



HOPKINS COUNTY COMPREHENSIVE PLAN

Transportation

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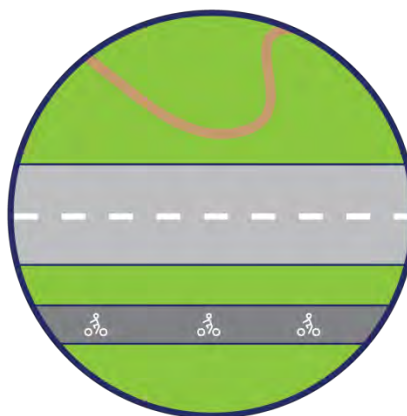
CHAPTER 4

TRANSPORTATION

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This chapter outlines the transportation systems and strategies for Hopkins County.

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■ The Hopkins County transportation network is closely linked to the type and quality of development within the community. The transit network will influence the specific land uses because developments require specific types of access – such as goods and material delivery in commercial and industrial areas. As such, it is important for the comprehensive plan to assess the current transportation network and determine future needs based on the proposed future land uses. The transportation element of the comprehensive plan will evaluate the framework for the development of an integrated plan that meets all the transportation needs throughout the county.



Photo: CSX traveling on railroad

EXISTING NETWORK & STUDIES

The existing surface transportation network in Hopkins County consists of over 1200 miles of roadway. This system is maintained by multiple agencies with the State responsible for nearly 500 miles, Hopkins County responsible for nearly 450 miles, local municipalities responsible for nearly 200 miles, and the remaining roads (50 miles) are managed by private owners or the school system.

In 2014, the Pennyrile Area Development District, the regional transportation planning agency, issued the Regional Transportation Asset Inventory which includes an assessment of Hopkins County. The report identifies several key items for the evaluation of the network including: adequacy ratings comprised of three elements (condition, safety and service); major traffic generators; major freight users; intermodal connections; truck parking inventory; and a list of rail yards. The purpose of this report is to assist in capturing needs within the system for the possible inclusion into the Kentucky Transportation Cabinet (KYTC) Six-Year Highway Plan; the plan determines state and federal funding for roadway projects. Following are maps showing the Adequacy Ratings for Hopkins County and Madisonville as well as the Major Traffic Generators for Hopkins County.

ADEQUACY RATING PERCENTILE

Ratings with a higher percentage indicate roads which are in better condition in relationship to condition, safety and service.

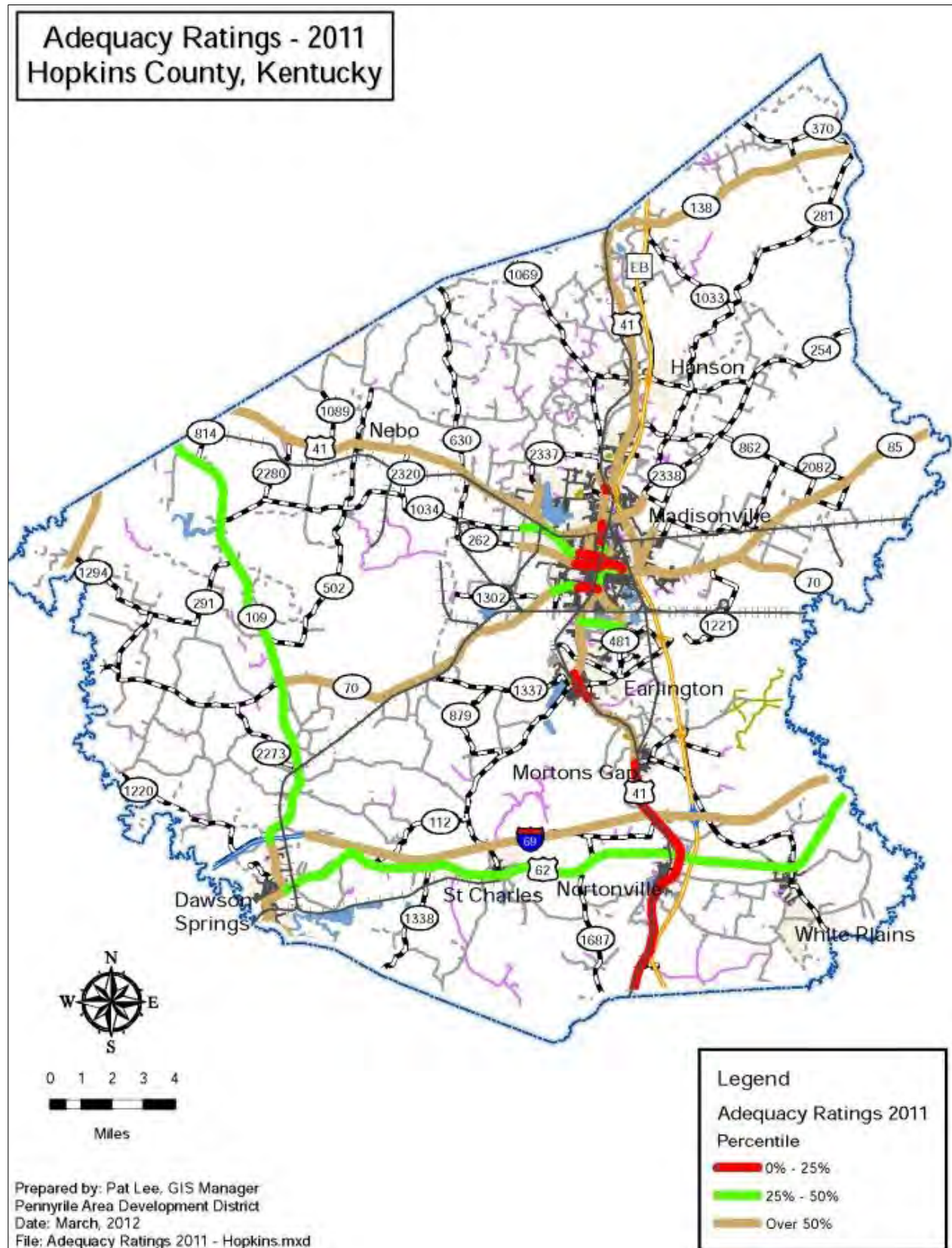


Figure: 2011 Adequacy Ratings for Hopkins County

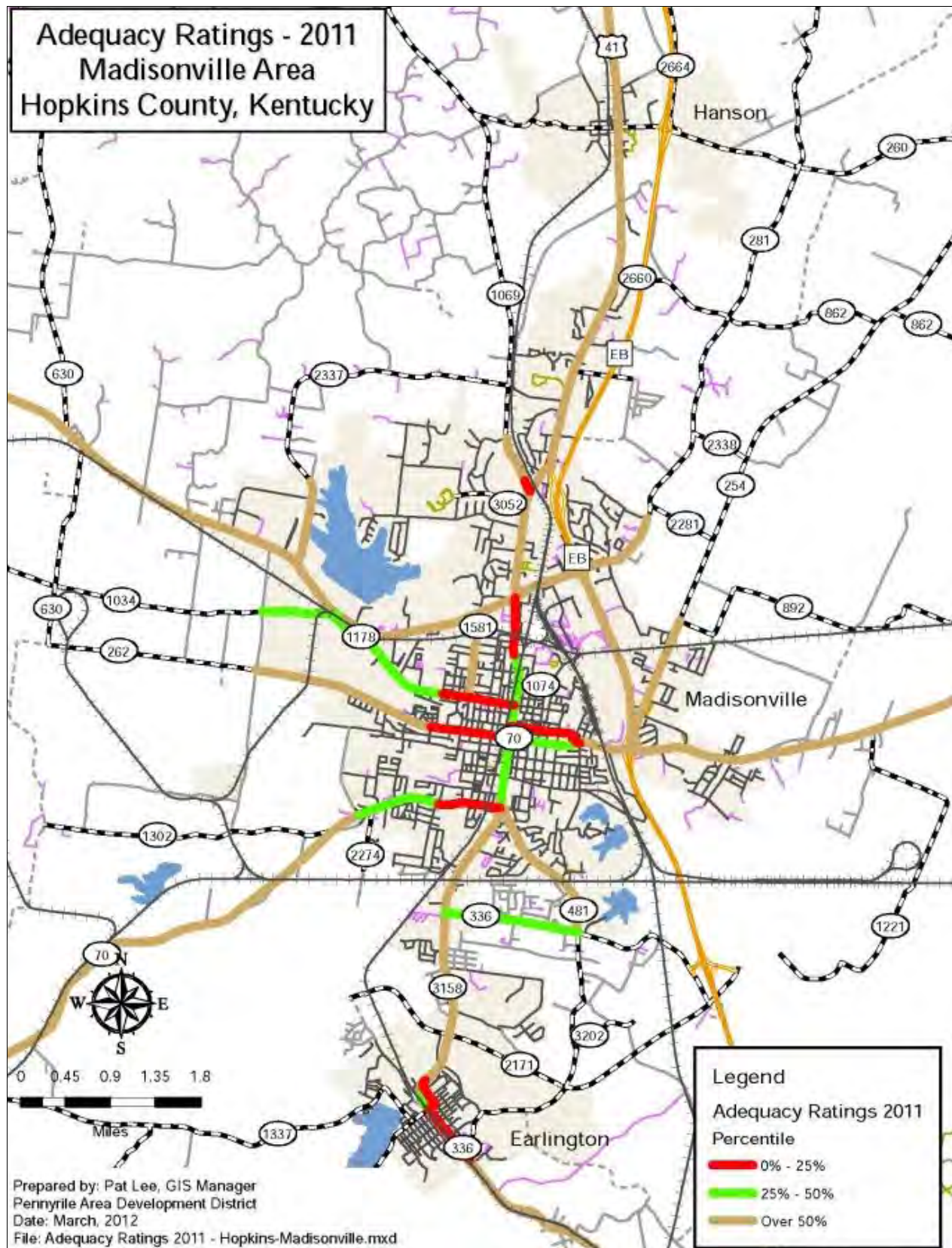
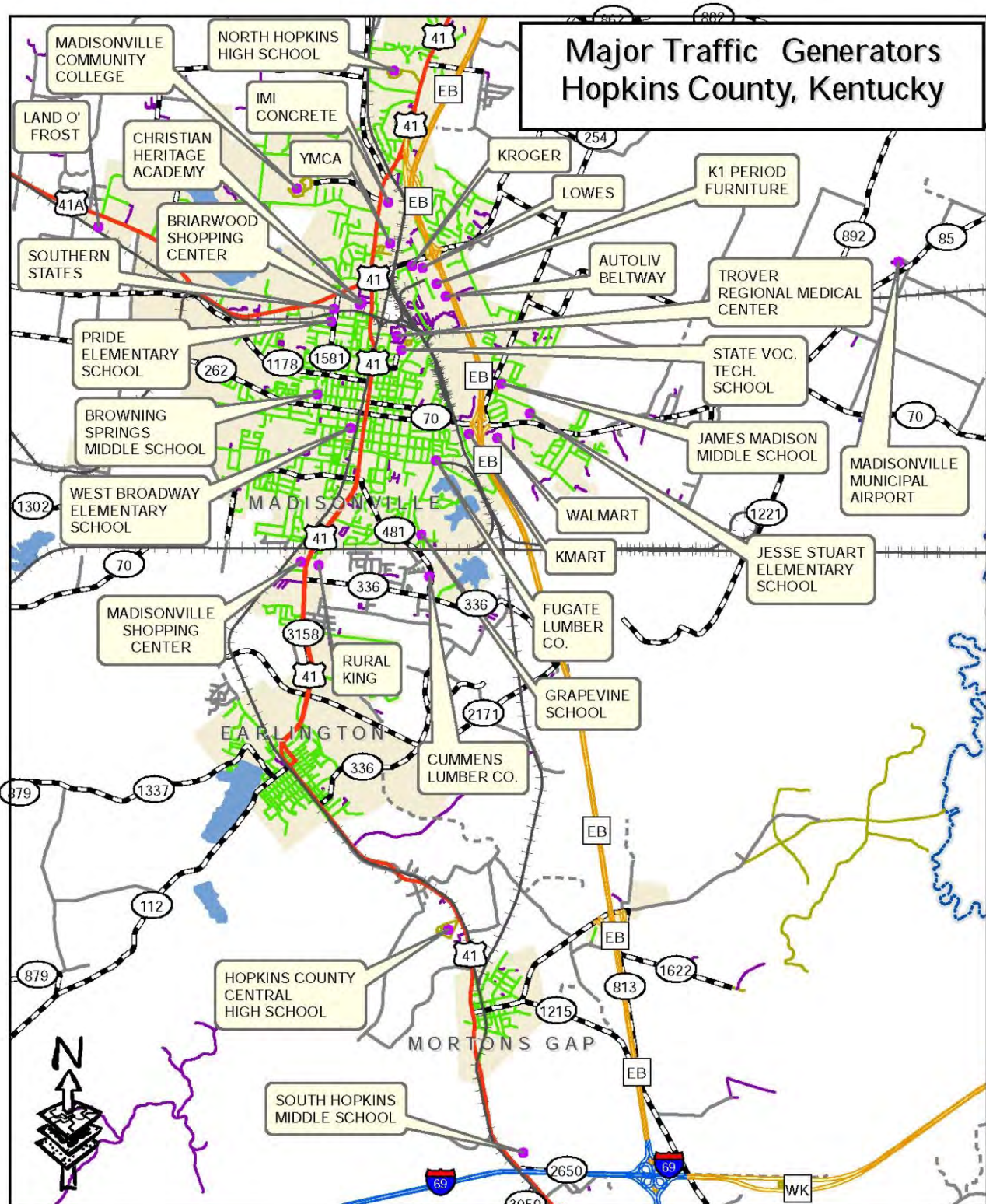


Figure: 2011 Adequacy Ratings for Madisonville



Prepared By: Pat Lee, GIS Manager
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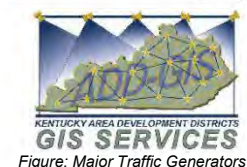
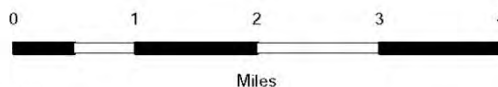


Figure: Major Traffic Generators

INTERSTATE 69 SUMMARY

In 2005, KYTC updated the master plan for the I-69 corridor passing through this region. The report titled I-69: Eddyville to Henderson Corridor Planning Study details the necessary improvements needed to convert the existing Wendell H. Ford (Western Kentucky) Parkway and Edward T. Breathitt (Pennyrile) Parkway to meet federal interstate standards. The implementation of this plan is currently on-going with new construction occurring in 2014 at several of the major interchanges near Dawson Springs and at the intersection of the two parkways. Improvements to the other interchanges are scheduled to occur within the next four years.

PRIORITY CORRIDOR

Priority corridors are Congressionally designated as significant to the US.

I-69 Project Background

I-69 was one of several priority corridors identified by the U.S. Congress as part of the federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and continued in subsequent federal transportation legislation.

- A national feasibility study was completed in 1995 by the Federal Highway Administration, which concluded that the future construction of I-69 from Canada to Mexico was economically feasible.
- The Corridor 18 Special Issues Study, completed in 1997, identified a Representative Corridor along the Parkway system in Kentucky, which best serves the purposes of Corridor 18 and yields the most benefits relative to facility costs.
- In recent years, KYTC has a goal to utilize as much of the existing infrastructure as possible. Thus, I-66 and I-69, would be routed along the state's existing Parkway system to the maximum extent possible.
- This KYTC study has integrated the national I-69 goals with the local needs and concerns identified for the Eddyville to Henderson segment. Preliminary project goals have been established to help form the basis of the project purpose and need for this I-69 Section of Independent Utility (SIU), as follows:
 - Maximize the use of the existing Parkways;
 - Serve local industry; and
 - Provide an improved facility for increasing truck traffic.

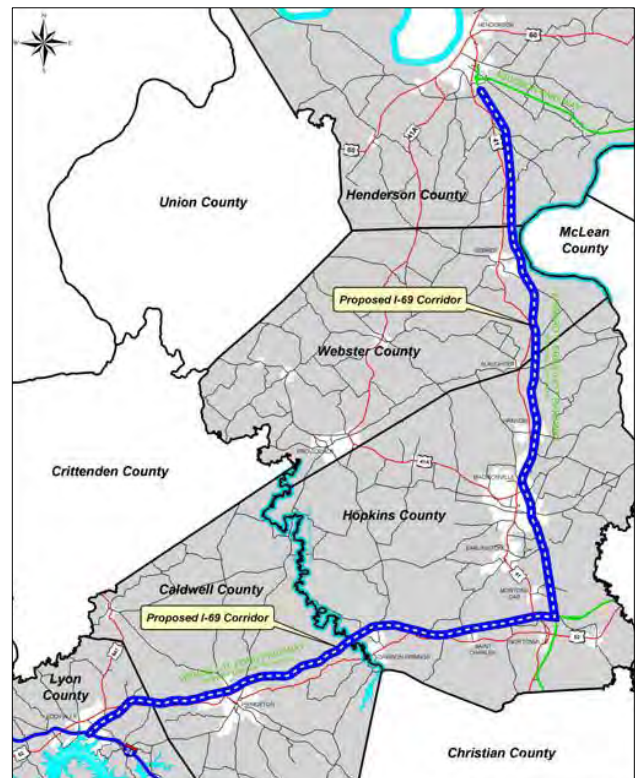


Figure: I-69 Alignment
Source: I-69: Eddyville To Henderson Corridor Planning Study Executive Summary;
Kentucky Transportation Cabinet - Division of Planning; March 2005

INTERSTATE 66 SUMMARY

In 1995, Section 1105(c)(3) of ISTEA was amended and in Kentucky listed I-66 as centered on the cities of Pikeville, Jenkins, Hazard, London, Somerset, Columbia, Bowling Green, Hopkinsville, Benton and Paducah. The Southern Kentucky Corridor (I-66) would connect with the proposed King Coal Highway (also called I-73/74 North-South Corridor) in West Virginia. Studies were performed in 2004 and 2005 by KYTC focusing on the Western Kentucky portion of the project. Their determination concluded that adequate federal and local funding were not available to implement the project at this time. In the event the project starts to move forward again it will likely utilize the existing Parkway Corridor System and proceed with necessary improvements similarly to the I-69 process.

US 41A SUMMARY

In May of 2012, KYTC released the scoping study for the US 41A - Kingdom Hall Road to KY 670 improvements. The defined limits for this study extend from Kingdom Hall Road (MP 3.426) just west of Madisonville in Hopkins County to KY 670 (MP 1.324) in Webster County, a distance of 11.176 miles. For practical reasons detailed in the full report, this study also included the 800-foot section from Kingdom Hall Road east to Industrial Road. KYTC's purpose of this project was to:

- Provide an improved connector for Webster County to Madisonville
- Improve access to the Pennyrile / Breathitt Parkway
- Provide access to Future I-69

US 41A between Madisonville and Providence is a two-lane rural minor arterial roadway; it is included on the National Truck Network but not on the National Highway System. Work, shopping, freight shipments, higher education, and recreation trips constitute much of the travel on this route.

Issues along the study corridor include sight distance restrictions; narrow lanes and shoulders; curve and grade deficiencies; the communities of Manitou, Nebo, and Providence where development is close to the road; the CSX railroad which closely parallels US 41A in the east end of the study area, limiting roadway improvement options in that portion of the study area; abandoned and active coal mines, resulting in large and fully loaded coal trucks in the traffic stream; potential historic structures and archaeology sites; several large substations; overhead utilities, businesses with active or inactive underground storage tanks; a golf course; numerous residences and scattered churches and businesses. The study recommends completing spot improvements over the next 5-20 years along the corridor including; improving the 2-lane alignment between Nebo and KY 2280; installing an acceleration lane eastbound from KY 630 South in Manitou a distance of 1500 feet; and realigning of US 41A in Nebo to provide for left-turn lanes onto KY 502 north and south.

FUNCTIONAL CLASSIFICATION

The functional classification system defines roadways by primary use and volume of traffic. KYTC identifies the following for urban road types within Hopkins County.

Interstate Highway

Although not fully updated, the new I-69 corridor will serve as the major north and west connector across Hopkins County along with the Edward T. Breathitt Parkway and Western Kentucky Parkway. Defining and enhancing connections to I-69 is a major goal of KYTC. An Interstate Highway should have:

- Highest traveling speeds,
- Largest capacity for traffic volumes,
- Limited access and
- Divided highways with minimum of two-lane in each direction.



Edward T. Breathitt Parkway

Principal Arterials

Principal arterials carry the majority of the traffic load within Hopkins County. These roads are designed to serve high volume traffic movements while connecting major destinations with minimal access to adjacent properties. US 41, US 41A and US 62 fill this roll within the Hopkins County transportation network. Principle arterials should:

- Connect major traffic generators,
- Generally be multi-lane with minimal access points and
- Provide connections from I-69 into the local communities.



Photo: US 41 / Main Street

Minor Arterials

Minor arterials carry the majority of the traffic load within the cities of Hopkins County. Hanson, Madisonville, Earlington, Mortons Gap and Nortonville are along the US 41 corridor. Dawson Springs, Saint Charles, Nortonville and White Plains are intersected by US 62. These roads are designed to serve higher volumes of traffic while connecting major destinations with limited access to adjacent properties. Minor Arterials should have:

- Lower travel speeds,
- Generally be two to four lanes wide and
- Provide more access to adjoining properties.



Photo: US 70 / Anton Road

Urban Collectors

Urban collectors provide the majority of the connections through and around the Madisonville traffic network by linking neighborhoods, commercial areas and industrial zones. There are several urban collectors including KY 70, West Center Street, and McCoy Avenue. Urban Collectors should have:

- Lower speeds,
- Lower traffic volumes and
- Connections between neighborhoods.



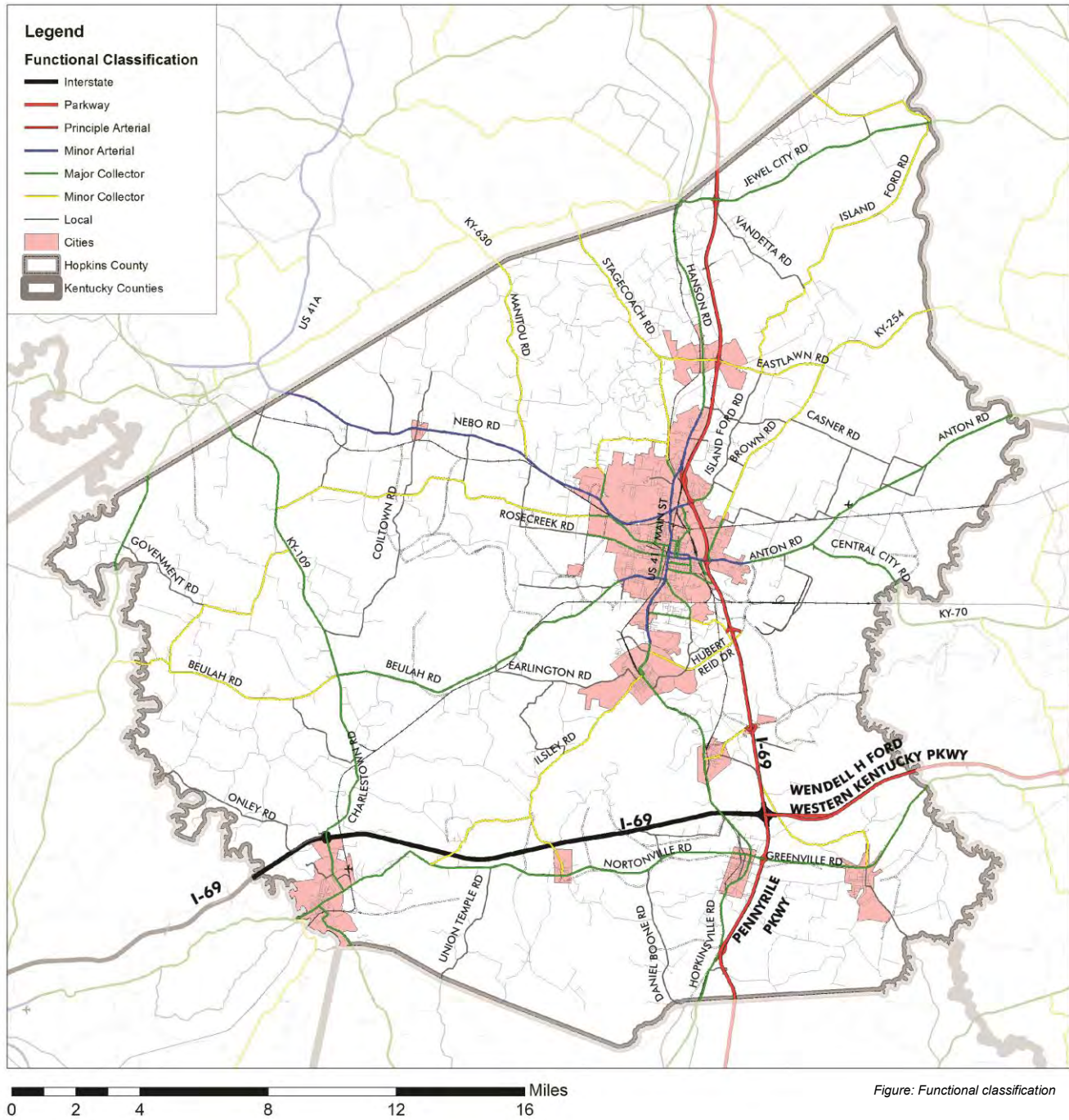
Photo: US 70

Local Streets

All other public roads and streets form the local street network. These roads generally include neighborhood roads and are designed for low speeds and lower traffic volumes. However, these roads also provide essential and emergency services to neighborhoods. Local Streets should have:

- Low speeds and
- Highest access to adjacent properties.

On the following page is a map of the functional classification.



TRAFFIC COUNTS

One of the best measures of the significance of a road segment and how it relates to the local transportation network is to perform a traffic count study. KYTC has a reoccurring program that measures the volume of traffic flowing on a given road. The Average Daily Traffic Volume (ADT) is an automatic count of the number of vehicles passing a given spot on the road during a 24-hour period.

According to the Kentucky Transportation Cabinet's 2012 data, the highest ADT for Madisonville is a segment of the Pennyriple Parkway from Hwy 70 to Hwy 281 with a count of 26,136 vehicles per day. The second highest is a segment of Center Street (Hwy 70) between the Pennyriple Parkway and Park Avenue having a count of 22,756 vehicles per day. Other counts of interest include:

- Hwy 41 from Hospital Drive to KY 281 (McDonald's) in Madisonville – 22,406 vehicles per day;
- Hwy 62 from Industrial Drive (Hwy 109) to Hospital Drive (Hwy 109) in Dawson Springs – 6,209 vehicles per day;
- Pennyriple Parkway from Hwy 62 to the Western Kentucky Parkway in Nortonville – 13,969 vehicles per day;
- Pennyriple Parkway from Hwy 813 to Trabue Road in Mortons Gap – 19,402 vehicles per day;
- Hwy 41 in Earlington from Hwy 2171 to Preston Bunch Lane – 9,669 vehicles per day.

The following maps identify the traffic counts and points of counts throughout the County.

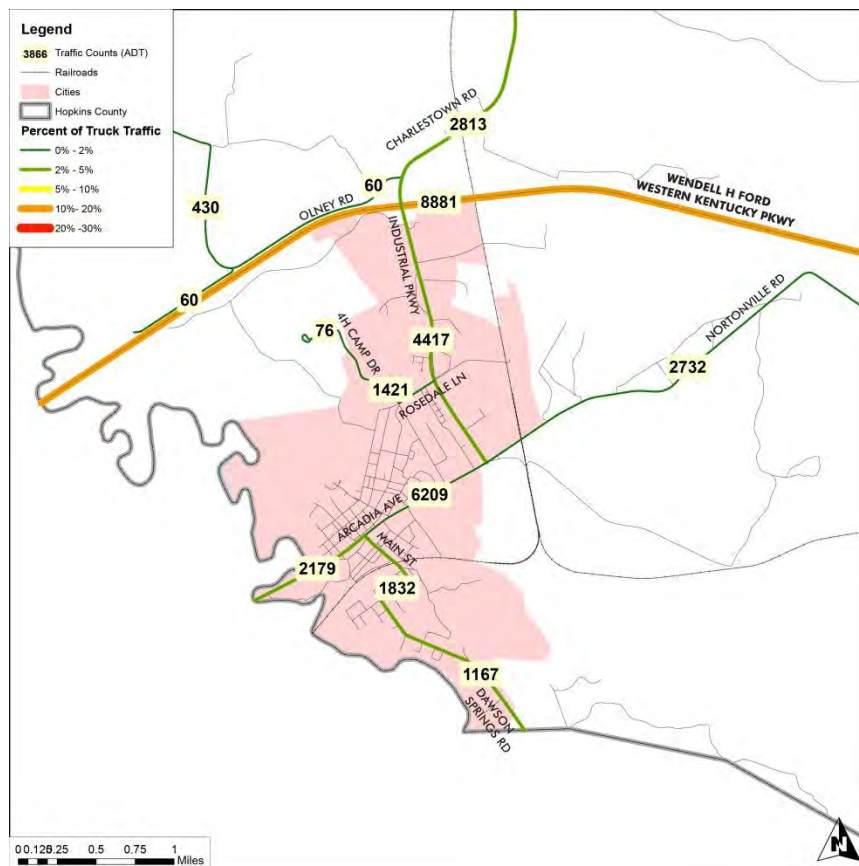


Figure: 2012 Dawson Springs Traffic Counts

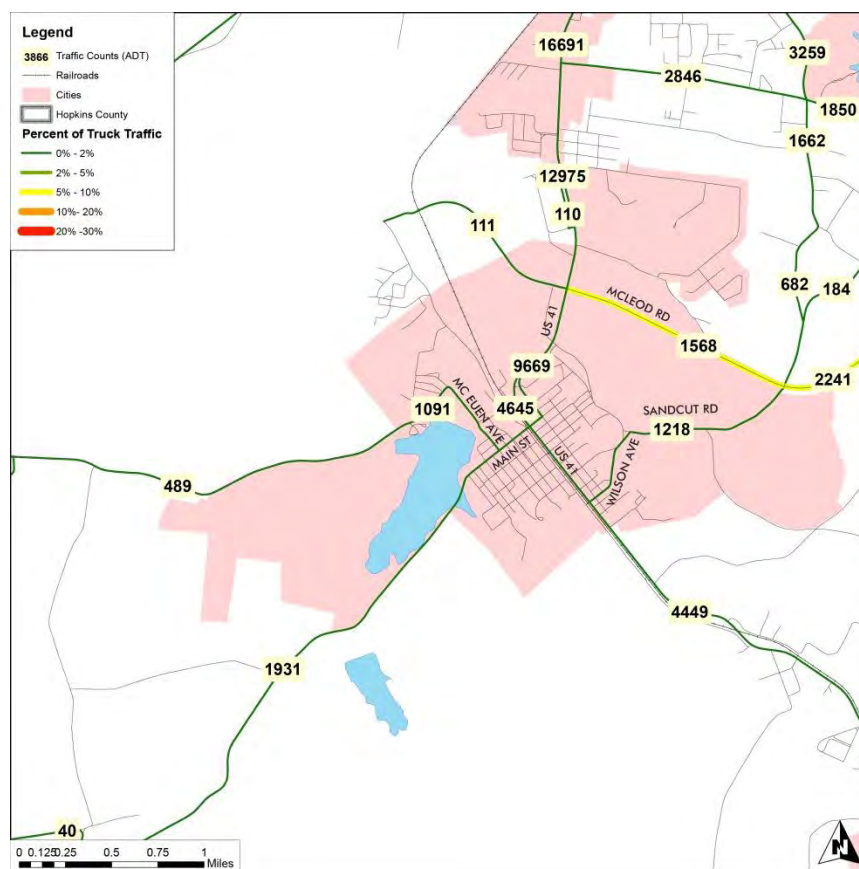


Figure: 2012 Earlington Traffic Counts

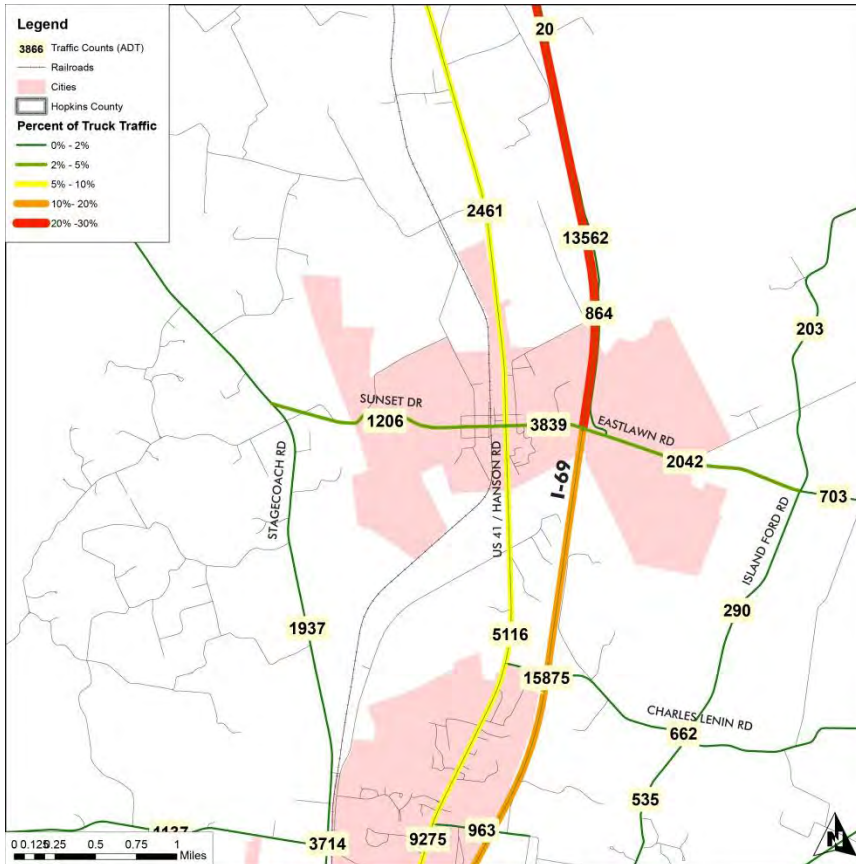


Figure: 2012 Hanson Traffic Counts

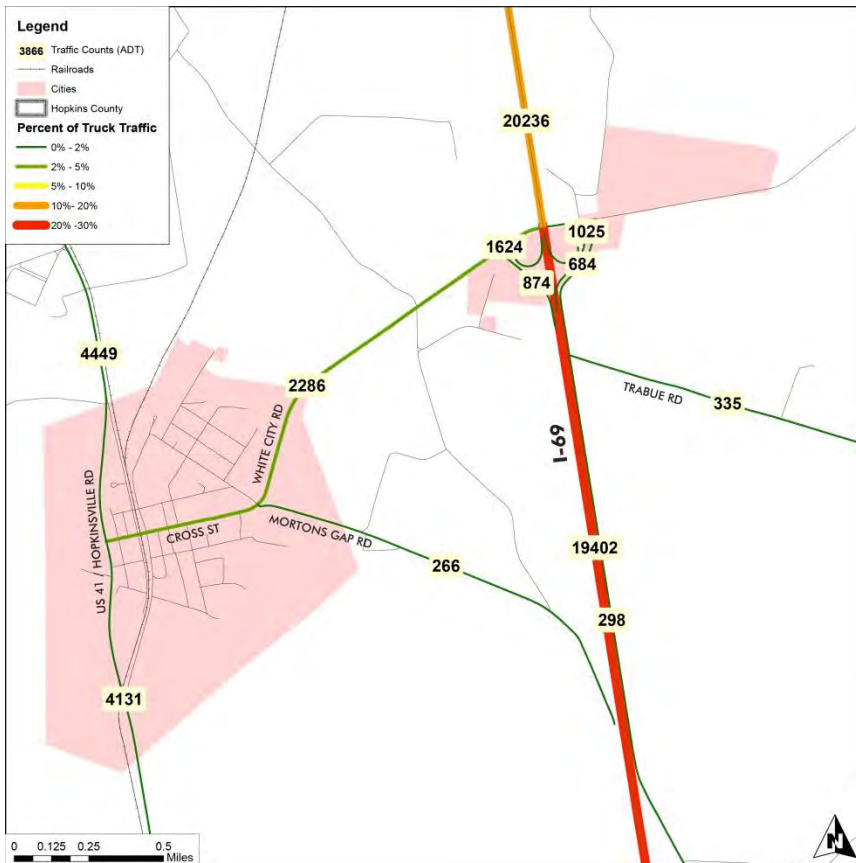


Figure: 2012 Mortons Gap Traffic Counts

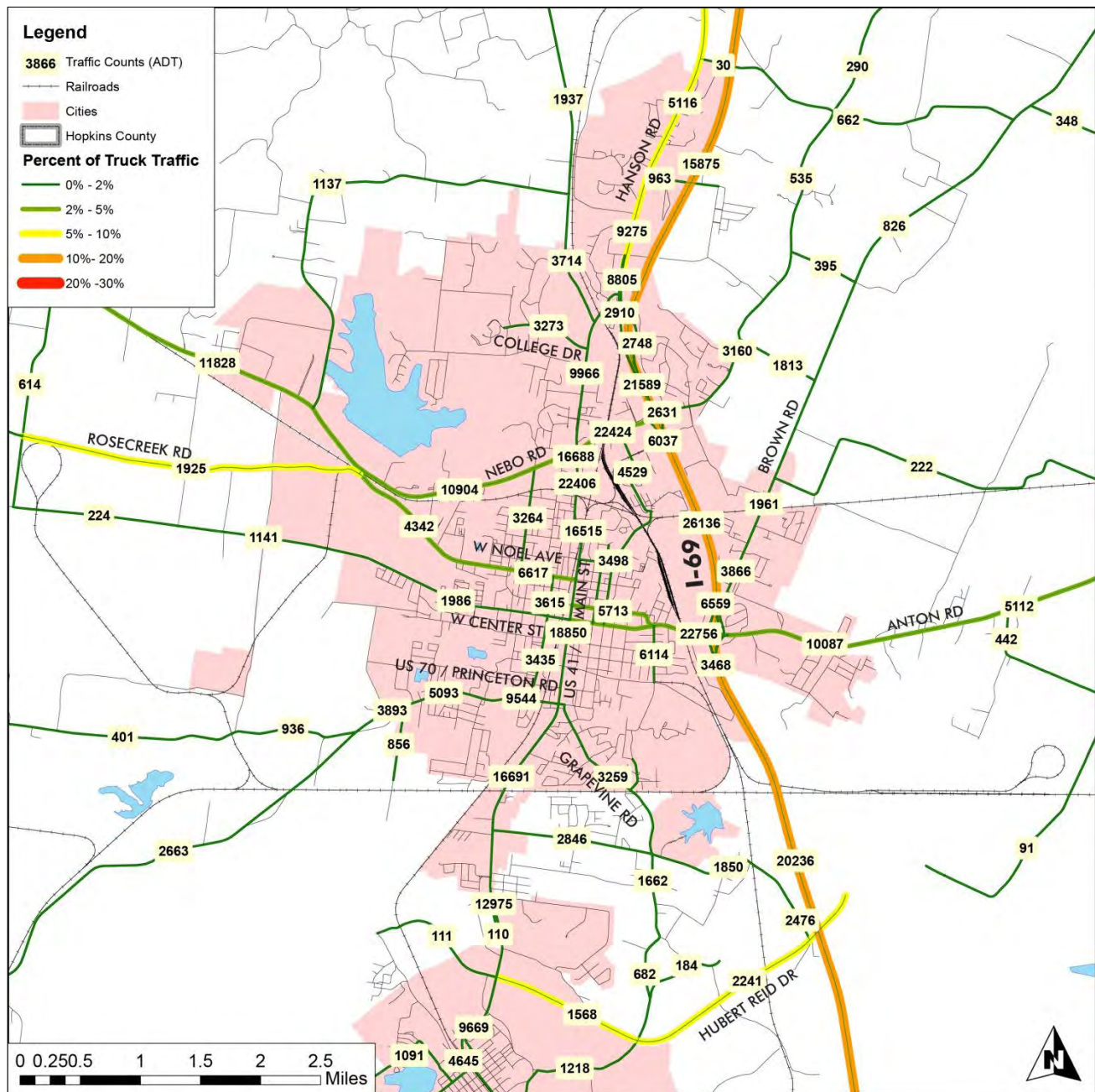


Figure: 2012 Madisonville Traffic Counts

MULTI-MODAL

Currently, the public transportation available in the county is provided by Pennyriple Allied Community Service (PACS). It serves the elderly and handicapped persons only and operates Monday-Friday with a requested call at least 24 hours ahead. At this time, the other bus service in Hopkins County is provided by Greyhound Bus Lines in Madisonville at 4765 Hanson Road (US41), just north of the Madisonville North Hopkins High School.

Dawson Springs is Kentucky's first "Kentucky Trail Town," part of an effort to promote and develop adventure tourism opportunities across the state. "Kentucky Trail Town" is a designation and assistance program administered by Kentucky's Office for Adventure Tourism that guides travelers to trails, food, lodging, campgrounds, museums, entertainment and other services. Dawson Springs is near several areas with outdoor attractions which include the Pennyriple Forest State Resort Park, Pennyriple State Forest, the Tradewater River and Tradewater Wildlife Management Area, Jones-Keeney Wildlife Management Area and Lake Beshear. While these destinations are outside of Hopkins County, Dawson Springs has become the hub for accessing these recreational areas. In addition, a 13-mile hiking and biking trail connects the state park to Dawson Springs and the 14,600-acre forest offers 50 miles of horseback riding and mountain biking trails along with the new equestrian campground. Currently, a mountain bike skills area is under construction at the state park as well. The city is also promoting cycling, and paddling on the scenic Tradewater River.

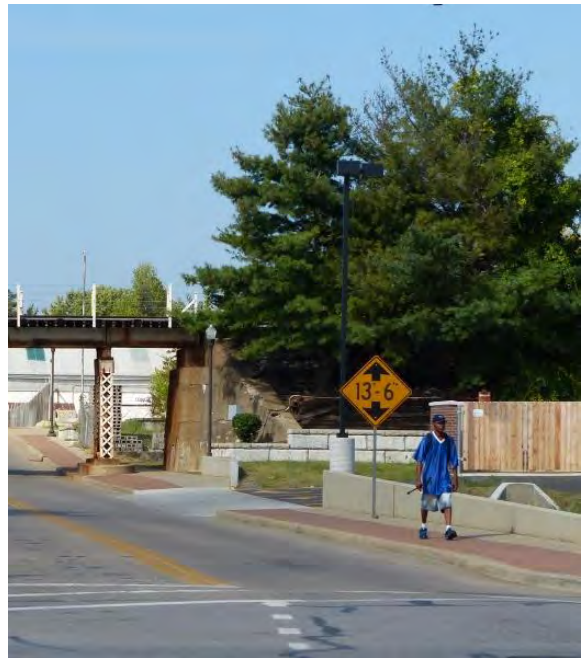


Photo: sidewalk

In addition to the trails near Dawson Springs, rails to trails studies have identified the following routes as possible conversion candidates: St. Charles-Ilse Trail connecting St. Charles and Ilse and the White Plains Trail (1.5 miles long). This eight-foot wide paved rail trail is located in White Plains.

COAL HAUL ROAD SYSTEM

The 2013 Coal Haul Road map identifies three main roads for coal transport; US 41A, US 41 and the Edward T. Breathitt (Pennyriple) Parkway. These three roads along with I-69 and Western Kentucky Parkway saw just over 3.8 million ton-miles of coal transported through Hopkins County in 2013.

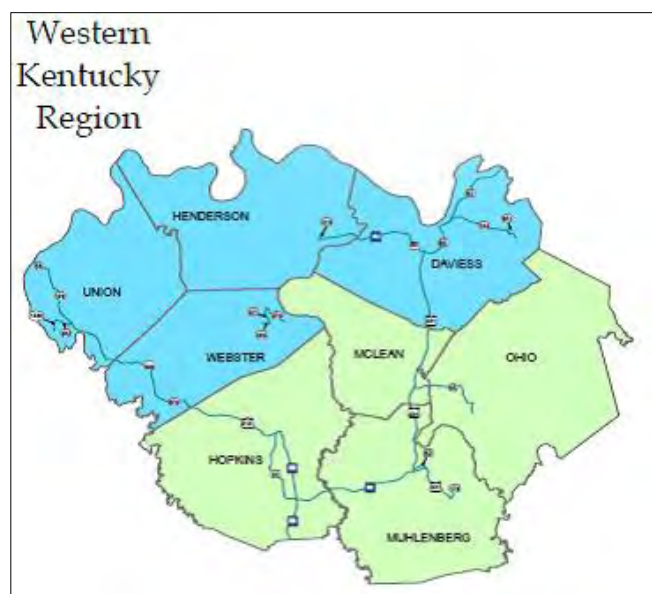


Figure: Designated Coal Haul Roads in Western Kentucky
Source: KYTC; 2013

RAILROADS



Photo: Railroad

There are approximately 180 miles of railroad contained within Hopkins County. These rail lines are owned and operated by two companies, CSX and P&L. CSX operates a rail yard in the northeast section of Madisonville (Atkinson Yards) near the hospital while maintaining nearly 90 miles of rail. P&L has over 70 miles of rail and operates the West Yard located on Princeton Pike. The remaining 20 miles of rail is owned by various private parties.

In 2012, a Rail Traffic Controller (RTC) study was completed for the north-south CSX rail line that runs through Madisonville and Hopkins County. The RTC objective was to evaluate the performance of the rail line if all rail traffic was rerouted around central Madisonville. The findings in the report indicate that there is sufficient capacity to reroute the train traffic out of central Madisonville if several improvements were made to the rerouting system. Costs are still being evaluated and no timeframe has been established to complete this effort.

AIRPORTS



Photo: Airport sign

The Madisonville Municipal Airport (MMA) site is just over 400 acres and has a 6,050 foot long, 100-foot wide runway and averages 51 flights per day. It is located six-miles northeast of Madisonville on KY 85. Currently, the airport is utilized by over 2,700 local operations and nearly 9,500 itinerant operations per year (take-off and landing would be two operations). The projected activity for 2013 is a total of 18,000 operations. Flights to and from MMA travel not just within the US but worldwide as well. The facility can serve business jet aircraft as well as general aviation.

MMA has Madisonville Flying Service (MFS) on site as the fixed base operation. MFS provides service for the 19 aircraft that are based at the airport. They provide fuel for all types of aircraft as well as a full maintenance facility. The terminal building was constructed in 1997. It provides computerized weather, lounge areas for pilots and passengers, as well as bathroom and shower facilities.

Flight Summary Statistics:

- 19 aircraft based at the airfield
- 56% transient general aviation
- 12% air taxi
- 23% local general aviation
- 3% military



Photo: Aircraft

The Tradewater Airport located in Dawson Springs is one of only a few remaining turf runways in the State. It is popular with flying enthusiasts looking to experience the grass runway.

TRANSPORTATION STRATEGIES

One of the most important subjects in any Comprehensive Plan is the future transportation plan. The transportation strategies listed below comprise recommendations that will ensure current deficiencies are remediated and that future demands on the transportation network in Hopkins County will be met.

ROADWAY STRATEGIES

The I-69 upgrades to the current Parkway system will enhance several of the interchanges in Hopkins County. These changes will allow for better access to and from the interstate and offer new opportunities for development at these locations. Beyond the Interstate, transportation throughout the county can be improved with a series of planned improvements to the primary and secondary arterials with key intersection and road widening projects. Developers should be required to make improvements to all roads impacted to their developments and require that multimodal accommodations be implemented.

In conjunction, there are several projects listed in the 2014 KYTC Six-Year Plan that will aid in the improvement of the transportation network. A summary of projects and estimated costs in this plan that will impact Hopkins County are listed below.

- US 41A Phase II Design and Right-of-Way. (2005HPP-KY 135) (See 2-137.01 for "STP" Component (\$2,879,680)
- Widen US 41A from Industrial Drive to Yorkwood Place (\$11,000,000)
- Widen US 41A from Yorkwood Place to US 41 / KY 281. (\$9,000,000)
- Study Possibilities for Improving Railroad Crossing On KY 1034 at US 41A, MP 11.336.(10CCR) (\$200,000)
- Reconstruct KY 85 from KY 70 East to Airport Road at Anton (\$9,410,000)
- Improve Ramp Configuration at the Existing I-69/Western Kentucky Parkway/Pennyrile Parkway Interchange (I-69 Corridor Improvement) (\$18,000,000)
- Reconstruct Elements of Existing Edward T Breathitt Pkwy (Pennyrile Parkway) Between MP 37.0 And MP 73.4 to Upgrade Geometrics to Interstate Standards (I-69 Corridor Improvement) (\$16,000,000)

- Center Street/Island Ford Connector Road in Madisonville: State Share to be Used North of the Railroad Tracks to Connect with KY 281. South of Railroad to be built by Others. (\$3,000,000)
- Replace Bridge On Ky-260 (Mp 2.14) Over Otter Creek; .20 Mi East Of Pennyrite Parkway; (\$1,140,000)
- Replace Bridge On KY 262 Over Greasey Creek 0.67 Mile East of Bean Cemetery Rd (\$900,000)
- Replace Bridge On KY 293 At The Caldwell/Hopkins County Line (\$2,050,000)
- Widen North Main Street From Hospital Drive to KY 281 (\$13,210,000)
- US 62; Three Lanes from Board of Education to City Park in Dawson Springs. (\$2,500,000)
- Construct a Left Turn Lane by Providing a Three Lane Curve on KY 3052. (\$2,760,000)
- Upgrade Morton's Gap Interchange at MP 37.07 to Interstate Standards (I-69 Corridor Improvement). (\$12,170,000)

CONGESTION MITIGATION STRATEGIES

Congestion mitigation techniques aid in the reduction of traffic related issues at key intersections and corridors within the county. The Future Transportation Plan identifies several intersections that would benefit from the principals of congestion mitigation such as at the US 41, US 41A and KY 281 intersection. In addition, improvements can be implemented along the Arch Street/Center Street/KY 70 corridor to improve travel flow and safety.

ACCESS MANAGEMENT STRATEGIES

Access management is a process where traffic flow is increased along a corridor while access to adjoining properties is decreased to improve safety and traffic flow. This takes land-use into consideration. This transportation plan recommends US 41, US 41A and KY 70 be evaluated for access management improvements within the city limits of Madisonville. Proper access management measures such as service drives, cross-development access, limited curb cuts, and signal timing should be analyzed to improve or maintain an adequate level of service on these roadways. While it is more difficult in built-out areas to reconstruct the site access with limited curb cuts or service drives, other access management measures should be implemented to improve roadway function. Evaluating signal timing, reducing the number of conflict points, consolidating driveway locations and requiring interconnected parking should also be considered.

For undeveloped areas, new development should be required to increase driveway spacing and shared driveways, utilize internal access roads, and incorporate cross-development access/interconnected parking areas to aid in reducing congestion and traffic conflicts.

BIKE AND PEDESTRIAN STRATEGIES

A system of multi-use paths can reinforce a pedestrian environment and provide outdoor recreation for residents. Through input gathered from the Planning Committee and public, there was a large desire to make Hopkins County more pedestrian and bicycle friendly. As a result, a multi-use path system should be developed to connect destinations and favorable routes for non-motorized traffic movement. This system would include, ideally, a ten to twelve-foot path where feasible. Where rights-of-way are limited, such as downtown, the path width could be reduced or incorporated as a bike lane. In addition, the careful planning of safe pedestrian crossings would improve safety for users. Bicycle and pedestrian facilities will need to be expanded to meet the demands of the changing demographics. Shared-use trails and walking paths can improve the quality of life in a community. This should be first evaluated as part of the “Connections Master Plan” strategy in *Chapter 9: Parks & Recreation*.

AIR AND RAIL STRATEGIES

Improvements to the airport should continue as identified in the 2013 Airport Capital Improvement Program. This includes upgrades for a Future T-Hanger, Runway 23 Extension, Precision GPS approach to Runway 23, access road turnaround, as well as a new 200-foot by 200-foot hanger.

Railroad improvements should continue to follow the RTC report recommendations to remove the rail traffic from central Madisonville. In addition, any newly abandoned rail should be converted to a shared-use trail for recreational use.

PUBLIC TRANSPORTATION STRATEGIES

PACS needs to continue to support the elderly and handicapped residents of Hopkins County through its on-demand pick up service. A second form of transit should be evaluated to see if service can be provided for commuters and non-drivers throughout Hopkins County. An in-town trolley bus system that would serve the residents and visitors of Madisonville should also be evaluated. In addition, regional routes should be explored to connect Madisonville to Henderson and Hopkinsville. These routes would enhance the economic opportunities of the region.

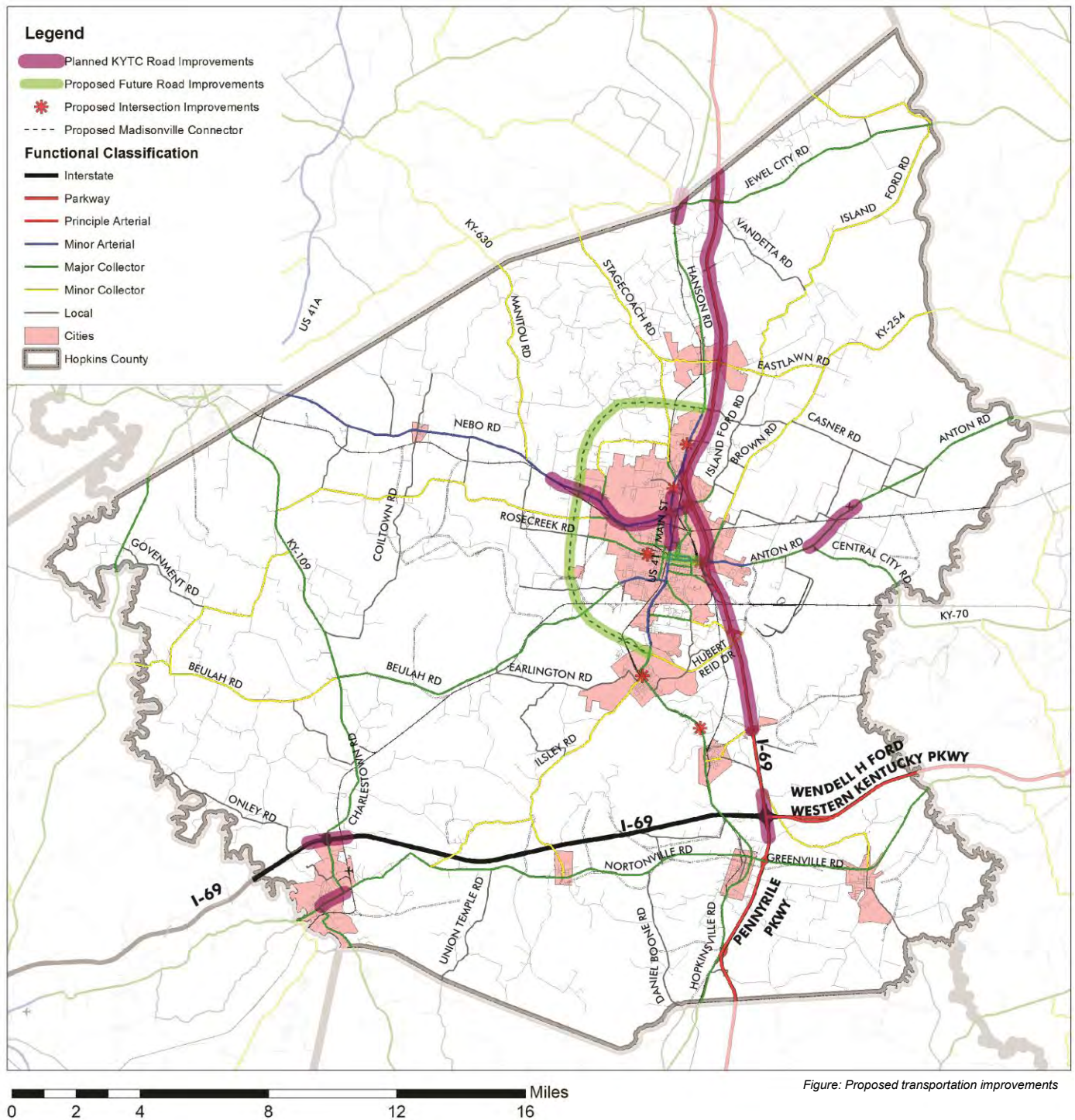


Figure: Proposed transportation improvements