019 4:36 PM
31	31W and Ring Rd	7/3/2019 10:40 AM

2045 Metropolitan Transportation Plan Public Survey

32	None	7/3/2019 7:37 AM
33	The 4 way near walgreens, walmart, lowes, etc.	7/3/2019 1:41 AM
34	Dixie and Joe Prather	7/2/2019 9:37 PM
35	dixie highway	7/2/2019 7:24 PM
36	Dixie Avenue in E-Town	7/2/2019 6:59 PM
37	31w and Ring Rd	7/2/2019 6:49 PM
38	Ring Road and N. Miles in Elizabethtown	7/2/2019 4:44 PM
39	Lincoln trail and logston.	7/2/2019 2:33 PM
40	the rural country 2 lane highway with a farm tractor or accident which causes a detour	7/2/2019 12:07 PM
41	hwy 62	7/2/2019 11:17 AM
42	31w	7/2/2019 10:59 AM
43	Dixie Highway	7/2/2019 10:42 AM
44	31W	7/2/2019 10:27 AM
45	31W in the afternoons through Etown from Veterans Pkwy to the Bypass	7/2/2019 10:09 AM
46	Dixie	7/2/2019 10:05 AM
47	Ring Road and Dixie	7/2/2019 10:03 AM
48	Dixie Highway	7/2/2019 10:02 AM
49	31 and joe prather	7/2/2019 9:50 AM
50	Stoplight at St. John and Dixie, by Walgreens and Roses	7/2/2019 9:38 AM
51	Ring road and 31W/Dixie	7/2/2019 9:19 AM
52	Dixie hwy in front of mall	7/2/2019 9:15 AM
53	Ring rd and patriot parkway	7/2/2019 9:15 AM
54	Dixie hwy near HMH toward downtown e-town	7/2/2019 9:14 AM
55	31W	7/2/2019 9:11 AM
56	W. Dixie just down past the hospital.	7/2/2019 9:10 AM
57	Patriot Parkway & 31W	7/2/2019 8:55 AM
58	Ring Road and 31W	7/2/2019 8:54 AM
59	Dixie Highway in Elizabethtown	7/1/2019 12:26 PM
60	Ring rd Dixie intersection	7/1/2019 1:43 AM
61	31 and Ring Road	6/26/2019 6:22 PM
62	St. John rd and 31w intersection	6/26/2019 9:54 AM
63	31W and Ring Road	6/25/2019 8:12 AM
64	Dixie Highway	6/24/2019 8:26 PM
65	Ring road and st john intersection	6/24/2019 4:58 PM
66	Ring road	6/24/2019 4:56 PM
67	65 south	6/24/2019 4:53 PM
68	62	6/24/2019 4:52 PM
69	By the Towne Mall on Dixie	6/24/2019 4:44 PM
70	Intersection of Dixie and Western Ky parkway	6/24/2019 3:25 PM
71	KY 313	6/24/2019 3:13 PM
72	US62 near I65 interchange. Poorly timed lights mostly seem to cause this.	6/24/2019 2:18 PM

2045 Metropolitan Transportation Plan Public Survey

73	Joe Prather and Patriot Parkway	6/24/2019 1:56 PM
74	N/A	6/24/2019 1:53 PM
75	31W	6/24/2019 1:52 PM
76	Intersection of Old Ekron Road and KY 313 (Brandenburg Bypass).	6/24/2019 1:50 PM
77	no problems in Meade Co. Hardin Co. more traffic but not bad	6/21/2019 2:45 PM
78	Dixie towards downtown etown	6/21/2019 10:59 AM
79	Ring Road Elizabethtown	6/21/2019 1:20 AM
80	Dixie Highway, Ring Road, and every intersection on these two roads.	6/20/2019 9:26 PM
81	Dixie hwy near mall in elizabethtown	6/20/2019 8:12 PM
82	1600 and Rineyville school road	6/20/2019 7:12 PM
83	Dixie Hwy!	6/20/2019 5:12 PM
84	31W	6/20/2019 3:57 PM
85	I-65	6/20/2019 3:29 PM
86	Dixie around Ring Road	6/20/2019 11:27 AM
87	Hwy 62 and Nicholas street crossing. as well as Hwy 62 and 31 downtown	6/20/2019 10:41 AM
88	US 31W	6/20/2019 10:22 AM
89	Dixie and Pear Orchard NW	6/20/2019 9:08 AM
90	Right now, 313 from 31W to 1646. 313 to the River should be expanded to 4 lanes	6/20/2019 8:56 AM
91	31-w	6/20/2019 8:38 AM
92	U.S. 31W	6/20/2019 6:46 AM
93	1638 and 448	6/20/2019 5:52 AM
94	31 w is congested and speeding is a major issue	6/19/2019 11:13 PM
95	Dixie highway from Walgreens/Southeastern Church to the square in Elizabethtown	6/19/2019 10:40 PM
96	Dixie highway	6/19/2019 10:22 PM
97	31w	6/19/2019 6:25 PM
98	Ring Road and Dixie Highway	6/19/2019 5:53 PM
99	Dixie hwy	6/19/2019 4:09 PM
100	Dixie Highway and Ring Road. Downtown.	6/19/2019 3:02 PM
101	Ring rd/Dixie Ring rd/ Mulberry	6/19/2019 2:22 PM
102	Highway 31W	6/19/2019 1:07 PM
103	361 & Ring Road 313 all intersections in Vine Grove 313 & 361	6/19/2019 12:48 PM
104	Anywhere on Dixie. It takes forever to get anywhere.	6/19/2019 11:44 AM
105	Dixie near the mall	6/19/2019 11:33 AM
106	Ring Road and Dixie	6/19/2019 10:25 AM
107	dixie- ring road	6/19/2019 10:16 AM
108	Lincoln Parkway/31W intersection	6/19/2019 10:16 AM
109	The 2 block radius around the Ring Road/Highway 31 intersection. 2nd would be the traffic circle in old downtown Etown.	6/19/2019 10:12 AM
110	North Dixie	6/19/2019 10:11 AM
111	KY 361 (Patriot Parkway) at Ring Road (KY 3005)	6/19/2019 10:05 AM
112	The area in front of the mall, which is expected.	6/19/2019 10:03 AM

2045 Metropolitan Transportation Plan Public Survey

113	Patriot Parkway, Ring Road, and 31W	6/19/2019 9:56 AM
114	Dixie highway between the mall and hospital.	6/19/2019 9:45 AM
115	31W and WK Parkway	6/18/2019 9:01 PM
116	Dixie Hwy	6/18/2019 7:13 PM
117	Ring Rd and Dixie	6/18/2019 5:24 PM
118	All of Elizabethtown intersections are congested. In front the mall in front of HMH both Walmart intersections in front of ft Knox credit union by target downtown St. John's road	6/18/2019 4:55 PM
119	too many stop lights	6/18/2019 4:05 PM
120	Dixie Avenue and US 62	6/18/2019 3:07 PM
121	313 between Meade County between US60 and Vine Grove	6/18/2019 2:39 PM
122	US 31W at Ring Road	6/18/2019 2:02 PM
123	Joe Prather	6/18/2019 2:00 PM
124	Downtown, the intersection of 31 and Mulberry.	6/18/2019 1:53 PM
125	Dixie Hwy.	6/18/2019 1:31 PM
126	Downtown around courthouse	6/18/2019 12:21 PM
127	Dixie highway near mall and Walmart	6/18/2019 12:18 PM
128	Bardstown Rd/Mulberry from Dixie out past the new Lincoln Trail Elementary School	6/18/2019 11:32 AM
129	Highway 1638	6/18/2019 11:14 AM
130	313 in Hardin County	6/18/2019 10:47 AM
131	Dixie Hwy	6/18/2019 10:40 AM
132	Dixie Highway	6/18/2019 9:31 AM
133	79, 1638, 60, and 313 Around the school is horrible	6/18/2019 8:29 AM
134	Bypass at Kroger intersection in Brandenburg And One lane bridge towards Corydon	6/17/2019 9:06 PM
135	Dixie Highway	6/17/2019 8:57 PM
136	Dixie Highway	6/17/2019 6:36 PM
137	313	6/17/2019 6:36 PM
138	Brandenburg bypass	6/17/2019 6:12 PM
139	Brandenburg Kroger area is a mess!	6/17/2019 5:44 PM
140	Brandenburg by pass	6/17/2019 5:07 PM
141	The most congested is in front of all the public schools. The bypass in Brandenburg is always congested as well.	6/17/2019 4:26 PM
142	none, I'm from Southern California	6/17/2019 4:18 PM
143	By-Pass and 313	6/17/2019 4:11 PM
144	Hwy 79 & 313	6/17/2019 4:02 PM
145	31w	6/17/2019 3:56 PM
146	Hwy 79 & 313	6/17/2019 3:50 PM
147	Bypass in Brandenburg	6/17/2019 3:44 PM
148	Vine Grove area Joe prather, Joe prather Flaherty area	6/17/2019 3:42 PM
149	New 313 Highway	6/17/2019 3:40 PM
150	313	6/17/2019 3:38 PM
151	1051 By-Pass Rd Brandenburg	6/17/2019 3:36 PM

2045 Metropolitan Transportation Plan Public Survey

152	Brandenburg Road and Weldon RD	6/17/2019 3:26 PM
153	79 & 1239	6/17/2019 3:13 PM
154	Dixie Highway in Radcliff and Etown	6/17/2019 3:05 PM
155	1638	6/17/2019 2:40 PM
156	31w	6/17/2019 2:34 PM
157	31w	6/17/2019 2:33 PM
158	313 in front of Kroger and the shopping center	6/17/2019 2:32 PM
159	Hwy 79	6/17/2019 2:31 PM
160	Ring Road and Dixie Hwy, for shopping in the area. I try to find alternate ways to get around the area. to avoid Dixie Hwy.	6/17/2019 2:17 PM
161	In front of the Kroger plaza in Brandenburg.	6/17/2019 2:16 PM
162	313 & 1238	6/17/2019 2:15 PM
163	Dixie highway	6/17/2019 2:14 PM
164	Highway 31W	6/17/2019 2:14 PM

Q9 When you travel to work, school, or shopping in your community, what roadway section or intersection has the greatest need for improvements to increase your safety as you travel?

way 1600 bypass St John Rd lights Patriot Parkway Dixie Highway N Hwy street
Dixie Hwy 1238 Dixie turning lane Ring Road St John
31W 1638 road Brandenburg intersection Pear Orchard
needs cars Rd US 31W Ring Rd area front Highway North

Q9 When you travel to work, school, or shopping in your community, what roadway section or intersection has the greatest need for improvements to increase your safety as you travel?

Answered: 154 Skipped: 17

#	RESPONSES	DATE
1	Dixie Highway	8/1/2019 11:03 AM
2	St. John Rd & 31W Intersection	8/1/2019 11:00 AM
3	Dixie Hwy, the change from 4-lane to 2-lane with turning lane and especially the changing of green lights to flashing yellow in turn lanes. From the beginning I've considered these flashing arrows as having to take our lives into our own hands having to cross on-coming traffic.	8/1/2019 10:58 AM
4	I-65 to WK Pkwy Exit/Merge (too short of a merge area to just get right back off onto the bypass)	8/1/2019 10:50 AM
5	Pear Orchard	8/1/2019 10:44 AM
6	Saint John Rd.	8/1/2019 10:42 AM
7	In general, the narrow rural county roads with no shoulder and barely enough room for 2-way traffic (i.e. Constantine Road, Pr___ Mill Road.	8/1/2019 10:40 AM
8	Dixie	8/1/2019 10:34 AM
9	Ring Road, Patriot Pkwy	7/31/2019 2:53 PM
10	Elizabethtown Bypass, near New Glendale Road. Improvements to reduce danger/risk of sinkholes.	7/31/2019 2:51 PM
11	Poplar & S. Miles 4 way stop by St. James Dixie Hwy	7/31/2019 2:46 PM
12	Joe Prather	7/31/2019 2:43 PM
13	Ring Road and Dixie	7/31/2019 2:40 PM
14	Interstate 65	7/31/2019 2:31 PM
15	The road by my house: Amish Road, Sonora is half destroyed by holes. Horseshoe Bend Rd., Patriot Parkway, half of the rural Sonora roads.	7/31/2019 2:28 PM
16	Dixie Hwy (31W) between Hardin Memorial Hospital and downtown E'town	7/31/2019 2:22 PM
17	Repaving all of US 31E from St. John Road	7/31/2019 2:17 PM
18	Same as above	7/31/2019 2:09 PM
19	Hwy 79	7/20/2019 7:54 AM
20	31-W North (deteriorated into a washboard experience and to the point of dangerous to vehicle and passengers)	7/19/2019 11:44 AM
21	Ring rd and 1600	7/17/2019 2:54 PM
22	Dixie and Ring Road	7/17/2019 9:48 AM
23	4 way stops in town. they are so often ignored.	7/17/2019 8:21 AM
24	Dixie Hwy	7/16/2019 1:07 PM
25	n/a	7/16/2019 1:03 PM
26	Us 31 and Ring Road as well as side streets at that intersection.	7/16/2019 12:56 PM
27	31W - Lincolntrail Blvd	7/15/2019 11:13 AM
28	Us 31w	7/12/2019 10:02 PM
29	Brandenburg Bypass and River Ridge Plaza, Old Ekron Rd., Old State Rd.	7/11/2019 4:36 PM

2045 Metropolitan Transportation Plan Public Survey

30	St John Rd between Ring Rd and 31W Bypass	7/3/2019 10:40 AM
31	Dixie	7/3/2019 7:37 AM
32	Logsdon and Joe Prather	7/2/2019 9:37 PM
33	dixie highway	7/2/2019 7:24 PM
34	Highway 313 in Meade County. It needs more effective sight distance for passing.	7/2/2019 6:59 PM
35	St John Rd	7/2/2019 6:49 PM
36	Ring Road and N. Dixie	7/2/2019 4:44 PM
37	Logston and 313	7/2/2019 2:33 PM
38	The service road by the Brandenburg McDonald's and going over to Burger King. Bad design and dangerous	7/2/2019 12:07 PM
39	31w	7/2/2019 11:17 AM
40	Ring road	7/2/2019 10:59 AM
41	Ring Road and 31W	7/2/2019 10:27 AM
42	31W through business are of Etown (Best Buy to Target)	7/2/2019 10:09 AM
43	Mulberry needs more sidewalks toward Lincoln trail elementary	7/2/2019 10:05 AM
44	Ring Road and Dixie	7/2/2019 10:03 AM
45	Dixie Highway in front of HMM	7/2/2019 10:02 AM
46	31 and Lincoln trail	7/2/2019 9:50 AM
47	All of the Dixie needs better street lighting, from the Hospital all the way to Best Buy and beyond. It's too dark at night to be able to see cars trying to enter the road from areas that do not have stoplights at intersections.	7/2/2019 9:38 AM
48	Ring road and 31w	7/2/2019 9:19 AM
49	Dixie hwy in front of mall	7/2/2019 9:15 AM
50	Patriot parkway	7/2/2019 9:15 AM
51	Ring road and Dixie hwy	7/2/2019 9:14 AM
52	Miracle mile 31W	7/2/2019 9:11 AM
53	31W	7/2/2019 8:55 AM
54	Dixie Highway in Elizabethtown from the Helmwood Plaza to the intersection with Hwy 313 and the area of North Mulberry Street from Ring Road to I-65	7/1/2019 12:26 PM
55	Ramps off I65	7/1/2019 1:43 AM
56	Ring Road and Patriot	6/26/2019 6:22 PM
57	WKP/Lincoln trail parkway and 31w intersection needs to be a wider and right hand turning lane going towards Hardin County Jail.	6/26/2019 9:54 AM
58	31W and Saint John Rod	6/25/2019 8:12 AM
59	Dixie and ring rd	6/24/2019 8:26 PM
60	31w is terrible	6/24/2019 4:58 PM
61	31	6/24/2019 4:56 PM
62	All	6/24/2019 4:53 PM
63	West park rd and ring road	6/24/2019 4:52 PM
64	The intersestion at McDonalds and Walmart. People sometimes walk across suddenly, ride thier wheel chair across or down the road	6/24/2019 4:44 PM
65	Neighborhoods off Old Hodgenville Road - roadways are deteriorating and are rarely prepped or treated in inclement weather.	6/24/2019 3:25 PM

2045 Metropolitan Transportation Plan Public Survey

66	Ring road and 31W	6/24/2019 3:13 PM
67	US31W from bypass, north to Ring Road intersection. Also, US31W from Public Square south to New Glendale Rd, although that section may not be part of the MPO.	6/24/2019 2:18 PM
68	Joe Prather	6/24/2019 1:56 PM
69	N/A	6/24/2019 1:53 PM
70	31W	6/24/2019 1:52 PM
71	Continued widening to 4 lanes and adequate shoulders along KY 313 from the Hardin/Meade County line to Brandenburg.	6/24/2019 1:50 PM
72	can't think of any one in particular	6/21/2019 2:45 PM
73	Old Glendale road	6/21/2019 1:20 AM
74	North Mulberry between I65 interchange and Ring Road is dangerous for people who try to walk across to eat at restaurants. Maybe we construct an overhead walkway bridge.	6/20/2019 9:26 PM
75	dixie hwy south of downtown (lack of pedestrian space)	6/20/2019 8:12 PM
76	1600 and Rineyville school rd	6/20/2019 7:12 PM
77	Dixie Ave	6/20/2019 5:12 PM
78	31W. Stupid turning lanes on 31W are a huge safety concern.	6/20/2019 3:57 PM
79	i65	6/20/2019 3:29 PM
80	Dixie between St. John and the square	6/20/2019 11:27 AM
81	Dixie hwy from downtown to Ring Rd	6/20/2019 10:41 AM
82	US 31W	6/20/2019 10:22 AM
83	Ring Rd and Veterans Way, specifically driving East on Ring Rd as you approach Veterans Way	6/20/2019 9:08 AM
84	Any of the intersections on 31W between Fort Knox and South of Elizabethtown.	6/20/2019 8:56 AM
85	Ring road and 31-w intersection	6/20/2019 8:38 AM
86	U.S. 31W around the mall and between St. John Road and downtown E'town	6/20/2019 6:46 AM
87	1638 and 448	6/20/2019 5:52 AM
88	There are several roads that need work	6/19/2019 11:13 PM
89	Dixie highway in Elizabethtown from HMH to Ring Road	6/19/2019 10:40 PM
90	Dixie highway	6/19/2019 10:22 PM
91	unk	6/19/2019 6:25 PM
92	The distance from I-65 to Ring Road	6/19/2019 5:53 PM
93	Good question. Dixie and childers court	6/19/2019 4:09 PM
94	Dixie has some increasing pot hole issues	6/19/2019 2:22 PM
95	Highway 31W	6/19/2019 1:07 PM
96	313 & 1238 1238 & 1638	6/19/2019 12:48 PM
97	Towne mall intersections	6/19/2019 11:44 AM
98	Pear Orchard	6/19/2019 10:25 AM
99	Dixie ring rd	6/19/2019 10:16 AM
100	Lincoln Parkway/31w intersection	6/19/2019 10:16 AM
101	St John road between the bypass and Ring Road has no shoulder and no sidewalk, has residential driveways open onto it, and people walk on the side of the road to get to and from work/houses/the library because there is nowhere else to walk. That stretch of road is too skinny and has way too high of a speed limit to be safe with all of the use it gets.	6/19/2019 10:12 AM
102	Entrances from Freeman Lake to North Dixie	6/19/2019 10:11 AM

2045 Metropolitan Transportation Plan Public Survey

103	Ring Road at Bacon Creek Road	6/19/2019 10:05 AM
104	31w at the Glendale caution lights. Trucks are always pulling out in front of cars and then they stop to turn to get back on 65. I've seen MANY near accidents and been near a few myself. There needs to be a more direct route back to 65 so they don't actually turn out into the road for like 50 feet just to block the whole intersection turning.	6/19/2019 10:03 AM
105	31W	6/19/2019 9:56 AM
106	Wilson Road	6/19/2019 9:45 AM
107	31w	6/18/2019 9:01 PM
108	Johnstown Rd	6/18/2019 7:13 PM
109	Dixie from the hospital north	6/18/2019 5:24 PM
110	Pot holes fixed immediately especially on ring road and Dixie Railroad tracks by akebono Widen pear orchard too many cars use it as a main road Veteran's Way at light to ring road turn lanes Patriots parkway Road leaving academy sports going into sam's	6/18/2019 4:55 PM
111	light at Kroger entrance	6/18/2019 4:05 PM
112	North Dixie Avenue	6/18/2019 3:07 PM
113	US 31W in the mall area	6/18/2019 2:02 PM
114	Ring road and Dixie is awful.	6/18/2019 2:00 PM
115	Same as #8	6/18/2019 1:53 PM
116	Dixie Hwy @ Hwy. 434	6/18/2019 1:31 PM
117	Hey 210 and 31 by the park and ride	6/18/2019 12:21 PM
118	Dixie highway	6/18/2019 12:18 PM
119	Dixie Hwy from Mulberry to Veteran's Pkwy needs resurfacing badly.	6/18/2019 11:32 AM
120	Brandenburg By-pass	6/18/2019 11:14 AM
121	313, enjoy the new road including 256. Widen all the way to and including bridge to 135 Indiana	6/18/2019 10:47 AM
122	can't think of one at this moment	6/18/2019 10:40 AM
123	That dark curvy road in front of Doe Valley	6/18/2019 9:31 AM
124	Armory Place and Old Ekron Road. Trying to get across the road to go to Kroger or vice versa, or just turning is not safe.	6/18/2019 8:29 AM
125	Corydon bridge	6/17/2019 9:06 PM
126	Dixie Highway	6/17/2019 8:57 PM
127	Dixie Highway	6/17/2019 6:36 PM
128	313	6/17/2019 6:36 PM
129	Fairgrounds and Payneville RD	6/17/2019 6:12 PM
130	Coming out of 1238 unto 1638.	6/17/2019 5:44 PM
131	The light in front of Tony Brown Chevrolet has the most congested traffic with alot of accidents. Something needs to be done there as well as alot of the lights in Brandenburg. Especially in front of McDonald's in Brandenburg. There is alot of accidents there. Alot of the older citizen's get confused. BUT alot of the younger citizen's cant stay off there cell phones from texting and that is what causes alot of distractions.	6/17/2019 4:26 PM
132	none	6/17/2019 4:18 PM
133	1600 between Flaherty and Etown	6/17/2019 4:11 PM
134	Hwy 79	6/17/2019 4:02 PM
135	hwy 79	6/17/2019 3:56 PM
136	Hwy 79 & 313	6/17/2019 3:50 PM

2045 Metropolitan Transportation Plan Public Survey

137	Widen 313 in Meade County as Hardin County	6/17/2019 3:44 PM
138	Hwy 313 & 333	6/17/2019 3:42 PM
139	Need Highway 313	6/17/2019 3:40 PM
140	31w	6/17/2019 3:38 PM
141	hwy #228	6/17/2019 3:36 PM
142	313	6/17/2019 3:26 PM
143	79& 1239	6/17/2019 3:13 PM
144	79 and 1638	6/17/2019 3:05 PM
145	Dixie Hwy	6/17/2019 2:40 PM
146	1238&1639	6/17/2019 2:34 PM
147	1238	6/17/2019 2:33 PM
148	Buck Grove Rd. We are getting alot of traffic from 313 to 1638	6/17/2019 2:32 PM
149	Hey 79 midway rd	6/17/2019 2:31 PM
150	Speed on Rabbit Run Road in Flaherty, at the intersection of 144 and 1600, congested, has no shoulder, bad repair holes and lots of traffic.	6/17/2019 2:17 PM
151	The one in front of the Kroger plaza. Leaving Mr. Gatti's/McDonalds is so dangerous.	6/17/2019 2:16 PM
152	1238	6/17/2019 2:15 PM
153	Intersection of Hwy 60 and 313. Needs to warn traffic of up coming signal at that location on Hwy 60.	6/17/2019 2:14 PM
154	By pass beandenburg	6/17/2019 2:14 PM

Q10 Please provide any additional comments.

community one Thank bus way Elizabethtown think safe
need public transportation sidewalks many 31W people Etown
traffic well need lanes roads many people
public transportation None drive see counties roadways
better system Meade County Highway transportation Radcliff needs area dangerous

Q10 Please provide any additional comments.

Answered: 74 Skipped: 97

#	RESPONSES	DATE
1	It may be funding issues but the roadways have deteriorated significantly in the past year. I think it was a result of inclement weather last winter but repairs that are being made, patching, etc. are so rough they're not much better than the pot holes that we're filled. It is better but not by much.	8/1/2019 10:58 AM
2	Sidewalks needed on all of Pear Orchard	8/1/2019 10:44 AM
3	Thanks	8/1/2019 10:42 AM
4	I appreciate your willingness to positively improve the safety of our roadways/community. Thank you!	8/1/2019 10:34 AM
5	Please make public transportation (bus system) a benefit to this community - so many people can use it.	7/31/2019 2:46 PM
6	MTP is needed	7/31/2019 2:40 PM
7	Improved commercial transportation to and from Louisville Airport, could include air taxi (helicopter) service from Addington Field, E'town to Louisville Airport.	7/31/2019 2:22 PM
8	Radcliff needs an influx of interesting and appropriate businesses such as use to be US Calvary Shop, if possible	7/31/2019 2:09 PM
9	It's very important to maintain our country sides. Improving our current roadways need to be top priority instead of building new roads, when any way possible.	7/20/2019 7:54 AM
10	With more and more on-line purchases being delivered into neighborhoods, our roads are going to deteriorate at a much faster rate due to heavier trucks and vans using roads built for smaller vehicle traffic.	7/19/2019 11:44 AM
11	N/A	7/17/2019 9:48 AM
12	Route Trucks away from Downtown Etown on 62 & 31W improved signage and street markings on streets for safety	7/17/2019 8:21 AM
13	n/a	7/16/2019 1:03 PM
14	For us senior citizens which do not drive anymore on account of health issues but need to see on account of those issues doctors, mainly in E-town, transportation is non-existing if you are not on Medicaid. Public transportation between outlying towns and E-town needs to be finally established. Seems to come up at every election without any results	7/15/2019 11:13 AM
15	For Question 3, I work outside of the two counties.	7/3/2019 10:40 AM
16	We need public transportation for people who can't drive or can't afford a car. TACK helps but they're closed on weekends. Taking a cab is expensive. Bus stops should be conveniently located in populated areas. Public transportation should be available at for the whole week. There can be a time frame like 5:00am to midnight. I know Singapore and Hardin County are so different from one another but the fact that public transport was available to the common man was a lot of help.	7/3/2019 7:37 AM
17	None	7/2/2019 6:59 PM
18	AFFORDABLE***Public transportation is critical for Mead County. Many seniors who don't drive are at the mercy of family and friends. They lose their Independence and self-esteem for self sufficiency	7/2/2019 12:07 PM
19	Maintain roads. 31w from hospital to mall needs attention NOW	7/2/2019 11:17 AM
20	Safety is up to the individual and police dep. Obey the speed limits, lights and get off your cell phones and wrecks will decrease.	7/2/2019 10:02 AM
21	Congestion is out of hand in elizabethtown.	7/2/2019 9:19 AM
22	*	7/2/2019 9:14 AM

2045 Metropolitan Transportation Plan Public Survey

23	Although it is expensive, sidewalks are needed throughout our community, along the major roads. Unfortunately, many people are walking or riding bicycles on these roads and I'm scared for their safety.	7/1/2019 12:26 PM
24	The 31W change from 4 to 3 lanes has had a negative impact on traffic congestion, particularly before, after, and at the Saint John Road intersection.	6/25/2019 8:12 AM
25	Too much to type out.	6/24/2019 4:58 PM
26	Without public transportation it is hard to get places and live in Elizabethtown	6/24/2019 4:56 PM
27	Many lights on ring road are dangerous.	6/24/2019 4:52 PM
28	thank you for asking	6/24/2019 4:44 PM
29	Thank you for your time and tireless efforts!	6/24/2019 3:25 PM
30	Right now, inside the MPO limits as I understand them, US31W from the bypass north to Ring Rd seems to need the most improvement. I'm not talking about pavement condition. Non crossable medians like those that are north of Ring Rd are needed in this area.	6/24/2019 2:18 PM
31	TRAFFIC ENFORCEMENT IS HORRIBLE. THERE IS NONE.	6/24/2019 1:53 PM
32	Upgrade US 31-W to provide a median and safe shoulders from Muldraugh into Jefferson County. 4-lane undivided highways are very dangerous.	6/24/2019 1:50 PM
33	More side walks should be created around Elizabethtown. What exists usually leads into a ditch.	6/21/2019 1:20 AM
34	I don't understand how Elizabethtown's Dixie Highway north of St. John Road fell apart full of pot holes and unlevel blacktop to the degree it has. It's like riding on a pogo stick. I would think it would have been maintained by the state before it got to the horrible shape it is in now.	6/20/2019 9:26 PM
35	the "where do you work" question needs an other...many people live in the area, but work in Louisville, Lexington, Bowling Green or many other "others" The original plan to extend the bypass to I-65 should be revived. The 18-wheel truck traffic is forced to pass through etown and greatly decreases safety. Bullitt County is currently building a new interchange and its major industrial park is already very close to the interstate. Etown is far far behind...and may never catch up.	6/20/2019 8:12 PM
36	I want public transportation in our community	6/20/2019 7:12 PM
37	Youngers Creek Rd needs to be widened in s curve between BG Parkway and US 62!	6/20/2019 5:12 PM
38	Leaving Fort Knox from Wilson Gate and merging on to 31W is an absolute nightmare; a direct ramp should be built to support traffic. Less traffic lights, more round-about.	6/20/2019 3:57 PM
39	Looking forward to widening on Ky. 313	6/20/2019 11:27 AM
40	As a resident of Elizabethtown I think public transportation would greatly benefit downtown Elizabethtown. with all the new growth and foot traffic downtown and the lack of parking. A public transportation system would help bring more people to downtown. it could also benefit the shopping centers and the sports park as well.	6/20/2019 10:41 AM
41	Traffic light patterns in left turn lanes need to be researched and changed.	6/20/2019 9:08 AM
42	Please change the design of the roadway to carry the additional car traffic count and weight of commercial traffic. Roadways and repairs (" 2" " overlays and patches) are not withstanding the wear and tear today vehicles put on them.	6/20/2019 8:56 AM
43	Right-turn lanes at intersections on busy roads such as Lincoln Trail Blvd. in Radcliff and Mulberry Street in E'town including in front of Pritchard could help reduce delays	6/20/2019 6:46 AM
44	Radcliff needs public transportation	6/19/2019 10:22 PM
45	We need public transportation.	6/19/2019 5:53 PM
46	I think public transportation is long over due for these counties. It would go a long way helping people get to dr appts, going to work, getting to the grocery etc. It would hopefully reduce the number of cars on the roads as well.	6/19/2019 4:09 PM
47	Highway 31W has been a dangerous hwy with many wrecks and fatalities since I can remember. The speed on Hwy 31W should be reduced to 35 m.p.h. through all cities to include Muldraugh. There have been numerous fatalities in Muldraugh that could have been avoided if the speed was reduced to 35 or even 45 m.p.h.	6/19/2019 1:07 PM

2045 Metropolitan Transportation Plan Public Survey

48	Not Trimming overhanging trees and people putting huge mounds of trimmings in roadway are extreme safety hazards in neighborhoods.	6/19/2019 10:25 AM
49	seniors need public transportation, many school children have need for transportation. it is the single most lacking area in our community	6/19/2019 10:16 AM
50	It drives me crazy that the only way to get anywhere in Etown is to drive yourself. There is no public transportation, there are only sidewalks in some neighborhoods and a couple blocks of historic downtown, large uncrossable roads (mulberry, ring road, the bypass, highway 31) divide major parts of Etown, and the roads are not safe for walking or biking. Owning a car should not be the only way for people to get to work/the store/the public library!	6/19/2019 10:12 AM
51	Would love to see more local emphasis on pedestrian and bicycle facilities, including connections to the local trail system.	6/19/2019 10:05 AM
52	Overall, my largest concern is the need of repairs. So many roads have really rough bumps and holes.	6/19/2019 10:03 AM
53	Public transportation is one of the largest barriers Meade and Hardin Counties face. Failure to address this issue will retard growth and economic development in these counties.	6/19/2019 9:56 AM
54	None	6/18/2019 4:05 PM
55	Dixie Hwy from downtown E-town north to Ring Rd. is shot, and desperately needs to be resurfaced. From Ring Rd. all the way north to Radcliff, there needs to be islands in the middle with turning lanes and U-turn lanes, and needs to be expanded to 3 driving lanes in each direction. This would make commutes faster and safer. The worst issue with Dixie Hwy is slow drivers in the left lane, that may stay in the left lane as they "eventually" have to make a left turn. My above suggestion will correct this and many other issues. This is the best long-term solution.	6/18/2019 1:31 PM
56	I wish the park and ride lot was better maintained and easier to exit	6/18/2019 12:21 PM
57	Na	6/18/2019 12:18 PM
58	Etown is seeing exponential growth and will continue to do so. We need roads that not only meet our population and growth NOW but for the growth that will be happening over the next 50 years. Plan and Develop BIG now so in 15 years, our city is accommodating the businesses, schools, travelers, and citizens rather than trying to catch up to it.	6/18/2019 11:32 AM
59	Happy 313 is being widened. Hope it is widened in Meade County as well. The new steel mill will increase traffic as well as traffic from I65 to I 64 west. Overall good for growth in Meade County. More water and tear on road and bridge systems.	6/18/2019 10:47 AM
60	I would like to see public transportation to get around town. When I worked at Robins AFB there was a shuttle that ran all around the base and you could ride for free. Brandenburg needs that.	6/18/2019 8:29 AM
61	To increase opportunities for low income to attain and keep quality jobs flexible transportation is important,	6/17/2019 8:57 PM
62	Brandenburg is a very nice city. I think it need's to be cleaned up from one business to the next. We have inmates at the detention centers. They need to be cleaning on the sides of the road and if you see a business that needs attention have them stop and ask if it's ok to do something. If this city was cleaned up and kept up it would be alot nicer. We need more shopping places. With shopko leaving we need a bigger and better place to shop. We need to keep our money in Meade County and to do that we have to start with businesses that can grow. Our mayor and others need to take this into consideration. We need more places for our young adults/teenagers to go and stay out of trouble. There is a place for senior citizens there should be for the younger adults.	6/17/2019 4:26 PM
63	I thing the roads are good.	6/17/2019 4:18 PM
64	Come up with other ways for highway drainage besides rip rap rock in drainage ares. Those areas quickly overgrow and become eyesores. Build shoulders that are able to be mowed and maintained...ie, the capture basin around the By-Pass in Brandenburg	6/17/2019 4:11 PM
65	Hwy 79 very dangerous needs to be widened	6/17/2019 4:02 PM
66	Hwy 79 is dangerous, congested, and very narrow. Lots of accidents	6/17/2019 3:50 PM
67	Control truck traffic between Hardin and Meade County to southern Indiana.	6/17/2019 3:44 PM
68	.	6/17/2019 2:40 PM

2045 Metropolitan Transportation Plan Public Survey

69	Stop wasting our money on stupid endeavors. Take care of public servant, invest in our children. Everything else is secondary.	6/17/2019 2:33 PM
70	Some of the smaller roads are to narrow, but I don't know how to solve the problem.	6/17/2019 2:32 PM
71	Hey 79 needs to be widened. The persons who put the grooves on the edge of it should be fired !! It's so dangerous. People drive close to the center line to avoid the grooves!	6/17/2019 2:31 PM
72	Potholes are really bad all over the roads in this region, but the loss of shoulders where great holes are made with large grain and delivery trucks trying to get in small spaces or turns are everywhere. I am always afraid I will damage my car if I were to drive into one.	6/17/2019 2:17 PM
73	We do not need public transportation in Meade county! We need roads fixed (1238 for example) we also need to focus on the river front park area! Clean it up and get businesses in there so when the river cruise stops people can actually shop and spend money in our county!!	6/17/2019 2:15 PM
74	Would love to see public transportation improved for trips to Louisville and Etown and this includes bus transport, uber, taxi or shuttles	6/17/2019 2:14 PM