

Existing and Future Conditions Assessment for the Clark County Thoroughfare Plan

Kentuckiana Regional Planning and
Development Agency
& the Clark County Board of Commissioners

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The Kentuckiana Regional Planning and Development Agency (KIPDA) and Clark County Board of Commissioners have initiated a study of Clark County's transportation system. This study includes all of Clark County, and not just those facilities within the county's jurisdiction. The study also encompasses the entire transportation network: vehicular, transit, pedestrian, and bicycle. The Thoroughfare Study will examine the existing transportation network, identify deficiencies, analyze alternatives to correct these deficiencies, and recommend an implementation plan. This process will involve technical analysis by traffic engineers and professionals, guidance and input from a Project Study Team, and comments and suggestions from the public.

The first stage in the process is to develop an "Existing and Future Conditions Assessment for the Clark County Thoroughfare Plan". The assessment process began with a Project Study Team Kick-off Meeting held on April 12, 2012. At this meeting, the study team learned about the purposes of a study, general schedule of milestones, and provided input on past planning efforts for their respective agencies.

The "Existing and Future Conditions Assessment" is a summary of the data collection and past planning efforts by various agencies. It also describes the technical analysis completed to date. This technical analysis includes studying crash histories throughout the county, traffic and congestion modeling, inventories of the county's functional classification map, and identifying programmed future projects.

The safety analysis identified 15 corridors as having a crash rate higher than expected. Some of these corridors are the area's most travelled, like I-65 approaching the Ohio River, 10th Street in Jeffersonville, Eastern Boulevard in Clarksville and SR 62 in Charlestown. Many of these corridors provide direct connections between the highest volume roads (like I-65 and I-265) with the largest employment centers, such as River Ridge Commerce Park and Port of Indiana.

The congestion analysis identified 11 corridors as having levels of congestion exceeding accepted practice. Many of the same corridors mentioned above are also included here, in addition to facilities like US 31 in Sellersburg, SR 60 in Borden and Veteran's Parkway in Clarksville and Jeffersonville.

Networks of trails and multi-use paths exist throughout the County. This includes an extensive network within Clark State Forest. There are also trails within Charlestown State Park. Clarksville has developed the Clarksville Heritage Trail that runs through Clarksville and ends at the Falls of the Ohio State Park. The Ohio River Greenway is a multi-county pathway that extends from New Albany to Jeffersonville. It will have its own crossing of the Ohio River via the former Big Four Railroad Bridge.

KIPDA, INDOT and many local communities have already programmed (and in many cases started designing) projects to improve the safety and congestion of transportation facilities. These projects were inventoried, mapped, and then taken into account for the development of a future conditions assessment. Some of these projects will only improve the impacted corridor. Other projects will show a tremendous improvement, almost County-wide. The two new Ohio River bridge crossings are a good example of projects that provide a county-wide improvement.

The first stage of the Thoroughfare Plan will conclude with a public meeting in July of 2012. This meeting will be advertised in local media, held at a public location, and provide local citizens with the opportunity to learn about the process and comment on the "Existing and Future Conditions Assessment". Most importantly, it will provide an opportunity for the public to identify areas in need of improvement.

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Clark County is located in southeastern Indiana directly across the Ohio River from Louisville, Kentucky and is bordered by the Ohio River and the counties of Jefferson, Scott, Washington, and Floyd in Indiana. The county is part of the Louisville/Jefferson County, KY-IN Metropolitan Statistical Area. The county is also part of the Kentuckiana Regional Planning and Development Agency (KIPDA) which carries out various planning functions including acting as the Metropolitan Planning Organization responsible for transportation planning. The Clark County Board of Commissioners, the Town of Clarksville, the City of Charleston, and the City of Jeffersonville are members of the Transportation Policy Committee, which directs transportation policy decisions within the MPA. Figure A shows Clark County.

Clark County was named in honor of General George Rogers Clark, a Revolutionary War hero and early settler. The county was organized in 1801 and the county seat has been Jeffersonville since 1878. The proximity of Clark County to a major population center, a navigable river, and major rail lines produced a booming economy in the late 19th and 20th centuries. Today, the county retains a diversity of industrial, commercial and agricultural operations.

As of the 2010 U.S. Census the population of Clark County was 110,232 persons, a 14.3% increase from the 2000 population. Future forecasts for population were developed for the current Comprehensive Plan for the county by Woods and Poole and show a 2030 population of 124,617 persons.

The backbone of the transportation system for Clark County is Interstate 65 which runs north-south through the county. Interstate 265 also runs through the county from the Floyd County line to SR62 to the east. Public transportation is provided by the Transit Authority of River City (TARC) which is the primary provider of public transportation in Clark County.

There is no rail passenger service near Clark County. The nearest AMTRAK station is in Cincinnati, Ohio. The Greyhound Bus Line has service in downtown Louisville and provides Thruway Bus Services for AMTRAK. The Clark County Regional Airport is located along US 31 to the north of Interstate 265. The airport is open to the public and primarily serves general aviation activities. Clark County is home to one of the three Indiana ports. The Port of Indiana Jeffersonville has 12-month ocean access and has a Foreign Trade Zone classification.

Purpose of Study

KIPDA, in conjunction with The Clark County Commissioners, has initiated development of this county-wide thoroughfare study. The study is to guide the identification and implementation of future transportation improvements in Clark County over the next twenty (20) years.

Initially, the study will analyze the existing transportation conditions in the county and consider the changes in these conditions with the anticipated future growth in the area. These conditions will consider all modes of travel in the county including highways, transit, and bicycle and trails. A geographic information system (GIS) will enable the collection of data in layers and mapping of this information. Upon completion of the existing and future conditions analysis, alternatives and specific transportation improvements will be developed and assessed to determine their impact upon these conditions. The final product will be a plan that will guide the future transportation development in Clark County. The plan will identify specific projects, estimated costs, funding sources, phasing, and project responsibility.

Project Study Team

To guide the development of the Clark County Thoroughfare Plan, KIPDA has organized a Project Study Team. This team includes the following agencies and organizations:

City of Charlestown
City of Jeffersonville
Clark County Planning Commission
Clark County Commissioners
Clark County Highway Department
Clark County Regional Airport
Indiana Trails
Indiana Department of Transportation
Lifespan
Louisville Bicycle Club
New Hope Services
Ohio River Greenway
One Southern Indiana
Port of Indiana Jeffersonville
River Hills Economic Development Agency
River Ridge Commerce Center
Transit Authority of River City
Town of Borden
Town of Clarksville
Town of Sellersburg
Town of Utica

The first Project Study Team Meeting was held on Thursday, April 12, 2012 at the Clark County Government Building in Jeffersonville. The meeting minutes can be found in the appendix. The objectives of this meeting were as follows:

- Introduce the team to the presence of this study
- State the general purpose of a Thoroughfare Plan
- Describe the study process, schedule of deliverables, and public outreach
- Establish areas of focus of Clark County's transportation network

Focus Areas

At the first Project Team Meeting, six topics were identified as major focus areas for the Thoroughfare Plan. Under each focus area, points of emphasis were established. These can be used as the frame work for this study and its future implantation.

Focus Area #1: Safety, Mobility and Connectivity

Points of Emphasis: Capacity and safety improvements in areas with the dense industry and populations, effects of the East End and downtown Louisville-Southern Indiana Ohio River Bridge Project, improved connectivity between the Clark County Regional Airport, River Ridge Commerce Center, and Port of Indiana, better connectivity between neighborhoods within communities.

Focus Area #2: Bike and Pedestrian

Points of Emphasis: Completion of Big 4 Bridge and Ohio River Greenway, improved connections between residential areas and employment centers, better integration with TARC, establish multi-modal design parameters.

Focus Area #3: Non-Highway Infrastructure

Points of Emphasis: Expansion of Clark County Regional Airport, Heavy Truck/Heavy Rail connection between River Ridge Commerce Center and Port of Indiana, additional rail spur into River Ridge Commerce Center.

Focus Area #4: Transit

Points of Emphasis: Increase bus service beyond urban areas and to River Ridge Commerce Center, transit accessibility to elderly and disabled populations, increase choice ridership, increase express routes and park-and-ride services.

Focus Area #5: Funding

Points of Emphasis: Provide education to agencies about the funding options available to them, fundraising and donation initiatives, Public-Private Partnerships.

Public Outreach

Along with the Project Study Team, input from the community will help ensure all aspects of the County are addressed. A public meeting will be held shortly after the release of this initial report. This meeting will be an open house format at a public location in Clark County. A brief presentation will be made, copies of this report will be available for review, and maps will be displayed throughout the room. The public will be asked to provide feedback on the current state of the transportation network in Clark County. Specifically, areas of the county (whether geographic or functional in nature) will be identified for further study. These areas will be bolstered by this report's findings. Comment sheets will be available for meeting attendees to provide comments during the meeting or take a form home and mail it back to the project team. These sheets can be submitted at any time during the study.

During initial consultations with KIPDA and Clark County, it was decided to focus the analysis on the major roadway facilities serving Clark County. These major facilities were defined using the functional classification map for Clark County as prepared for the Indiana Department of Transportation. The major facilities include interstates, expressways, arterials, and collectors (see Figure A). Local roads and streets were not deemed major facilities and as such not included in the analysis.

In order to conduct the analysis of the existing and future conditions for Clark County, data on the characteristics of the highway system and its major facilities is collected from a variety of sources. This information is incorporated into the ArcGIS geographic information system. This system connects to TransCAD which is the travel demand modeling software used by KIPDA in their modeling process. The analysis of the existing and future conditions uses TransCAD together with ArcGIS to conduct the analysis, identify the deficiencies, and prepare all tables and maps.

Sources of Data

KIPDA together with the Clark County Highway Department, the Clark County Commissioners office, the Clark County Planning Commission, the River Ridge Development Authority, and the Port of Indiana Jeffersonville provided the following information:

- Socioeconomic Data
- Crash data
- Railroad Crossings
- Existing and Future Traffic Volumes
- Functional Classification
- TARC Routes/Stops/Service
- Land Use and Economic Development Data
- School Bus Routes & Schedules
- Bicycle/Pedestrian facilities

Description of Analysis

Upon completion of data collection, the analysis considered (1) existing traffic volumes, (2) level of service (LOS), (3) crash statistics, and (4) non-motorized transportation.

- (1) Existing Traffic Volumes - The best data available for existing traffic volumes for the major roads in Clark County were provided by KIPDA and the Indiana Department of Transportation. The existing traffic volumes from KIPDA were 2007 volumes. Volumes from the KIPDA travel demand model base year of 2007 were used for existing counts. (The 2007 daily volumes used in the model are based on counts over several years, and were factored up or down by KIPDA to arrive at 2007 ADTs). Using growth rates from the KIPDA travel demand model, the 2007 traffic volumes were factored up to 2012 volumes. Additional traffic volumes (2008) were obtained using INDOT's Traffic Count Interactive Map. Using the growth rates from the KIPDA model, these 2008 volumes were also factored up to 2012 traffic volumes. The 2008 INDOT ADTs may also be factored from counts performed in previous years.
- (2) Level of Service - Level of service (LOS) is a method for describing traffic conditions and flow. The Highway Capacity Manual 2010 developed for the Transportation Research Board of the National Academies was the technical basis for this analysis.

The levels of service are defined and have letter designations from A to F. These levels of services are defined as follows:

- LOS A – This is free-flow traffic operations where traffic flows at or above the posted speed. Motorists have total mobility between lanes.
- LOS B – This is reasonable free-flow operations where mobility between lanes is just slightly restricted.

- LOS C – This is stable traffic flow operations where the posted speed is maintained. Motorists changing lanes must have a greater awareness.
- LOS D – This is approaching unstable flow where the speeds are beginning to decrease. Mobility between lanes is much more limited.
- LOS E – This is unstable traffic flow with speeds decreasing and delays are possible
- LOS F – This is a breakdown in traffic flow with significant delays.

INDOT considers a minimum LOS of D in urban areas and LOS C in rural areas as acceptable traffic flow and conditions.

- (3) Crash Statistics - The crash statistics were derived from the Automated Reporting Information Exchange System (ARIES) and cover the years 2007 to 2011. The number of crashes along the study roadways were used to create crashes rates measured in crashes per 10^8 vehicle-miles. These rates were compared to the “expected” crash rates of similar roadways in Indiana. The expected crash rates are based on average crash rates obtained for the state of Indiana.
- (4) Non-motorized Transportation – Non-motorized transportation includes public transit, park and ride services, bicycle and trails. Information on public transit schedule and routes as well as park and ride facilities was obtained from the Transit Authority of River City (TARC). While a GIS layer showing TARC routes was available, the only known park and ride lot is in Jeffersonville and there is a proposal to eliminate it. Bicycle and trail information was provided by KIPDA and the Indiana Department of Natural Resources.

Planning Studies

Many local agencies and jurisdictions have adopted formal planning studies in the recent past. To the extent available, copies of these plans were reviewed and are summarized below. The purpose of this review is to assure future recommendations and alternatives proposed in this study are consistent and compliment the planning efforts done thus far.

Clark County Comprehensive Plan

December 2007

Clark County has been on a growing trend and will continue to do so with the completion of the two new bridges between Clark County and Jefferson County, Kentucky. A comprehensive plan (which included a chapter devoted to a Thoroughfare Plan) was developed with an eye toward future needs how Clark County can both accommodate and be prepared for growth. This plan will guide land use decisions in the unincorporated areas of Clark County. Additionally, community involvement, which is an important element, has been incorporated along with the assistance of the Community Planning Grant Standing Committee and Task Force.

Existing Transportation Network

A transportation network should effectively and efficiently connect land use activities within the county as well as on state and national levels. Clark County maintains roughly 530 center-line miles of roadway within its boundaries. This includes all roadways not located within the county’s incorporated cities and towns except interstates, U.S. highways, and state roads. The County also maintains 129 bridges within its limits.

I-65 and I-265 are the Major Arterials in Clark County. Interstate 65 runs north-south connecting Clark County to Louisville to the south and Scott County, Indiana to the north. Interstate 265 connects Clark County to SR 62 to the east and Floyd County to the west. SR 3, SR 403 and SR 62 in Charlestown and SR 60 and SR 131 in Clarksville are also Major Arterials. The Minor Arterials for Clark County are SR 60 and SR 62. There are also several Urban Minor Arterials within Charlestown, Clarksville and Jeffersonville. These roads range from 2-lane to 6-lane facilities.

Traffic counts covering U.S. and state highways in Clark County for 1994, 1999 and 2002 indicate that there are only minor differences between 1994, 1999 and 2002.

In Fiscal year 2006, Clark County received \$2,317,945 from the Motor Vehicle Highway fund, \$553,535 from the Local Road and Street fund for roadway maintenance and resurfacing, \$500,000 from Major Moves and \$560,876 for bridge projects.

There are a few existing bikeways in the incorporated cities and towns of Clark County; hiking/biking trails are also present in Clark State Forest, Charlestown State Park, Falls of the Ohio State Park. While the county does not have any designated bikeways in unincorporated Clark County, the low amount of traffic on county roads and in subdivisions throughout the county, make biking in these areas possible.

Transit Authority of River City (TARC) provides transit services for the area. There are four transit routes that enter Clark County. The nearest intercity bus service is Greyhound Bus Lines in Louisville.

Clark County does not have passenger rail service. Cincinnati is the nearest city with an AMTRAK station. The Greyhound Station in Louisville provides Thruway Bus Service for AMTRAK.

Clark Regional Airport, which is located along US 31 to the north of I-265 primarily, provides general aviation activities. Clark County is also home to one of three Indiana ports. The Clark Maritime Center located in Jeffersonville is the fastest growing port on the Inland Waterway System, provides 12-month ocean access, and has a Foreign Trade Zone classification.

Thoroughfare Component of the Comprehensive Plan

The Plan addresses the use and improvement of the transportation network system in unincorporated Clark County. (See Figure D.) Overall, the thoroughfare plan is designed to serve four purposes:

- Preservation of right-of-way to accommodate existing and future transportation needs which includes establishing functional classification of streets, application of urban versus rural design standards, and location on existing versus new alignment.
- Continuity of the functional, physical and aesthetic character of the functional class of street. The plan defines typical cross-sections to serve as initial design parameters.
- Preservation of thoroughfare capacity through appropriate access management policies by functional class.
- Identification of transportation improvements to address existing and future transportation needs. Provide for the movement of pedestrians through the provision of walkways and sidewalks.

Thoroughfare Improvements

Roadways

The physical characteristics of a roadway system provide insight regarding the structural adequacy (pavement and bridge loading capacities), geometric adequacy (horizontal and vertical curves and turning radii at intersections), and functional adequacy (ability to handle traffic). The existing roads have to be upgraded to new standards in order to be able to handle the increase in traffic volumes due to future developments. Figure B, taken from the Clark County Comprehensive Plan, shows the number of lanes on major roadways.

Typical cross-sections for a rural interstate (I-65), rural major collector (US 31) and a rural minor arterial (SR 60 and SR 62) are shown in the Thoroughfare Plan that is part of the Clark County Comprehensive Plan. Right-of-Way widths on major roadways, from the Clark County Comprehensive Plan, are shown in Figure C.

Based on the Clark County Subdivision Control Ordinance, any new street must conform in width and alignment to the comprehensive plan and official thoroughfare plan. Many county roadways are currently very narrow; some are less than twenty feet in width. For safety reasons, it is important to increase roadway widths in the county to at least twenty feet whenever possible.

Also, several residential lots are in close proximity to each other and front a county road, it would be beneficial to increase roadway widths to the standards set for new subdivision roads.

Jeffersonville Comprehensive Plan

July 2007

The City of Jeffersonville maintains a connection among citizens and their government by managing growth and encouraging opportunities for citizen interaction.

The City inspires a strong sense of community based on pride and participation. In order to for the development to be consistent, economical and environment friendly throughout the City, the Comprehensive Plan was developed as guide for future development and also to make changes to the existing system based on future growth patterns.

The Comprehensive Plan presents Goals and Objectives and Policy Recommendations for Land Use, Planning Districts, Primary Gateways, Traditional and Sub-urban Marketplace corridors, Traditional and Sub-urban Workplace, Regional Market Centers, Public Ways, Public Places, Public Utilities, and Government.

The following list briefs the items related to the transportation element of the comprehensive plan.

- Identify land use policies which apply to emerging forms and patterns of development. These policies will guide for the location, type and design of future land development, transportation and community facilities.
- Encourage greater diversity of land use while ensuring compatibility of new development and redevelopment with nearby existing sites.
- Provide a well planned and coordinated system of major thoroughfares and collectors that are safe, cost effective and responsive to planned growth and development.
- Coordinate improvements to the transportation system with land use decisions.
- Utilize traffic impact analyses to project, describe, and suggest ways of offsetting the traffic affects and effects of development when appropriate.
- Establish minimum right-of-way and design and construction standards for collectors and local roads to accommodate safe emergency vehicle access respond to environmental constraints and ensure compatibility with the character of proposed development.
- Prioritize improvements to existing transportation facilities that optimize the flow of traffic and reduce accidents at locations where the flow of travel is hindered while preserving aesthetic qualities where possible.
- Ensure that safe transportation solutions are designed in harmony with the community.
- Coordinate the through plan with other modes of travel, including bus transit, rail, pedestrian and bicycle, to comprehensively address mobility issues and needs.
- Encourage the development of corridors that offer a variety of transportation choices for users.
- Enhance opportunities for transit use.
- Encourage the neighborhood concept in the design of new residential areas.
- The comprehensive plan will determine most desirable, appropriate, economic pattern of public and private development.
- Ensure future growth should promote most efficient use of resources.
- Develop an active pedestrian environment.
- More street connections should be encouraged in residential subdivision design. Encourage more “through streets” to better disperse traffic and reduce its isolated impacts at certain points.
- Primary gateways which form the entry and exit points of the City should not only shape a visitor’s first impression but can also reflect the unique features and character of Jeffersonville. Such gateways require unique structural elements, landscaping. Provide pedestrian and bicycle accommodations along the entire length of the gateway corridor areas.

Clarksville Comprehensive Plan

August 1992

Clarksville's intriguing past has a common theme: Respect for its heritage. From the beginning of the town in 1783, through its unique associations with George Rogers Clark and the settlement of the western frontier, Clarksville has had the kind of legacy of which few communities can boast. It has proudly withstood challenges of every kind to become a place rich in history and poised for the future.

This Comprehensive Plan created for the Town of Clarksville, Indiana is the officially adopted guide for action and decisions on the use of land.

Purpose

The purpose of the Comprehensive Plan is to encourage the improvement of health, safety, convenience and welfare of citizens and to plan for the future development of the community.

The Comprehensive Plan process was developed:

- 1) to ensure that highway systems are carefully planned;
- 2) that any new communities grow only with adequate public way, utility, health, educational, and recreational facilities;
- 3) that the needs of agriculture, industry, and business be recognized in future growth;
- 4) that residential areas provide healthful surroundings for family life; and
- 5) that the growth of the community is commensurate with and promotive of the efficient and economical use of public lands.

Transportation

The main objective of the comprehensive plan is to provide Clarksville with a balanced, coordinated transportation system which enables individuals and goods to move safely, efficiently and affordably by:

The following is a list of recommendations that the comprehensive plan involves.

- Ensuring that all new developments and changes in use have adequate streets and roadways to handle the traffic generated by the development.
- Conducting traffic analyses to determine the magnitude of roadway improvements required to accommodate the traffic generated by the proposed development while maintaining the defined Base Level of Service Standards.
- Using transportation demand strategies to effectively use the existing transportation system.
- Establishing a truly balance transportation system by pursuing programs and policies that support increased use of public transit. Developing an aggressive and effective transit marketing strategy. Reviewing the public transit operational system in the present and future years.
- Identifying major transit corridors for busway and/or light-rail development.
- Incorporation and proper design of pedestrian and bicycle facilities in the reconstruction of streets and in the development and expansion of land uses.
- Ensuring that provisions are made for adequate, safe and convenient air and rail transportation service for the Town of Clarksville. Only compatible and complementary land uses should be permitted in the vicinity of these facilities.
- Prepare for participation in regional and national transportation linkages by perusing the coordination of transportation planning and transportation system capital improvements.
- Planning and ensuring the development of transportation systems that contribute to the achievement of improved air quality, preserve environmentally sensitive areas, protect historic landmarks and structures, and enhance community aesthetic values.
- The community should develop guidelines on the manner of access to public streets that reduce the frequency of driveways entrances, particularly on arterials.
- Coordinate transportation infrastructure development with the Kentuckiana Regional Planning and Development Agency (KIPDA), the Transit Authority of River City (TARC), the Indiana Department of Transportation (INDOT) and local jurisdictions to ensure implementation of the local Future Transportation Plan, Thoroughfare Plan, roadway capital improvement program and associated priorities.

Kentuckiana Regional Planning & Development Agency Long Range Plan

Horizon 2030

An effective transportation plan is one that understands transportation needs, defines transportation priorities, and works within the parameters introduced to the planning process by state and federal guidance and regulations. The goal of a transportation plan is the development of strategies which benefit the region, leading to the more efficient movement of people and goods.

Horizon 2030 is the planning document that reflects a vision of how the transportation network in the Louisville (KY-IN) Metropolitan Planning Area (MPA) will function and appear in the future. Comprehensive land use and other plans from the jurisdictions within the MPA help to obtain a realistic picture of how the area is expected to change, develop, and/or remain the same over time. This Long-Range plan is a cooperative effort between member governments, the Transportation Technical Coordinating Committee, the Transportation Policy Committee, and the public. This effort enables the Kentuckiana Regional Planning and Development Agency (KIPDA) Metropolitan Planning Organization (MPO) to meet key elements required of a long-range metropolitan transportation plan.

The Louisville (KY-IN) Metropolitan Planning Area (MPA) includes Clark, Floyd, and a portion of Harrison counties in Indiana; and Bullitt, Jefferson, and Oldham counties in Kentucky. Horizon 2030 includes strategies to specifically meet the challenge of providing a transportation system for people and goods across different and evolving environments.

Regional Priorities

Regional Priorities were defined and adopted during the development of Horizon 2030 to serve as a guide for the development of the Transportation Plan. These priorities identify important issues used to assist the TPC in assuring projects that support these priorities move forward.

Freight

In the Louisville (KY-IN) MPA, the interstate system and some of the major roadways have been identified as being part of the Freight Corridor system. Figure E shows the freight corridor system for the KIPDA study area. Once identified as a segment of the Freight Corridor system, proposed improvements are to be studied and designed in order to improve freight movement.

Bicycle and Pedestrian

As part of the transportation plan update process, emphasis was given on greater diversity in transportation strategies. In order to not only further the implementation of alternate modes, but also improve connectivity with existing roadway and transit options, the TPC adopted the Bicycle and Pedestrian Priority Corridors. Figure G shows the bicycle and pedestrian priority corridors for the KIPDA study area.

Traffic

Horizon 2030 includes KIPDA's Congestion Management Process (CMP) a methodology for reviewing projects that are intended to mitigate existing or projected congestion by increasing capacity. The initial focus of the review was a determination if the identified congestion could be improved to an acceptable level by implementing alternate mode strategies instead of adding the capacity.

The final list of projects, programs, and strategies in Horizon 2030 represents the Transportation Policy Committee's decision as to which combination of transportation system improvements are to be implemented through the year 2030 to address mobility needs. Figure F shows the Horizon 2030 investment areas in the KIPDA's planning area.

Land Use

An important component of the Horizon 2030 transportation planning process involved reviewing the area's comprehensive land use plans to ensure consistency between them and the metropolitan transportation plan. Identifying future land use patterns is important in determining appropriate levels of resource investment.

The purpose of comprehensive land use planning is to develop a community wide strategy for the future. Land use and socioeconomic characteristics of transportation system users help to determine travel demand levels and travel patterns. Forecasts of these characteristics can be used to estimate future demand for area transportation facilities, to identify system needs, and, ultimately, to select appropriate strategies for transportation investments.

Alternate Modes

Transit, paratransit, other forms of public transportation, ridesharing, bicycle, and pedestrian modes of transportation are collectively known as alternate modes because they offer an alternative to the single occupancy vehicle. Connectivity of and between all modes ensures choice for transportation users. The benefits of alternate modes can translate to improved air quality, less wear and tear on roadways, and better health. The variety of modes included in Horizon 2030 guarantees residents of the Louisville (KYIN). Metropolitan Planning Area (MPA) continued mode choice in terms of transportation.

Transit Authority of River City Long Range Plan

For over 30 years, the Transit Authority of River City (TARC) has been in operation, providing service in the Louisville-Jefferson County metropolitan area. An aging population, outward growth and development, and a historic focus on the needs of automobile users are among the challenges facing nearly every public transportation provider. The stakes for creating and sustaining a robust regional public transit system are enormous. TARC's mission is to explore and implement transportation opportunities that enhance the social, economic and environmental well-being of the greater Louisville area.

Recognizing its support in the growth and development of this competitive city and region, TARC prepared this plan. This long-range plan defines a vision that involves trends and conditions that may not be clearly foreseeable. As such, incremental decisions must be made mindful of the dynamic mobility challenges.

The purpose of this plan is:

- To provide guidance concerning the scope of public transportation services and identify the financial resources necessary to implement public transportation improvements while preserving and maintaining the existing system;
- To provide a basis to coordinate transportation and land use policies and projects, with state, regional and local planners, other transportation providers, institutions and businesses, as well as the general public; and,
- To provide TARC with a consistent and clearly defined direction for coordinating short-term service and investment decisions with longer-term goals and objectives.

In recent years, TARC has embarked on a few key programs and initiatives that serve as a foundation for what the community values in transit investments, policies and financing. These key initiatives include: T2 (Transportation Tomorrow), Project Gobility, and an Urban Partnership Agreement application.

TARC has identified the following factors considered critical to its success

- Adequate Financial Resources
- Effective Team
- Effective Visionary Leadership
- Community Support
- Focus on Customer Needs
- Quality Services
- Prudent Fiscal Management
- Strategic Management
- Focus on Safety

The recommendations are presented in the following time frames (based on the direction of Federal Highway Administration and Federal Transit Administration):

- Short-Term Strategies to 2015 (Years 1-7)
- Mid and Long Term Strategies from 2016 to 2030 (Years 8-22)

For each timeframe, the plan considers programs, projects, and policies addressing: Service and Capacity Enhancements, Technology and Infrastructure, Finances, and Plans and Policy.

Short-Term Strategies to 2015 (Years 1-7)

The basic strategy is to secure an expanded, consistent revenue base for TARC. With a secured revenue base, immediate actions would be taken to increase service to the community, by improving frequency on bus routes, adding new routes to serve areas without service, and to increase the level of passenger amenities at the stops. A summary of the short-term transit projects recommended is outlined in table 3 on page 18.

Finances

- Identify funding/financing options
- Explore procedures and assess preparations for securing an expansion of the local and/or state revenue base
- Build toward increased discretionary funding/coordinate with American Public Transportation Association and other advocacy organizations efforts on new Federal Transportation Authorization legislation (energy bill, economic stimulus bill, etc.)
- Increase advertising revenue
- Build active and ongoing partnerships with local businesses
- Implement Transit Oriented Development and Public-Private-Partnership initiatives as a way to finance infrastructure improvements and create economic development synergies
- Plans and Policies
- Build a dialogue to identify policy changes needed to make transit more attractive and efficient in community
- Continue to work with Metro Louisville on Mayor's strategic initiatives.
- Implement changes in policies to encourage Transit Oriented Development in anticipation of Bus Rapid Transit and rail corridors.
- Create priority development corridors
- Push for complete streets implementation.
- Implement changes in parking policies to encourage better utilization of CBD land and encourage transit use

Mid- and Long-Term Strategies from 2016 to 2030 (Years 8-22)

The strategy that follows for the mid- to long-term projects is based on securing increased local revenue. Depending on the additional local or state resources an entirely different strategy will have to be considered for the long term.

Under the assumption that the short term projects and service expansions are underway, TARC would move forward on planning and engineering work for the High Capacity Corridors.

A summary of the mid- and long-term transit projects are outlined in the Table 4 on page 19

Finances

- Implement funding choices identified in short term

Transit Supportive Policies

- Integration of transit supportive land use and development policies and practices
- Reviewing needed policy changes for more efficient transit services

Next Steps and Immediate Action Plan

TARC should continue working with KIPDA and other local project sponsors, like the Kentucky Transportation Cabinet and Metro Louisville, to fine tune and introduce selected transit projects.

Table 1: Short-Term Transit Projects

	Project	Capital Cost (in millions)	Annual Operating Cost (in millions)	Potential Funding Sources
Service and Capacity Improvements	Comprehensive Operations Analysis: will examine existing bus service efficiency and effectiveness	\$0.5 to \$1	---	Sec. 5307, CMAQ
	5@15 bus routes: will improve frequency of buses on major routes to no more than 15 minutes	XXXXXX	\$2.5	In Horizon 2030 LRTP
	Neighborhood Circulator Pilot Program: will add service using smaller vehicles into neighborhoods	\$1.5	\$1	Sec. 5307, CMAQ
	Vanpool Expansion: will continue vanpool and carpool to meet demand for service	---	\$0.2	Sec. 5307, CMAQ
	Additional Express Bus Routes: will add new or restructured express routes across the service area	\$24	\$3	Sec. 5309 Bus, Sec. 5307, CMAQ
	Bus Rapid Transit Routes and Technologies: will improve operations and service on high capacity corridors	\$15-\$22	\$8.5	Sec. 5309 Bus, Sec. 5307, CMAQ
	Crosstown Bus Route Options: will supplement existing crosstown routes to provide more connections outside of downtown	\$12	\$8.5	Sec. 5309 Bus, Sec. 5307, CMAQ
	Planning High-Capacity Corridors: will begin federal project development process	\$2-\$5	---	Sec. 5307, Sec. 5339,
	Downtown Trolley Improvements: will increase service on trolleys	\$1-\$4.5	\$1.5	\$1.4 million in Horizon 2030 LRTP; Sec. 5309 Bus, Sec. 5307, CMAQ
	Planning for Downtown Circulator: will begin planning efforts for downtown transit circulation	\$0.5	---	Sec. 5307, Sec. 5339,
Paratransit Service Expansion: will expand demand-response service county-wide	\$1-\$3	\$2-\$4	Sec. 5307, JARC, New Freedom programs	
Technology / Infrastructure	Fare Collection System: will include credit card use on vehicles	\$4-\$5	---	\$4 million in Horizon 2030 LRTP
	Ticket Vending Machines: will install vending machines at select locations	\$1-\$3	---	Sec. 5309 Bus, Sec. 5307
	Automatic Passenger Counters: will improve operating efficiency through data collection	\$0.4	---	\$0.6 million in Horizon 2030 LRTP
	Real-time Vehicle Information: will increase information for customers	\$4.6	---	In Horizon 2030 LRTP
	Additional Shelters: will improve passenger boarding areas	\$2-\$4	---	
	Additional Park-and-TARC locations: will increase and improve park and ride facilities	\$4.6	---	\$11.5 million in Horizon 2030 LRTP
	Bicycle and Pedestrian Improvements: will contribute to bike and pedestrian infrastructure	\$1.0	---	In Horizon 2030 LRTP
Total Estimated Range		\$77 - \$96	\$27 - \$29	(in 2008\$)

Table 2: Mid- and Long-Term Transit Projects

	Project	Capital Cost (in millions)	Annual Operating Cost (in millions)	Potential Funding Sources
Service & Capacity	Neighborhood Circulators and Flex Service: <i>will expand reach of transit service by providing neighborhood focused service</i>	\$5-\$8	\$3-\$5	Federal Transit Program funds supported by Dedicated Local Funding Source
	High Capacity Corridor Projects: <i>will build out rail or Bus Rapid Transit on the following corridors</i> <ul style="list-style-type: none"> - Anchorage to LaGrange - Bardstown Road - Clarksville-New Albany - Dixie Highway / Southwest - Frankfort - Shelbyville Avenue - South Central - Southeast 	\$1,400-\$2,000	\$25-\$40	Federal Transit Capital Investment Funds, Energy and Environmental Programs. Dedicated Local Funding Source
	Downtown Circulator System: <i>will serve new major activity centers in downtown</i>	\$50-\$200	\$1-\$4	Federal Transit Capital Investment Funds, Energy and Environmental Programs. Dedicated Local Funding Source
	Regional Paratransit Service Expansion; <i>will allow for regional paratransit service through coordinated services approach</i>	\$5-\$10	\$5-\$10	Federal Transit Program funds supported by Dedicated Local Funding Source
Technology & Infrastructure	Internet Service On-board Vehicles: <i>will allow for Wifi or similar service on transit vehicles</i>	\$5-\$15	---	Federal Transit Capital Investment Funds, Energy and Environmental Programs.
	Security System on Vehicles and at Facilities: <i>will include on-board camera systems</i>	\$1-\$5	---	Dedicated Local Funding Source
	Multimodal Transit Facility: <i>will construct transit operations and maintenance building</i>	\$25-\$100	---	
Total Estimated Range		\$1,491-\$2,091	\$33-\$59	(in 2008\$)

River Ridge Commerce Center Master Plan

Land Planning Element

The River Ridge Commerce Center Master Plan Update is an update to the 2001 Master Development Plan to redevelop the Indiana Army Ammunition Plant (INAAP) into the River Ridge Commerce Center (RRCC). This particular phase focuses more on the Land Planning Element and provides a detailed land use and infrastructure development plan. This plan can be used in marketing and redevelopment of the property that was lacking in the initial plan. Since, connectivity and mobility are vital components for the success of a redevelopment area, the existing rail lines and roads helped determine the location of future land uses. The planning strategy involved the development of a Short Term and Long Term Plan for the RRCC in relation to the I-265 extension proposed in the vicinity. The Short Term Plan (see Figure H) is considered for a time frame of less than 10-15 years or before the completion of the I-265 extension to the south of the River Ridge Commerce Center. The Long Term Plan takes into account the I-265 extension and interchange that will serve as a “front door” to RRCC.

Roadways

Since the development would attract more traffic to the area, existing roads with deficiencies were identified for improvement. For the Short Term Plan, intersection of Stacy Road with SR 62 area will act as the “front door” of the property. To serve the RRCC better, a boulevard, which will become the main thoroughfare through the southern portion of the property, is planned from the SR 62 and Stacy Road intersection to an existing road that parallels the existing rail line. For the Long Term Plan several new roads will be added to improve accessibility. It also includes removal of the road that runs parallel to the existing rail line and extending the Boulevard from the rail line to the proposed I-265 interchange. A new road loop is also proposed in the southwestern portion of the property. This proposed road will connect at the boulevard in two locations and create an office park type of setting.

Railways

The Short Term and Long Term Plans utilize the existing rail lines. The Long Term Plan also proposes two connections. First, a connection to the rail line on the west side of SR 62 is planned to the north of Bethany Road. This line runs parallel to SR 62 for the entire length of the RRCC boundary. Currently, the only connection to the existing lines is on the northern portion of the RRCC which forces trains coming from the south to go past the RRCC and back into it. A second rail line extension connecting to rail lines outside of the RRCC is planned in the southern portion of the property and runs south. The proposed connection is with an existing rail line in the Clark Maritime Centre (Port of Indiana-Jeffersonville). This rail connection and a planned road will create a better network between the Port and the RRCC. Planning between the Port Authority and the RRDA will need to occur to determine the best alignment for this proposed rail line. This rail line will need to overpass or underpass the I-265 extension. Coordination with INDOT and with the project coordinators working on the I-265 extension will therefore be crucial. Before the I-265 designs are finalized, attention to the planning process now will make this a feasible project in the future.

On-Going Planning Efforts

During the coordination process of the Clark County Thoroughfare Plan, some agencies made mention of plans that are on-going. This includes:

- KIPDA is updating their long range transportation plan to the year 2040. It is anticipated to be completed in 2014.
- The Town of Sellersburg is creating a new Transportation Plan.
- The City of Charlestown is developing a Comprehensive Plan.
- The Town of Clarksville is updating their Master Plan.

EXISTING CONDITIONS

The scope of the existing transportation conditions is generally limited to the present vehicular travel, transit services, and bicycle and trail facilities. Since changes in land use directly impacts transportation, the analysis will discuss existing and future land uses in the county.

Jurisdictions

Clark County consists of the Town of Borden, City of Charlestown, Town of Clarksville, City of Jeffersonville, Town of Sellersburg, and Town of Utica (see Figure I). According to the 2010 U.S. Census, the population of these communities is:

Borden –	808 persons
Charlestown -	7,585 persons
Clarksville –	21,724 persons
Jeffersonville –	44,953 persons
Sellersburg –	6,128 persons
Utica –	776 persons

These communities are part of the Project Study team that will meet as a part of this study to review study information and recommendations. As the project moves into the development, evaluation and selection of an alternative, the involvement of representatives from these communities will be critical to the successful implementation of the various projects in that alternative.

Existing and Future Land Uses

Using 2005 aerial photography of Clark County, an inventory of existing land use in Clark County was completed as part of the 2007 Clark County Comprehensive Plan. Table 5 shows the results of the inventory. Developed urban land uses comprise approximately 126 square miles of the total 376 square miles in Clark County. The cities and towns make up about 37 square miles of these 126 square miles.

Table 3

Land Use Category	2006			
	Acreage	Square Miles	Percent Developed Area	Percent Total Area
Residential				
Urban/Suburban	6,000	9.4	7.4%	2.5%
Rural	19,300	30.2	23.9%	8.0%
Total Residential	25,300	39.5	31.4%	10.5%
Commercial	500	0.8	0.6%	0.2%
Industrial	12,500	19.5	15.5%	5.2%
Public/Quasi-Public				
Parks and Recreation	17,700	27.7	22.0%	7.4%
Educational	100	0.2	0.1%	0.0%
Government	700	1.1	0.9%	0.3%
Total Public/Quasi-Public	18,500	28.9	23.0%	7.7%

EXISTING CONDITIONS

Cities/Towns	23,800	37.2	29.5%	9.9%
Agricultural/ Undeveloped	160,200	250.3		66.5%
Developed	80,600	125.9	100.0%	33.5%
Undeveloped	160,200	250.3		66.5%
Total	240,800	376.3		100.0%

Clark County Existing Land Uses

The Year 2030 future land use in Clark County was derived from past trends and demographic projections in the 2006 complete Economic and Demographic Data Source by Woods and Poole Economics. This information formed the basis for the 2007 Clark County Comprehensive Plan and is shown in Table 6.

The information shows that growth is anticipated to continue in Clark County. As the population and employment increase, there will be a projected demand for an additional 7,567 acres for residential growth, 861 acres for commercial growth and 551 acres for industrial growth. The River Ridge Commerce Center should accommodate all industrial growth. Much of the residential growth will likely be located around the cities and towns. Similarly, the commercial growth will more than likely be located just beyond the existing city and town boundaries where there is a greater density of residences. This growth will place additional demands upon the transportation networks in these areas.

Table 4

Land Use Category	2006				2006-2030	2030			
	Acres	Square Miles	Percent Developed	Percent Total Area	Demand Area	Acres	Square Miles	Percent Developed	Percent Total Area
Residential									
Urban	6,000	9.4	7.4%	2.5%	3,886	9,886	15.4	11.1%	4.1%
Rural	19,300	30.2	23.9%	8.0%	3,681	22,981	35.9	25.8%	9.5%
Total Residential	25,300	39.5	31.4%	10.5%	7,567	32,867	51.4	36.9%	13.6%
Commercial	500	0.8	0.6%	0.2%	861	1,361	2.1	1.5%	0.6%
Industrial	12,500	19.5	15.5%	5.2%	0	12,500	19.5	14.0%	5.2%
Public / Quasi-Public									
Parks and Recreation	17,700	27.7	22.0%	7.4%	0	17,700	27.7	19.9%	7.4%
Educational	100	0.2	0.1%	0.0%	0	100	0.2	0.1%	0.0%
Government	700	1.1	0.9%	0.3%	0	700	1.1	0.8%	0.3%
Total Public / Quasi-Public	18,500	28.9	23.0%	7.7%	0	18,500	28.9	20.8%	7.7%
Cities/Towns	23,800	37.2	29.5%	9.9%	0	23,800	37.2	26.7%	9.9%

Agricultural/ Undeveloped	160,200	250.3		66.5%	0	160,200	250.3		66.5%
Developed	80,600	125.9	100.0%	33.5%	8,428	89,028	139.1	100.0%	37.0%
Undeveloped	160,200	250.3		66.5%	0	151,772	237.1		63.0%
Total	240,800	376.3		100.0%	8,428	240,800	376.3		100.0%

Transportation Network Facts

The best available traffic data for Clark County were from both KIPDA (2007) and INDOT (2008). From the KIPDA travel demand model, 2007 daily volumes were available. These volumes were normalized to the year 2007 from traffic counts taken over several years, both before and after 2007. Daily counts for 2008 on Indiana state roads were available via the INDOT interactive traffic count map (these volumes may be factored from counts conducted in years prior to 2008). Using growth rates from the KIPDA travel demand model, these counts volumes were factored to reflect the year 2012 and are shown on Figure J. Clearly, the most heavily traveled roadways are I-65 especially south of I-265 to the Ohio River and I-265 from the Floyd County line to SR 62. I-65 has volumes that are approaching 122,000 vehicles per day in Jeffersonville. INDOT has widened I-65 in the past several years so that from the 10th Street interchange (Exit 2) to I-265, I-65 is an 8-lane facility. North of I-265, I-65 is a six-lane highway to SR 311. From that point northward I-65 is a four-lane highway through the rest of Clark County. I-265 is a four-lane facility.

In Jeffersonville, the major traffic carriers are 10th Street (formerly SR 62) and US 31. 10th Street has four through lanes beginning at the I-65 interchange and continuing northeast through Jeffersonville. US 31 is a two-lane facility that closely parallels I-65. In Clarksville, the Lewis and Clark Parkway and Brown Station Way are the major multi-lane facilities. Both have interchanges with I-65. Exit 9 (SR 311) provides direct access to Sellersburg. US 31 also traverses Sellersburg in a north-south direction, paralleling I-65. In Charlestown, both SR 62 and SR 3 provide inter-urban connections to other points within the county as well as local access.

With regard to pedestrian and bicycle trails (see Figure L), Clark State Forest, a 24,000 acre area, has activities such as camping, fishing, hunting, picnicking and trails for recreation. Hiking trails include White Oak Nature Trail (0.9 mile, self guided loop), Resource Trail (1 mile, self-guided) and Knobstone Trail (56 miles, 32 of which are in Clark State Forest). Hiking is also permitted on the entire property including fire trails and horse trails. Charlestown State Park has four hiking trails ranging in length (from one mile to 2.5 miles) and difficulty (moderate to rugged). Falls of the Ohio State Park offers a hiking trail along the levee across the southern portion of the park.

The Clarksville Heritage Trail is a one and a half mile walking/biking/rollerblading (asphalt section) trail through Clarksville. The trail is a loop with several points of interest including Falls of the Ohio State Park, the George Rogers Clark Cabin Site, Colgate Park and the Colgate Building. The rail-trail section of the trail is an asphalt path, which follows Clark Boulevard between the levee and State Street. The remainder of the loop uses paths along the Ohio River, in the Falls of the Ohio State Park, on the top of the levee, and one on-street route. Future plans include a trail along the abandoned CSX railroad line, which will connect to New Albany and the Loop Island Wetland area.

In addition to hiking trails, there are nine horse trails (totaling 64 miles) in Clark State Forest ranging in difficulty from easy to rugged and five miles of mountain bike trails in Clark State Forest and Deam Lake State Recreation Area.

The Transit Authority of River City (TARC) is responsible for public transit serving Clark County and the current routes are shown on Figure M. The routes that serve Clark County include the Southern Indiana Express (Route 65), the Clarksville-New Albany (Route 72), the Jeffersonville-Riverfront (Route 74), Jeffersonville (Route 71), and the Southern Indiana Shopper (Route 83). Accordingly to statistics from TARC, these routes comprise 8% of the total TARC routes yet carry only 3.4% of the total TARC ridership.

Functional Classification

Functional classification is the approach by which roads in a county are organized by groups according to the function that they serve. These groups are: (1) Principal Arterials (which includes Interstate and Freeway/Expressway); (2) Minor Arterials; (3) Collectors; and (4) Local Roads. These classifications are defined below:

1. Principal Arterials. – These routes serve corridor trips with long trip lengths that suggest major interstate travel. Interstate highways as well as freeways and expressways fall under this classification.
2. Minor Arterials - These routes are designed to be within a reasonable distance of all residents in developed areas. These arterials form a network that connect the collectors to the interstates. These facilities provide through movements with relatively high overall speeds.
3. Collectors – Typically collectors fall into major and minor classifications. The Major Collectors provide service to communities within a county not served by arterials as well as points of importance in a county such as consolidated schools, shipping areas, county parks, and important mining and agricultural areas. Minor Collectors are designed to collect traffic from local roads and as such are spaced at regular intervals throughout the county. These facilities also link the locally important traffic generators with their rural areas.
4. Local Roads – These roads are to provide access to adjacent land. They are used for travel over relatively short distances so as to get motorists access to high level facilities including collectors and arterials.

These functional classifications are based upon the U.S. Department of Transportation Highway Functional Classification Manual. The roads in the Clark County road network are classified according to the function they perform as well as being differentiated between urban and rural as determined by the most recent census urbanized boundary. For this analysis, roads serving as Interstates (which according to the functional classification are Principal Arterials), Principal Arterials, Minor Arterials, and Collectors have been identified and are shown on Figure N. The Interstates in Clark County are I-65 and I-265. The other Principle Arterials include SR 3, SR 403 and SR 62 in Charlestown, SR 60 in Sellersburg, Lewis & Clark Parkway, Old Indiana 62, and Eastern Boulevard, in Clarksville, and 10th Street in Jeffersonville. There are also several urban Minor Arterials within Charlestown, Clarksville and Jeffersonville. Outside the urban areas, SR 60 and SR 62 are Minor Arterials with all other state highways as Collectors. Figure N also shows roads that are classified as Collectors. The remaining streets and roads are designated as local streets and are not discussed as part of this study.

Figure N is based upon the INDOT functional maps which include recent relinquishments. As additional roads are discussed for relinquishment from INDOT to the local jurisdictions, these functional classifications would be changed to reflect these additions.

Table 5

INDOT Functional Classification	Clark County Mileage	Percent
Interstate	24.5	3%
Principal Arterial	37.4	4%
Minor Arterial	90.8	10%
Major Collector	176.0	18%
Minor Collector	43.3	4%
Local	582.0	61%
Total	954.0	100%

Safety Analysis

A review of accident history for Clark County was performed to identify roadway segments that have a higher than expected number of vehicle crashes. The observed crash rate of the roadways was compared to the “expected” crash rate of similar roadways in Indiana. Those roadway segments with a crash rate that is significantly higher than the expected crash rate (defined as the critical crash rate, according to accepted practice) are flagged for possible further review. High crash rates may be indications of sub-optimal design or traffic operational characteristics, and a review of these locations may lead to possible safety improvements.

A total of five years of crash data was reviewed, covering the years 2007 to 2011. These crash data were taken from the ARIES database, maintained by the state of Indiana. Staff at KIPDA with access to ARIES delivered the data for analysis. The analysis included all crash data that could reasonably be located using the latitude and longitude coordinates from the individual crash records. The average crash rates used for analysis comparison included rates for interstates, state roads, and local streets for the state of Indiana.

High crash rate segments include the following (table on next page).

This information is presented for the entire county in Figure O.

Congestion Analysis

As discussed in the description of the analysis procedures, traffic congestion is measured as level of service (LOS). The level of service was calculated for all roads that are functionally classified as collector and above in Clark County. This information is presented for the entire county in Figure P. Figure Q is a detail subset of Figure 9 showing roads in Clarksville and Jeffersonville.

For urban areas, a minimum LOS of D is acceptable and LOS C for rural areas. Table 7 shows roadway segments that exceed those values using 2012 traffic. Most other routes in the county operate at acceptable levels of services.

Future Projects

The Metropolitan Transportation Plan, Horizon 2030, is KIPDA’s planning document that reflects all surface transportation investments through the year 2030 for the Louisville (KY-IN) Metropolitan Planning Area that includes Clark County. For Clark County, this planning document includes projects from the Indiana Statewide Transportation Improvement Program (INSTIP) and the Indiana 10-year Transportation Plan, known as Major Moves. KIPDA’s plan also includes projects originating from the communities in Clark County and the Commissioners of Clark County. Figure R shows these future projects.

Some of the projects that will impact the major roadways in Clark County are described as follows:

- Ohio River Bridges project – The Ohio River Bridges project is a massive undertaking that will impact travel throughout the Louisville (KY-IN) Metropolitan area. This project involves the following components: (1) Downtown Crossing - a new I-65 Bridge immediately upstream of the existing I-65/Kennedy Bridge, as well as redecking of the existing I-65/Kennedy Bridge, and improved and expanded approach roadways for the I-65 bridges, including the I-65 approach in Jeffersonville, and the I-65/I-64/I-71 Kennedy Interchange, reconstructed in-place, in Louisville; (2) an East End Crossing - a new bridge and approach roadways connecting KY 841 (Gene Snyder Freeway) in eastern Jefferson County, Kentucky with S.R. 265 (Lee Hamilton Highway) in eastern Clark County, Indiana; (3) Electronic toll facilities - both of the I-65 bridges and the new East End Bridge will be toll facilities using the most current electronic tolling capabilities; and (4) Transportation Management elements – this includes enhanced bus service throughout the area.

EXISTING CONDITIONS

Table 6

Roadway	From	To	Length	Crash Rate	Critical Crash Rate	Ratio
10th St	Penn St	Springdale Dr	1.32	1208.6	425.6	2.84
Blackiston Mill Rd	Gutford Rd	Lewis-Clark Pkwy	0.91	673.0	425.8	1.58
Charlestown Pk	Salem-Noble Rd	IN 62	0.73	2936.8	427.1	6.88
Court Ave	US 31	I-65 SB on-ramp	0.11	784.6	425.7	1.84
Eastern Blvd	Lewis-Clark Pkwy	Evergreen Dr	0.44	923.8	425.7	2.17
Eastern Blvd	Evergreen Dr	I-65	0.73	1474.2	425.8	3.46
Eastern Blvd	I-65	Spring St	0.50	669.5	425.8	1.57
IN 160	Henryville Otisco Rd	Memphis Rd	6.99	864.6	220.4	3.92
IN 160	Memphis Rd	IN 403	0.22	1006.8	220.1	4.57
IN 3	IN 203	IN 362	0.71	1046.4	220.3	4.75
IN 311	IN 60	I-65 SB Ramp	0.74	948.0	219.7	4.32
IN 403	Bethany Rd	IN 160	2.28	340.2	219.8	1.55
IN 403	IN 160	Market St	0.09	435.4	219.7	1.98
IN 60	Daisy Hill Rd	Martinsburg Rd	0.27	362.0	219.8	1.65
IN 60	Payne Koelher Rd	I-65 SB ramp	0.15	417.7	219.7	1.90
IN 62	I-265	Utica-Sellersburg Rd	0.36	480.6	219.6	2.19
IN 62	Market St	Monroe St	0.45	722.0	219.8	3.29
I-65	n/a	Court Ave	0.35	284.2	80.6	3.53
I-65	Court Ave	10th St	0.54	193.8	80.6	2.40
I-65	10th St	Eastern Blvd	1.18	140.9	80.6	1.75
Lewis-Clark Pkwy	Eastern Blvd	Applegate Ln	0.51	1367.0	425.7	3.21
Market St	Missouri Ave	Spring St	0.62	646.1	426.2	1.52
Market St	Monroe St	IN 403	0.59	868.9	425.8	2.04
Market St	IN 403	Clark Rd	0.35	714.4	425.8	1.68
Monroe St	IN 62	Tunnel Mill Rd	0.29	691.0	426.4	1.62
Montgomery Ave	Clark Blvd	Spring St	0.71	860.3	426.6	2.02
Naab-New Washington Rd	IN 362	North New Market Rd	4.38	814.1	428.3	1.90
Pixley Knob Rd	n/a	Bartle Knob Rd	3.94	1709.9	429.3	3.98
US 31	Armed Forces Dr	Coopers Ln	0.60	348.3	184.3	1.89
US 31	Bean Rd	Charlestown Rd	1.91	386.0	184.3	2.10
US 31	Charlestown Rd	Utica St	0.23	915.8	184.1	4.97
US 31	Utica St	IN 403	0.52	741.0	184.2	4.02
US 31	IN 160	Brownstone Rd	1.22	326.5	184.3	1.77
Veterans Pkwy	Broadway St	I-65	0.46	1009.6	425.6	2.37

EXISTING CONDITIONS

On June 19, 2012, the revised Record of Decision for the Ohio River Bridges project was published which documents FHWA compliance with NEPA on this project. In an agreement between Indiana and Kentucky, Kentucky would be responsible for the downtown portion of the project while Indiana would be responsible for the East End portion.

The Downtown Bridge project includes the reconstruction (redecking) and reconfiguration of the existing 7-lane Kennedy Bridge to a 6-lane bridge to accommodate I-65 southbound traffic and the construction of a new 6-lane bridge, plus a pedestrian/bicycle lane, over the Ohio River just east of the Kennedy Bridge to accommodate I-65 northbound traffic. This project also includes the reconstruction of the Kennedy Interchange to the south of the existing interchange and an interchange with I-71/Frankfort Avenue in Kentucky, and the reconfiguration of I-65 and U.S. 31 in Indiana.

The East End Bridge project is a 6-lane freeway on new alignment that would connect KY 841 (Gene Snyder Freeway) in Kentucky with S.R. 265 (Lee Hamilton Highway) in Indiana. This project includes a new 6-lane bridge over the Ohio River and a 6-lane tunnel under the historic Drumanard Property in Kentucky. It also includes interchanges at U.S. 42 (half diamond) in Kentucky and at Old Salem Road and S.R. 265/S.R. 62 in Indiana. These interchanges in Indiana will service both the River Ridge Commerce Center and the Port of Indiana Jeffersonville.

- 10th Street in Jeffersonville – As one of the heavily travel urban roads in Clark County, 10th Street will be widened and reconstructed from Penn Street to Reeds Lane. This widening will accommodate a dedicated left turn lane for the entire corridor.
- Blackiston Mill Road in Clarksville – This road provides an important connection between Clarksville and New Albany. Clarksville is looking to make improvements to Blackiston Mill Road from Lewis & Clark Parkway to Gutford Road.
- Veteran's Parkway – The Phase 2 of the Veteran's Parkway project is to widen Charlestown-New Albany Pike from 2 lanes to 4 lanes. This project would connect 10th Street to the first phase of Veteran's Parkway.
- Salem Noble Road & Bethany Road – Clark County continues make improvements to the connections between SR 403 and SR 62. This corridors are becoming important as River Ridge Commerce Center grows.

While many of the future transportation projects focus on moving vehicular traffic, there are a series of trail projects designed to provide pedestrian and bicycle alternatives. The Ohio River Greenway project and the Wheels & Heels Trail in Jeffersonville are the most extensive of the pedestrian and bicycle trail projects. TARC has a Multi Modal Transit Access Plan that considers park and ride lots as well as improved bicycle and pedestrian facilities. The Southern Indiana Demo Express Bus Service & Park & Ride project will investigate service between downtown Louisville and growing portions of Clark and Floyd Counties. The TARC Jeffersonville Riverfront Transit project will look at new express bus service between downtown Louisville and Jeffersonville.

KIPDA has a ridesharing program that will have additional monies for increased services including local matching service, employer-based and regional ridesharing, van subscription services, promotional activities, and program evaluation and administration.

As this study moves into the development and evaluation of short-term and land-term transportation alternatives, these projects that are part of the Metropolitan Transportation Plan, Horizon 2030, will be included in this analysis.

EXISTING CONDITIONS

Table 7

Roadway	Location	Beginning	Ending	Current Year LOS	Number of Lanes
I-65	Jeffersonville	State Line	Market Street	E	6
I-65	Jeffersonville	10th Street	Brown Station Way	E	8
US 31	Sellersburg	I-65	SR 403	D, E, F	2
US 31	Jeffersonville	State Line	Market Street	D, E, F	4
SR 60	Borden	Washington County Line	Walnut Street	D	2
SR 60	Sellersburg	Newberry Road	Avco Blvd	D	2
SR 60		Wilson Switch	SR 111	D	2
SR 62	Charlestown	Market Street	Monroe Street	D	2
SR 62		Decker Lane	Poplar Drive	D	2
SR 311	Sellersburg	Floyd County Line	I-65	D	2
SR 403	Charlestown	SR 160	Market Street	D	2
10th Street	Jeffersonville	Spring Street	Wall Street	E	4
10th Street	Jeffersonville	Nachand Lane	Clairview Drive	D	4
Applegate Lane	Clarksville	SR 131	South of SR 131	D	2
Blackiston Mill Road	Clarksville	Altawood	Eastern Blvd	D	2
Blackiston Mill Road	Clarksville	Floyd County Line	Bowling Avenue	E	2
Coopers Lane/ Utica Sellersburg		Sundancer	SR 62	D	2
Court Avenue	Jeffersonville	US 31	I-65	D	4
Eastern Blvd	Clarksville	Lewis and Clark Parkway	Flamingo	D	4
Eastern Blvd	Clarksville	Brooks Avenue	I-65	D	4
Eastern Blvd	Jeffersonville	I-65	Center Street	D	4
Greentree Blvd	Clarksville	Potters Lane	Redwood Drive	E	2
Indiana Avenue	Sellersburg	Andres Street	US 31	D	2
Lewis and Clark Parkway	Clarksville	Cedar Street	I-65	D	6
Lewis and Clark Parkway	Clarksville	Brown Station Way	Lakeview Drive	D	4
Market Street	Charlestown	Denham Lane	Birch Drive	D	4
Market Street	Charlestown	Thompson Street	Water Street	D	4
Memphis Blue Lick		I-65	US 31	D	2
Middle Road		Capital Hills	Pebble Creek	D	2
Stanisfer Blvd	Jeffersonville	I-65	Francis	D	4
Veteran's Parkway	Clarksville	I-65	Hamburg Pike	D	4
Veteran's Parkway	Clarksville	Giltner Lane	I-65	F	4

FUTURE CONDITIONS

As with the existing conditions, the future roadway network was evaluated for likely congestion levels. The KIPDA Travel Demand Model was used to project traffic conditions for the year 2030. Projected traffic volumes for the Year 2030 are shown on Figure S for the entire county and Figure T, which is a detail subset of Figures S showing roads in Clarksville and Jeffersonville.

The level of service was calculated for all roads that are functionally classified as collector and above in Clark County for which existing traffic counts exist. This information is presented for the entire county in Figure U. Figure V is a detail subset of Figure U showing roads in Clarksville and Jeffersonville.

For urban areas, a minimum LOS of D is acceptable and LOS C for rural areas. Table 8 shows roadway segments that exceed those values using 2030 traffic. Most other routes in the county currently operate at what are considered to be acceptable levels of services.

The routes that operate at an acceptable LOS in 2012 but are expected to exceed the LOS thresholds in 2030 are:

- Veterans Parkway east of I-65;
- Triangle Drive in Clarksville;
- SR 311/Charlestown Road in Sellersburg;
- SR 111 south of SR 60;
- I-65 from SR 311 to Memphis Blue Lick Road; and
- US 31 south of SR 160

The routes that are expected to see a decrease in congestion levels from the existing to future conditions (moving to an acceptable level of service) are:

- I-65 in downtown Jeffersonville

Table 8

Roadway	Location	Beginning	Ending	Current Year LOS	Future Year LOS	Existing Number of Lanes
I-65	Jeffersonville	State Line	Market Street	E	D	6
I-65	Jeffersonville	10th Street	Brown Station Way	E	D	8
I-65		Scott County Line	US 31	Acceptable	D, E	4
I-265	Clarksville	Floyd County Line	I-65	Acceptable	D	4
US 31	Sellersburg	I-65	SR 403	D, E, F	D, E, F	2
US 31	Sellersburg	SR 60	Diamond Heights	Acceptable	D	2
US 31	Jeffersonville	State Line	Market Street	D, E, F	E	4
US 31		SR 160	Slate Rund Drive	Acceptable	D	2
SR 60	Borden	Washington County Line	Walnut Street	D	D	2
SR 60	Sellersburg	Newberry Road	Avco Blvd	D	D	2
SR 60		Wilson Switch	SR 111	D	D	2
SR 62	Charlestown	Market Street	Monroe Street	D	D	2
SR 62		Decker Lane	Poplar Drive	D	D	2
SR 111		Floyd County Line	SR 60	Acceptable	D	2
SR 311	Sellersburg	Floyd County Line	I-65	D	E	2
SR 403	Charlestown	SR 160	Market Street	D	D	2
SR 403	Sellersburg	Maple Street	Salem Noble Road	Acceptable	D	2
10th Street	Jeffersonville	Spring Street	Wall Street	E	E	4
10th Street	Jeffersonville	Nachand Lane	Clairview Drive	D	F	4
Applegate Lane	Clarksville	SR 131	South of SR 131	D	D	2
Blackiston Mill Road	Clarksville	Altawood	Eastern Blvd	D	E	2
Blackiston Mill Road	Clarksville	Floyd County Line	Bowling Avenue	E	E	2
Coopers Lane/ Utica Sellersburg		Sundancer	SR 62	D	D	2
Court Avenue	Jeffersonville	US 31	I-65	D	D	4
Eastern Blvd	Clarksville	Lewis and Clark Parkway	Flamingo	D	Acceptable	4
Eastern Blvd	Clarksville	Brooks Avenue	I-65	D	Acceptable	4
Eastern Blvd	Jeffersonville	I-65	Center Street	D	D	4
Greentree Blvd	Clarksville	Potters Lane	Redwood Drive	E	F	2
Indiana Avenue	Sellersburg	Andres Street	US 31	D	D	2
Lewis and Clark Parkway	Clarksville	Cedar Street	I-65	D	D	6
Lewis and Clark Parkway	Clarksville	Brown Station Way	Lakeview Drive	D	D	4
Market Street	Charlestown	Denham Lane	Birch Drive	D	D	4
Market Street	Charlestown	Thompson Street	Water Street	D	D	4
Memphis Blue Lick		I-65	US 31	D	D, E	2
Middle Road		Capital Hills	Pebble Creek	D	D	2
Progress Way	Clarksville	Koetter Drive	US 31	Acceptable	D	2
Stanisfer Blvd	Jeffersonville	I-65	Francis	D	D	4
Veteran's Parkway	Clarksville	I-65	Hamburg Pike	D	E	4
Veteran's Parkway	Clarksville	Giltner Lane	I-65	F	E	4


BERNARDIN, LOCHMUELLER & ASSOCIATES, INC.

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April 18, 2012

To: Clark County Thoroughfare Project Team

RE: Minutes from Project Team Meeting #1

The following are the minutes from the Project Team kick-off meeting for the Clark County Thoroughfare Meeting held on April 12, 2012 at the Clark County Government Building.

- The purpose of this meeting is to introduce the purpose and need of a Thoroughfare Plan, explain the roles of the Project Team and Public Involvement, and establish goals and objectives for the Transportation Plan of Clark County.
- The general schedule for the study will be development of a report every two months. After drafts of each of the three reports are complete, they will be submitted to the Project Team and general public for comment. The study will then conclude with a Final Report in November of this year.
- A request was made to rotate the locations of the Project Team meetings and no one objected. A suggestion was made to have the next meeting at River Ridge.
- Significant discussion was held on the past planning efforts of each agency represented.
 - KIPDA: Maintains a long range transportation plan for its 5-county planning area with a horizon year of 2030 and will soon develop plan to year 2040. KIPDA has assisted other counties with Thoroughfare Plans. It also published the Transportation Improvement Plan (TIP) to document short term funding priorities.
 - INDOT: like KIPDA, has also completed a long range transportation plan and TIP.
 - River Ridge: Completed a **Master Plan** with recent updates. Has sold about 400 of its 6,000 acres.
 - Charlestown: currently developing a **Comp Plan**. Concerned about impact on network with River Ridge, especially on SR 403.
 - Jeffersonville: have drafted a Comp Plan in the past. Recently completed a **Sidewalk Master Plan** and may start soon on a Trail/Bike Master Plan.
 - Clark County: completed a Comp Plan in the early 1990's.
 - Clark County Airport: currently expanding runway and has finished a **Master Plan** and Capital Improvement Plan.
 - Clarksville: has completed a Comp Plan that included a Thoroughfare Plan about 20 years ago. Looking at improving linkages between neighborhoods. Currently updating **Master Plan** and Parks Master Plan.
 - TARC: has completed a **Long Range Plan**.
 - Ohio River Greenway: has a completed **Master Plan** and suggested involving US Bike Route 35.
 - Port of Indiana: was invited to meeting but could not attend. It was suggested to involve in future meetings.
- A Goals and Objectives exercise has conducted and below are the results for each category:
 - Bike and Pedestrian
 1. Dedicated network of bike lanes.
 2. Complete Big 4/Greenway.
 3. Provide alternative to auto travel.
 4. Integrate with future development/transportation plans.
 5. Connect residential areas with employment centers.
 6. Integrate with TARC routes.
 7. Improve livability of community
 - Connectivity
 1. From East End bridge area
 2. Airport to River Ridge
 3. To adjacent counties
 4. Rural to suburban



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5. Within communities and neighborhoods
6. Include connectivity with all modes
- Funding
 1. Education on funding options
 2. Competitive grants
 3. Federal Funds for Surface, Rail and Air
 4. Donations/Fundraising
 5. Public/Private Partnerships (PPP)
- Transit
 1. Increase bus service county wide
 2. Increase service for elderly population
 3. Increase access for elderly
 4. Increased growth in aging population
 5. Increase access to disabled population
 6. Separate services for aging and disabled population. Expand TARC or use rural transit services.
 7. Provide services for low income ridership
 8. Increase choice ridership
 9. Respond to population and employment growth
 10. Increase express routes/park & ride routes to employment areas
 11. Increase funding for services such as CMAQ
- Safety and Mobility
 1. Road capacity decisions based on population and industry
 2. Turn lanes for manufacture areas
 3. Sidewalk and bikes
 4. Signals to increase safety as well as industry and residential
 5. East end bridge
 6. Education on mass transit as a good thing
 7. Feeder roads from industry location to spread across county
 8. Shuttle methods connecting to mass centers
 9. Airport connection to industry with more direct road connection
- Modal
 1. River Ridge to airport (Bethel Connection) and to Northbound 65
 2. Expansion of airport to accommodate industrial and commercial traffic
 3. Heavy road/rail connection from port to river ridge
 4. Additional rail spur into River Ridge from CSX mainline
 5. Direct access to I-65 from airport
 6. Public transportation to River Ridge
 7. Expansion of HWY 62 to handle increases traffic & lighted Intersections.

This is my understanding of the meeting. I ask that any corrections and/or omissions be noted to me by seven days after this transmittal date. Otherwise, I will assume these minutes to be complete and accurate.

Sincerely,

BERNARDIN-LOCHMUELLER & ASSOC., INC.

L. Nick Batta, P.E.
Project Engineer

Cc: File

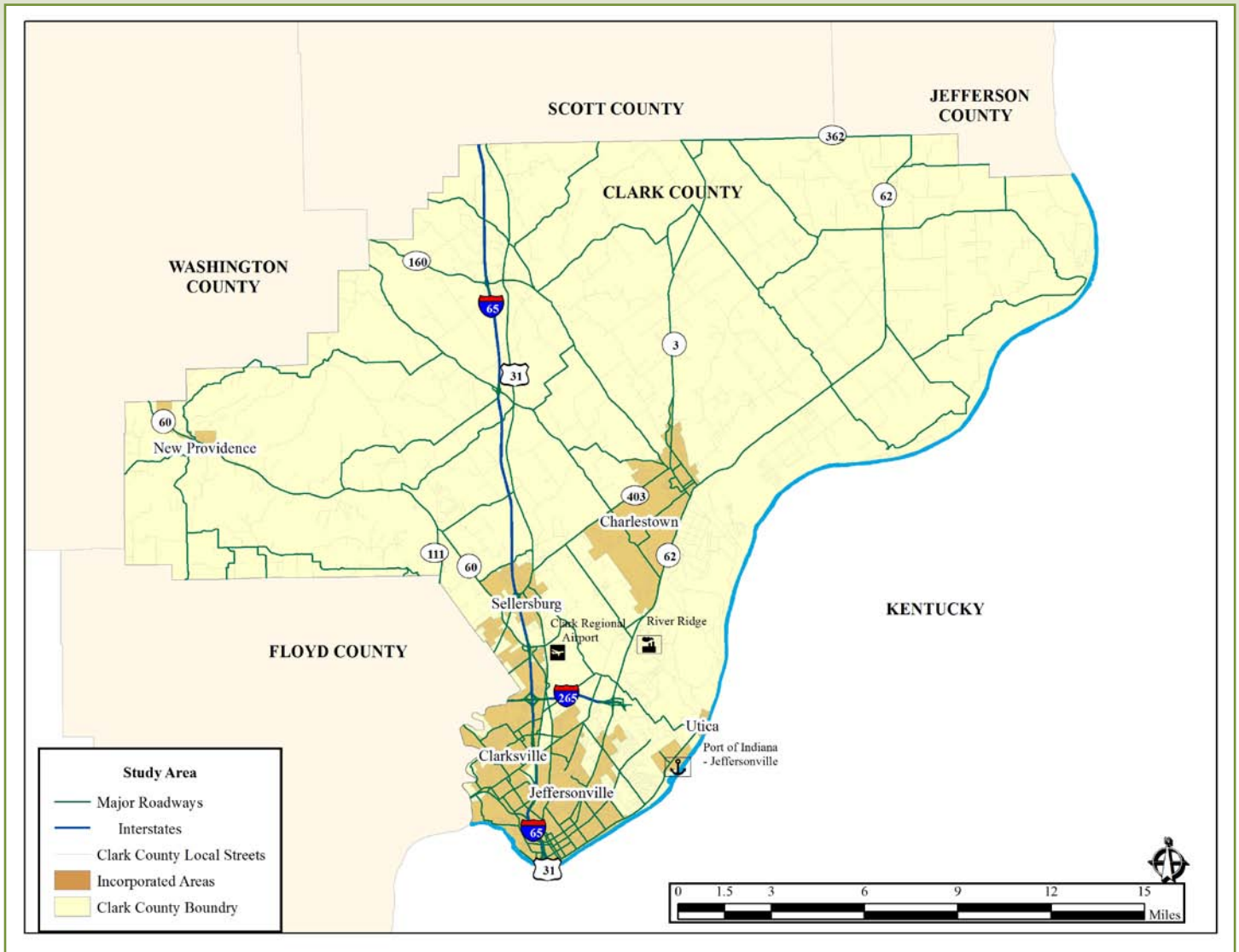


Figure A

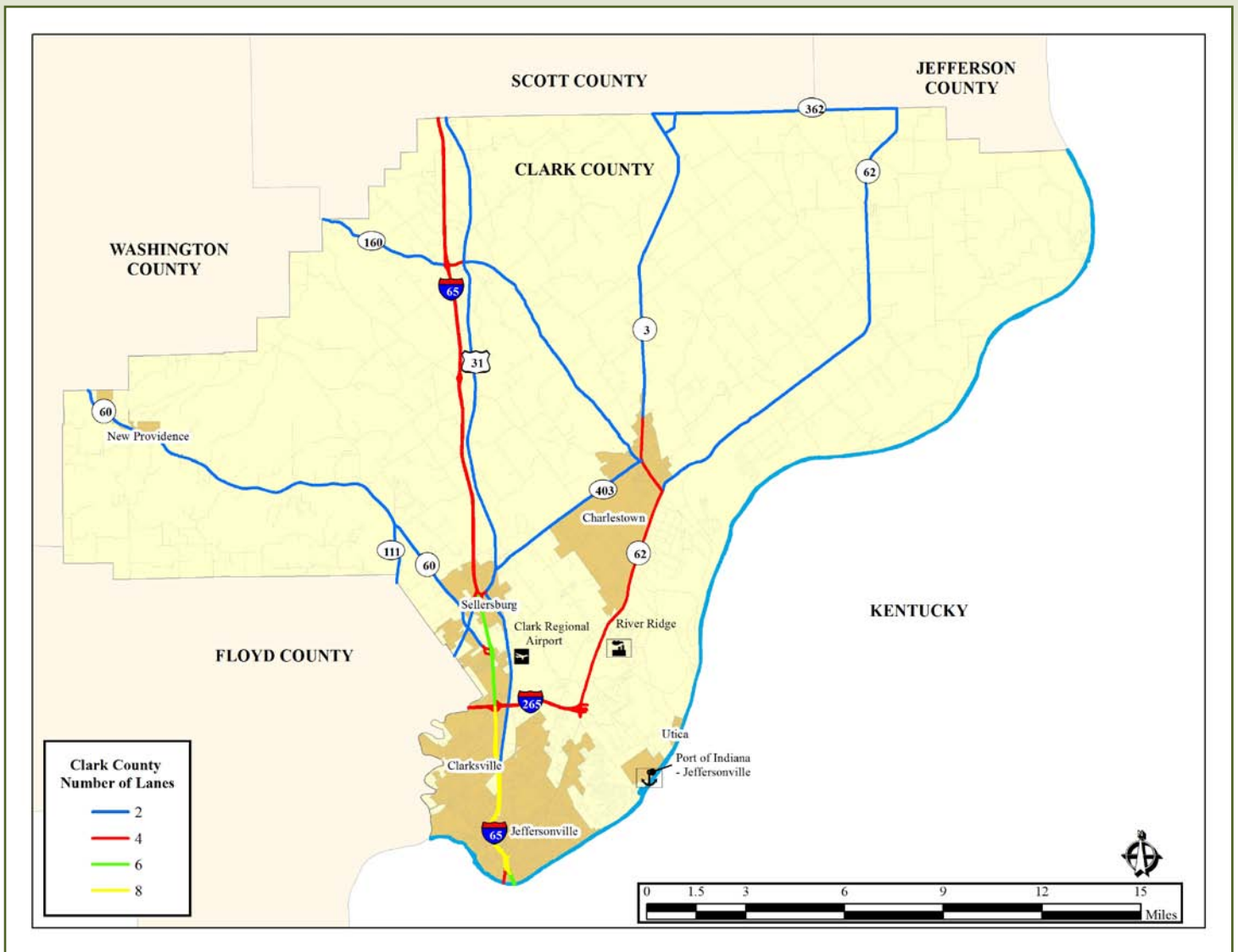


Figure B

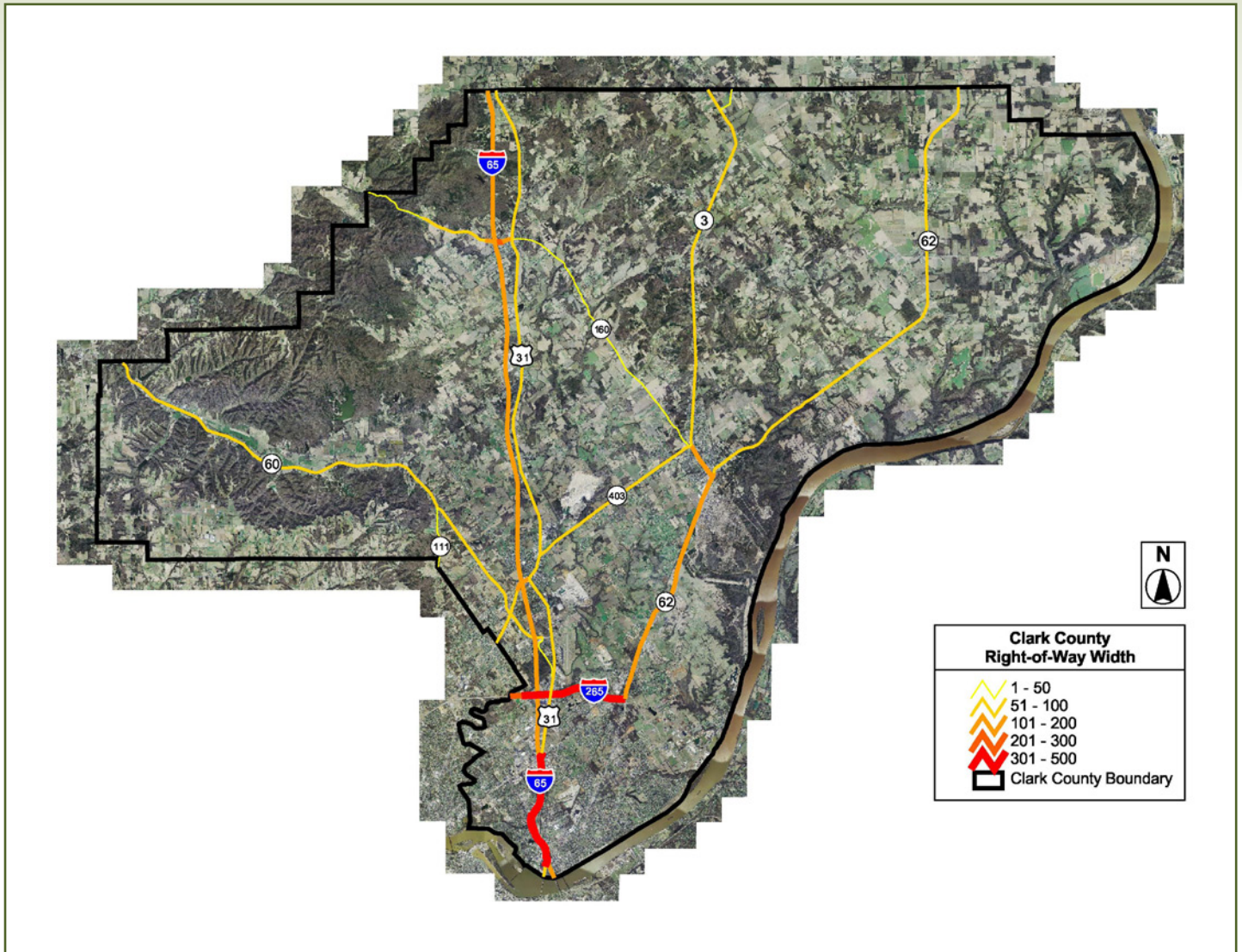


Figure C
From the Clark County Comprehensive Plan, 2007

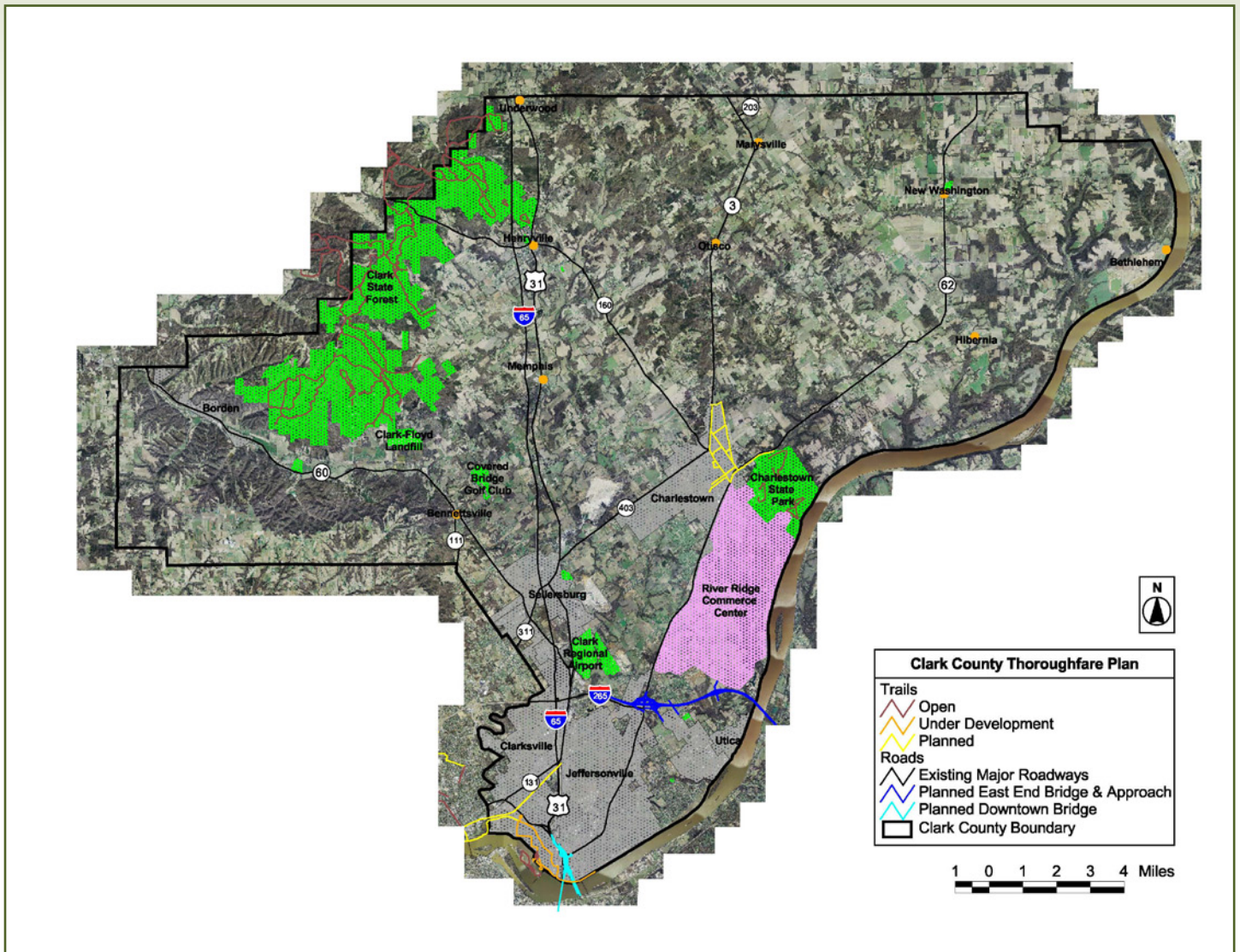


Figure D
From the Clark County Comprehensive Plan, 2007

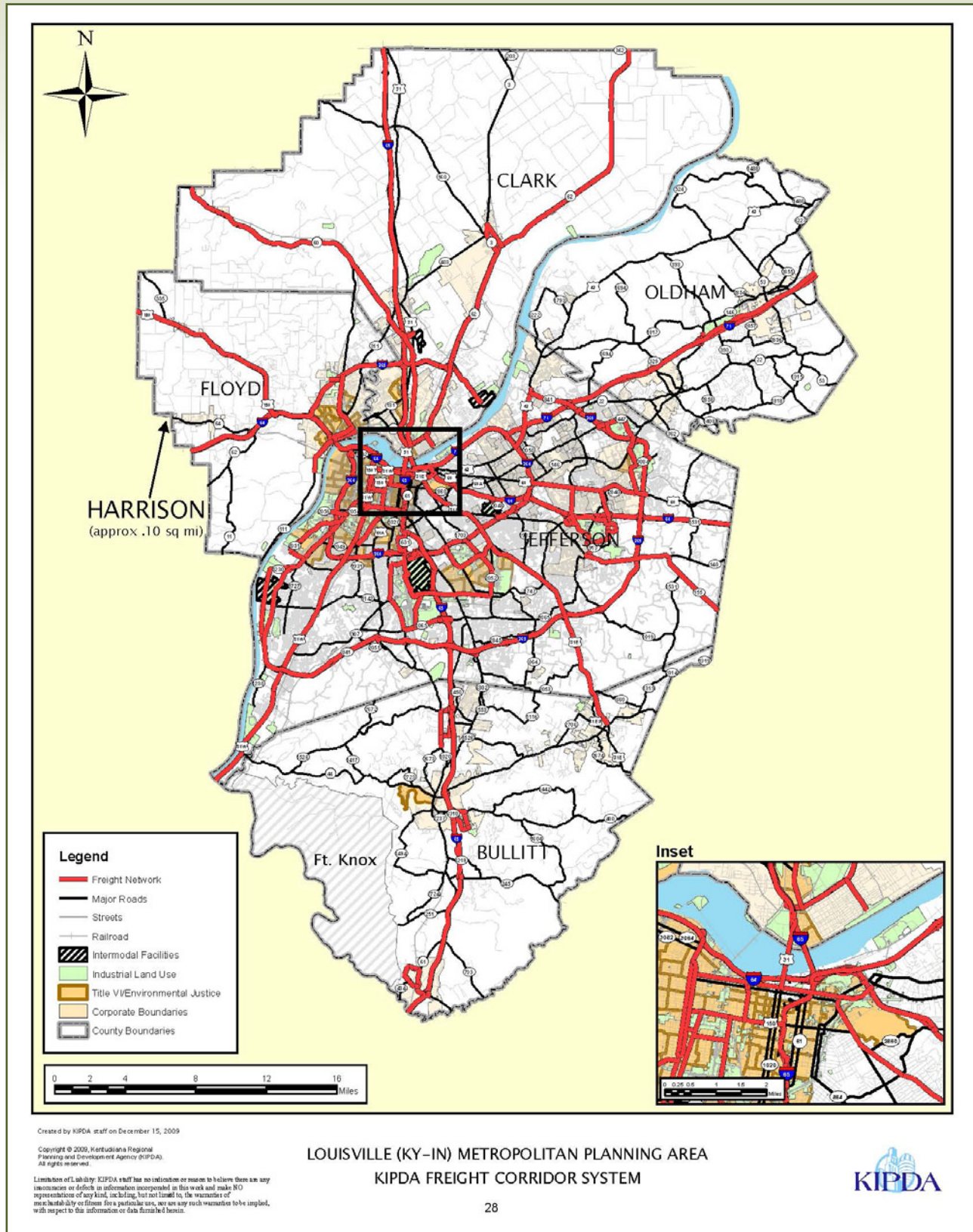


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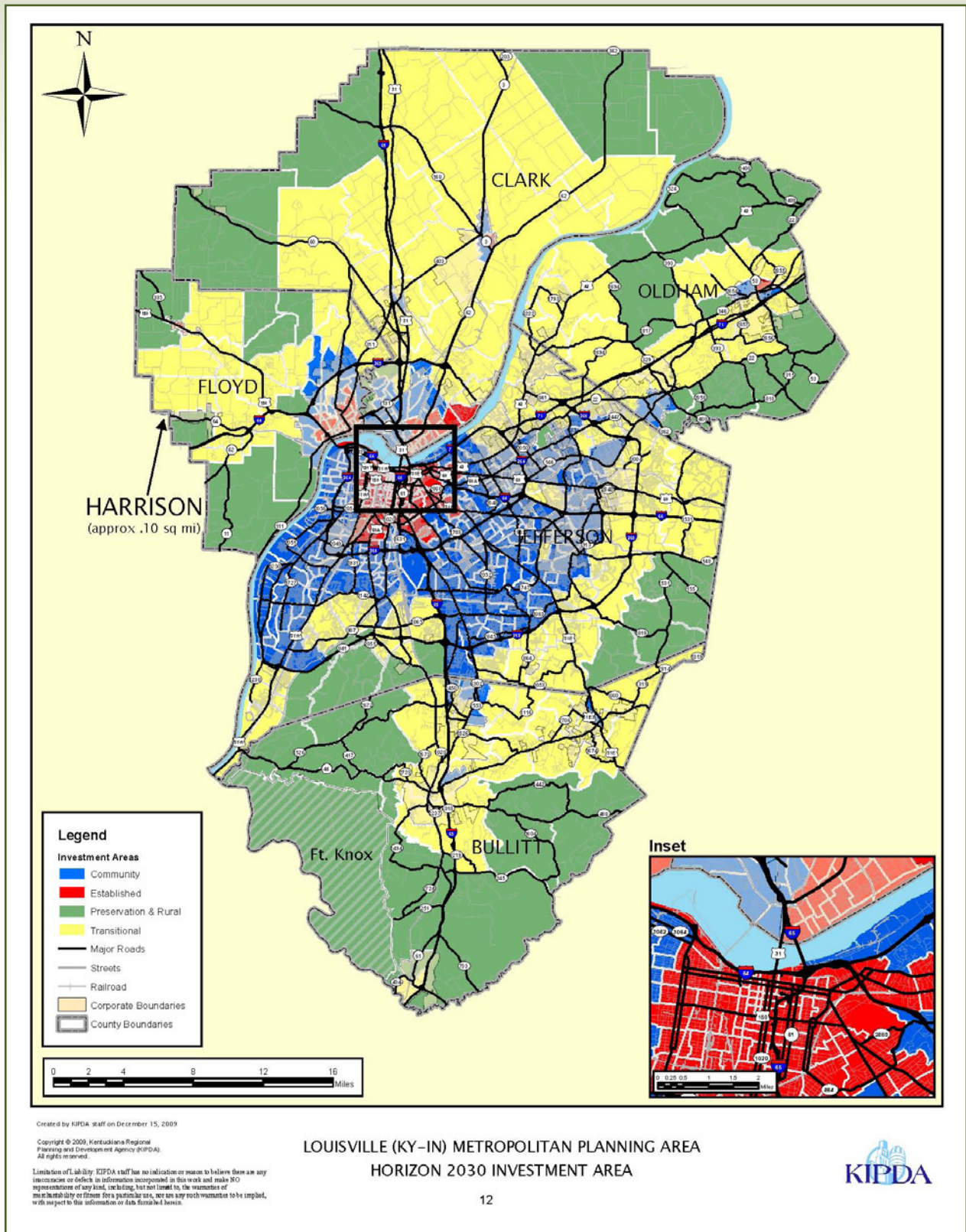


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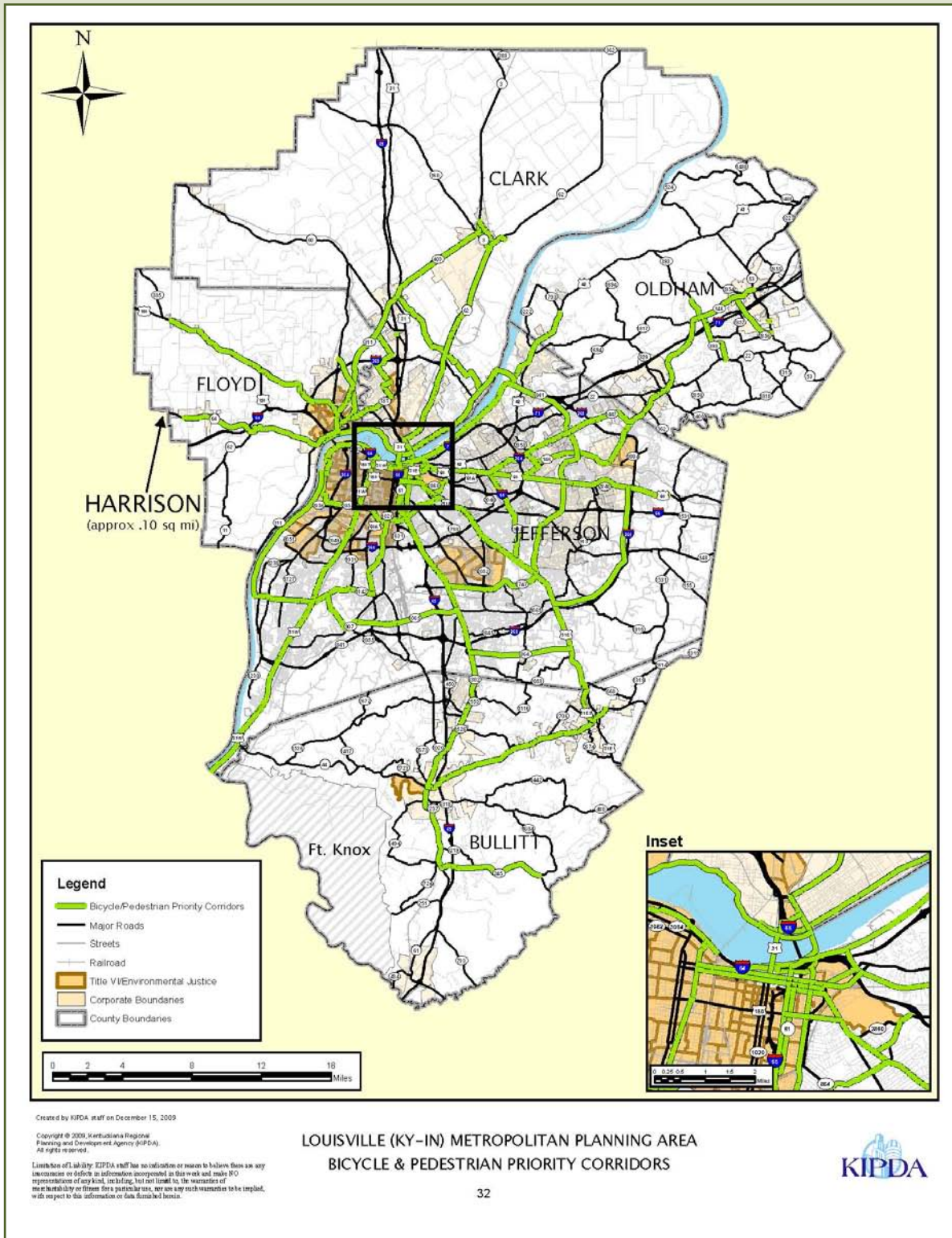


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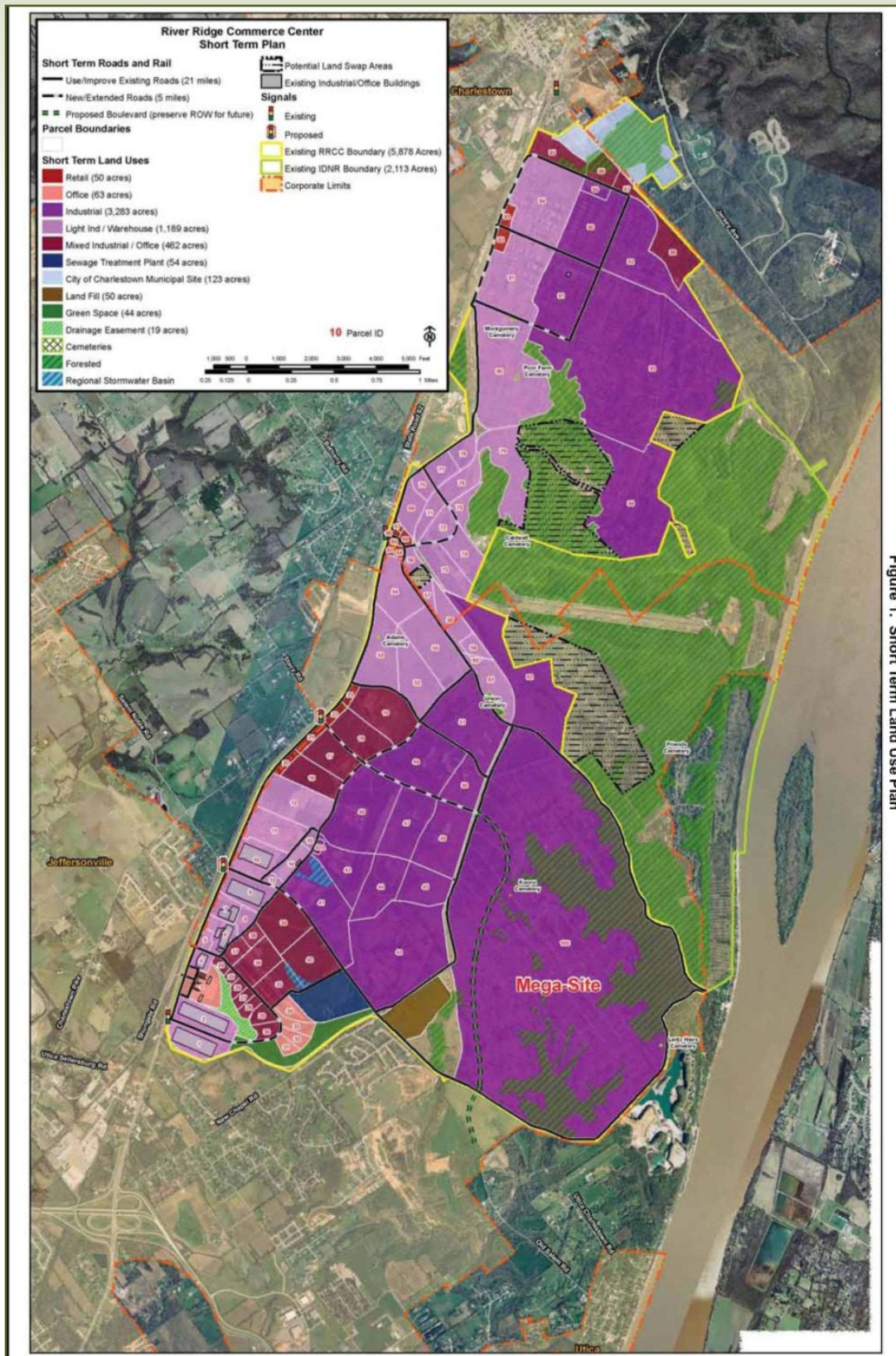


Figure 1. Short Term Land Use Plan

Figure H
From the River Ridge Commerce Center Master Plan Update, 2010

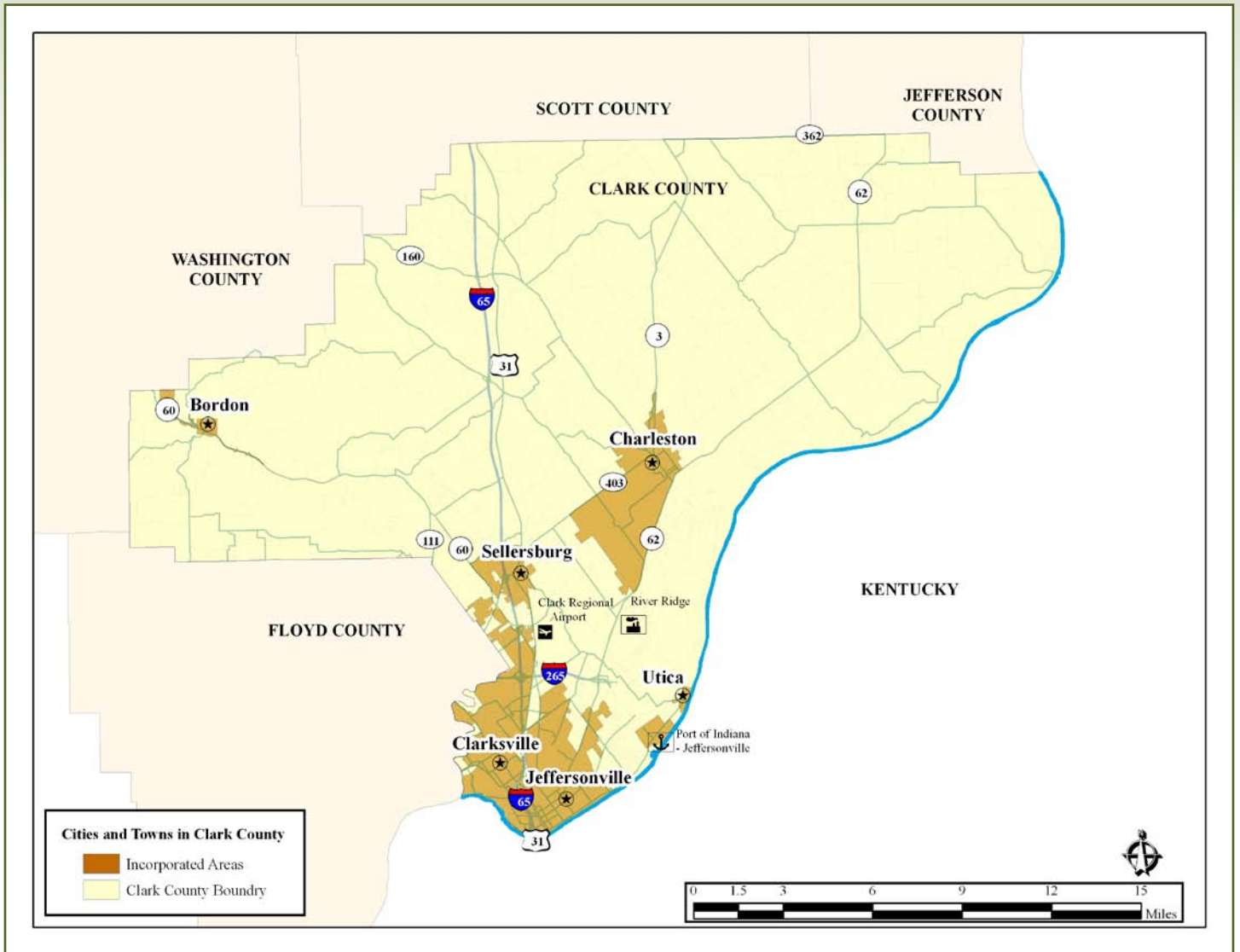


Figure I

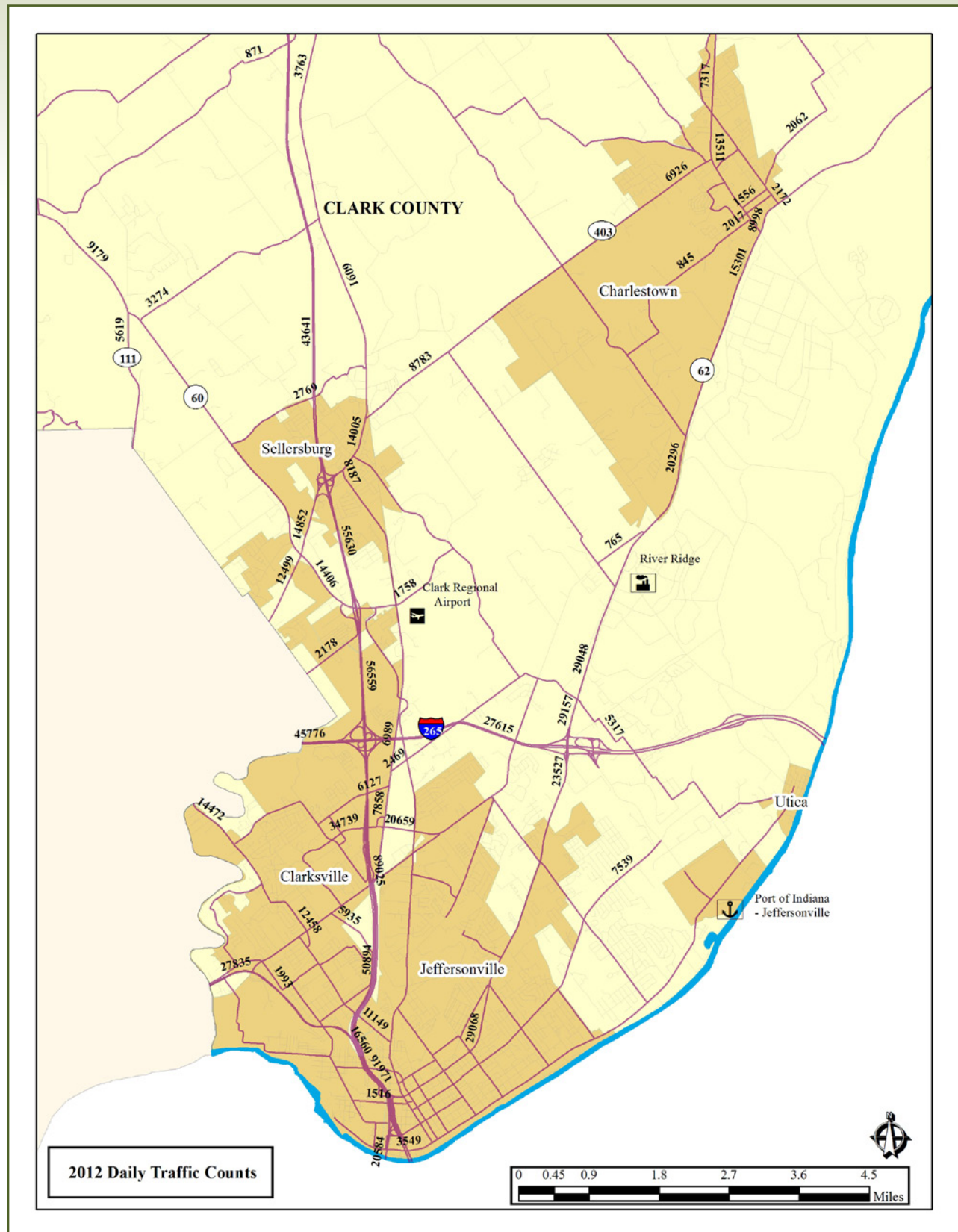


Figure K

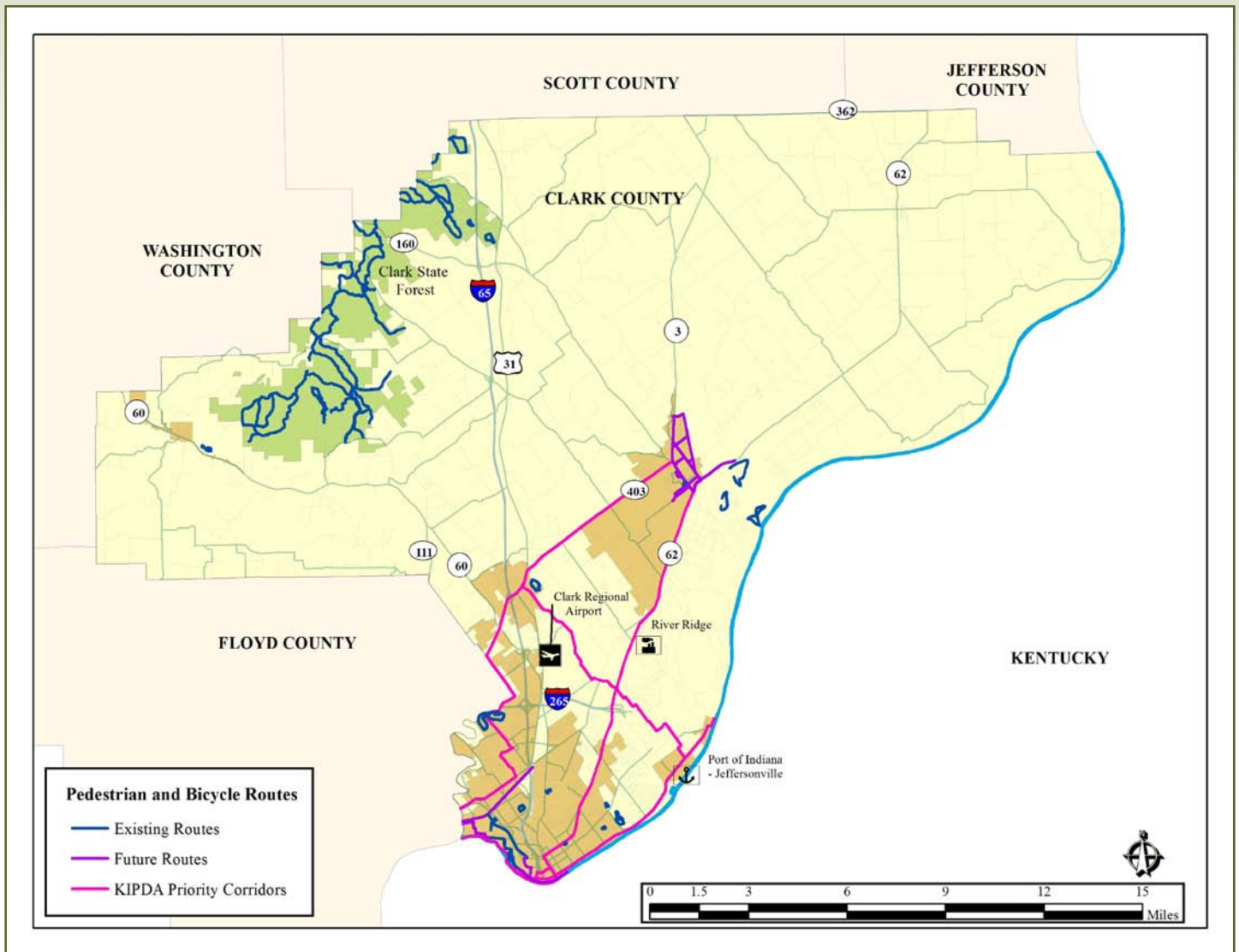


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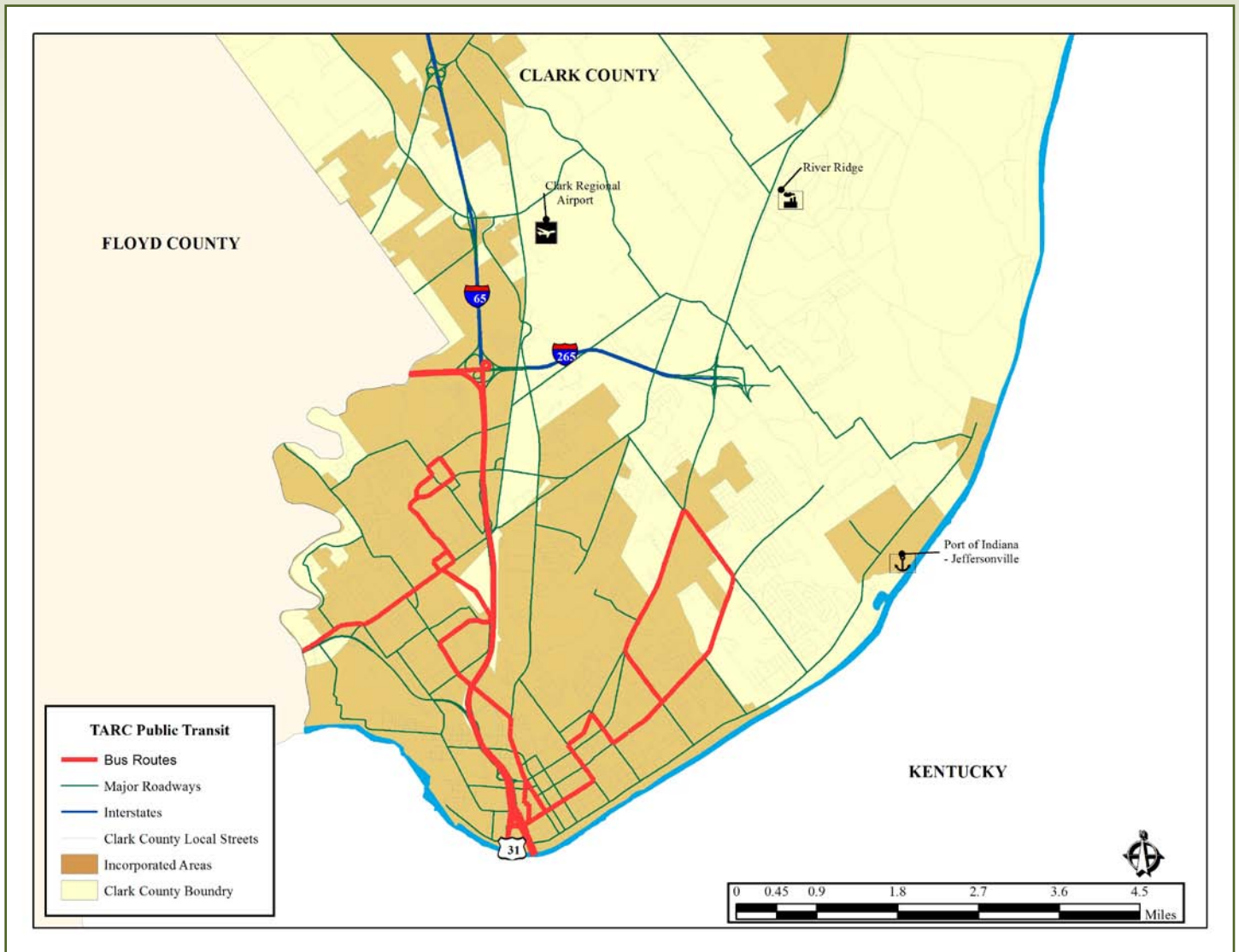


Figure M

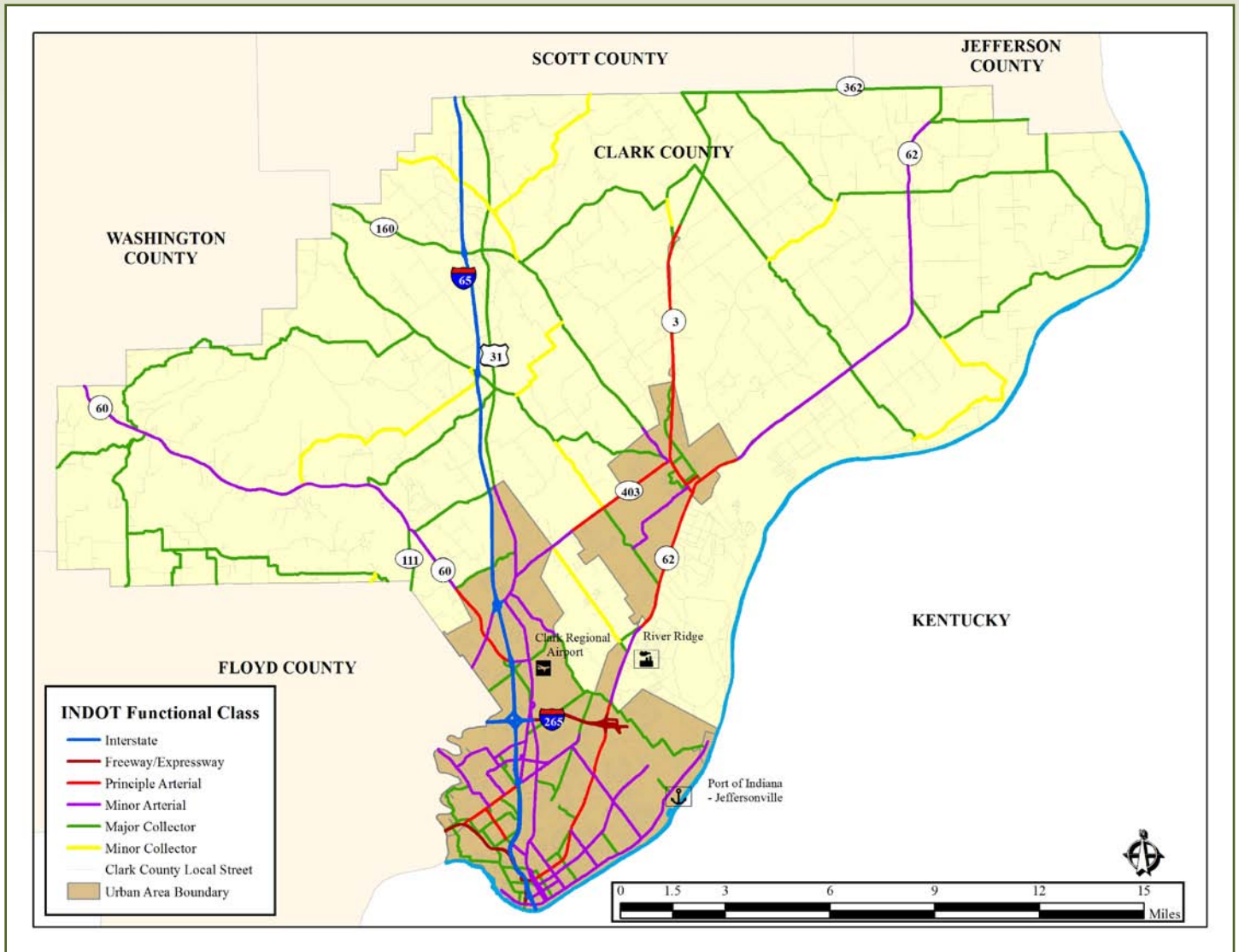


Figure N

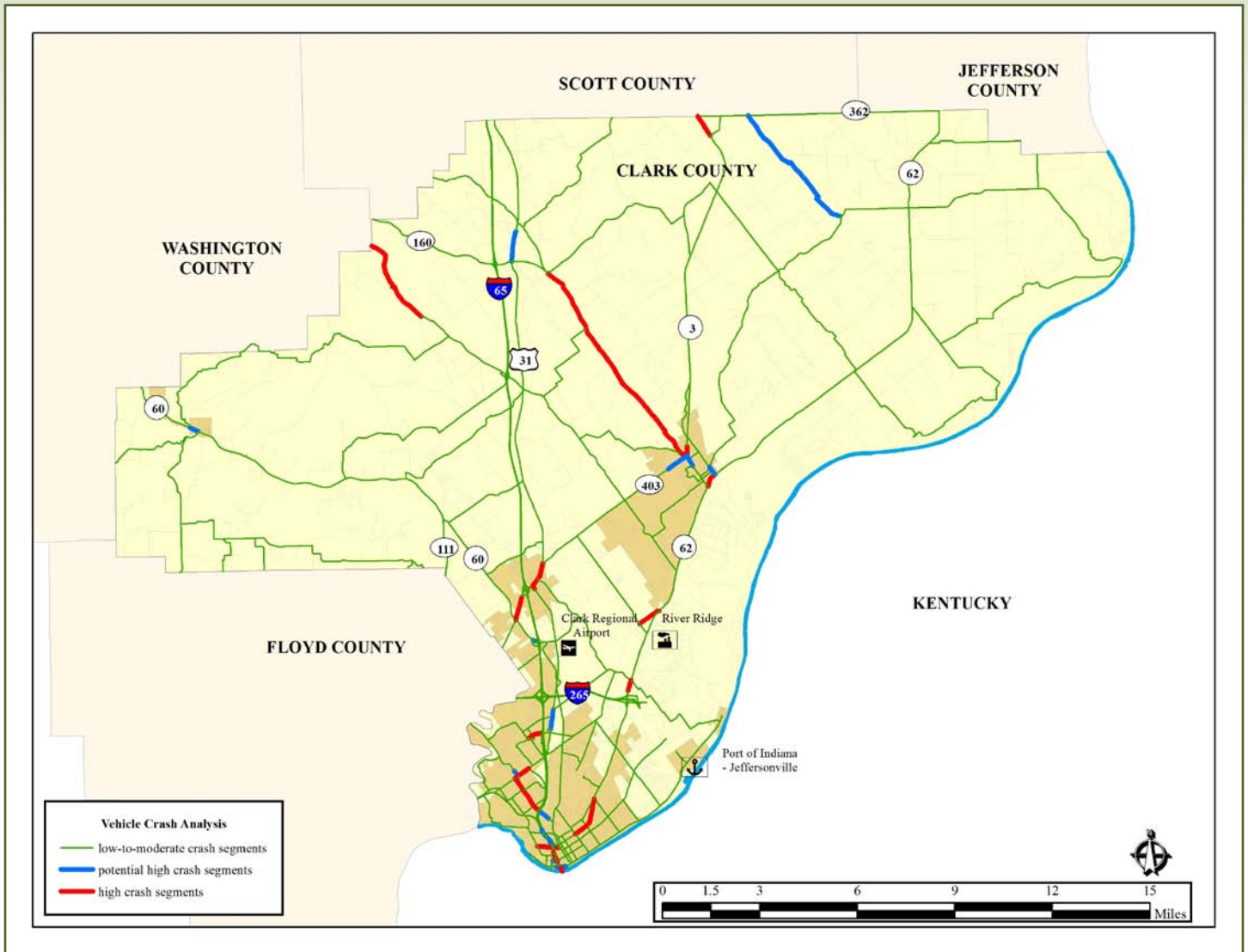


Figure O

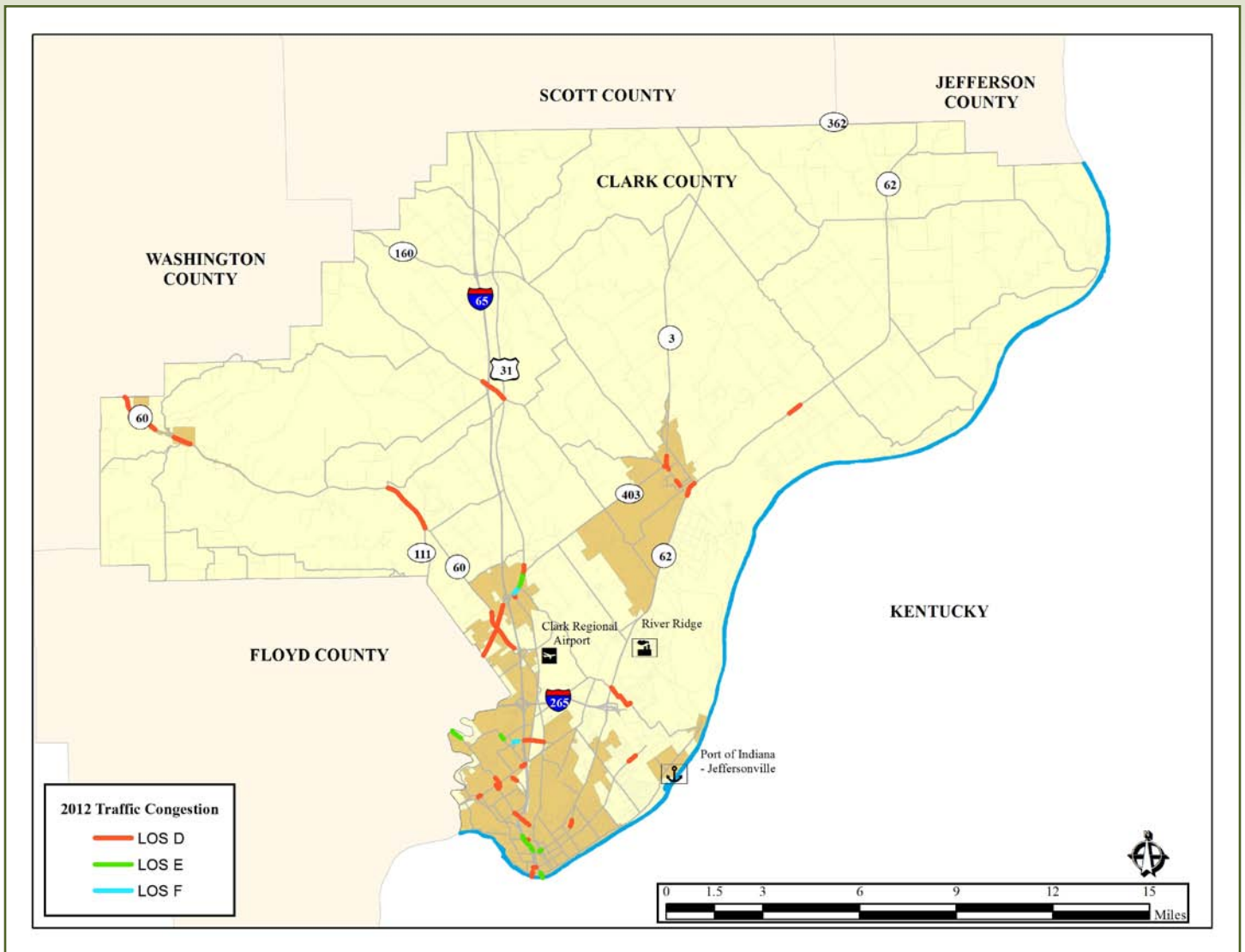


Figure P

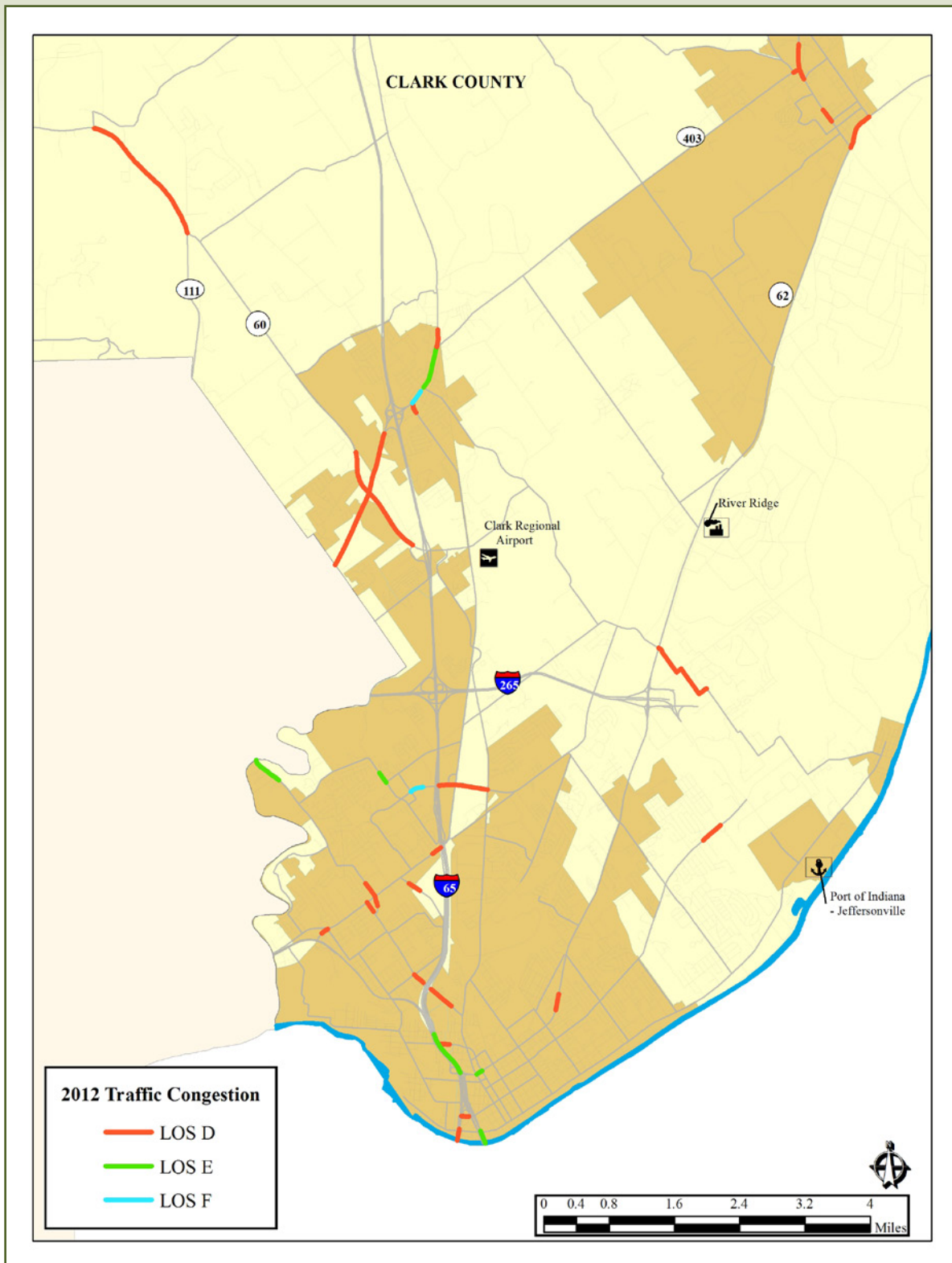


Figure Q

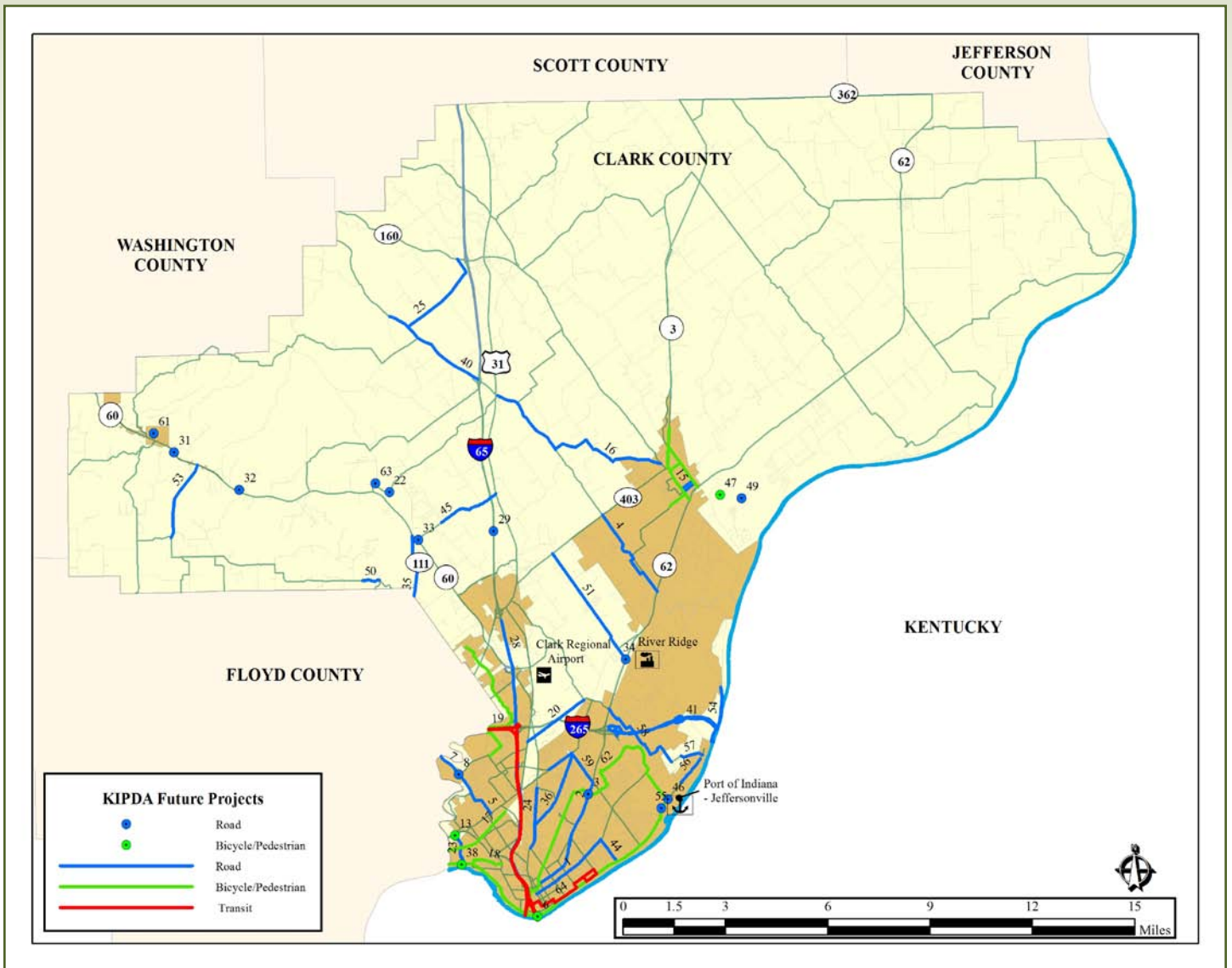


Figure R

Number	Project	Description	Estimated Open to Public Year	Cost	Pedestrian/Bicycle Facility
1	8th Street	Reconstruct 8th Street as a 2 lane road from Spring Street to Perrin Lane.	2020	\$3,480,193	Sidewalks
2	10th Street	Widen 10th Street from 4 to 7 lanes (3 travel lanes in each direction plus a center turn lane) from Reeds Lane to Allison Lane.	2020	\$3,700,611	
3	10th Street	Signalize the intersection and add turn lanes at Thompson Lane.	2011	\$416,000	
4	Bethany Road	Widen existing lanes (no new travel lanes) on Bethany Road, provide turning lanes at 4 intersections and realign vertical/horizontal curves from IN 62 to IN 403.	2016	\$4,834,661	
5	Blackiston Mill Road	Reconstruct and widen Blackiston Mill Road from 2 to 4 lanes from Lewis and Clark Parkway to Blackiston View Drive.	2020	\$5,000,000	
6	Big Four Bicycle & Pedestrian Bridge	Construction of a ramp at the north end of the Big Four Bridge providing access to the bicycle and pedestrian bridge.	2012	\$7,250,000	Shared use path
7	Blackiston Mill Road	"Reconstruct and widen Blackiston Mill Road from 2 to 3 lanes (3rd lane will be a center turn lane) from Blackiston View Drive to Gutford Road."	2030	\$20,000,000	
8	Blackiston Mill Road	Intersection improvements at Blackiston Mill Road and Potters Lane.	2012	\$900,000	Sidewalks
13	Brown Station Way Pedestrian Bridge Rehabilitation	Rehabilitation of existing pedestrian bridge over major arterial highway.	2010	\$200,000	Pedestrian facilities
15	Charlestown Inner City Multi-Modal Facility	Construction of a multi-modal facility for pedestrians and bicyclists.	2010	\$1,000,000	Shared use path
16	Charlestown-Memphis Road	Reconstruct Charlestown-Memphis Road as a 2 lane (no additional lanes) road from US 31 to IN 160.	2021	\$7,081,489	
17	Clarksville CSX Rail Trail	Construct a pedestrian/bicycle trail on 3.8 miles of track abandoned by CSX.	2012	\$2,163,200	Shared use path
18	Clarksville Levee Trail Extension	Construct and pave a pedestrian/bicycle trail on top of the earthen levee between Francis Avenue and the abandoned CSX rail corridor.	2010	\$315,000	Bicycle and pedestrian facilities
19	Clarksville North Trail	Construct a pedestrian/bicycle trail on 3.75 miles of sewer right-of-way to connect neighborhoods in north Clarksville.	2012	\$2,352,480	Shared use path and other amenities
20	Cooper Lane	Reconstruct Cooper Lane as a 2 lane road (no additional lanes) from US 31 to Utica-Sellersburg Road.	2013	\$4,049,510	
22	Ebenezer Church Road	Railroad grade crossing improvement at Ebenezer Church Road and CSX Railroad near Borden.	2010	\$225,000	

APPENDICES

23	Emery Crossing Road	Reconstruct Emery Crossing Road as a 2 lane (no additional lanes) road from Harrison Avenue to Browns Station Way.	2020	\$1,924,318	
24	Hamburg Pike	Reconstruct Hamburg Pike as a two-lane road from Dutch Lane to Charlestown-New Albany Pike.	2012	\$8,800,000	Wide outside curb lane
25	Henryville-Blue Lick Road	Reconstruct Henryville-Blue Lick Road as a 2 lane road	2020	\$13,322,198.00	
27	I-65 Kennedy Bridge	Maintenance and repair of I-65 bridge over the Ohio River.	2011	\$457,600	
28	I-65	Pavement resurfacing on I-65 from IN 62 to 0.26 mi south of IN 311.	2015	\$1,272,279	
29	I-65	Rehabilitate bridge on I-65.	2011	\$41,600	
30	I-265	Pavement rehabilitation of I-265 from I-64 to I-65.	2014	\$7,019,151	
31	IN 60	Replace bridge on IN 60 over Muddy Fork Creek 4.8 miles east of IN 335.	2012	\$1,058,886	
32	IN 60	Intersection improvement at Dow Knob Road.	2017	\$223,875	
33	IN 60	Intersection improvement at Perry Crossing Road including the addition of turn lanes.	2017	\$319,765	
34	IN 62	Replace traffic signal at IN 62 and Salem Noble Road.	2011	\$250,000	
35	IN 111	Widen IN 111 from 2 to 5 lanes (5th lane will be a center turn lane) from Klerner Lane to Chapel Road.	2013	\$30,613,045	
36	Jeffersonville-Charlestown Pike	Reconstruct Jeffersonville-Charlestown Pike (Charlestown Pike).	2016	\$3,427,920	
38	Lewis & Clark Trail	Construction of a bicycle and pedestrian trail from George Rogers State Park to Loop Island Wetlands.	2012	\$551,616	
39	Main Street	Reconstruct Main Street as a 2-lane road.	2015	\$1,102,440	Sidewalks
40	Memphis-Blue Lick Road	Reconstruct Memphis-Blue Lick Road as a 2 lane road with turning lanes at 6 locations.	2019	\$11,386,494	
41	Ohio River Bridges	Construction of 2 new Ohio River bridges, 1 in the downtown (I-65) corridor and 1 in the far east (I-265) corridor.	2017	\$1,166,900,000	
42	Ohio River Greenway	Construct 2 lane road and bicycle and pedestrian path from New Albany to Jeffersonville along the Ohio River.	2010	\$3,200,000	Bicycle and pedestrian facilities
43	Ohio River Greenway	Construct pedestrian walkway along Restaurant Row by the Ohio River in Jeffersonville.	2012	\$1,081,600	Sidewalks
44	Perrin Lane	Reconstruct Perrin Lane as a 2 lane road.	2016	\$1,328,585	
45	Perry Crossing Road	Reconstruct Perry Crossing Road as a 2 lane road with left turn lanes from Covered Bridge Country Club to US 31.	2010	\$4,000,000	
46	Port Road	Railroad protection improvement at MG Rail, Inc. at Port Road in Jeffersonville, Indiana.	2010	\$265,000	

APPENDICES

47	Porterville Iron Bridge	Relocate the Portersville Iron Bridge to Charlestown State Park.	2012	\$3,028,480	
48	Riverwalk	Riverwalk pedestrian walk and landscaping along the riverfront.	2015	\$618,060	Sidewalks and other amenities
49	Rose Island Amusement Park	Archaeological investigation, preservation and interpretive exhibits of the Rose Island Amusement Park located in Charlestown State Park.	2011	\$364,000	
50	Saint John Road	Reconstruct and realign Saint John Road as a 2 lane.	2010	\$2,731,040	
51	Salem-Nobel Road	Reconstruct Salem-Nobel Road as a 2 lane.	2012	\$12,900,000	
52	Southern Indiana Demo Express Bus Service & Park and Ride	"Express bus service between downtown Louisville and growing areas of Clark and Floyd counties and construction of park and ride lot in the vicinity of I-65 and I-265."	2012	\$1,043,798	
53	Star Hill Road	Construct Star Hill Road as new 2 lane road from Rake Road and Saint John Road via Koetter Hollow to SR 60.	2014	\$11,230,642	
54	Upper River Road Rehabilitation	Repave (mill, grind and replace with 1.5 inches of pavement) from 2nd Street to Patrol Road.	2010	\$51,200	
55	Utica Pike Clark County Bridge No. 3	Replace County Bridge No. 3 on Utica Pike over Lancassange Creek.	2011	\$1,248,000	
56	Utica Pike Rehabilitation	Repave from the Jeffersonville city limit to the bridge in Utica.	2010	\$95,600	
57	Utica Sellersburg Road Rehabilitation	Repave from the bridge to Utica Pike.	2010	\$63,800	
58	Utica-Sellersburg Road	Reconstruct Utica-Sellersburg Road as a 2 lane road with turning lanes at 3 intersections.	2015	\$7,543,248	
59	Veterans Parkway Phase 2	Phase 2: Widen Charlestown-New Albany Pike from 2 to 4 lanes and widen Holman Lane from 2 to 4 lanes.	2015	\$3,400,000	
60	Water Street	Reconstruct Water Street existing pavement as a 2-lane road (no additional lanes), sidewalk, and curb and gutter.	2010	\$1,195,700	
61	West Street	Railroad protection improvement at CSX railroad at West Street in Borden, Indiana.	2011	\$275,600	
62	Wheels and Heels Trail	A fourteen mile long pedway interconnected system of trails for bicycle and pedestrians.	2014	\$2,632,182	
63	Wilson Switch Road	Railroad grade crossing improvements at Ebenezer Church Road and CSX Railroad near Borden.	2010	\$225,000	
64	TARC Jeffersonville Riverfront Transit	New express bus service from downtown Louisville to Jeffersonville for employees who work along Jeffersonville's riverfront.	2014	\$395,314	

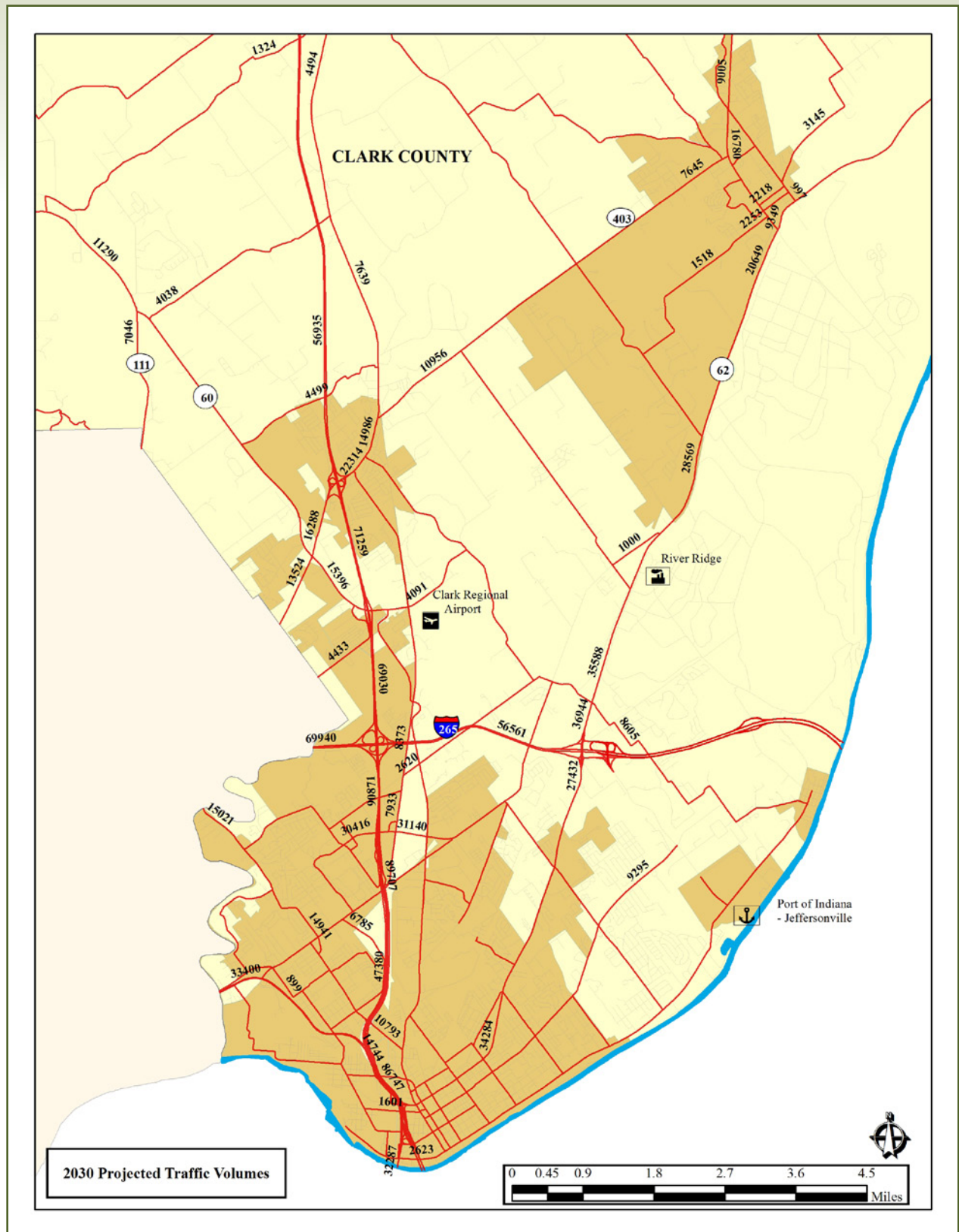


Figure T

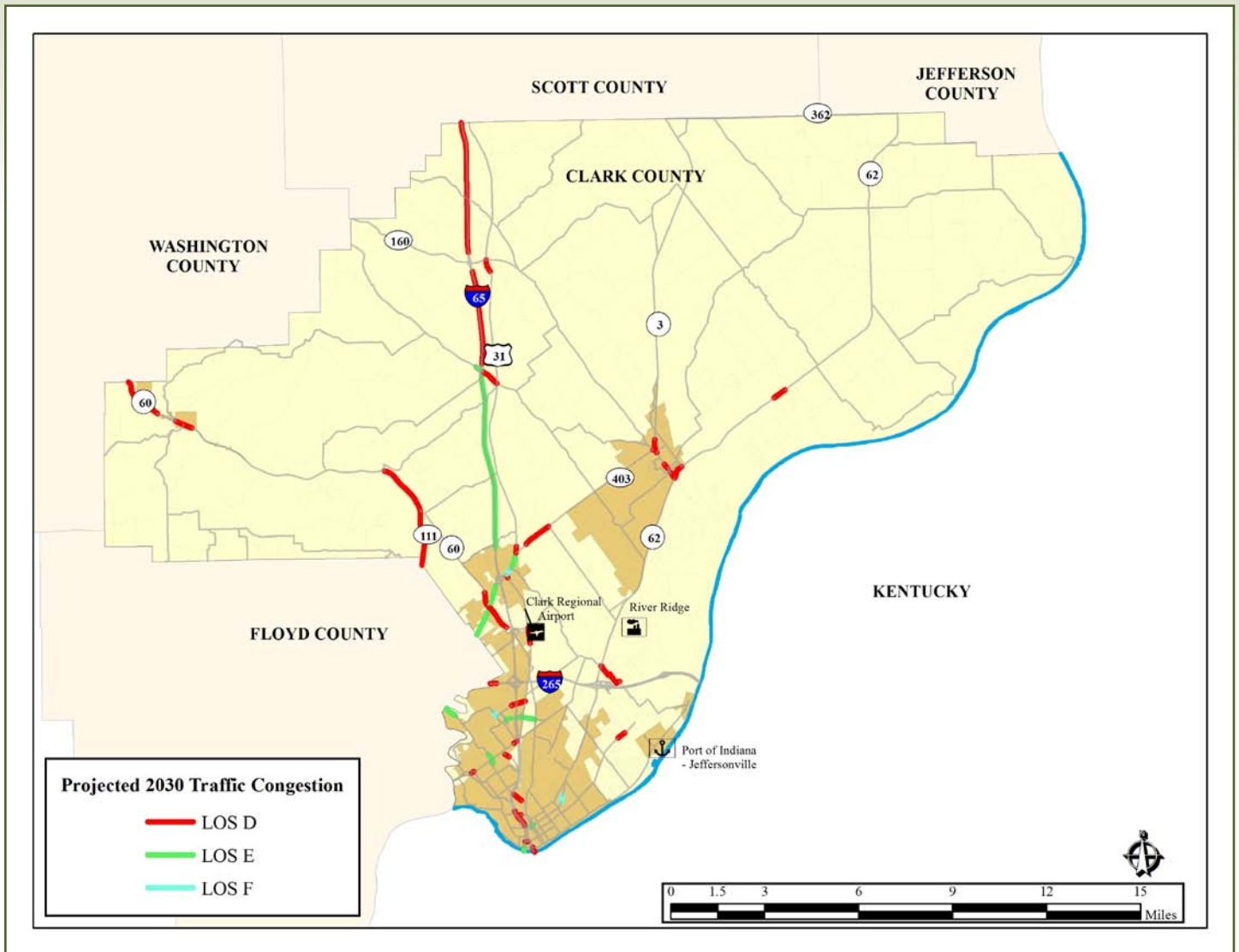


Figure U

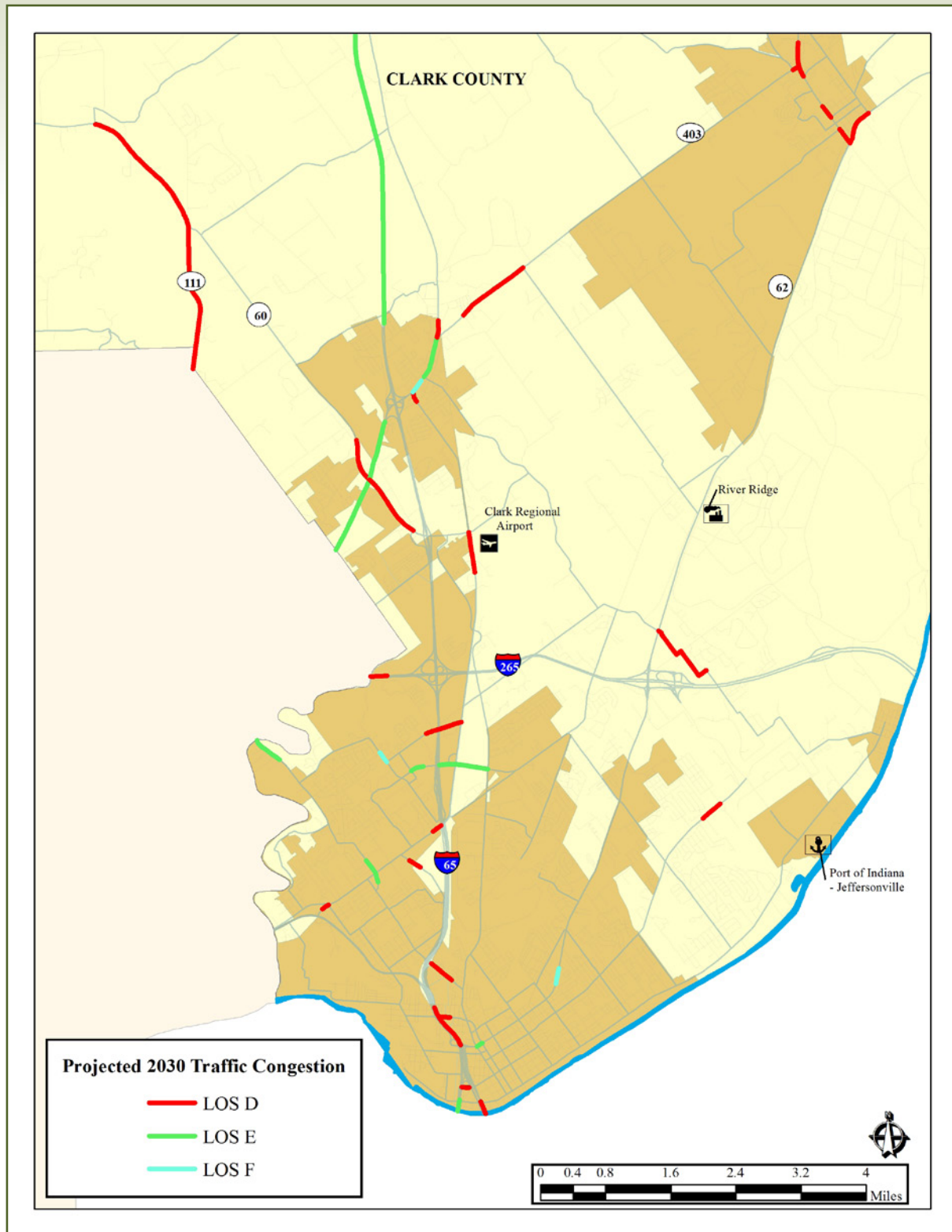


Figure V