



August 22, 2007

# Bicycle and Pedestrian Master Plan

**Prepared for:**

The Lexington Area Metropolitan Planning Organization  
101 East Vine Street  
Lexington, Kentucky



# **Bicycle and Pedestrian Master Plan**

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**August 22, 2007**

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# Executive Summary

This is a plan for bicycling and walking in Fayette and Jessamine Counties. It is a blueprint for developing our communities and transportation system over the next twenty years in a way that makes bicycling and walking a safe and convenient way to travel to school, to work, to shop, to play and to stay fit.

## Plan Development

The mission of the planning process was to articulate the community's vision for bicycling and walking, and to develop strategies for making travel on foot and by bike a routine activity – for transportation, recreation and health – for all ages and abilities.

During the planning process, community goals and objectives were developed, existing bike and pedestrian facilities were assessed, policies were suggested and improvement projects were proposed.

## Creating a Vision

To get a sense of what the public desires for bicycling and walking, the process began with an extensive series of public meetings, forums and opinion surveys. These became the basis for a shared vision for this plan.

The vision statements and goals embrace the benefits of reducing our dependence on the automobile and the social importance of providing more independence for children, seniors, people who are disabled and others who don't drive. They emphasize improved connectedness with our neighborhoods and sustainable community growth. They also envision more livable communities, strong local economies and people who are healthy and active.

## Call to Action

A set of actions are presented based upon community goals and an analysis of factors that affect bicycling and walking. Factors include street type, safety issues, existing sidewalks and bike facilities,

land use patterns and connections to destinations such as schools, parks, shopping areas and employment sites.

The plan appeals to local governments and planning commissions to create more walkable and bicycle-friendly communities by bringing about development patterns and site designs that make bicycling and walking easy and enjoyable.

The plan calls for refocusing transportation projects and planning efforts on creating "complete streets" that provide real transportation options and a better balance between cars, bikes, pedestrians and transit. The plan includes a system of off-road trails with an emphasis on completing north-south and east-west corridors within and between the two counties. A future system of rural bike routes and regional trails is also envisioned to attract bicyclists from across the country to the beautiful Bluegrass Region.

Finally, a list of bike/pedestrian roadway and trail projects is prioritized for each county based upon safety and connectivity. Short, medium and long-term projects are identified based upon project feasibility. This means the most realistic and low-cost projects can be completed in the near future, while more significant resources will need be needed for high priority projects that are more challenging, but no less important.

## Implementing the Vision

Arguably, the most important part of the plan is the implementation chapter. This chapter lays out several critical elements for the long-term development and financing of the plan.

The plan calls for integrating bicycle and pedestrian-friendly policies and improvements into the daily business of local and state governments. It outlines funding opportunities and procedures for making sure that bicycle and pedestrian projects are 'on the table' when budgets and funding decisions are made. The plan identifies a set of performance





measures to monitor progress and to evaluate the impacts of our investments in bicycling and walking over time.

The plan also appeals to partners and the public for their help in implementing the plan. Successful implementation will require a sustained effort over many years and continued advocacy to accomplish the community vision. Acknowledging this, the plan calls for citizen-based groups in each county to provide oversight and to be actively involved in implementing the plan. These designated groups should call on every segment in the community – government, schools, law enforcement, employers, developers, public health agencies, and more – to be a part of the effort to improve our community for bicycling and walking.

In conclusion, the plan challenges us to join together to create a better community that works more efficiently for everyone and perhaps most of all, for our children, and for their children. Viewed in that light, it is a modest investment of time and energy that is well worth the effort.



# *Chapter 1*

## Introduction



# Chapter 1.

## Introduction

### 1.1 Background

The Lexington Area Bicycle and Pedestrian Master Plan (Master Plan) is a framework that directs bicycle and pedestrian efforts in Fayette and Jessamine Counties. These two counties became the regional Lexington Area Metropolitan Planning Organization (MPO) in 1993. The MPO is a transportation policy-making organization responsible for the planning and funding of transportation projects within the region.



*Rural Fayette County Horse Farm*



*Brannon Crossing in Northern Jessamine County*

The Bicycle and Pedestrian Master Plan was a recommendation in the Lexington Area MPO 2030 Transportation Plan that was adopted in June 2004. As noted in the Transportation Plan “barriers have made bicycling and walking uncomfortable at best, and even dangerous in some locations.” The plan states “cities with programs, policies, and funding in place to improve conditions for bicycling and walking have enhanced bicycle and pedestrian safety in their communities, while making travel by these modes more

enjoyable.” The three primary recommendations in the plan were to prepare comprehensive bicycle and pedestrian plans for the counties in the MPO, to ensure that a full-time bicycle and pedestrian coordinator position is funded and integrated into the MPO, and to develop bicycle and pedestrian facility improvements. With the completion and adoption of this Master Plan, the framework will be in place to achieve those recommendations.

### 1.2 Why Accommodate Biking and Walking?

The 2030 Transportation Plan has a section devoted to bicycle and pedestrian planning. However, increasing interest in biking and walking warrants a more in-depth plan to improve accommodations for these modes in Fayette and Jessamine Counties. Benefits of walking and biking include:

#### Quality of Life

Communities where people want to live are ones with a high quality of life. Throughout the world this is exemplified by a community that is walkable. People-oriented, walkable cities provide a quality of life that is attractive to prospective businesses and residents. The National Center for Bicycling and Walking has developed the following statements as a general description of a walkable community:

- People of all ages and abilities have easy access to their community “on foot” - an automobile is not needed for every trip.
- People walk more and the community and neighborhoods are safer, healthier, and friendlier places.
- Parents feel comfortable about their children being outside in their neighborhoods; they don’t worry about the threat of motor vehicles.
- Children spend more time outside with other children and are more active, physically fit, and healthy.
- Streets and highways are designed to provide safe and comfortable facilities



for pedestrians and bicyclists, and are safe and easy to cross.

- Pedestrians are given priority in neighborhood, work, school, and shopping areas. Motor vehicle speeds are reduced to ensure compatibility with pedestrian traffic.
- Motor vehicle speeds are carefully controlled to ensure compatibility with adjacent land uses and the routine presence of pedestrians.
- Drivers of motor vehicles operate them in a prudent, responsible fashion, knowing that they will be held strictly accountable for any threat, injury, or death caused by their lack of due care or violation of the vehicle code.
- Streetscapes are designed to attract pedestrian use. There are buffers between cars and pedestrians, street trees, pedestrian-scale buildings, setbacks, front porches and interesting storefronts.

## Economics

### *Property Values*

Property values tend to be higher in walkable communities and houses near trails have higher resale values than those not located near trails. Note, for example, the five most walkable cities in the U.S. in 2007, according to a survey by the American Podiatric Association. They are: Madison, WI; Austin, TX; San Francisco, CA; Charlotte, NC; and Seattle, WA. Each is among the leaders in property values in their regions.

### *Reduced Transportation Costs*

Biking and walking to local destinations reduces vehicle trips and can reduce the personal and public cost associated with automobile use, including congestion mitigation, air emission controls and frequent pavement maintenance. Roadway widening is costly and the use of valuable land for additional vehicle lanes and parking lots removes it from more beneficial uses and results in negative environmental impacts.

Needless expense is added to tight school and family budgets when many school students who could walk

or bike are driven or bused. It is estimated that over 50% of parents in Fayette County drive their children to school despite many of them living within walking or biking distance. There is a high cost associated with busing students to school sites that are not located within biking or walking distance to the students they serve. Many students that do live within biking and walking distance are “hazard bused” because there is a lack of safe sidewalks and roadway crossings.

### *Tourism*

Bicycle tourism contributes significantly to many local economies. Bicycle tourism alone is responsible for \$60 million in North Carolina’s Outer Banks, and Monterey, CA holds a four-day bike festival which contributes over \$25 million to the local economy. The local “Horsey Hundred” ride hosted in neighboring Georgetown, KY has drawn 1500 cyclists from 34 states and Canada to the Bluegrass Region on an annual basis. The region is lauded by local cyclists as one of the most scenic and attractive places in the country to bicycle and there are significant opportunities to expand, enhance and promote bicycle tourism.

### *Health Care Costs*

The State of Kentucky spent approximately \$1.1 billion dollars in 2003 for obesity-related medical expenditures. Walking is the number one activity that doctors recommend and which Americans prefer to stay fit; however, safe and desirable walking facilities must be present.

## Safety

There were 622 motor vehicle crashes involving pedestrians or bicyclists in Fayette and Jessamine Counties from 2003-2005. Eighty-four percent of collisions resulted in injuries and 15 crashes involved a fatality.

While less than five percent of work-related trips in Fayette County are made by walking, pedestrians represent 10-20% of all traffic fatalities each year. A perceived sense of decreased safety also exists. Many cyclists interviewed during the development of this plan said they no longer bike in Jessamine County due to an increase in traffic speeds, volumes and aggressive drivers.

## Recreation

Parks provide many benefits to a community, and safe access to parks is vital, especially for children. In addition to needing bike and pedestrian access to parks,



over 700 citizens responding to a 2006 survey in Fayette County cited walking trails and a county-wide bike path system as the second-most priority need for parks in the area, second only to more restroom facilities.

## Air Quality

The American Lung Association rated the air quality of Fayette County as no better than “C” in 2006. Fayette County achieved “attainment” status in 2006 for ozone and particulate matter pollutants; however, the area was on the cusp of “attainment” versus “non-attainment” status. Auto and other emissions must be closely monitored to maintain acceptable pollutant levels in the area.

## Health, Fitness and Physical Activity

Sixty percent of Fayette and Jessamine County residents are either obese or overweight. Fewer than 35% of our residents engage in moderate physical activity five or more days a week. Creating more and safer opportunities to walk and bike for recreation and transportation will encourage people to be more active. Studies have shown direct correlations between the presence of sidewalks, trails and bike lanes and an increase in bicycle commuting and recreational walking.

## Social Equity

Year 2000 U.S. Census data indicates approximately 6.5% of households in Jessamine County and 8% of households in Fayette County do not have access to a vehicle. Over 20% of Fayette County and Jessamine County residents are over 65 or under 16 years of age. Fourteen percent of residents are physically disabled and may be unable to drive. Safe pedestrian accommodations, augmented by public transit, are needed to provide the non-driving public (approximately 1/3 of our residents) with the mobility they need.

## Legal Requirements

The MPO and associated Long Range Transportation Plan are required by federal transportation legislation (SAFETEA-LU) to “provide for the development and integrated management and operation of transportation facilities (including pedestrian walkways and bi-

cycle transportation facilities) that will function as an intermodal transportation system.”

## Public Demand

The public articulated their desire for improvements to the bicycling and walking environment during public meetings and in response to over 600 citizen surveys completed during this planning process. Some people said they need better places to walk and bike. Others said they have limited time to incorporate walking or biking into their busy schedules. Some have a perception that it is not safe to walk or bike. Nearly all agreed that more trails, sidewalks and bike lanes are needed and that these facilities would encourage them to bike and walk more frequently. Recent research has established that, in fact, people do walk and bike more often if safe facilities connect them to places they want to go.

## Summary

The reasons for accommodating bicycling and walking and the underlying purpose of this plan is more than simply meeting the requirements of laws and regulations; it is a plan intended to respond to the desires of the people of the region for better opportunities to walk and bike; to identify the actions needed to make our neighborhoods better, safer places for people to live healthy and active lives; and to improve the quality of life in our region while ensuring our continued economic vitality.

## 1.3 Study Area

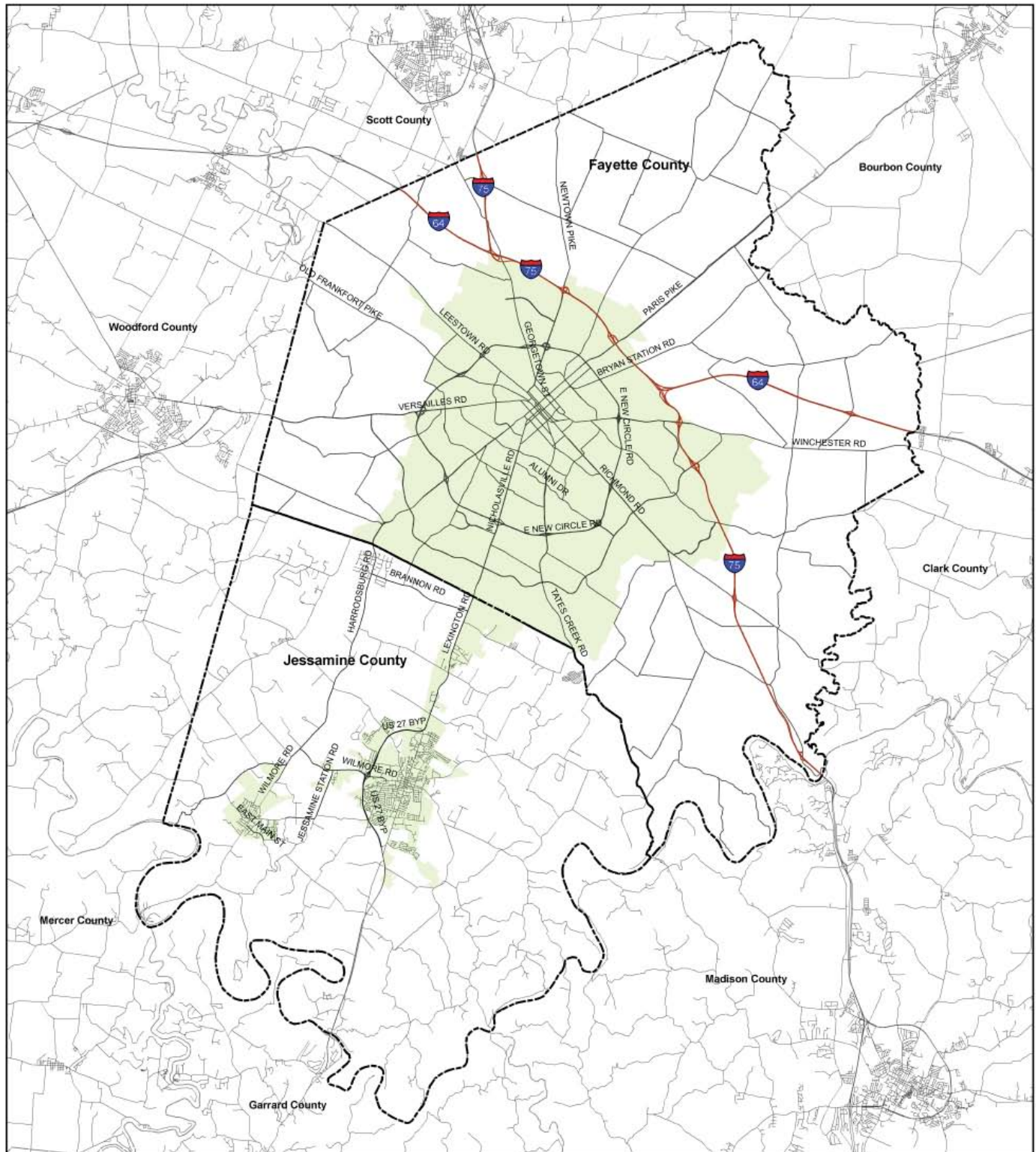
The Study Area for the plan is the two counties that comprise the Lexington Area MPO—Fayette County and Jessamine County, Kentucky (see figure 1). Fayette County has a merged city/county government (Lexington-Fayette Urban County Government or “LFUCG”), while Jessamine County has two city governments (City of Wilmore and City of Nicholasville) and a county government.

Jessamine County’s estimated population is 43,463 persons, while Fayette County’s is 268,080 persons (U.S. Census Bureau estimate, 2005). Fayette County’s growth from 1990 to 2000 was 15%, and Jessamine County grew by 28%. There are 173 square miles of land in Jessamine County and 284 in Fayette County.





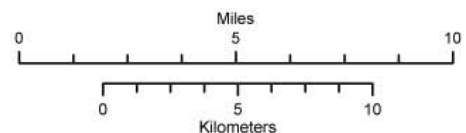
Figure 1. Study Area - Fayette and Jessamine Counties



**Legend**

- Urban Service Area/Urbanized Area
- Interstate
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2006)



## FAYETTE COUNTY

- Merged city/county government--Lexington Fayette Urban County Government (LFUCG)
- Guided by Lexington Fayette Urban County Comprehensive Plan
- 268,080 persons (2005 estimate)
- 284 square miles of land

## JESSAMINE COUNTY

- Two city governments, one county government
- Guided by Jessamine County/Wilmore Comprehensive Plan and Nicholasville Comprehensive Plan
- 43,463 persons (2005 estimate)
- 173 square miles of land

Pressure to develop is strong in both Fayette and Jessamine Counties. With the 2006 Comprehensive Plan Update, the Expansion Area in Lexington-Fayette County was not increased, meaning growth will occur as infill and redevelopment. In 2006, Nicholasville city limits in Jessamine County were extended northward along the US 27 corridor to the Fayette County line. This resulted in an uninterrupted expanse of residential and commercial development between the two counties.

### 1.4 Brief History of Bicycling and Walking in the Region

Shortly after the settlement of Lexington, sidewalks were required of property owners downtown and in adjacent neighborhoods. This trend continued until the 1950's and 1960's when opinions changed about sidewalks and new subdivisions, such as Lexington's Stonewall and Lakewood, were built without sidewalks. Suburban design did not include pedestrian-oriented commercial centers and the street patterns lacked connectivity. Transit ridership and pedestrian travel declined. The 1970's Subdivision Regulations required sidewalks on local and collector streets, however, Lexington's planning commission could waive sidewalks on arterial streets.

Due to development trends and the range of access that personal autos provided, schools, parks and commercial sites in Fayette and Jessamine Counties were located on large parcels, separated from neighborhoods, and accessed by major roadways. Busing students longer distances to schools increased and walking to school decreased. Neighborhood groceries and retail shops were also regionally-oriented, rather than neighborhood-oriented.

In the 1990's the inclusion of sidewalks on both sides of local streets became routine, however, many collector and arterial streets continued to lack sidewalks. Transportation improvements focused on roadway capacity building and the addition of travel lanes continued to increase roadway widths and pedestrian crossing distances.

From 1990 to 2000, the U.S. Census reported a continued decline in walking rates in Fayette and Jessamine Counties as the number of vehicle miles traveled increased steadily. During that same time period, bicycling rates in Fayette County increased for the first time. It was during that time that Lexington implemented a number of bicycle facility improvements including the Alumni Drive and Euclid Avenue bike lanes.

In 1999, the Bicycle Pedestrian Advisory Committee (BPAC) was established by the MPO to provide guidance on bicycle and pedestrian needs and projects in the MPO region. Bicycle and pedestrian facilities began to be routinely included in roadway improvement projects. Both grants and federal surface transportation funds were also allocated for more bike and pedestrian projects during the ensuing years. A Bicycle and Pedestrian Coordinator Position was established in 2003. Bicycle and pedestrian facility mileage and funding have steadily increased in the region since the establishment of the BPAC and Coordinator position.



## 1.5 Planning Framework

This Master Plan shall be adopted by the MPO as an element of the 2030 Transportation Plan. The 2030 Plan is also an element of the LFUCG Comprehensive Plan as adopted by the Fayette County Planning Commission. Plan adoption by the Jessamine County/Wilmore Joint Planning Commission and the Nicholasville Planning Commission is also desirable.

Comprehensive planning documents relevant to the two-county study area are:

- Lexington-Fayette Urban County Comprehensive Plan, 2006 Update
- Jessamine County/City of Wilmore Comprehensive Plan, 2004
- Nicholasville Comprehensive Plan, 2002

## 1.6 Planning Objectives

The planning process included steps to meet the following key objectives:

- Seek and gain meaningful input from the public, stakeholders and MPO;
- Provide multiple opportunities for input at the beginning of the process, during the draft preparation and before adoption;
- Develop vision and goals that articulate the input received from the public, stakeholders and MPO;
- Review existing documentation to understand other planning efforts up to this point;
- Evaluate physical conditions to understand the current pedestrian and biking environments;
- Propose policies and standards for pedestrian and bicycle facilities and a prioritized list of on-road and off-road facility needs; and
- Recommend strategies for implementing the Master Plan.

## 1.7 Organization of the Plan

This plan is organized into the following chapters and appendices:

**Chapter 1: Introduction** provides the background for the development of this plan.

**Chapter 2: Mission, Vision, Goals** describes a detailed set of objectives to make bicycling and walking regular, routine activities.

**Chapter 3: Community Input** describes the various activities used to directly involve the residents, professionals, agencies and organizations of the Region in the development of the plan.

**Chapter 4: Existing Conditions** examines the existing land use patterns; streets, sidewalks and trails; and comprehensive planning documents.

**Chapter 5: Recommendations to Accommodate Biking and Walking** focuses on recommending actions for creating a more walkable and bike-friendly region and for eliminating gaps in the existing network of on-street bicycle facilities, sidewalks and trails.

**Chapter 6: Implementation** presents the “how” complement to the “what” of the goals and objectives and recommendations set forth in Chapters 2 and 5.

**Appendix A: Existing Conditions** provides further background information about the study area, the pedestrian environment and bicycle environment.

**Appendix B: Survey** contains a copy of the survey distributed across the study area at the beginning of the project and a summary of the 629 responses.

**Appendix C: Summary of Public and Stakeholder Meetings** provides a summary document from the earliest planning phase of the process, as well as comments from the public about the Draft Plan.

**Appendix D: Plan Adoption** contains the resolution by the Lexington Area MPO amending the 2030 Long Range Transportation Plan and the summary of public comments.

**Appendix E: Bibliography** provides a list of sources consulted during the preparation of this plan.



# *Chapter 2*

## Mission, Vision and Goals





## Chapter 2.

# Mission, Vision, and Goals

### 2.1 Mission

The mission of this plan is to provide a vision and strategies for bicycle and pedestrian mobility in Fayette and Jessamine Counties that expand and enhance opportunities for walking and biking.

### 2.2 Vision

Several methods were used to involve and engage residents of the two counties including public meetings with stakeholder groups such as the disabled community, cyclists and seniors; as well as a web-based survey. The planning team asked citizens to envision the future and to consider what role biking and walking will play. The team heard that the people of the two counties envision:

- Places where there is a priority on preserving the natural and cultural resources and traditions of the region.
- Places where there is a commitment to a quality of life that enriches the lives of all residents.
- Places that are designed to facilitate and encourage healthy lifestyles and behaviors.
- Places that work for everyone, including children, seniors, and persons with disabilities and/or impairments.
- Places where change (e.g. development, growth, etc.) is consistent with and helps support the community's vision.

### 2.3 Goals

The planning team translated the vision for the future into several goals that express the team's understanding of residents' needs and desires regarding biking and walking. The five goals are:

**Goal 1:** Balanced Transportation System

**Goal 2:** Sustainable Community Development

**Goal 3:** Safety and Security

**Goal 4:** Economic Vitality

**Goal 5:** Quality of Life and Active Living

Each goal has multiple objectives, which are described in terms of "outcomes" or the resulting situation. A list of recommended actions that are necessary to achieve the objectives are included in the Recommendations chapter. Lastly, performance measures, or indicators, listed in the Implementation chapter describe how we will measure whether the objectives have been met. The diagram on the next page graphically depicts the hierarchy of the mission, vision, goals, objectives, actions and performance measures.







## **Goal 1:**

# **Balanced Transportation System**

Provide people with a range of choices for travel and develop a system that accommodates all users, by providing safe, convenient and pleasant places for people of all ages and abilities to walk or bicycle.

## **Objectives:**

### **Bike and Pedestrian Facilities**

Develop a bike and pedestrian network that connects people to destinations both within and between Fayette and Jessamine Counties by creating a seamless system of on-road and off-road facilities.

### **Complete Streets**

Develop “complete streets” that are safe, comfortable and convenient for people walking, biking and using public transit. Plan and construct all new streets with appropriate facilities for walking and bicycling. Retrofit existing streets to accommodate and/or better accommodate bicycling and walking.

### **Connectivity**

Create an interconnected street and trail network to provide more route choices, reduce trip lengths and eliminate physical barriers to biking and walking.

### **Mode Choice**

Develop a coordinated and seamless system of public transit, pedestrian, and bicycling services and facilities to provide alternatives to motor vehicle use.

### **Universal Access**

Accommodate the transportation needs of all residents regardless of age and ability by designing and maintaining pedestrian facilities to provide access for children, seniors and persons with disabilities.

### **Transportation Equity**

Ensure that bike and pedestrian facilities and programs adequately and equally serve all residents in the community.

## **Adequate Funding**

Allocate transportation funds to 1) ensure that all road projects include appropriate accommodations for bicycling and walking facilities, and 2) an appropriate share of transportation funding goes to eliminating bike and pedestrian deficiencies.

## **Goal 2:**

# **Sustainable Community Development**

Develop walkable and bike-friendly neighborhoods that maximize transportation options and allow people to get everywhere they need to go on a daily basis by walking or biking.

## **Objectives:**

### **Bike and Pedestrian Infrastructure**

Include biking and walking facilities as basic infrastructure in all new development and redevelopment projects. Require the development of bike, pedestrian and trail facilities that connect residential areas, schools, parks and commercial centers.

### **Transportation and Land Use**

Encourage compact, mixed-use development patterns that have been shown to increase walking and biking and can result in these modes being the preferred transportation choices for short-distance trips.

### **School Location and Access**

Make it easy and safe for students to walk and bike to school by locating schools within walking distance of the student population they serve. Design schools sites to be pedestrian and bike-friendly.

### **Park and Recreation Facilities**

Provide park and recreation facilities within easy walking and bicycling distance to neighborhoods. Provide bicycle and pedestrian facilities within parks. Connect local and regional parks with bike and pedestrian facilities.



## Commercial and Employment Areas

Promote planning and design practices which locate shops, civic services, jobs and transit within walking and biking distance of neighborhood housing.

## Site Design

Design school sites, recreation facilities, commercial centers and employment sites that are pedestrian-oriented and easily accessible by bicycle.

## Goal 3:

# Safety and Security

Create communities where people feel safe bicycling and walking and where the interactions of pedestrians, cyclists and motor vehicle operators are respectful and tolerant. Reduce the incidence of pedestrian and bicyclist injuries and traffic fatalities. Ensure proper maintenance of bike and pedestrian facilities.

## Objectives:

### Driver, Pedestrian and Cyclist Awareness

Ensure that all drivers, pedestrians and cyclists are aware of the rules of the road and the rights of other users.

### Enforcement of Traffic Laws

Ensure that all drivers, pedestrians and cyclists obey the rules of the road and act carefully and responsibly.

### Traffic Calming

Reduce motor vehicle operating speeds where you expect to see vehicle-pedestrian conflicts and in areas of high pedestrian use i.e. in neighborhoods, schools and commercial areas.

### Safe Routes to School

Initiate and sustain a Safe Routes to School Program to reduce barriers and make it safer for children to walk and bike to school.

### Eyes on the Street

Create a sense of safety for bicyclists and pedestrians by planning and designing neighborhoods and communities to have “eyes on the street”.

### Maintenance of Facilities

Maintain sidewalks, trails, streets and roads to ensure safe use for pedestrians and bicyclists.



## **Goal 4:**

### **Economic Vitality**

Recognize biking and walking as essential activities that contribute to the economic health of our communities.

#### **Objectives:**

#### **Expand and Enhance Tourism Opportunities**

Expand and enhance opportunities for bicycle and pedestrian tourism. Connect major tourism destinations using a network of routes for biking and walking.

#### **Promote and Market**

Promote and market Fayette and Jessamine Counties as destinations for bicycle tourism.

#### **Workforce Attraction and Retention**

Promote the pedestrian and bicycle-friendly qualities of our communities to encourage workforce attraction and retention.

#### **Downtown Revitalization**

Contribute to the revitalization of the two counties' downtown areas by making walking and biking priority considerations.

## **Goal 5:**

### **Quality of Life and Active Living**

Improve the quality of life for our residents by promoting active lifestyles and recognize pedestrian and bicycle-friendly qualities as components of a more livable community.

#### **Objectives:**

#### **Active Living by Design**

Enhance public health goals and outcomes by making neighborhoods and communities places where people can routinely bicycle and walk for fitness, transportation and recreation. Consider public health outcomes in transportation planning, land use planning and site design.

#### **Aging in Place**

Provide opportunities for seniors to "age in place" and remain active, both physically and socially, by providing places to walk and good alternatives to driving. Consider the mobility of seniors in transportation planning and site design.

#### **Child-Friendly Communities**

Create child-friendly communities that encourage and enable children to bicycle and walk and to be more independent.

#### **Active Commuting**

Promote bicycling and walking to work and encourage employers to offer incentives for active commuting.

#### **Public and Environmental Health**

Partner with health and environmental organizations to promote the benefits of bicycling and walking.







# *Chapter 3*

## Community Input



## Chapter 3.

# Community Input

### 3.1 Community Input

The community involvement process consisted of several key strategies designed to encourage participation and feedback from the greatest possible number of people. Public outreach included a web-based survey, a 4-day series of public meetings and a series of stakeholder meetings. Information about the development of the plan and survey were also available at the Bike Lexington event in 2006 and 2007.



*2006 Bike Lexington participant completes a survey*

#### Survey

A questionnaire was developed at the beginning of the planning process to elicit feedback from the community regarding their preferences for biking and walking in Fayette and Jessamine Counties. The survey questions were developed to determine such things as:

- Their level of comfort and/or skill riding a bike;
- How frequently they walked and/or biked;
- Where they walked and/or biked;
- Whether they walked and/or biked for commuting, recreation or other reasons;
- Whether there were barriers for biking and walking;

- What kinds of enhancements would encourage people to bike and walk; and
- Comments about biking and walking not addressed by the survey.

The online survey was open for citizens to complete for approximately two months. The survey was available at a number of community locations and was distributed at a series of public meetings. Over 600 residents of Fayette and Jessamine Counties completed the survey. All responses were entered into a database and analyzed. The following are key points that can be concluded from the survey results.

#### General:

- The age distribution of respondents was fairly even, along with the division between male and female respondents. Most respondents lived in Lexington and were not part of a pedestrian or bicycle club.

#### Both bikers and walkers:

- Cited the desire to walk/bike more on trails.
- Reported the need for sidewalks and bike lanes on major roads.

#### When responding to questions about walking, most respondents:

- Rated the conditions for walking as fair to poor.
- Walk for recreation or exercise purposes three or more times per week.
- Rarely walk between home, school or other destinations.
- Cited distance as a deterrent to walking for purposes other than recreation.
- Primarily walk on the sidewalk.
- Indicated that not enough trails is the leading reason they do not walk more followed by the need for sidewalks, safer intersection crossings and reduced trip distances.





*Bike Lexington 2007*

### When responding to questions about biking, most respondents:

- Were bicyclists of an intermediate skill level.
- Rated conditions for bicycling as poor.
- Were concerned about traffic and aggressive drivers.
- Bicycle primarily for recreation purposes and rarely between home, work, school or to other destinations.
- Ride on neighborhood streets, but would like to bicycle more on off-street trails and major roads.
- Cited concerns about traffic as the main reason why they don't bicycle more.
- Indicated that dedicated bicycle lanes, trails and paved shoulders would encourage them to bicycle more.
- Felt there were missing links and connections between existing bicycle facilities.

A small number of write-in responses revealed that some people do not walk or bicycle due to laziness or lack of time. Building our community and infrastructure in such a way that walking and biking are easily incorporated into people's daily routines could help increase physical activity levels by making it easy and convenient to bike and walk.

## Public Meetings

The planning process required significant community input to understand how citizens view the walking and biking environment. Public meetings were held:

May 31, 2006: Jessamine County Public Library, Nicholasville

June 1, 2006: Northside Public Library, Lexington

June 2, 2006: Luce Activity Center at Asbury College, Wilmore

June 3, 2006: Joseph-Beth Booksellers, Lexington



*Asbury College hosted the Wilmore public meeting in May, 2006.*

The goal of the meetings was to initiate a discussion with the public about the bicycle and pedestrian environments in both counties and to receive input and feedback about the planning process. The purpose was to talk specifically about attendees' experiences walking and biking in their communities. Active participation and feedback was encouraged at all meetings. Survey forms and maps of Jessamine and Fayette Counties were available for attendees to provide their thoughts.

A sample of comments heard at the public meetings are listed below. A full summary of the public meetings is included in Appendix C.

- "I want to be able to walk to something if I can see it."
- "I'd like to see a paved trail between Nicholasville and the Fayette/Jessamine County line that runs parallel to Nicholasville Road."
- "I'd like to see a bike lane on Main Street in Nicholasville from one end of the bypass to the other."



- “The gaps in the sidewalks should be filled in. Put sidewalks in more places where there aren’t any—have you tried walking on Nicholasville Road?”
- “My son is trapped in our neighborhood because there’s no connectivity.”
- “This effort (bike and pedestrian plan) needs to start with the disabled and aging people – what they need to get around.”
- “Major roads/crossings are unfriendly—New Circle Road is a barrier.”
- “There are lots of good places to walk; people just don’t take advantage of the opportunities out there.”
- “Enforcement is a big issue – especially in rural areas.”



*Discussion after the Nicholasville meeting*



*North Lexington meeting*



*South Lexington meeting*

The Final Draft of the Master Plan was distributed throughout the region and on the MPO website. Comments from the public were solicited for 30 days prior to the Final Draft adoption by the Transportation Policy Committee on August 22, 2007.

### 3.2 Stakeholder Input

Interviews with key stakeholders were conducted to better understand the needs and concerns of specific user groups and organizations. An initial list of potential stakeholders was developed; stakeholders not represented on plan oversight committees such as the MPO’s Bicycle and Pedestrian Committee (BPAC), the plan’s Technical Oversight Committee (TOC) and the MPO’s Transportation Policy Committee (TPC), were individually interviewed. The list of stakeholder meetings included:

- Fayette County Schools (June 2, 2006)
- Bluegrass Council of the Blind (June 17, 2006)
- Disabled community (June 23, 2006)
- Senior Citizens (July 12, 2006)
- Bluegrass Cycling Club (February 17, 2007)

Each of these groups had different insight into what a bicycle and pedestrian plan should contain, promote and be, in order to accommodate their needs. They were able to identify both specific facility needs (such as missing connections or places where repair is needed) as well as policy needs to improve service. All of the input gathered at these meetings was considered during the planning process and incorporated into the plan as much as possible. For additional information on input from these specific stakeholder groups, refer to Appendix C.







*Tour of downtown Lexington reveals many inadequacies such as curb ramps that are not ADA compliant*

### 3.3 Technical Input and Policy Oversight

Technical input and guidance was provided throughout the planning process by the Technical Oversight Committee (TOC) and the Bicycle and Pedestrian Advisory Committee (BPAC). The Transportation Policy Committee (TPC) provided policy oversight and guidance. Each of these groups and their role in the development of the plan is discussed in more detail below.

#### Technical Oversight Committee (TOC)

This committee provided technical guidance in the areas of planning, traffic, engineering and maintenance, and included representation from LFUCG, the University of Kentucky, the Kentucky Transportation Cabinet, Jessamine County, and the City of Nicholasville.

The TOC was instrumental in providing guidance on different elements of the plan, and the steps necessary for adoption and implementation.

#### Lexington Area MPO Transportation Policy Committee (TPC)

The TPC is the policy and decision-making body of the MPO and is comprised of representatives from Jessamine County, Wilmore, Nicholasville and the Lexington-Fayette Urban County governments. Presentations to the TPC were made at the beginning of the planning process, following the four initial public meetings, and to present the final draft of the plan.

#### Lexington Area MPO Bicycle and Pedestrian Committee (BPAC)

A sub-committee of the Lexington Area MPO, the BPAC advises the TPC about non-motorized transportation needs and projects. The committee was apprised of the progress on the plan at their monthly meetings to ensure that the group was informed and given the opportunity to provide input throughout the planning process.

To ensure good communication between all groups, the BPAC committee chair was a member of the TOC. Several other BPAC members also participated in other meetings.



*Dave Elbon (left) 2006 BPAC chair and Scott Campbell (right) 2007 BPAC chair flank Dexter Porter at the November 2006 BPAC meeting at Asbury College*





# *Chapter 4*

## Existing Conditions



## Chapter 4.

# Review of Existing Conditions

An assessment of existing conditions included an inventory of current use, bicycle and pedestrian facilities and related plans, policies and programs that affect bicycle and pedestrian travel in the region. The inventory revealed progress being made toward becoming a bicycle and pedestrian-friendly region – both “on the ground” and through the level of public and official support.

### 4.1 Bicycle and Pedestrian Trends

A review was conducted of bicycle and pedestrian travel in the region to determine how frequently people are bicycling and walking. The number, type and location of bicycle and pedestrian-related traffic collisions were also reviewed to identify roadways with unsafe conditions.

#### Bicycling and Walking in the Region

The total number of trips (for all purposes) made in the region by bicycling and walking is unknown; however, information on work-related bicycle and pedestrian trips is available through the U.S. Census. In Jessamine County, the number of walking commutes has continued to decline, from 5.5% in 1990 to 3.4% in 2000. In Fayette County, walking commutes have also declined, from 5.1 to 4.0%. Pedestrian commuting in the region exceeded the national and state averages of 2.7 and 2.1% in the year 2000.

Commutes by bicycle in Jessamine County increased slightly between 1990 and 2000 from 0.09% to 0.14%, while Fayette County saw a 40% increase from 0.35 to 0.57%. Bicycling in Fayette County exceeded the national and state averages of 0.44 and 0.17% in the year 2000. Figures depicting where commuters lived in 2000 are located in Appendix A.

The U.S. Census does not provide information on the number of trips made by bicycling or walking for recreation and for other utilitarian purposes, such as trips to the store, the park, or a friend’s home. Studies show that these utilitarian trips represent four out of five trips, so a random sample travel survey is needed to accurately determine the total number of bicycling and walking trips in the region. While the survey conducted for this plan, as described in Chapter 3,

provides insight into how often respondents bike and walk and for what purposes, the survey was self-selective and not representative of the overall region.

#### Pedestrian and Bicycle Crashes

Crash data was provided by the Lexington Area MPO for a three-year period from January 1, 2003, through December 31, 2005. The information was evaluated to determine trends during this period.

##### *Fayette County / Pedestrian*

- Motor vehicle crashes involving a pedestrian: 404
- Number of crashes with injury: 363
- Number of crashes with fatality: 11

##### *Jessamine County / Pedestrian*

- Motor vehicle crashes involving a pedestrian: 23
- Number of crashes with injury: 20
- Number of crashes with fatality: 1

##### *Fayette County / Bicycle*

- Motor vehicle crashes involving a cyclist: 182
- Number of crashes with injury: 132
- Number of crashes with fatality: 1

##### *Jessamine County / Bicycle*

- Motor vehicle crashes involving a cyclist: 13
- Number of crashes with injury: 9
- Number of crashes with fatality: 2

More information on crashes and crash conditions in each county is provided in Appendix A.



## 4.2 Walkability

Pedestrian-friendly communities share many characteristics that encourage walking, including pedestrian-oriented roadway design, site design and land use patterns. Walkable communities have convenient facilities (sidewalks, crosswalks and trails) that allow pedestrians to walk to destinations easily and safely.

### Roadway Design

Pedestrian-scaled streets are designed to encourage appropriate traffic speeds and volumes, provide a buffer between pedestrians and traffic, and provide interest and comfort for the pedestrian (such as shade trees and pedestrian-scale lighting).

Traffic speeds dramatically affect a pedestrian's actual and perceived sense of safety. Pedestrians struck by a motor vehicle traveling at 40 miles per hour (mph) will be fatally injured 85% of the time. Reducing speeds to 30 mph reduces the risk of death to 45%. Only 5% of pedestrians struck by vehicles traveling at 20 mph are fatally injured. Therefore, it is desirable to reduce vehicle speeds in areas where pedestrians are present, especially in neighborhoods and near schools and parks.

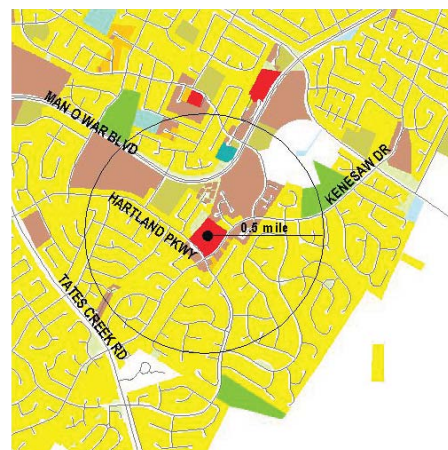
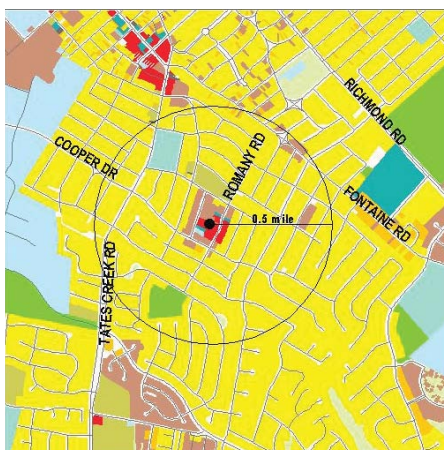
Vehicle speeds are most influenced by roadway design rather than posted speed limits. A narrow, curvilinear street with on-street parking and street trees slows traffic and creates a pedestrian-friendly atmosphere. Neighborhood and residential collector streets that are wide and straight and have very little on-street parking encourage fast moving traffic. These streets frequently receive requests for traffic calming measures.

In response to traffic calming requests, LFUCG initiated a Neighborhood Traffic Calming Program in the year 2000. Engineering studies are required to determine if traffic calming is warranted and neighborhoods must contribute to the cost of installing the recommended calming measures. Funding for the program is approximately \$40,000 annually. There are currently 50 active projects and many inquiries into the program each year.

In Fayette County, street trees and landscape buffers are required between the street pavement and sidewalk in residential areas. There is a provision for narrower streets in traditional neighborhood developments and the expansion area. Pedestrian-scale street lighting is not required, but is provided in the downtown area. A city-wide 25 mph speed limit has been initiated on local neighborhood streets, unless they are signed otherwise.

### Development Patterns and Design

Land use patterns have a significant affect on walkability. Neighborhoods that are compact (higher in density) and have mixed land use have been shown to increase bicycling and walking rates. Such areas have neighborhood-oriented commercial centers and destinations including schools, parks and workplaces within walking distance to where people live. Examples of walkable and less walkable neighborhoods are shown in the figures below.



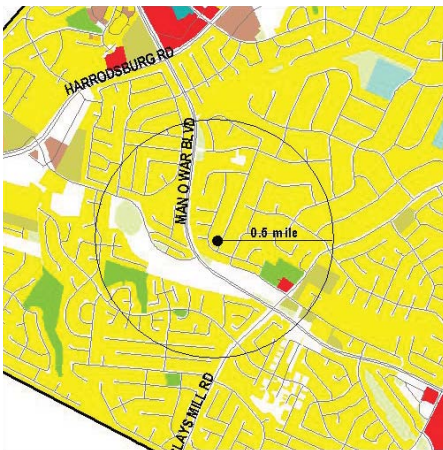
Shown above are Romany Road (left) and Hartland Shopping Center (right) areas, good examples of residential areas with neighborhood-oriented shopping centers and a mix of low and high density housing nearby.



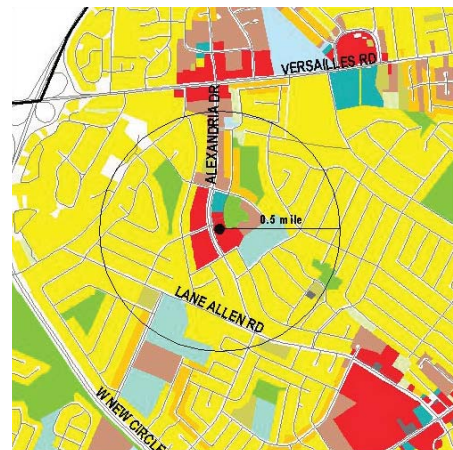


In the Lexington Area MPO region, commercial development is particularly concentrated along the US 27 corridor, the major arterial connecting Fayette and Jessamine Counties. This corridor is auto-oriented with big-box developments and strip shopping centers that are inaccessible to pedestrians due to a lack of continuous sidewalks. There are also deep building setbacks, with large parking lots that separate building entrances from the street, sidewalks and transit stops.

Street patterns and connectivity also influence walkability. Pedestrians are sensitive to long trip distances and out-of-direction travel. Well-connected streets with short blocks provide pedestrians with more direct access to their destination and a variety of routes from which to choose. The two figures on the following page depict how different street patterns found in Fayette County can influence travel distance.



*This single-family residential area in southwest Fayette County does not have access to neighborhood shopping. Palomar Shopping Center is nearby, but is oriented to Harrodsburg Road, a major arterial that acts as a barrier to pedestrians.*



*Gardenside Shopping Center is an example of a mixed neighborhood with schools, parks, professional offices and high and low density housing in close proximity. Many residences are within walking distance to shopping; however the commercial area is oriented more to the major collector street (Alexandria Dr.) than the neighborhood.*



*Pedestrian oriented shopping facility*



*Large parking lot separates pedestrian path from the front door of the business*





*Good and poor street connectivity: new development in north-east Fayette County on the left, development in southeast Fayette County on the right. The two starred properties in the right image are less than one-tenth of a mile apart, yet the walking distance, using the roadway system, is greater than one mile because of the preponderance of cul-de-sac street configurations.*

## Sidewalks

Sidewalks are needed for safe pedestrian travel on all roadways which allow pedestrian traffic. Studies have indicated that fewer pedestrian crashes occur along roadways with sidewalks on both sides of the street compared to streets with no sidewalks or sidewalks on one side only. The location of existing and missing sidewalks in Fayette and Jessamine Counties are depicted in figures 9 and 10.

Sidewalks should be of an adequate width, level, slip-resistant and free of obstacles to provide for safe travel, especially for seniors and people with visual and mobility impairments. A 2005 survey reviewed the condition of the sidewalks on 65% of Fayette County's roadways. The survey revealed that 15% of sidewalks were in poor condition, 40% were in fair condition and 44% were in good condition.

*Table 1. Sidewalks in Fayette and Jessamine Counties*

	Fayette County		Jessamine County	
	Arterial	Collector	Arterial	Collector
No sidewalks	38.1%	10.9%	57.9%	60.9%
Sidewalk on one side	14.9%	7.7%	3.5%	8.2%
Sidewalk on both sides	46.9%	81.3%	38.5%	31%

In Fayette County, 38.1% of arterial streets do not have sidewalks and 14.9% have sidewalks on only one side of the street. In Jessamine County 57.9% of arterials do not have sidewalks on either side of the street. Table 1 depicts the percentages of pedestrian accommodation on arterial and collector streets in each county.

In Fayette and Jessamine Counties, four-foot sidewalks are required in all new subdivisions. The Jessamine County/Wilmore Planning Commission also requires five-foot sidewalks on non-residential collector streets. Waivers to the sidewalk requirements may be granted by each jurisdiction's Planning Commission. Fayette County permits waivers in any development. The Jessamine Wilmore Planning Commission may grant sidewalk waivers in single-family residential develop-







*Coordination is essential - this sidewalk leads directly to a fence around Crawford Middle School property*



*Sidewalk ends along an arterial road*

ments. The Nicholasville Planning Commission allows sidewalk waivers in industrial developments.

Sidewalk maintenance is the responsibility of adjacent property owners in both Fayette and Jessamine County. Local governments are responsible for enforcing maintenance requirements. In Fayette County, the number of Code Enforcement Officers tasked with ensuring sidewalk maintenance has declined over the past five years to one individual. The reduction in staff has resulted in a complaint-driven enforcement pro-



*Fayette County sidewalk in poor condition*

cess. Annual (or bi-annual) proactive sweeps of the city to ensure sidewalk maintenance are not possible, but are desirable.

Fayette County has established a sidewalk assistance program that reimburses property owners 50% of the cost of sidewalk replacement. Funding for the program has decreased dramatically over the last five years from approximately \$300,000 to \$75,000 annually.

## Intersections

The ability and ease of crossing the street impacts the walkability of a community. Safe pedestrian crossings should be provided at intersections. Mid-block crossings should be provided where it is difficult for pedestrians to cross the street to reach key destinations (and where an intersection crossing is not provided nearby). Several recent national studies have provided guidance on appropriate treatments at mid-block crossings so that pedestrian safety is not compromised. Currently, neither LFUCG nor the Kentucky Transportation Cabinet typically install mid-block pedestrian crossings.

Large curb radii and multiple lanes of vehicular traffic increase the length of an intersection that a pedes-



*Difficult intersection with crossing distance of 150 feet*



*Missing mid-block crosswalk between two trail segments in Beaumont subdivision*



trian must successfully navigate. Curb extensions (or bulb-outs) and median refuges can shorten this span on busy streets. Lexington has curb extensions in the downtown area and in some newer developments. The intersection of Richmond Road and Chinoe Road is an example of a median that acts as a pedestrian refuge.



*Median serves as a pedestrian refuge at intersection of Richmond and Chinoe Roads*

Intersections and mid-block crossings should include crosswalks that are wide enough to accommodate pedestrian traffic; should be well-marked by signage and striping; signaled appropriately; and should be ADA compliant.

## Intersection Audits

Sixty intersections were audited in 2006-2007. The intersections selected for evaluation were geographically distributed and representative of each of the following environments in each county:

- Suburban commercial
- Suburban non-commercial
- Urban commercial
- Urban non-commercial

The sample audits noted the presence and visibility of crosswalks; the presence of sidewalks; the presence of pedestrian signals; accessibility of pedestrian actuators; curb ramps and other factors. Thirty intersection audits were performed for each county. This represents a small number of all signalized intersections in each county. Table 2 below depicts the results of some of the data collected for the 60 intersections. Table 3 on the next page depicts the results of five criteria used to determine if curb ramps were ADA compliant. Assuming compliance equates to meeting all five criteria, it can be stated that, in general, curb ramps are not ADA compliant in either county.

*Table 2. Intersection Audit Data for Fayette and Jessamine Counties*

	Fayette County	Jessamine County
Percentage of signalized intersections with crosswalks	93.3%	75%
Crosswalk Condition		
Poor	22.1%	0%
Fair	30.9%	84%
Good	47.0%	16%
Average Crosswalk Distance		
Arterial Street	79.5 feet	68.2 feet
Collector Street	52.6 feet	57.7 feet
Local Street	50.2 feet	32.1 feet
Presence of Pedestrian Signals at Signalized Intersections	76.5%	50%
Presence of Accessible Pedestrian Signal Actuators	84.6%	100%
Percentage of Intersections that have Sidewalks on all Approaches	76.7%	33.3%
Percentage of Sidewalks that have Curb Ramps	88.5%	67.2%



It should be noted that the presence of pedestrian crossing features, such as crosswalks, signals and curb ramps, may not be a direct indicator of whether the public perceives a location to be a safe crossing. Intersections located on major arterials such as Nicholasville Road at Reynolds Road and Man O War at Harrodsburg Road were found to have good pedestrian infrastructure. However, high traffic volumes, multiple travel lanes to cross, and aggressive or distracted drivers may lead people to feel unsafe.

The figures on the following pages depict some of the quantifiable existing conditions affecting the walkability of Fayette and Jessamine Counties. These figures consist of land use in Fayette and Jessamine Counties (figures 2 and 3); the availability of public transportation in Fayette County (figure 4); schools, community centers and libraries in Fayette and Jessamine Counties (figures 5 and 6); recreation areas in Fayette and Jessamine Counties (figures 7 and 8); absent pedestrian facilities in Fayette and Jessamine Counties (figures 9 and 10); and absent pedestrian facilities along major roads in Fayette and Jessamine Counties (figures 11 and 12). Figures showing the intersections audited in Fayette and Jessamine Counties are located in Appendix A.

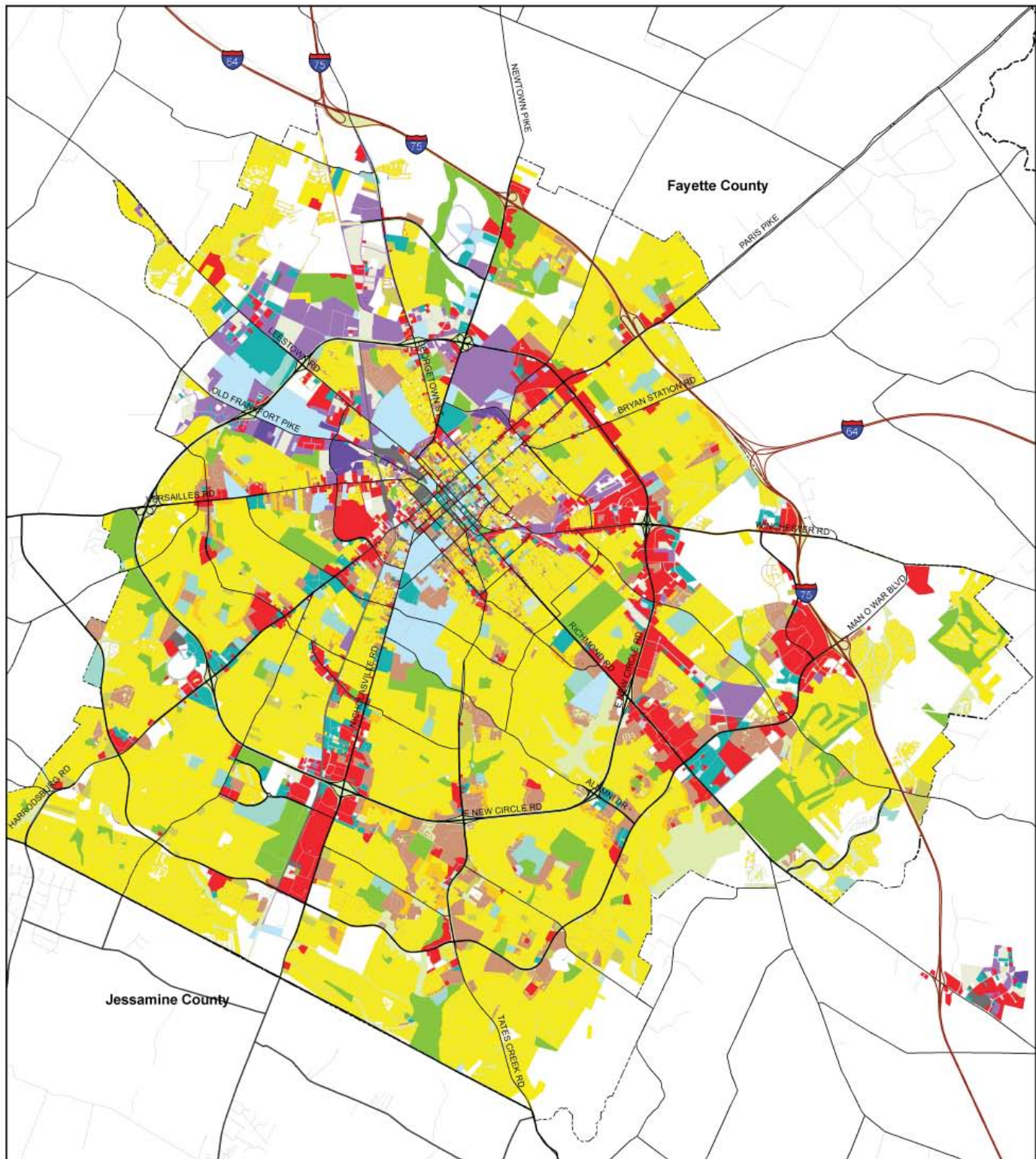
*Table 3. Compliance of Curbs with ADA Criteria*

<b>Number of Criteria Met</b>	<b>Fayette County</b>	<b>Jessamine County</b>
0	5.1%	2.6%
1	2.8%	2.6%
2	9.0%	40.3%
3	19.2%	20.8%
4	53.7%	20.8%
5	10.2%	13.0%





Figure 2. Land Use in Fayette County Urban Service Area



### Legend

- |                        |                    |                    |
|------------------------|--------------------|--------------------|
| Urban Service Area     | Commercial         | Schools            |
| Single Family          | Mixed use          | Greenspace         |
| Duplex housing         | Light Industrial   | Parking lot        |
| Townhomes              | Heavy Industrial   | Recreation         |
| Multi-family housing   | Warehouse          | Vacant lot         |
| Lodging/Group quarters | Places of Worship  | Interstate         |
| Professional Office    | Public/Semi-public | Arterial/Collector |
|                        |                    | Other Road         |

Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2006)

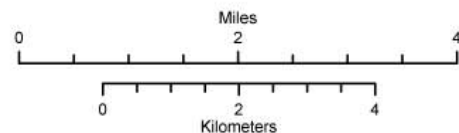
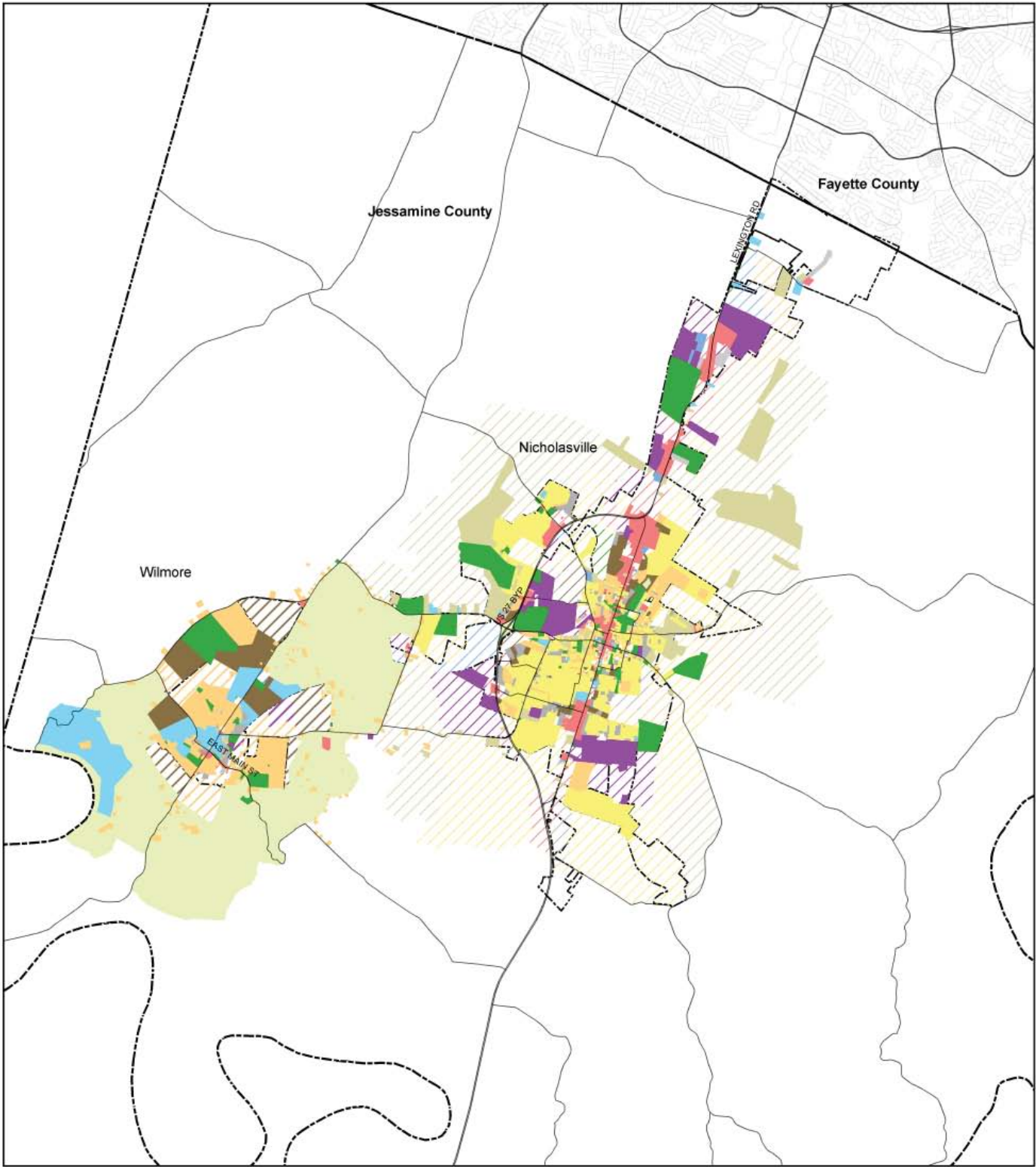


Figure 3. Land Use in Jessamine County



**Legend**

- |                               |                                   |                                     |
|-------------------------------|-----------------------------------|-------------------------------------|
| Urbanized Area                | Low Density Residential           | Future Professional Office          |
| Commercial                    | Future Low Density Residential    | Public/Semi-Public                  |
| Future Commercial             | Medium Density Duplex             | Future Public/Semi-Public           |
| High Density Townhomes        | Future Medium Density Duplex      | Undeveloped / Agricultural          |
| Future High Density Townhomes | Medium Density Residential        | Very Low Density Residential        |
| Industrial                    | Future Medium Density Residential | Future Very Low Density Residential |
| Future Industrial             | Mobile Homes                      | Arterial/Collector Road             |
| Institutional                 | Professional Office               |                                     |

Source: KYTC, KYGEONET, NATD (2005) and BGADD (2006)

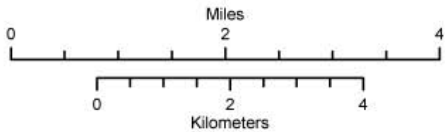
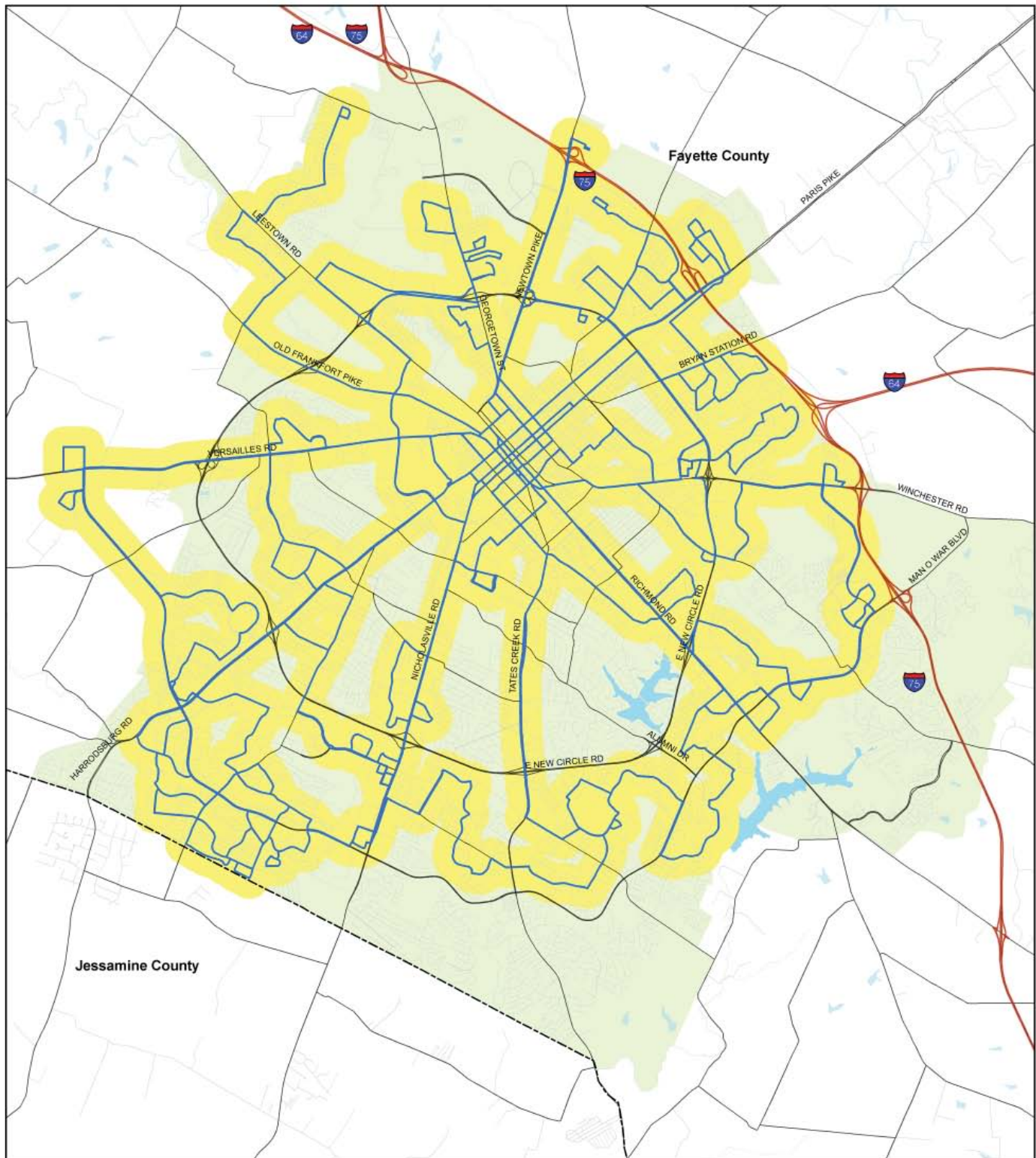




Figure 4. Public Transportation in Fayette County



#### Legend

- Lextran Routes
- 1/4 Mile Walk
- Urban Service Area
- Water
- Interstate
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005), LFUCG (2006/2008) and PB Analysis (2006)

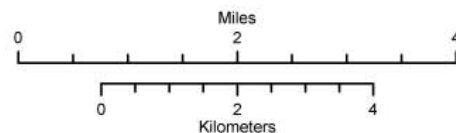
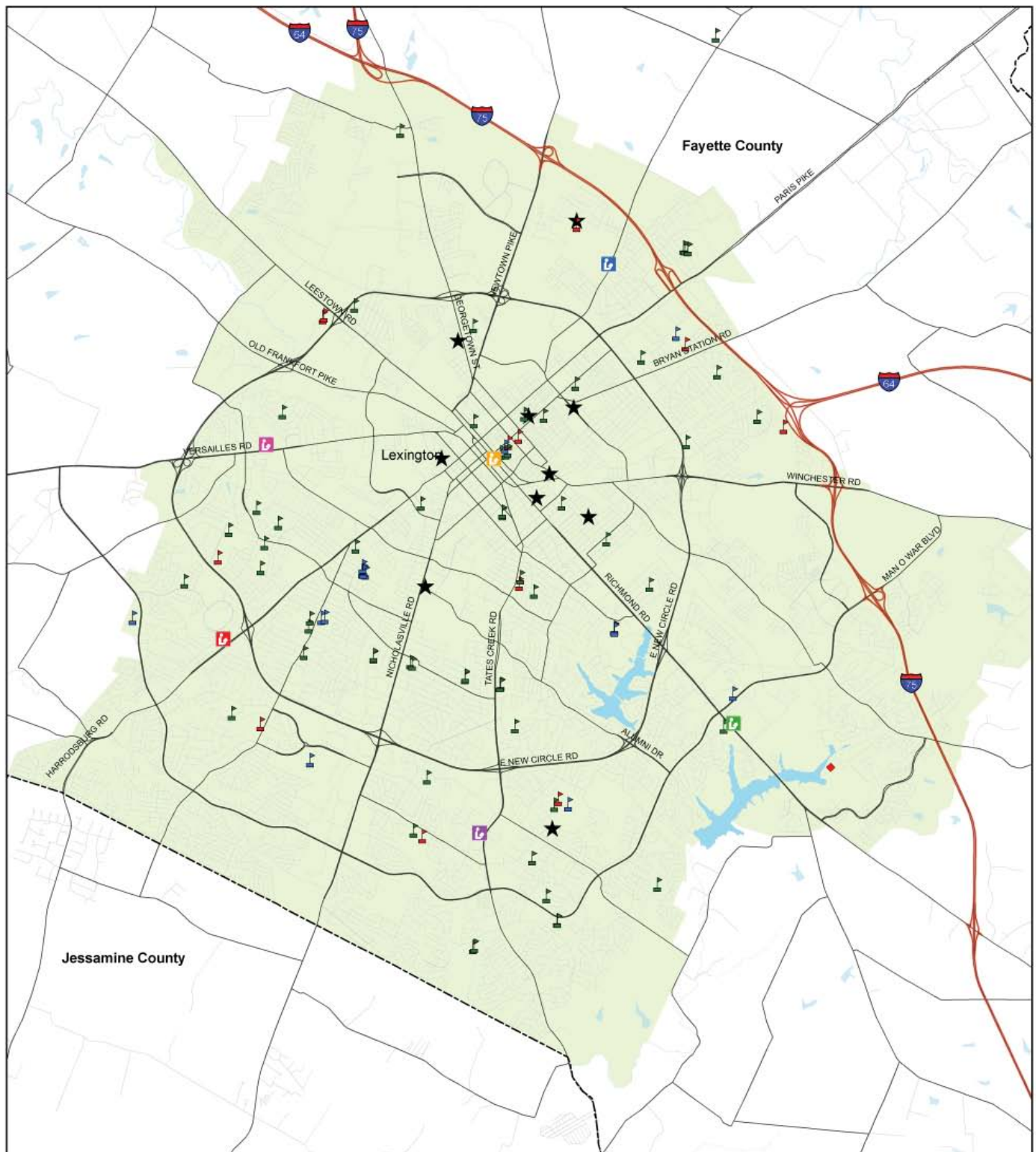


Figure 5. Schools, Community Centers, and Libraries in Fayette County



### Legend

- |                   |                     |                         |
|-------------------|---------------------|-------------------------|
| High School       | Beaumont Branch     | Water                   |
| Middle School     | Central Library     | Urban Service Area      |
| Elementary School | Eagle Creek Branch  | Interstate              |
| Community Center  | Northside Branch    | Arterial/Collector Road |
|                   | Tate's Creek Branch | Other Road              |
|                   | Village Branch      |                         |

Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2006)

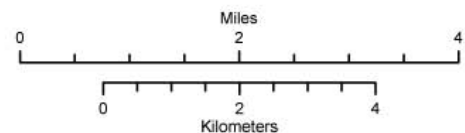
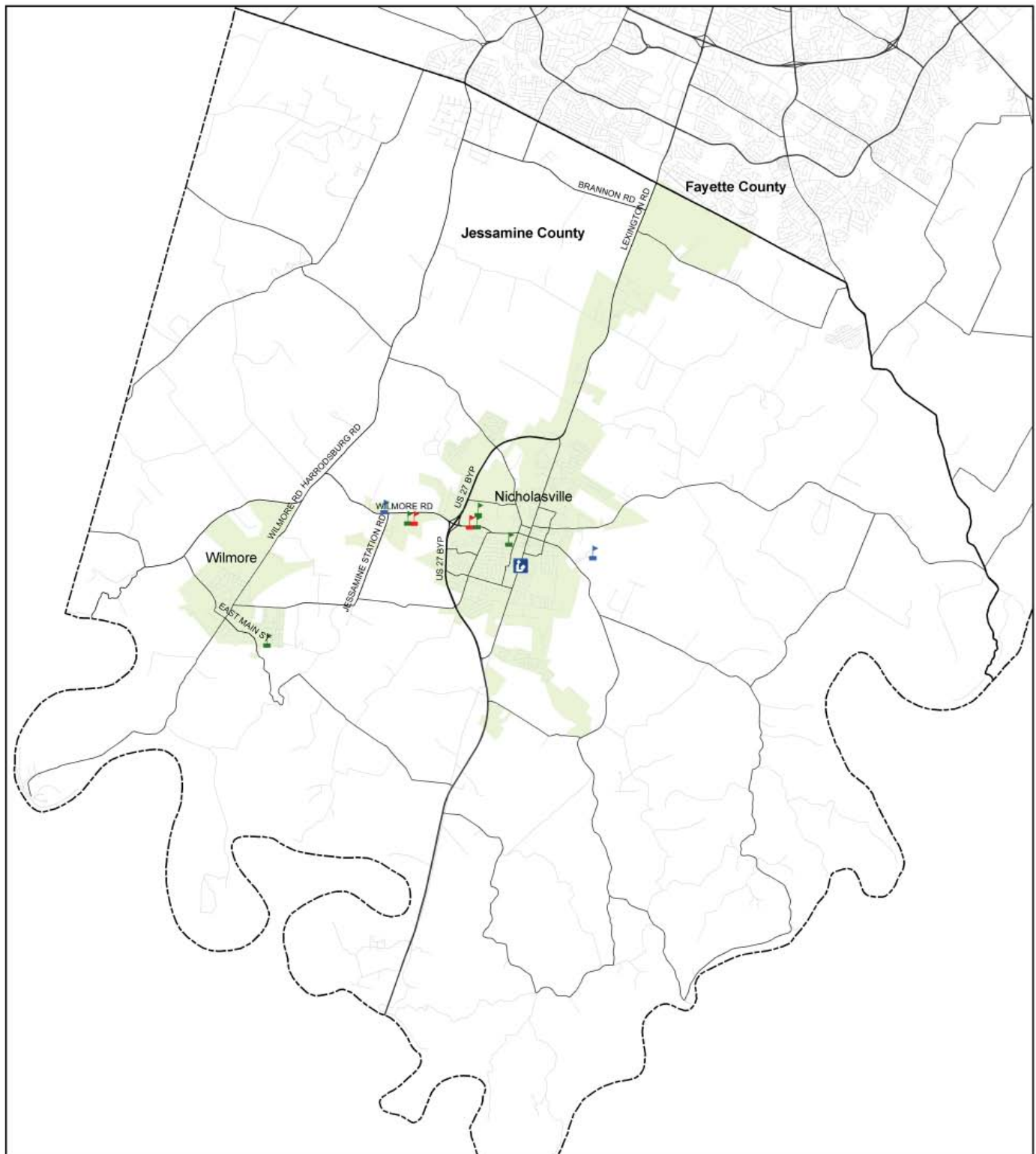




Figure 6. Schools, Community Centers, and Libraries in Jessamine County



### Legend

-  High School
-  Middle School
-  Elementary School
-  Main Library
-  Urbanized Area
-  Arterial/Collector Road
-  Other Road

Source: KYTC, KYGEONET, NTAD (2005) and BGADD (2006)

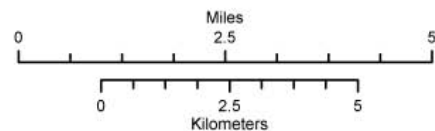
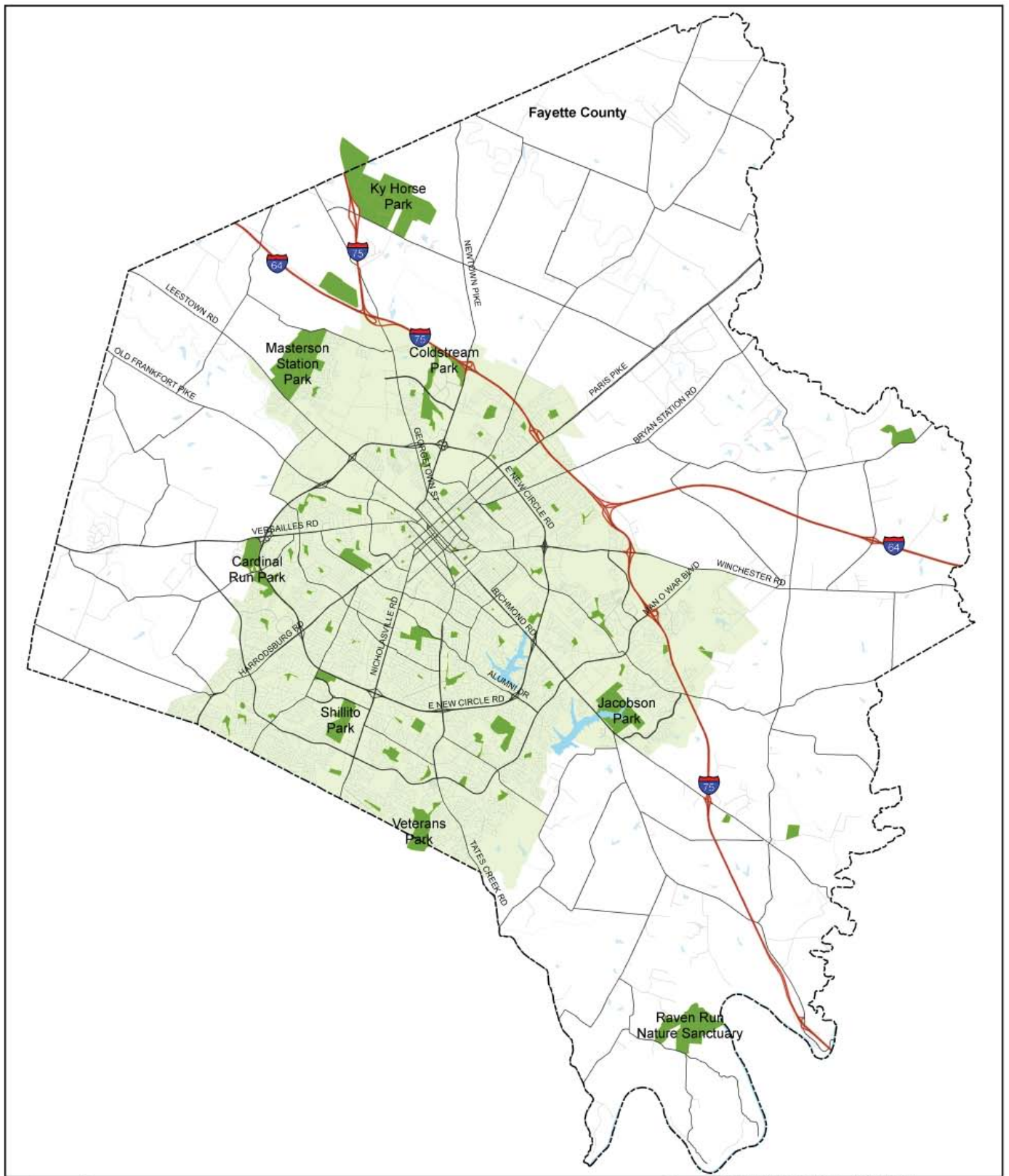
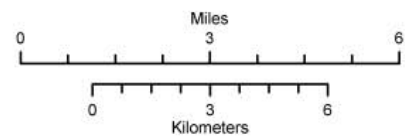


Figure 7. Recreation Areas in Fayette County



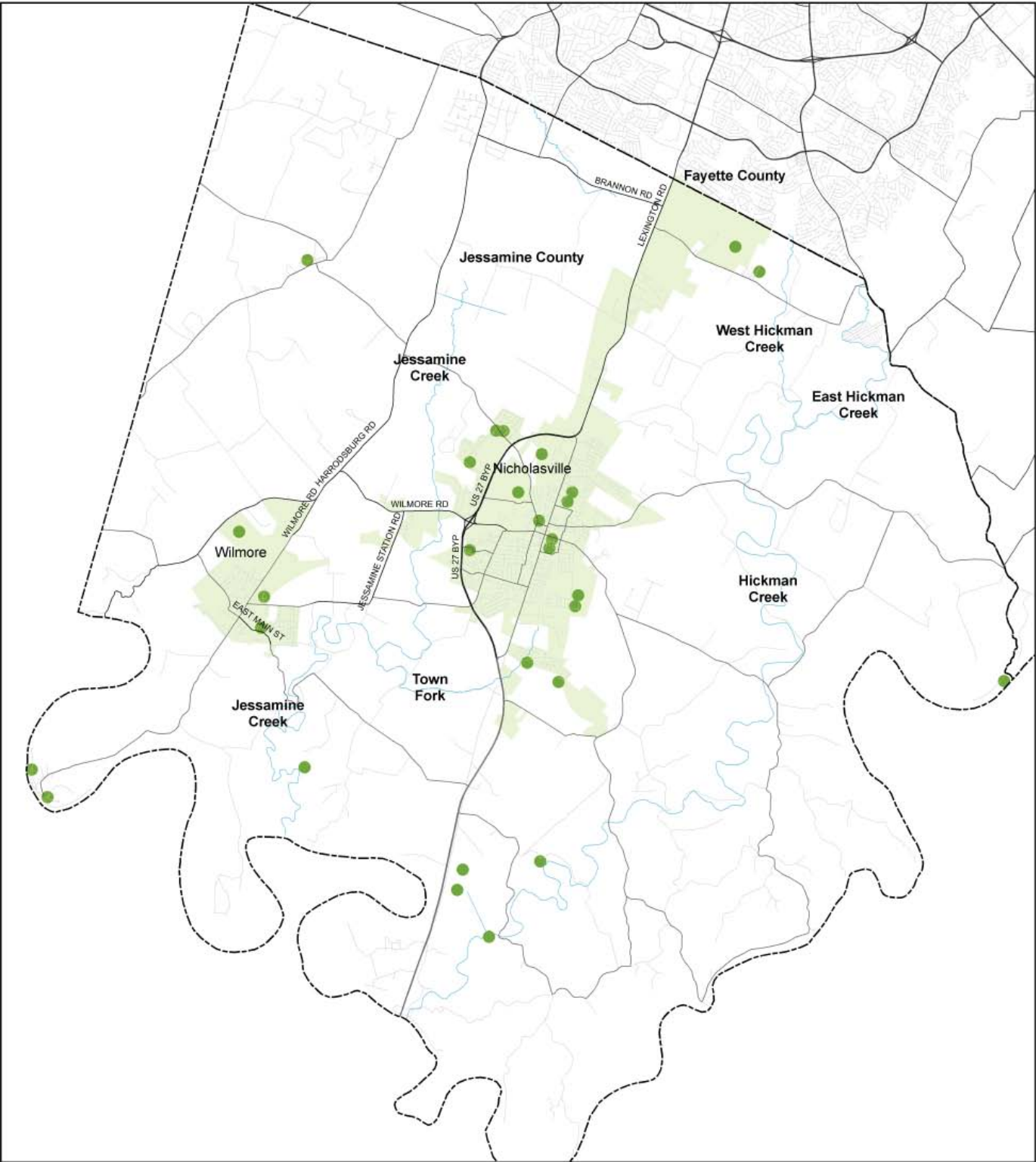
**Legend**

- Water
- Parks
- Urban Service Area
- Interstate
- Arterial/Collector Road
- Other Road



Source: KYTC, KYGEONET, NTAD (2005) and LFUGG (2006)

Figure 8. Recreations Areas in Jessamine County



**Legend**

- Parks
- Creeks
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and BGADD (2006)

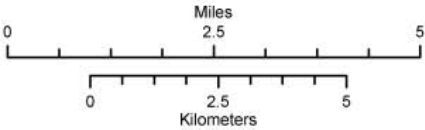
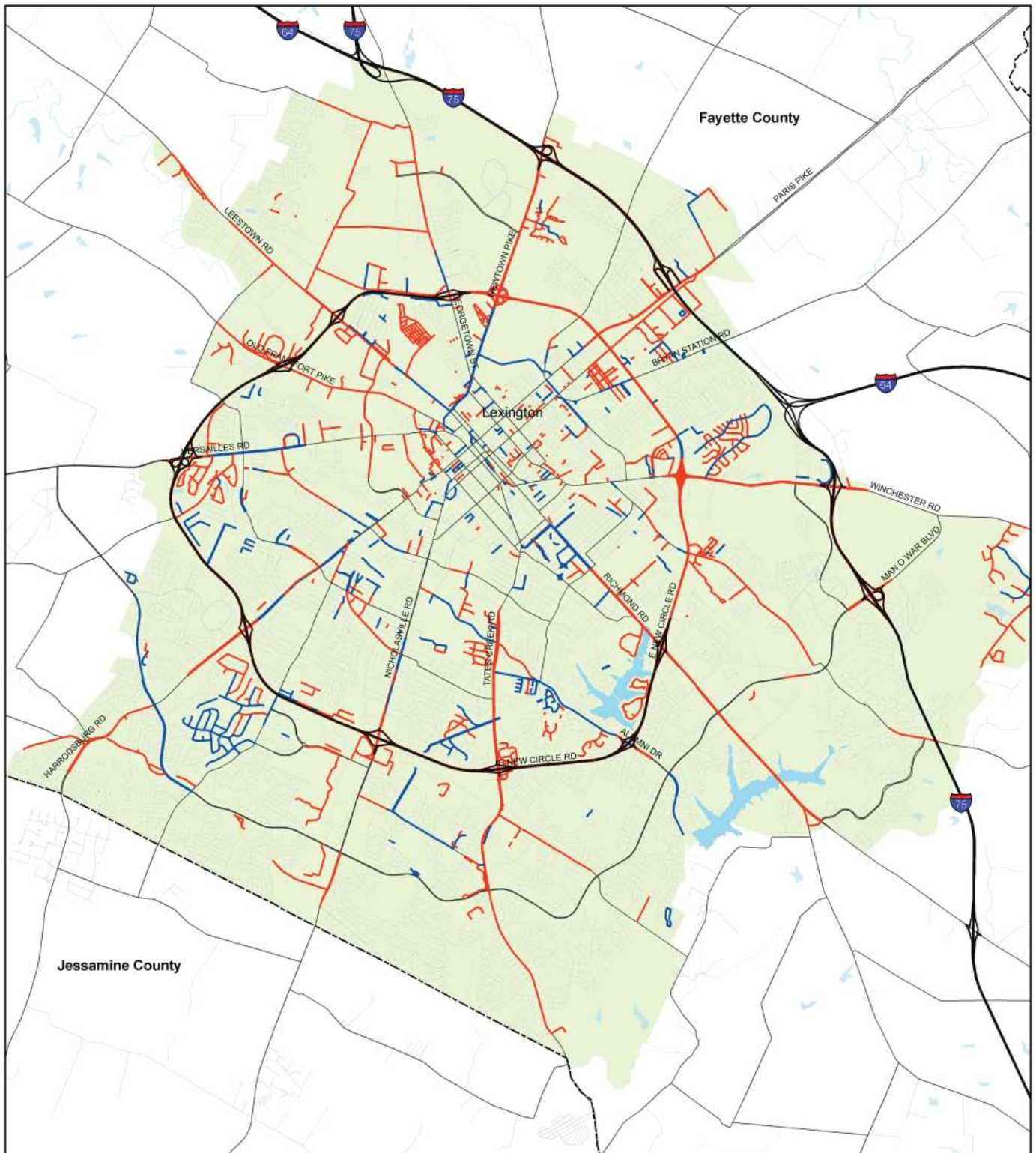




Figure 9. Absent Pedestrian Facilities in Fayette County



### Legend

- Sidewalk Absent Both Sides
- Sidewalk Absent One Side
- Water
- Urban Service Area
- Limited Access Road
- Arterial/Collector Road
- Other Roads

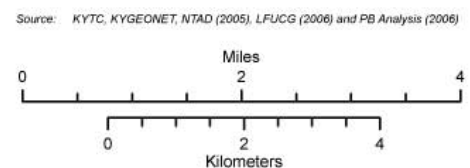
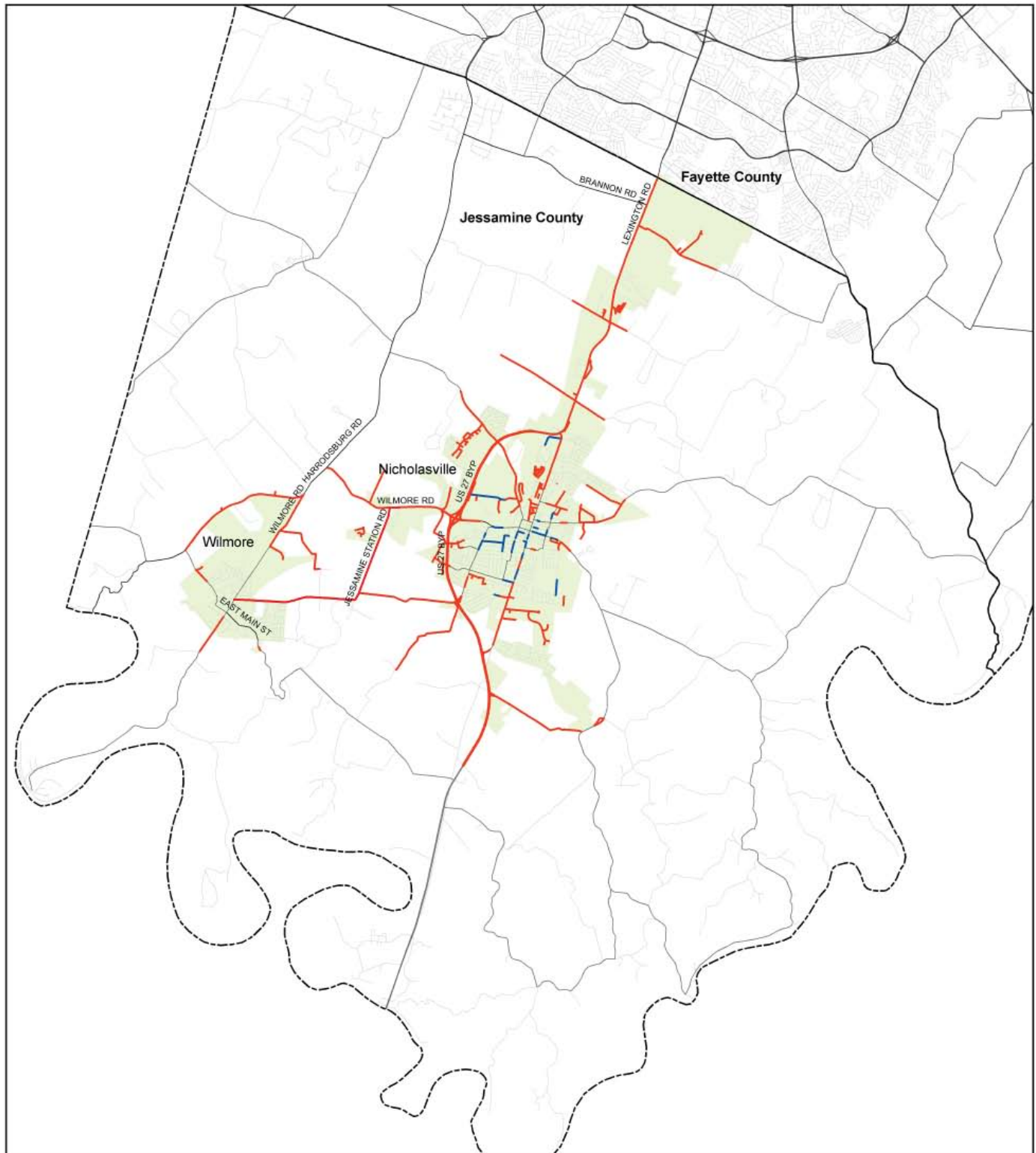


Figure 10. Absent Pedestrian Facilities in Jessamine County



**Legend**

- Sidewalk Absent on Both Sides
- Sidewalk Absent on One Side
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and PB Analysis (2006)

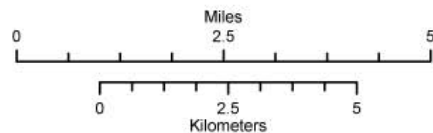
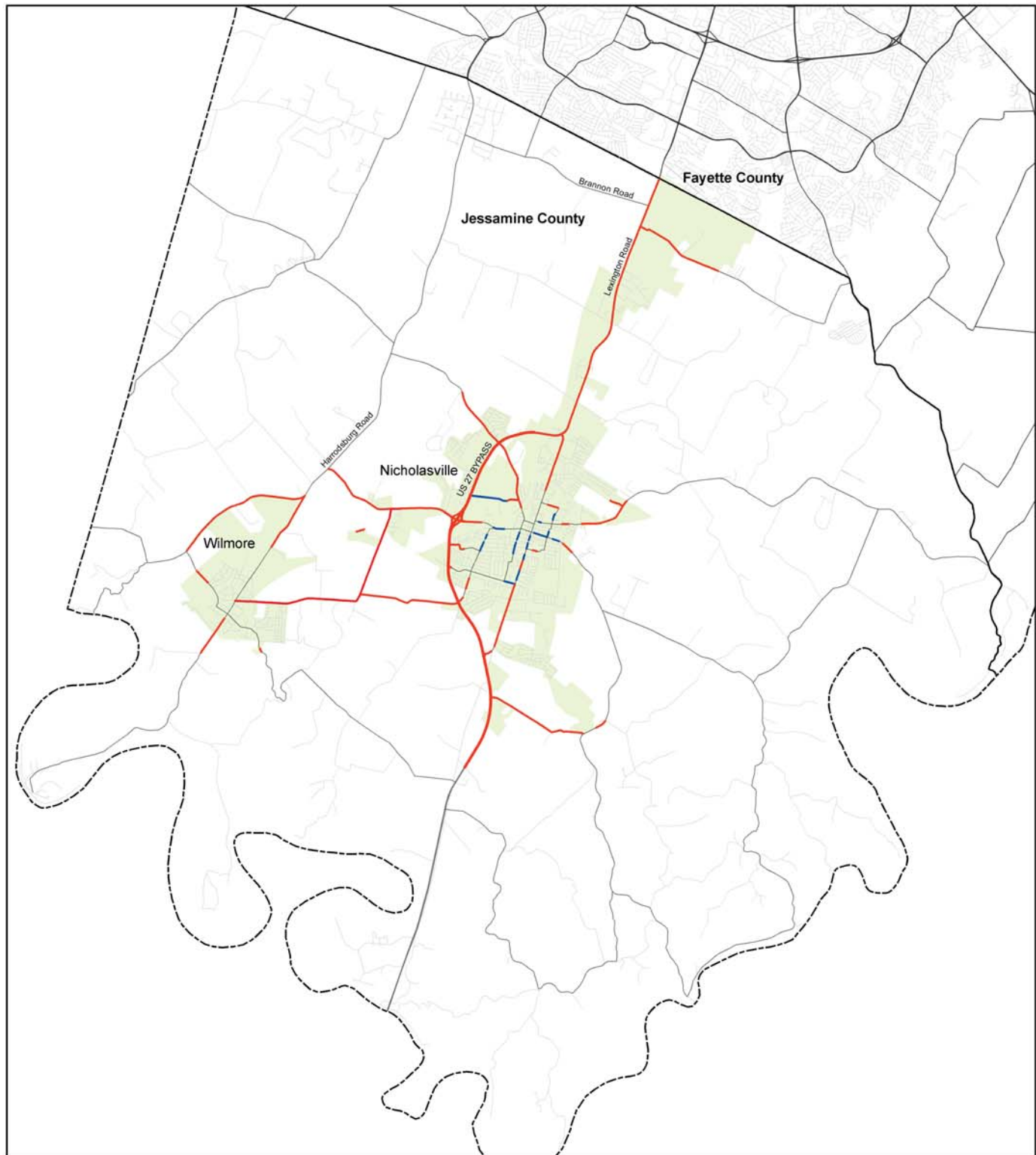






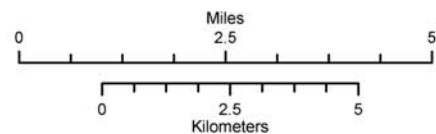
Figure 12. Absent Pedestrian Facilities Along Major Roads in Jessamine County



**Legend**

- Sidewalk Absent on Both Sides
- Sidewalk Absent on One Side
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and PB Analysis (2006)



### 4.3 Bikeability

A bicycle-friendly city ensures safe bicycle access for cyclists of various skill levels and for various types of cycling through off-road trails and on-road bike facilities. Different types of bicycle riding are encouraged throughout the community, including bicycling for recreation, utilitarian trips and transportation. Bicycle-friendly communities provide adequate bicycle parking and have public transit systems that accommodate bicyclists. Bicyclists are easily detected at roadway intersections and can negotiate them safely.

An assessment of existing conditions for bicycling in the MPO region follows.

#### Types of Bicyclists

The American Association of State Highway and Transportation Officials (AASHTO) classifies bicyclists into three categories: A, B and C. Each category describes a bicyclist's skill and comfort level, as well as the types of bike facilities that will best accommodate their needs:

- **A - Advanced** or experienced riders generally use bicycles as they would a motor vehicle. They ride for convenience and speed and want direct access to destinations with minimum detours or delay. They are typically comfortable riding in motor vehicle traffic.
- **B - Basic** or less confident adult riders may use their bikes for transportation purposes, but prefer to avoid roads with fast and busy motor vehicle traffic. Basic riders are comfortable riding on lower volume streets and shared use paths and prefer designated facilities such as bike lanes or wide shoulder lanes.
- **C - Children**, riding on their own or with their parents, may not travel as fast as their adult counterparts but still require access to key destinations in their community. Residential streets with low motor vehicle speeds, linked with shared use paths, and busier streets with well-defined pavement markings, can accommodate children without encouraging them to ride in the travel lane of major roadways.

#### Types of Bicycle Riding

- **Commuting** – Describes bicycle trips to work. Commuter cyclists generally desire direct routes to their destination and very little delay. They require secure bicycle parking and may desire showers and/or changing stations at their place of work.
- **Utilitarian** – Describes bicycle trips to destinations other than a place of work. Bicyclists riding to the store, park or other public facility also require direct access to destinations, but may be more tolerant of some out-of-direction travel and delay. Secure bicycle parking is needed at their destination.
- **Recreational / touring** – Describes bicycle trips for recreation, exercise or tourism. Longer routes are desirable and may include both urban and rural areas. Longer loops and linear routes, and signed (on-road or off-road) routes traversing several counties and/or states is desirable.

#### Types of Bicycle Facilities

The different types of bicycle facilities, as defined by AASHTO, are listed below. Table 4 on the following page depicts a comparison of the types and lengths of bike facilities in Fayette and Jessamine Counties.

- **Shared roadways** – Most bicycle travel currently occurs on these roadways. Signing or striping for bicycle use may be unnecessary for safety, or improvements may be needed before bikeway designation would be appropriate. Unsigned paved shoulders, wide curb lanes, neighborhood streets and rural roads are shared roadways.
- **Signed shared roadways** – Signage may be used to provide continuity to other bicycle facilities or designate preferred routes through high demand corridors.
- **Bike lanes** – Bike facilities established with appropriate pavement markings and signage along street corridors. Bike lanes delineate roadway space for bicyclists. They afford more predictable movements by both drivers and cyclists.





- **Shared use paths** – Trails may offer opportunities not provided by the road system. Trails are designed with bicyclist safety in mind, but other users such as pedestrians and joggers are likely to use these facilities. Recreational walking paths are not classified as shared use paths.



*Winchester Road Shoulder*



*Squires Road Shared Use Path*



*Euclid Avenue Bike Lane*

*Table 4.*

*Bike Facilities in Fayette and Jessamine Counties*

	Fayette County		Jessamine County	
	Existing	Funded	Existing	Funded
Shared roadway				
paved shoulder	15 mi.	7 mi.	18 mi.	1 mi.
wide curb lanes	un-known	n/a	un-known	n/a
Signed routes	4 mi.	0 mi.	0 mi.	0 mi.
Bike lanes	12 mi.	24 mi.	0 mi.	0 mi.
Shared use path	8 mi.	12 mi.	1 mi.	5 mi.

One type of facility will not fit all riders. Ideally, all cyclists, from experienced to novice, should be accommodated for all types of trips, whether for commuting or touring. By law, bicycles are considered a vehicle and have the same rights to the streets as motorized vehicles. Bicycle facilities may be added to certain roadways to add comfort and safety for cyclists, to encourage bicycling by those less inclined to ride with traffic, and where traffic volumes or street geometrics create hazardous conditions.

Existing and funded bike facilities in Fayette County are shown in figure 16. Existing and funded bike facilities in Jessamine County are shown in figure 17.

## **Bicycle Level of Service**

Since there are very few existing bike facilities in Fayette and Jessamine Counties, most bicycling takes place on roadways without designated facilities. A Bicycle Level of Service (BLOS) study was conducted in 2004 on all major streets in Fayette County to determine which ones are currently considered suitable for bicycle riding and which streets are most in need of improvement. The BLOS was determined for arterials and collector streets; local streets are considered to be suitable for bicycling due to low traffic speeds and volumes. The BLOS ratings were used in developing the bicycle facility needs presented in Chapter 5 of this plan.



Table 5. BLOS Ratings

BLOS A	<div style="text-align: center;"> Best Conditions  ↑  ↓  Worst Conditions </div>	Excellent
BLOS B		Good
BLOS C		Adequate - Need Some Improvement
BLOS D		Difficult or Hazardous to Cycle, Require Significant Improvement
BLOS E		
BLOS F		

Bicycle Level of Service is described according to a letter rating system ranging from BLOS 'A' (best conditions) to BLOS 'F' (worst conditions). Table 5 at left depicts this system graphically. The BLOS of a roadway is primarily dependent on traffic volume, motor vehicle speed, width of the outer-most travel lane, the presence or absence of bike facilities, the presence of on-street parking and pavement condition. Segments with an excellent or good BLOS are rated A or B and are considered bikeable for A and B riders. Segments with a BLOS C are considered adequate for bicycling, but may need some minor improvement. Segments with a poor BLOS (BLOS D, E, F) may be difficult or hazardous to cycle, and will require significant improvements to improve their condition. Tables 6 and 7 depict (respectively) the BLOS ratings for arterial and collectors roads in Fayette and Jessamine Counties.

Table 6. BLOS for Fayette County

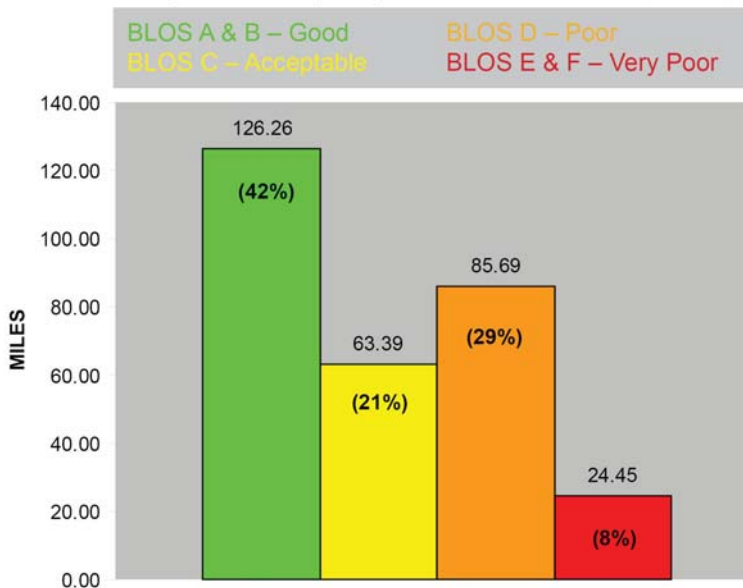


Figure 13 displays the BLOS for the urban service area of Fayette County; figure 14 depicts the BLOS for downtown Lexington. Figure 15 depicts the BLOS for Jessamine County. Many roads in the downtown areas and along most major arterials have poor BLOS ratings (below a BLOS D).

Table 7. BLOS for Jessamine County

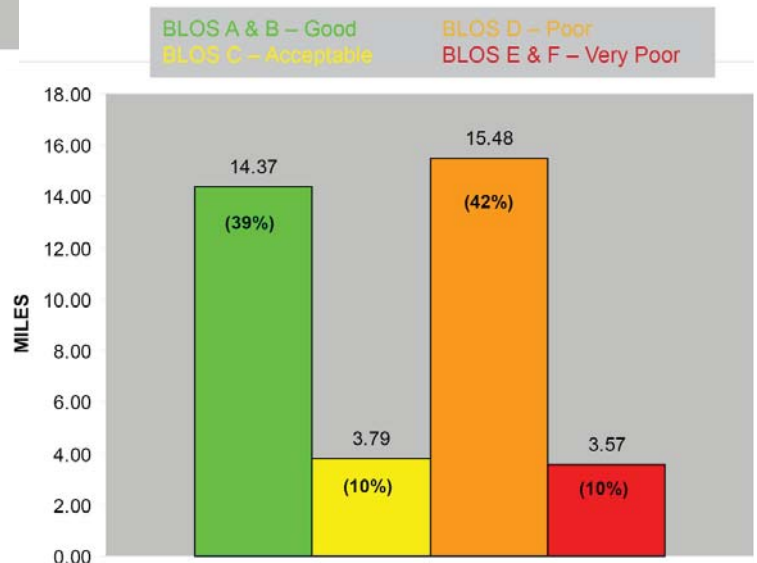
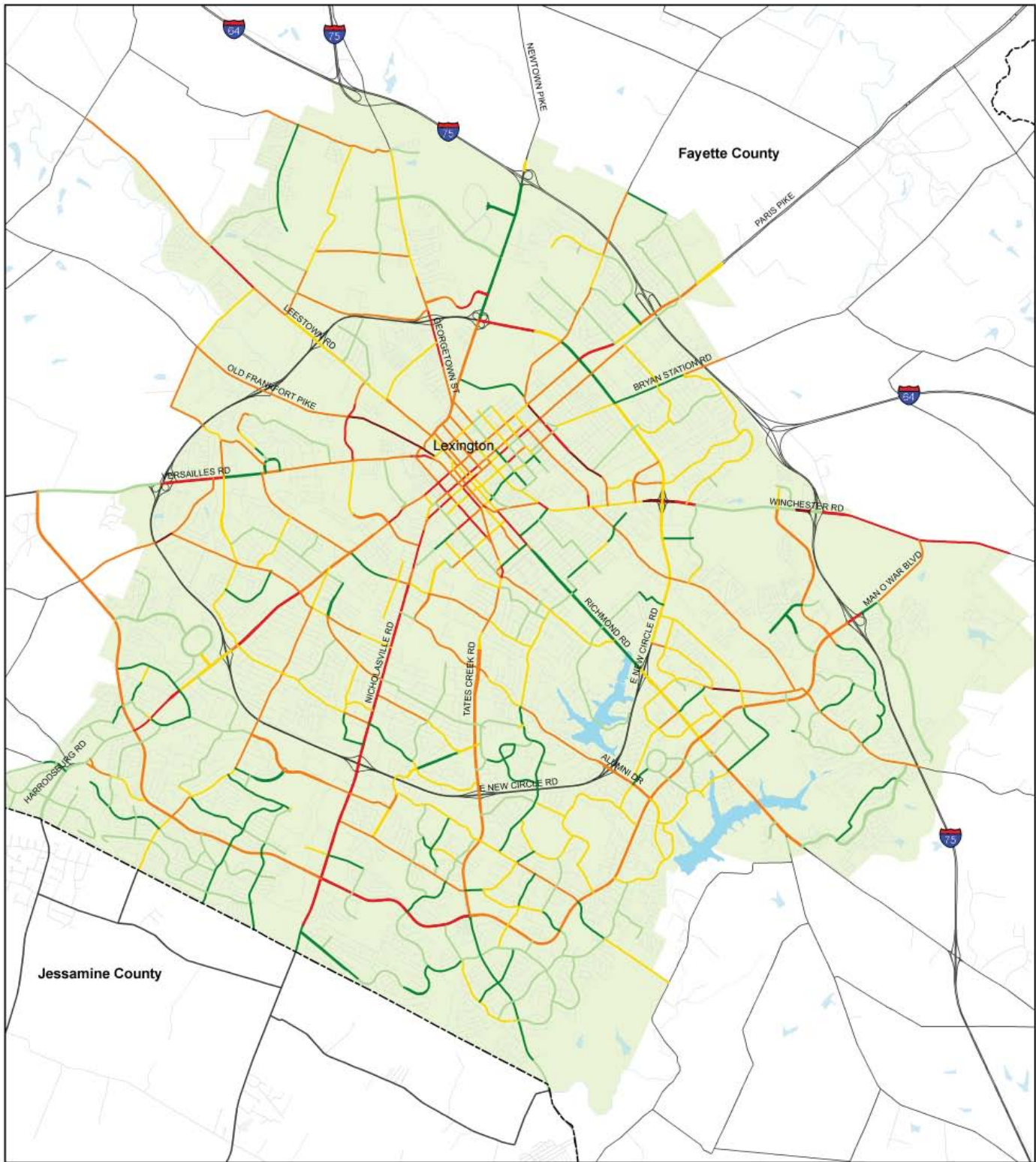




Figure 13. Bicycle Level of Service In Fayette County



#### Legend

- A Water
- B Urban Service Area
- C Arterial/Collector Road
- D Other Road
- E
- F

Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2006)

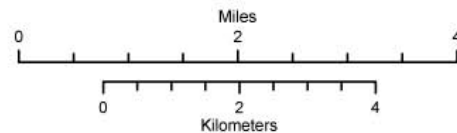


Figure 14. Bicycle Level of Service in Downtown Lexington

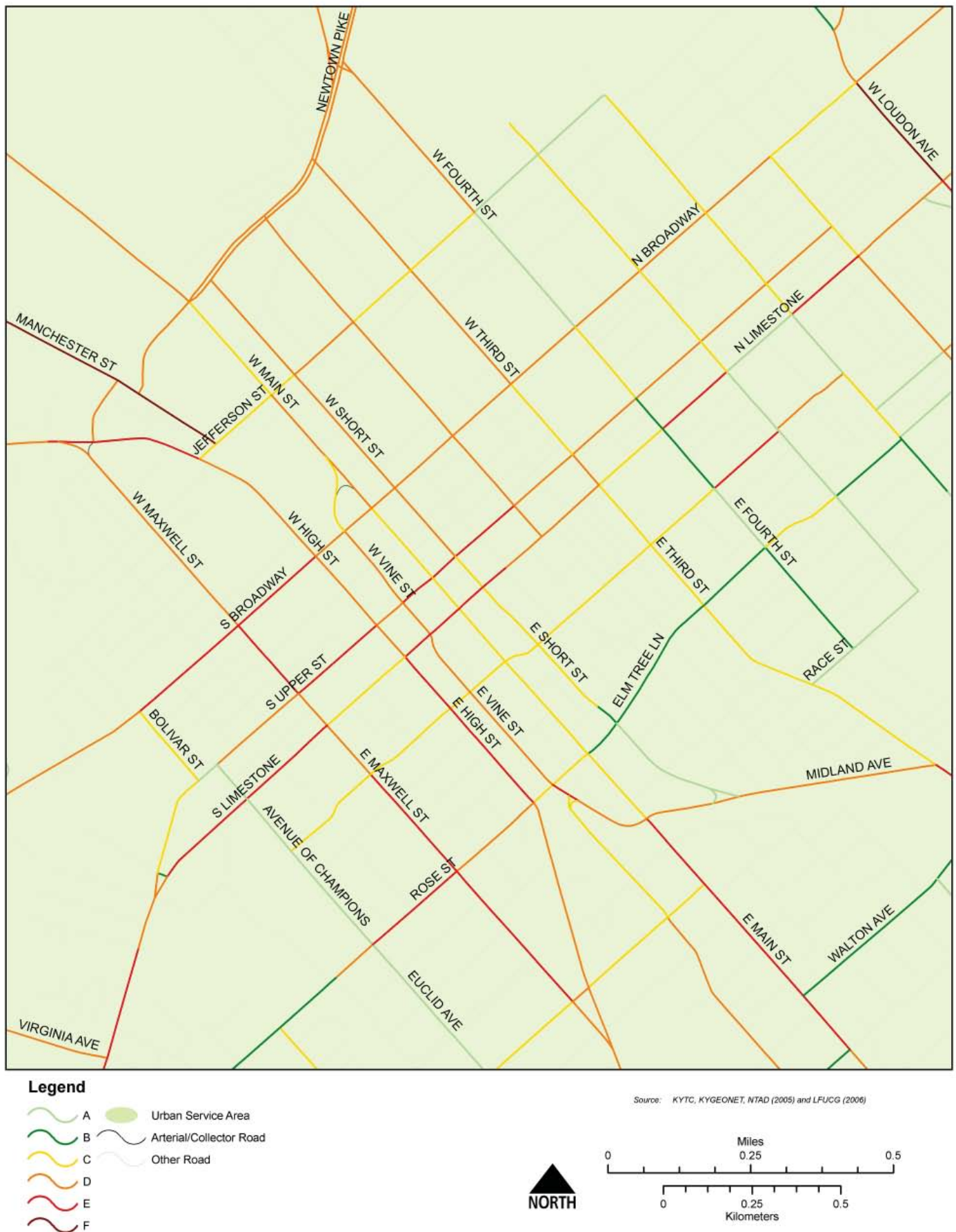
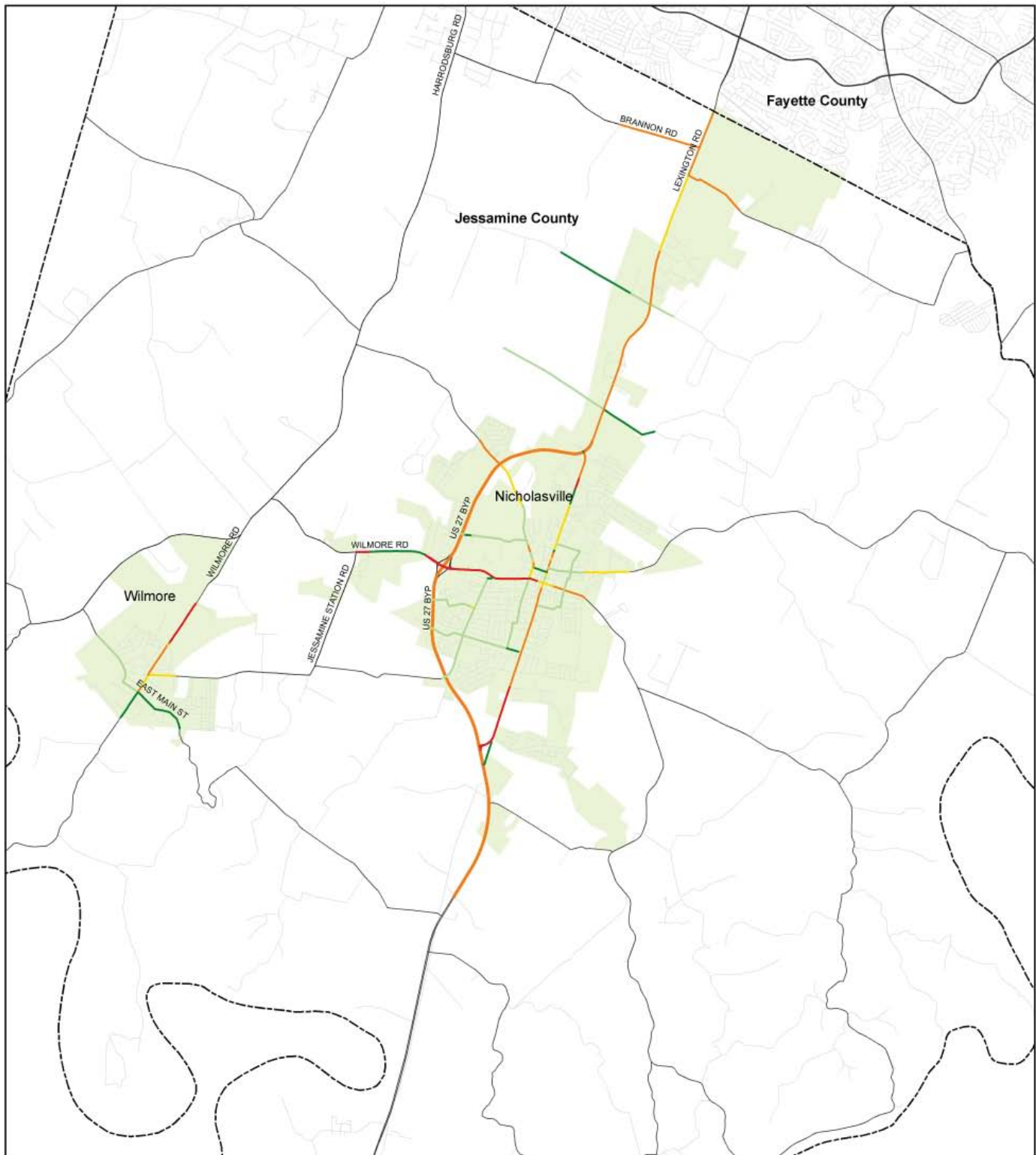




Figure 15. Bicycle Level of Service in Jessamine County



**Legend**

- |  |   |  |   |  |                         |
|--|---|--|---|--|-------------------------|
|  | A |  | D |  | Urbanized Area          |
|  | B |  | E |  | Arterial/Collector Road |
|  | C |  | F |  | Other Road              |

Source: KYTC, KYGEONET, NTAD (2005) and BGADO (2006)

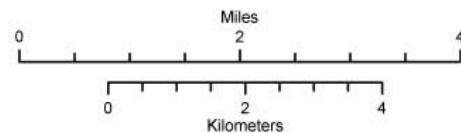
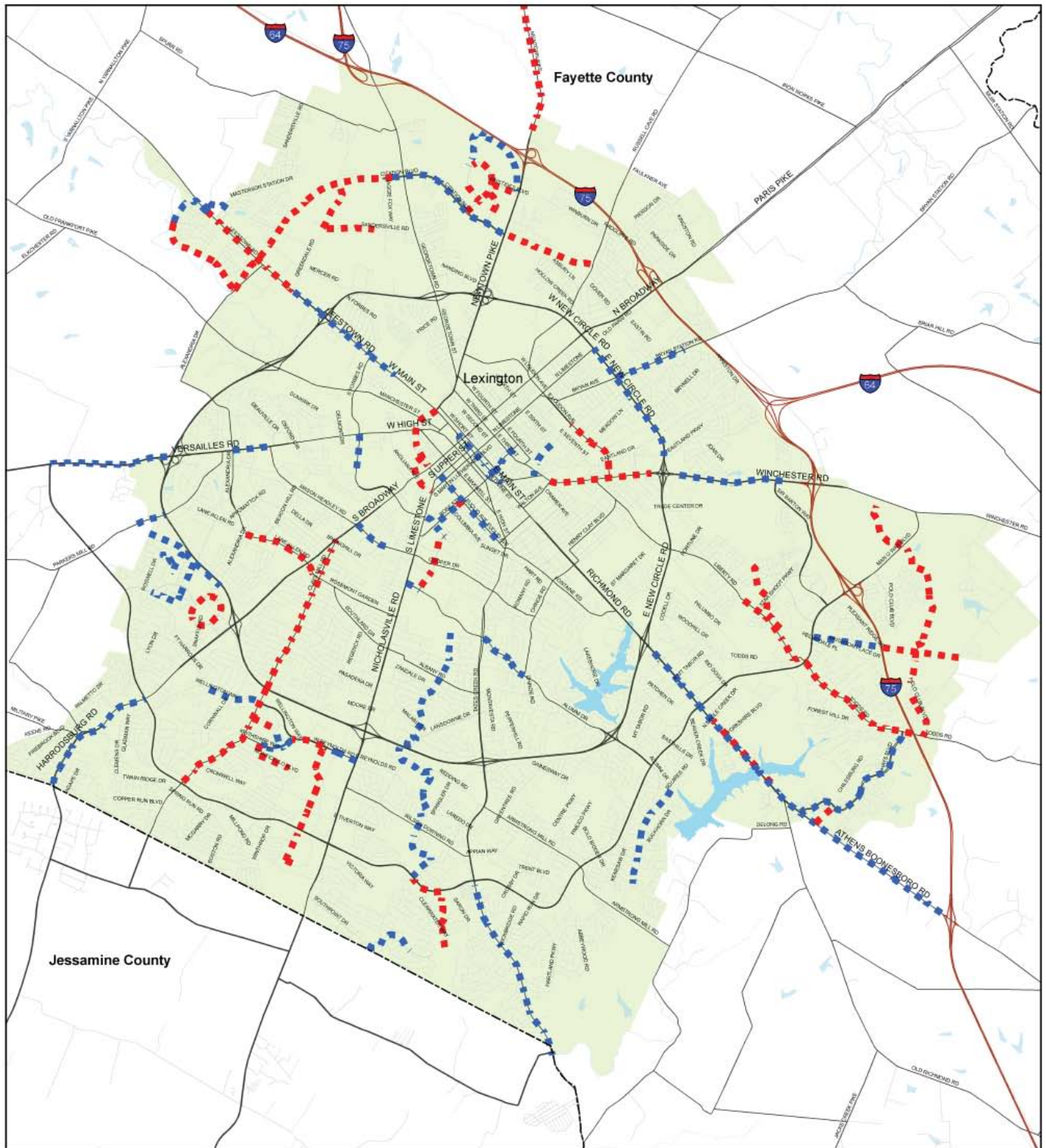


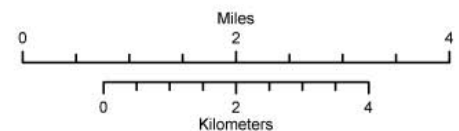


Figure 16. Existing and Funded Bicycle Facilities in Fayette County



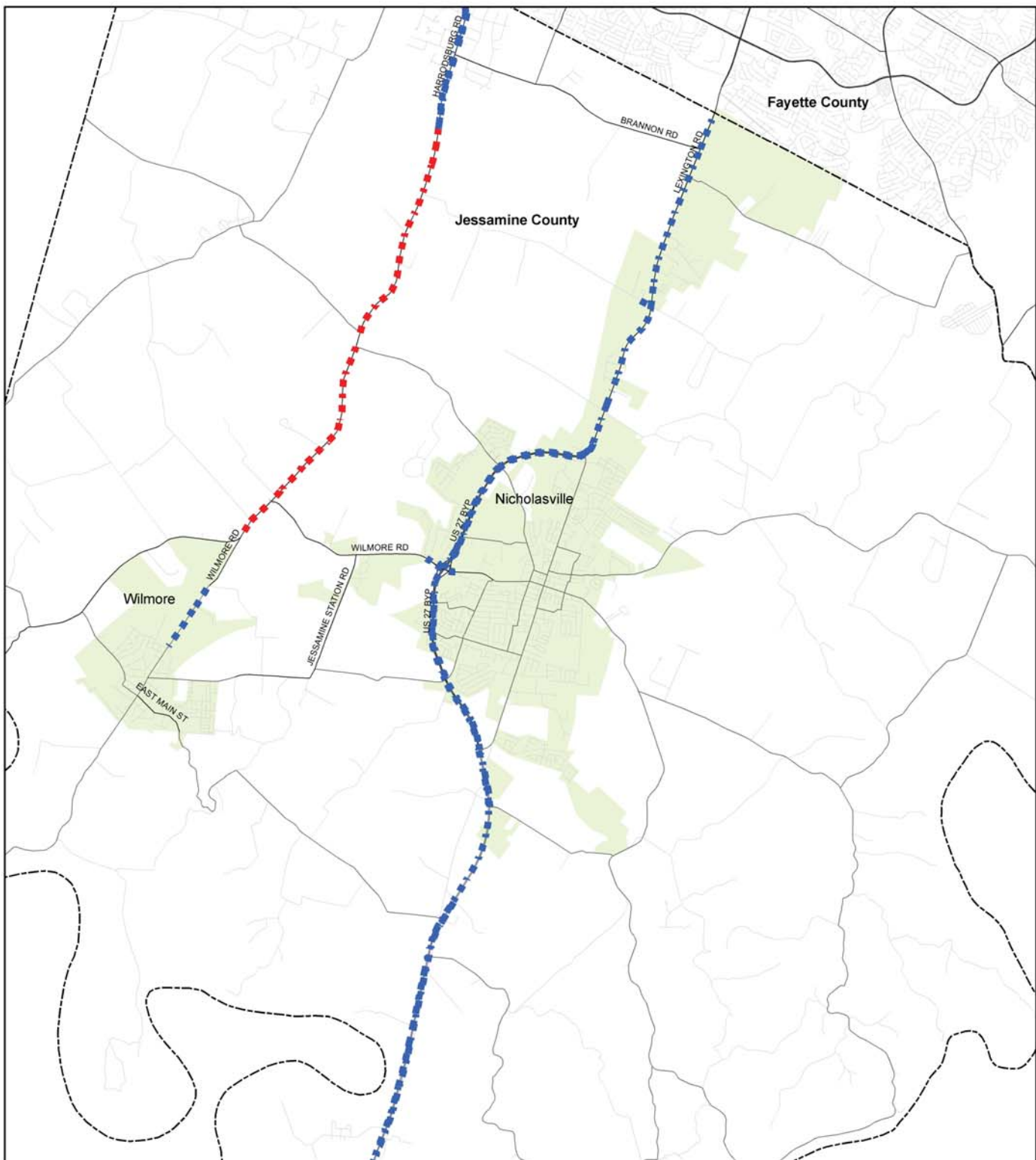
**Legend**

- Existing Bicycle Facility
- Funded Bicycle Facility
- Waterways
- Urban Service Area
- Interstate
- Arterial/Collector Road
- Other Road



Source: KYTC, KYGEONET, NTAD (2005) and LFUGG (2006)

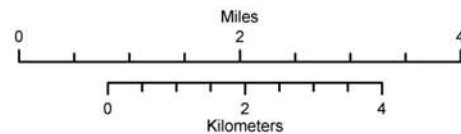
Figure 17. Existing and Funded Bicycle Facilities in Jessamine County



**Legend**

- Existing Bicycle Facility
- Funded Bicycle Facility
- Urbanized Area
- Collector/Arterial
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and BGADD (2006)





## 4.4 Transit

Every transit trip begins and ends with a walking trip. Good pedestrian access is essential to a good transit system. Lextran, the transit agency in Fayette County, has 14 fixed transit routes throughout the city. Many of those routes lack sidewalks. Many transit routes (even those with sidewalks) are not accessible to people with disabilities. Most transit routes also lack shelters and benches at bus stops.

People are typically willing to walk  $\frac{1}{4}$  to  $\frac{1}{2}$  mile (or five to ten minutes) to and from bus stops. A ten minute bicycle ride can extend the transit service area considerably. Integrating bicycling and transit increases the number of destinations that can be reached from a transit stop. All Lextran buses can accommodate two bicycles on racks attached to the front of the buses.

Jessamine County does not currently have fixed-route transit; however there is interest in creating a transit route from Nicholasville to Lexington via US 27.



*Transit buses in Fayette County are equipped with a rack to hold two bicycles*



*Bus stop on Harrodsburg Road*

## 4.5 Document Review

A review of planning documents that are applicable to bicycle and pedestrian planning and implementation in the MPO region are listed below.

### Lexington Area MPO 2030 Long Range Transportation Plan

The Long Range Transportation Plan is required by federal regulations and is updated every three to five years. The purpose of the document is to provide a multimodal transportation plan that addresses the future needs of the MPO area. The Long Range Transportation Plan states that bicycle and pedestrian facilities should be incorporated into all new roadway construction, reconstruction and resurfacing projects. The development of a bicycle and pedestrian plan was also recommended to ensure bicycle and pedestrian needs are identified and supported on a long-term basis.

### LFUCG Greenway Master Plan

This 2002 plan identifies the importance and need for greenways and recommends a county-wide network of on-road bicycle/pedestrian facilities and off-road greenway trails. There are 20 primary trails and associated secondary trails and rural road bike routes that all interconnect into a comprehensive network. Tertiary trails are not mapped, but they are described as neighborhood trails that connect neighborhoods together and to the primary and secondary routes. The Greenway Plan is an element of the Fayette County Comprehensive Plan. Greenway land is required to be dedicated to LFUCG within the Expansion Area; however, trails are not required to be built by the developer. All primary and secondary trails identified in the Greenway Master Plan are incorporated into this plan.

### Comprehensive Plans

Comprehensive Plans direct a community's land use decisions and include a transportation element. By Kentucky statutes, comprehensive plans must be updated every five years. There are three comprehensive land use plans in the study area:

#### *Jessamine County / City of Wilmore Comprehensive Plan*

This 2004 plan addresses the future growth of Jessamine County and the City of Wilmore. An objective of the transportation element of the plan was the promotion of "adequate and safe pedestrian



ways and bike routes.” A conceptual Greenway / Trail Plan for Jessamine County was also included in the plan. The conceptual plan is incorporated into this plan.

#### *Nicholasville Comprehensive Plan*

This 2002 plan states the desire for enhancements to the community that include:

- interconnections such as bikeways;
- to “locate neighborhood commercial areas to allow for maximum accessibility by pedestrians and bicyclists”;
- to “develop a plan for a bike path and bike-way system throughout the city, in coordination with master plans for recreation, schools, and roads”;
- to “minimize pedestrian and automotive conflict via well designed pedestrian and bicycle facilities”.

#### *Lexington-Fayette County Comprehensive Plan Update (2006/2007)*

The LFUCC Comprehensive Plan Update sets the following bicycle and pedestrian goals:

- Provide a balanced and coordinated multi-modal transportation system;
- Encourage the use of all viable modes of transportation;
- Enhance existing downtown open spaces and improve pedestrian connections;
- Promote human-scale, bicycle and pedestrian-friendly neighborhoods;
- Develop residential blocks or patterns that provide a well-organized and compete system of vehicular, pedestrian and bicycle-friendly facilities and have human scale architectural or urban design features and community focus or common area;

The transportation element of the comprehensive plan also includes a discussion of key land use issues and policies that should be addressed to create a bicycle and pedestrian-friendly community. The plan refers to and encourages the implementation of the Long Range Transportation Plan and the related Bicycle and Pedestrian Plan once adopted by the MPO.

## **University of Kentucky Campus Bicycle Plan**

The Campus Bicycle Plan was developed in June 2005. The purpose of the plan is to “increase the safety and mobility of students and employees who bicycle, and to encourage more bicycle travel.” A major goal of the plan is to decrease auto trips and to increase the percentage of bicycle trips to campus from the current estimate of 1 percent (+/-) to 7 percent of trips. Key recommendations include an on-road and off-road campus bike network, additional bicycle parking, bike safety education and the provision of incentives to encourage bicycling to campus. The project, policy and program recommendations in this plan have been reviewed to ensure compatibility with the Campus Bicycle Plan to allow for a seamless bicycle and pedestrian network between the University and the rest of Fayette and Jessamine Counties.

## **Federal and State Documents**

In 2002, the Kentucky Transportation Cabinet adopted a policy requiring the agency to “consider the incorporation of bicycle and pedestrian facilities on all new or reconstructed state-maintained roadways in existing and planned urban and suburban areas.” The policy requires state transportation projects to comply with local bicycle and pedestrian plans to the greatest extent possible.

The U.S. Department of Transportation and the Federal Highway Administration have also adopted a bicycle and pedestrian accommodation policy and have issued guidance on the design of streets and highways to accommodate bicycles and pedestrians (see: <http://www.fhwa.dot.gov/environment/bikeped/design.htm>). This policy is summarized in the following statement:

*“Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction and transportation facilities, except where bicycle and pedestrian use are not permitted.” (23 U.S.C. 217(g) (1))*

Taken together, these state and federal policies speak to a clear conclusion: if the desired outcome is that most people in the region can bicycle and/or walk on a regular, routine basis, then the plans, policies and programs that set the direction for the region must be adapted to ensure that all actions serve to provide and enhance opportunities to bicycle and walk.





# *Chapter 5A*

## Policy Recommendations



## Chapter 5.

# Recommendations to Accommodate Biking and Walking

The need and public desire for improved bicycle and pedestrian accommodations were documented in Chapters 3 and 4. This chapter focuses on recommendations ranging from facility construction to local and regional support of bicycle and pedestrian programs, policies and regulations. The following recommendations have been developed based on public input, goals and objectives and the inventory and analysis of existing conditions.

### 5.A Policies, Programs and Regulations for Bicycle and Pedestrian Travel

The following actions are considered necessary to make our region more bicycle and pedestrian-friendly and to achieve the goals and objectives outlined in Chapter 2.

#### 5.A.1 Balanced Transportation System

In recent years, the term “complete streets” has come to define how a well-balanced transportation system is created. Completing the streets means constructing and retrofitting our transportation corridors so that travel by bike, on foot and using public transit is just as desirable and convenient as driving a vehicle. Complete streets result in public right-of-ways that serve all citizens in a community whether they are young, old, able-bodied or not.

Greenway trails that are well-integrated with on-street bike and pedestrian facilities also contribute to a balanced, convenient and desirable non-motorized transportation system. Trail facilities provide connections not offered by the roadway system and can reduce trip length. Trail facilities connect key destinations and also offer bicycling and walking opportunities in natural and scenic environments.

The following actions are considered necessary to achieve a balanced transportation system:

#### General

- Adopt a “complete streets” policy and develop design standards to ensure all urban streets are built to appropriately accommodate pedestrians and bicyclists (and transit users if applicable).
- Develop a decision-making model for road improvement projects that considers a constant or reduced level of service for motor vehicles to improve the level of service for bicycling, walking and transit.
- Revise street design standards to incorporate bicycle and pedestrian-friendly design elements (such as street trees, buffer strips, pedestrian-scale lighting, etc.)
- Revise subdivision regulations to ensure appropriate bicycle and pedestrian facilities are constructed on roadways in and adjacent to new developments, including state maintained roadways.
- Include appropriate bicycle and pedestrian accommodation in all municipal, county and state roadway construction and reconstruction projects.
- Develop a strategic plan to bring all urban streets and intersections into compliance with the Americans with Disabilities Act (ADA).
- Ensure bicycle and pedestrian facilities and improvement projects are geographically distributed equitably across neighborhoods and regional communities.

#### On-road Bike Facilities

- Accommodate bicyclists on all urban arterial and major collector streets. Bike lanes should be used to the greatest degree possible; however, other bike facilities may be appropriate due to street geometrics, safety, traffic volumes, etc.
- Provide bicycle facilities on minor collector streets if traffic volumes, safety, connectivity or expected users warrant such a facility.



- Provide paved shoulders on all rural primary roads. Shared use paths may be constructed in addition to shoulders to accommodate cyclists who prefer not to ride on the roadway.
- Install signage on select rural secondary roads based upon bicycle use, safety, destinations and connectivity to adjacent counties.
- Identify and map bike routes that use low-volume streets to promote bicycling to less-skilled bicyclists. Complete small improvements that will enhance safety or connectivity along these routes where necessary.

### *Sidewalks*

- Provide sidewalks of an appropriate width on both sides of all urban streets, except for limited access highways, lanes or alleys.
- Provide a minimum sidewalk width of five feet in residential areas and six feet in commercial areas (or widths compatible with existing sidewalks in infill and redevelopment areas).
- Provide a minimum sidewalk clearance width of 8 feet in downtown areas, increasing the width accordingly for street furniture, street trees, sidewalk cafés or other obstacles.
- Build, retrofit and maintain all sidewalks to ADA standards.
- Establish design standards, city ordinances and enforcement responsibility to ensure sidewalks are unobstructed by signage, utilities, street furniture and other obstacles.
- Establish and fund a sidewalk retrofit program for Fayette and Jessamine Counties.

### *Off-road Trails*

- Fund and build shared use trails according to adopted greenway / trail plans.
- Develop and adopt a greenway / trail plan in Jessamine County.
- Develop a regional trail plan in partnership with surrounding counties.

- Develop walking paths in neighborhoods, parks and other public spaces.
- Develop hiking and mountain biking trails in the region.
- Ensure all trails and walking paths are built to meet ADA guidelines to the greatest degree possible.

### *Intersections and Crosswalks*

- Develop and adopt design standards for accommodating pedestrians and bicyclists at urban intersections.
- Provide for bicycle and pedestrian detection and signal actuation at intersections; ensure adequate clearance times are provided.
- Reduce pedestrian delay at intersections, particularly in high pedestrian activity areas.
- Provide 'countdown' signals and 'advanced walk' timing in pedestrian activity areas.
- Provide pedestrian refuge medians or islands along roadways and at intersections that exceed 70 feet in width.
- Develop a policy and design standards for the installation of mid-block pedestrian crossings.
- Complete an inventory and develop an action plan for bringing urban intersections into ADA compliance.

### *Transit*

- Retrofit transit routes with sidewalks.
- Ensure all bus stops, sidewalks and intersections along transit routes are ADA compliant.
- Provide bus shelters and pedestrian amenities along transit routes.
- Continue providing bike racks on all transit buses.
- Install secure bike parking at the transit center and at appropriate transit stops such as transfer points.



## 5.A.2 Sustainable Community Development

A person's decision to bike or walk is influenced by many factors. The presence or absence of facilities is one consideration, however, the way in which communities are developed and designed significantly impacts whether people will choose to bike and walk.

Pedestrians and bicyclists are sensitive to their surrounding environment. They dislike long trip distances and desire streets and pedestrian ways that connect them to nearby destinations as directly as possible. Pedestrians also desire streetscapes that provide visual interest, shade trees and adequate separation from traffic.

Sustainable community design principles ensure that transportation options are maximized by providing opportunities for people to get everywhere they need to go on a daily basis by walking, biking or public transit. Sustainable development practices include a mix of land uses, a variety of housing types, and higher densities that make communities more compact and walkable. Neighborhood-oriented retail and commercial centers are provided so that stores and services are located near to where people live. Schools and parks are located and designed so that it is easy for neighborhood children to walk or bike to them.

Such development patterns use land resources more efficiently, can improve air and water quality and reduce energy consumption. Sustainable communities also possess many other characteristics that appeal to bicyclists and pedestrians such as greenspace and natural areas, pedestrian-oriented store fronts, tree-line streets and active civic spaces.

The following actions are based upon sustainable development principles and will result in community development patterns and designs that encourage bicycling and walking:

### Development Patterns

- Incorporate a mix of land uses in new developments and infill projects that place retail, schools, parks and professional services in close proximity to where people live to reduce the length of regular, routine trips.

- Create incentives to encourage compact, higher density residential developments as needed to support neighborhood-oriented commercial development and to encourage transit use.
- Create neighborhood-oriented “town-centers” in new developments.
- Investigate opportunities for “town-center” development in Small Area Plans and large infill-redevelopment projects.
- Develop street connectivity standards and requirements for bicycle and pedestrian connections where streets cannot be constructed, at mid-block locations and at dead-end streets and cul de sacs.

### School Location and Access

- Encourage the development of school sites that are central to neighborhoods and away from high speed, high volume streets.
- Require the connection of neighborhoods to school sites with multiple access points, sidewalks, trails, bicycle-friendly streets and safe street crossings in new developments.
- Review existing neighborhoods for opportunities to construct sidewalks and trail connections to schools.
- Design school sites that provide safe access and give preference to students arriving by bike or walking; provide bicyclists and pedestrians with adequate separation from vehicular parking and drop-off areas.
- Encourage schools to provide adequate bicycle parking.

### Park and Recreation Facilities

- Follow the national recommended standards for neighborhood park locations and size.
- Locate neighborhood parks away from high speed, high volume roadways
- Require the connection of neighborhoods to parks with multiple access points, sidewalks,





trails, bicycle-friendly streets and safe street crossings in new developments.

- Review existing neighborhoods for opportunities to construct sidewalks and trail connections to parks.
- Connect major community and regional parks with the regional bicycle, pedestrian and trail network.
- Construct walking paths, mountain bike and shared use trails in public parks.

### *Commercial and Residential Design*

- Develop pedestrian-oriented design guidelines and incentives for commercial and retail developments such as reduced setbacks, rear parking and window store-fronts.
- Reduce on-site parking requirements for pedestrian and bicycle-friendly commercial developments.
- Require bicycle and pedestrian connections to commercial sites from adjacent neighborhoods in new developments.
- Review existing neighborhoods for opportunities to construct sidewalks and trail connections to commercial areas.
- Require on-site provisions for the safe movement of pedestrians within parking lots, between public buildings, and from public buildings to the street.
- Develop bicycle parking standards for retail, commercial and employment sites.
- Develop pedestrian-oriented design guidelines and incentives for residential developments such as reduced setbacks, garage setbacks, alleys and front porches.

## **5.A.3 Safety and Security**

To successfully increase travel by these modes, bicyclists and pedestrians need a sense of safety and security. Safety can be enhanced through the design and proper maintenance of bicycle and pedestrian facilities. A sense of security is created when the interactions between bicyclists, pedestrians and motor vehicle operators are respectful and tolerant. This can be achieved, in part, through public education and enforcement and can contribute to reduced crashes and fatalities involving bicyclists and pedestrians.

The following actions are considered necessary to achieve improved safety and security for bicyclists and pedestrians.

### *Design*

- Ensure roadway design manuals include standards for safe and accessible pedestrian ways and bicycle facilities.
- Design and construct all shared use trails to meet standards established by the American Association of State Highway Transportation Officials (AASHTO).
- Build and retrofit streets with bicycle-friendly drainage grates, beginning with bike routes and streets with bike lanes.
- Consider the safety and comfort of bicyclists in the placement of rumble strips on roadways. Utilize bicycle-friendly rumble strips where they are necessary for vehicle safety.
- Incorporate pedestrian-friendly design, such as street lighting and windows facing the sidewalk, to increase 'eyes on the street' and enhance pedestrian safety.
- Consider adopting "Crime Prevention through Environmental Design" guidelines, published by the National Crime Prevention Council.

### *Education*

- Conduct educational campaigns to increase public awareness of the rules of the road for bicyclists, pedestrians and motor vehicle drivers.
- Develop and implement a "Share the Road" campaign.
- Include bicycle and pedestrian safety information in driver tests and distribute information with drivers license renewals.



- Develop guidelines and install 'Share the Road' signage at appropriate locations based upon bicycle use, safety and bike route continuity.

### Enforcement

- Provide training on bicycle and pedestrian traffic laws to local police departments.
- Issue citations to bicyclists, pedestrians and drivers who disobey traffic laws.
- Ensure motor vehicle operators who disobey the rules of the road and injure pedestrians and bicyclists are charged and prosecuted.
- Strictly enforce speed limits in high pedestrian activity areas, including school zones.
- Improve the quality of police reporting for bicycle and pedestrian crashes.

### Maintenance

- Maintain all streets and trails to provide safe passage for bicyclists and pedestrians.
- Increase street sweeping schedules on roadways with bike lanes, paved shoulders and bike routes.
- Establish and fund a trail maintenance program in Fayette County.
- Conduct systematic reviews of sidewalk maintenance needs with the same frequency, or at the same time as roadway condition reviews.
- Conduct a public education campaign to inform property owners of sidewalk maintenance responsibilities.
- Provide adequate funding for the Fayette County Sidewalk Maintenance Assistance Program.
- Establish a Sidewalk Maintenance Assistance Program in Nicholasville, Wilmore and Jessamine County.

- Maintain crosswalk striping as necessary and with the same frequency as roadway striping.
- Install or repair curb ramps during all roadway resurfacing projects as required by the Americans with Disabilities Act.
- Create an easy-to-use system for the public to report sidewalk, bikeway, trail hazards and maintenance needs.
- Establish clear procedures and responsible agencies for the maintenance of pedestrian and bicycle facilities.
- Establish requirements for maintaining safe bicycle and pedestrian access within the public right-of-way during private and public construction projects. Establish permitting and enforcement procedures to ensure requirements are followed.

### Traffic Calming

- Design streets to encourage driving speeds that do not exceed posted speed limits.
- Require new developments to have street patterns and geometrics that have been shown to reduce vehicle speeds. Require the installation of traffic calming devices in developments where planned streets are not likely to discourage speeding.
- Establish criteria for the retrofitting of existing neighborhoods with traffic calming devices.
- Work with city departments impacted by traffic calming features to determine acceptable designs and installations.
- Maintain and/or increase funding for the Fayette County Traffic Calming Program as necessary
- Consider establishing a Traffic Calming Program in Jessamine County.



### *Safe Routes to School (SR2S)*

- Initiate and sustain SR2S programs throughout the region to identify and eliminate barriers to walking and bicycling to school.
- Develop a SR2S coalition and develop a strategic plan for region-wide implementation of SR2S programs.
- Develop guidance on the SR2S program and provide technical assistance and support to local school and neighborhood efforts.

### **5.A.4 Economic Vitality**

A bicycle and pedestrian-friendly region can greatly impact our economic vitality. Vibrant downtowns are pedestrian-friendly downtowns, with high activity levels and many businesses and restaurants. Walkable and bike-friendly communities are routinely recognized and marketed as communities with a high quality of life that attract and retain businesses and professionals.

Bicycling and walking facilities can also expand and enhance tourism opportunities. The contribution to tourism that regional bicycle trails, tours and events can make has been well-documented in many communities.

The following actions are considered necessary to expand and enhance the economic vitality of our region through bicycling and walking initiatives:

### *Downtown Revitalization*

- Establish design guidelines and initiate projects to enhance the pedestrian-friendliness of downtown Lexington, Wilmore and Nicholasville.
- Develop walking tours and bicycling tours of downtown areas and other places of interest.
- Develop and implement pedestrian wayfinding signage in downtown areas.

### *Tourism*

- Connect key tourist sites in the region with bicycle and trail facilities to attract residents and tourists.
- Partner with adjacent counties to sign and promote a regional system of on-road rural bicycle routes.
- Coordinate with adjacent counties to develop and promote multi-regional greenway trails.
- Partner with nonprofit organizations and cycling clubs to develop and promote bicycle touring events.

### *Marketing*

- Identify partners and opportunities to promote the bicycle and pedestrian-friendly qualities of the region to prospective businesses and residents.
- Work to achieve national recognition as a “Bicycle-Friendly Community”.
- Incorporate bicycle touring opportunities in state, regional and national tourism promotional materials.
- Work with realtors and economic development partners to promote pedestrian and bicycle-friendly facilities and activities.



### 5.A.5 Quality of Life and Active Living

Walkable and bicycle-friendly communities provide a high quality of life for all citizens by providing opportunities for greater mobility, by encouraging active lifestyles and by improving environmental quality. Many communities are now considering social, environmental and public health impacts during land use and transportation decision-making processes for the following reasons:

- Walkable communities allow children, seniors and people with disabilities to have greater independence and provide opportunities for them to be more socially and physically active.
- Studies have shown higher rates of bicycling and walking, and lower rates of overweight and obesity, in walkable and bicycle-friendly communities
- Environmental impacts to air, land and water are minimized through land use patterns and transportation systems that are less oriented to automobile use and more oriented to bicycling, walking and transit use.

The following actions will contribute to improved quality of life and more active lifestyles:

#### *Impact Assessment and Decision-Making*

- Establish environmental and health impact assessment models for land use planning and transportation decision-making.
- Conduct outreach and consider the transportation needs of seniors, children, persons with disabilities, and working people in need in transportation, land use planning and site development.
- Promote and support “aging in place” transportation initiatives.
- Survey residents and/or monitor physical activity levels and public health impacts in relation to bicycling and walking.
- Monitor air-quality and respiratory-related diseases in correlation with automobile and alternative transportation use.

#### *Promotion and Education*

- Develop and print maps and educational materials to promote bicycling and walking.
- Partner with public health agencies to promote walking and bicycling for health, transportation and recreation.
- Partner with environmental professionals and non-profit organizations to promote sustainable land use and transportation decision-making.
- Encourage employers to promote and support “active commuting” by providing employees with incentives such as reduced health care costs, parking discounts, showers, lockers and secure bicycle parking.
- Encourage employers to support “Live Where You Work” programs that give incentives to employees to live within close proximity to their jobs.
- Partner with public health agencies, non-profit organizations, bicycle clubs and advocates to conduct community events that promote bicycling and walking.







# *Chapter 5B*

## Project Recommendations



## 5.B Physical Improvements for Bicycle and Pedestrian Travel

The following physical improvements are considered necessary to make our region more bicycle and pedestrian-friendly and achieve the goals and objectives outlined in Chapter 2.

### 5.B.1 Complete Streets

Bicyclists and pedestrians should be appropriately accommodated on all public streets. Corridors that lack bike facilities and sidewalks should be retrofitted. Intersections along urban roadways should be bicycle and pedestrian-friendly. Action should also be taken to minimize the “barrier effect” that major roadways create for bicyclists and pedestrians trying to reach destinations across these corridors and to provide mid-block crossings where appropriate.

The type of accommodation for bicycling and walking may be different for each roadway depending on the context (urban, rural, residential, commercial) and classification of the street (local, collector or arterial). Roadway classification defines the level of access and mobility that a facility is intended to provide and dictates roadway design, traffic volume, vehicle speeds and street geometrics.

### 5.B.2 Local Streets and Minor Collectors

Most local and minor collector streets are residential streets that safely accommodate bicyclists and pedestrians. The sidewalk inventory did reveal that some of these streets have missing sidewalk segments. Although local and minor collector street improvements were not prioritized for the purposes of this plan, local governments should establish programs to retrofit these streets with pedestrian facilities. Priority should be given to roadways that provide access to transit, schools, parks and other key destinations.

Bike lanes should not be installed on local and minor collector streets in residential areas. Bike route signage may be provided along these streets to provide continuity to other bike facilities.

Local and minor collector streets should be designed to encourage traffic speeds and volumes that are compatible with pedestrian activity and to discourage future requests for traffic calming measures. In residential areas, speeds should not exceed 20 to 25 mph and traffic volumes should not exceed 1,500 vehicles per day.

### 5.B.3 Major Collector and Arterial Streets

Major collector and arterial streets provide a greater degree of mobility and connect the majority of destinations throughout the community and region. Transit routes are typically located along these corridors. Bicyclists and pedestrians desire safe and convenient access along these corridors, just as drivers do. Higher degrees of bicycle and pedestrian accommodation are generally needed for the safety and comfort of bicyclists and pedestrians traveling on these major roadways (such as designated facilities, greater separation from traffic, etc.) Arterials and major collectors are the focus of the improvement plans described in the following sections.

### 5.B.4 Complete Streets Plans

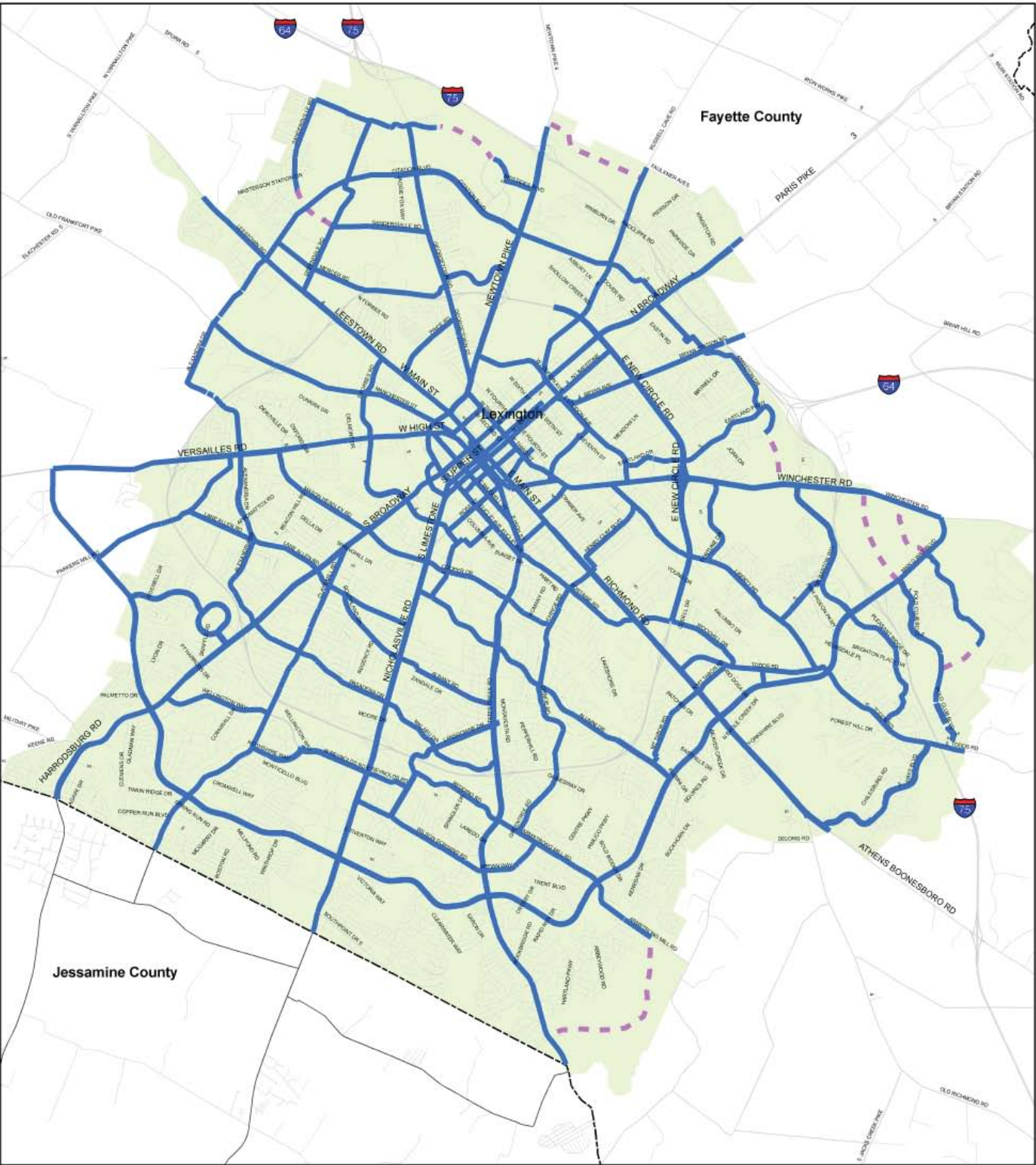
The Complete Streets Plans for Fayette and Jessamine Counties are depicted in figures 18 and 19. They show the arterials and major collector streets in each county that will need to accommodate bicyclists and pedestrians in order to provide the greatest level of access for these modes throughout the region. A limited number of minor collector and local streets are shown for connectivity purposes. Figures 20 and 21 indicate which of these roadways are currently providing adequate or inadequate bicycle and pedestrian access. Streets are considered ‘adequate’ if there is a sidewalk present and if the bicycle level of service is equal to an A, B or C. ‘Adequate’ streets are not included in the Improvement Plan outlined below; however, those streets with a bicycle level of service of B or C should be reviewed for minor improvements that can increase safety and the bike-ability of that roadway (such as bicycle-friendly drainage grates, signage and striping).

### 5.B.5 Complete Streets Improvement Plans

The Complete Streets Improvement Plans for Fayette and Jessamine Counties are shown in figures 22 and 23. The road segments identified in the Improvement Plans are major roadways rated as ‘inadequate’ for bicycle and pedestrian travel. These segments generally lack sidewalks and/or have a bicycle level of service of D, E or F.



Figure 18. Complete Streets Plan for Fayette County (Arterials and Major Collectors)



**Legend**

- Complete Streets Plan
- Proposed Road
- Urban Service Area
- Other Roads

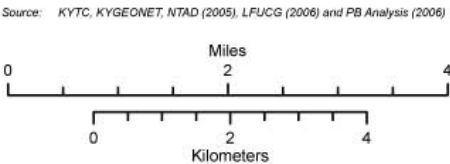
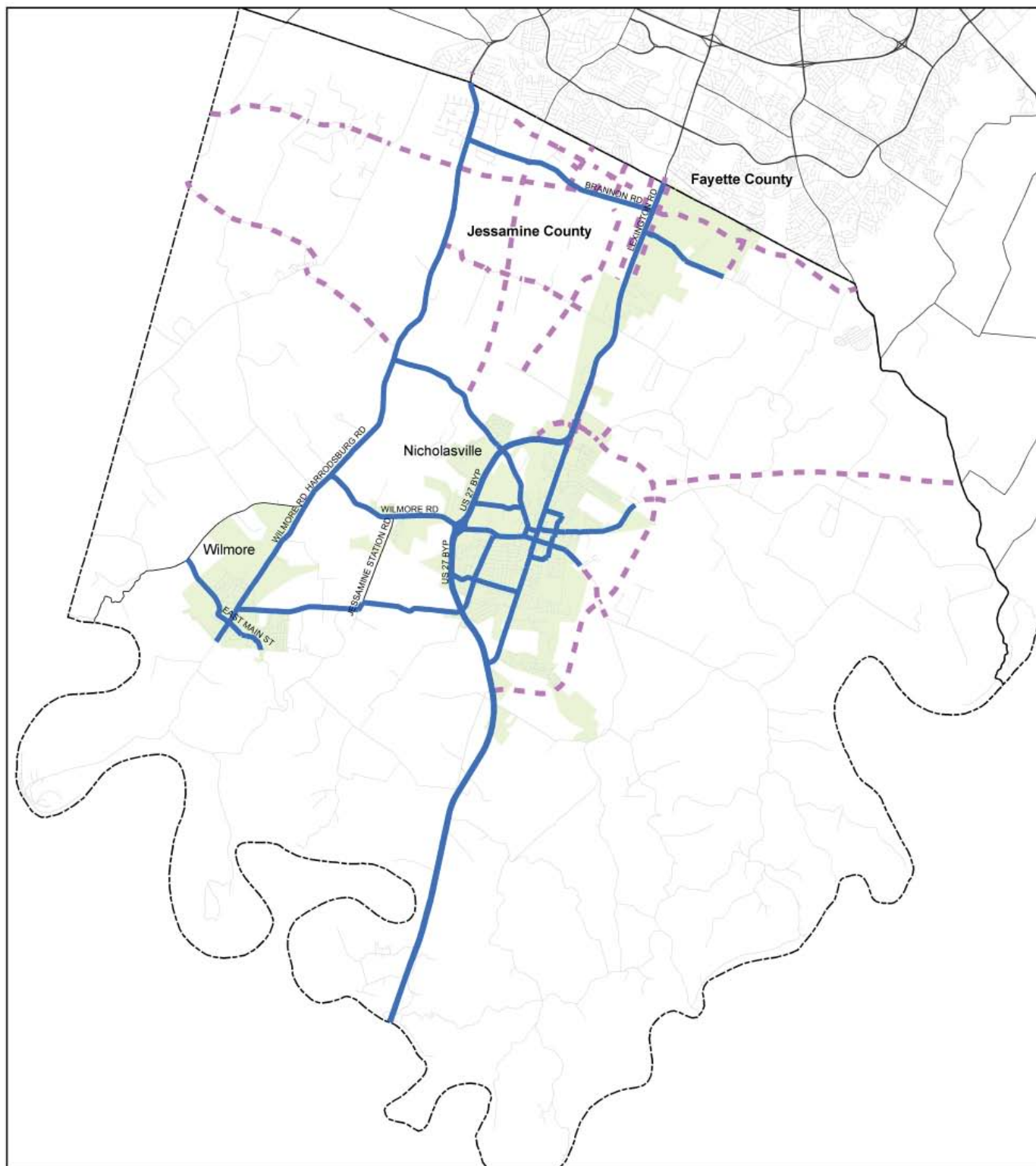




Figure 19. Complete Streets Plan for Jessamine County (Arterials and Major Collectors)



### Legend

-  Complete Streets Plan
-  Proposed Street
-  Urbanized Area
-  Other Road

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and PB Analysis (2006)

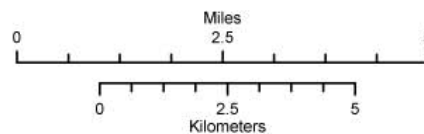
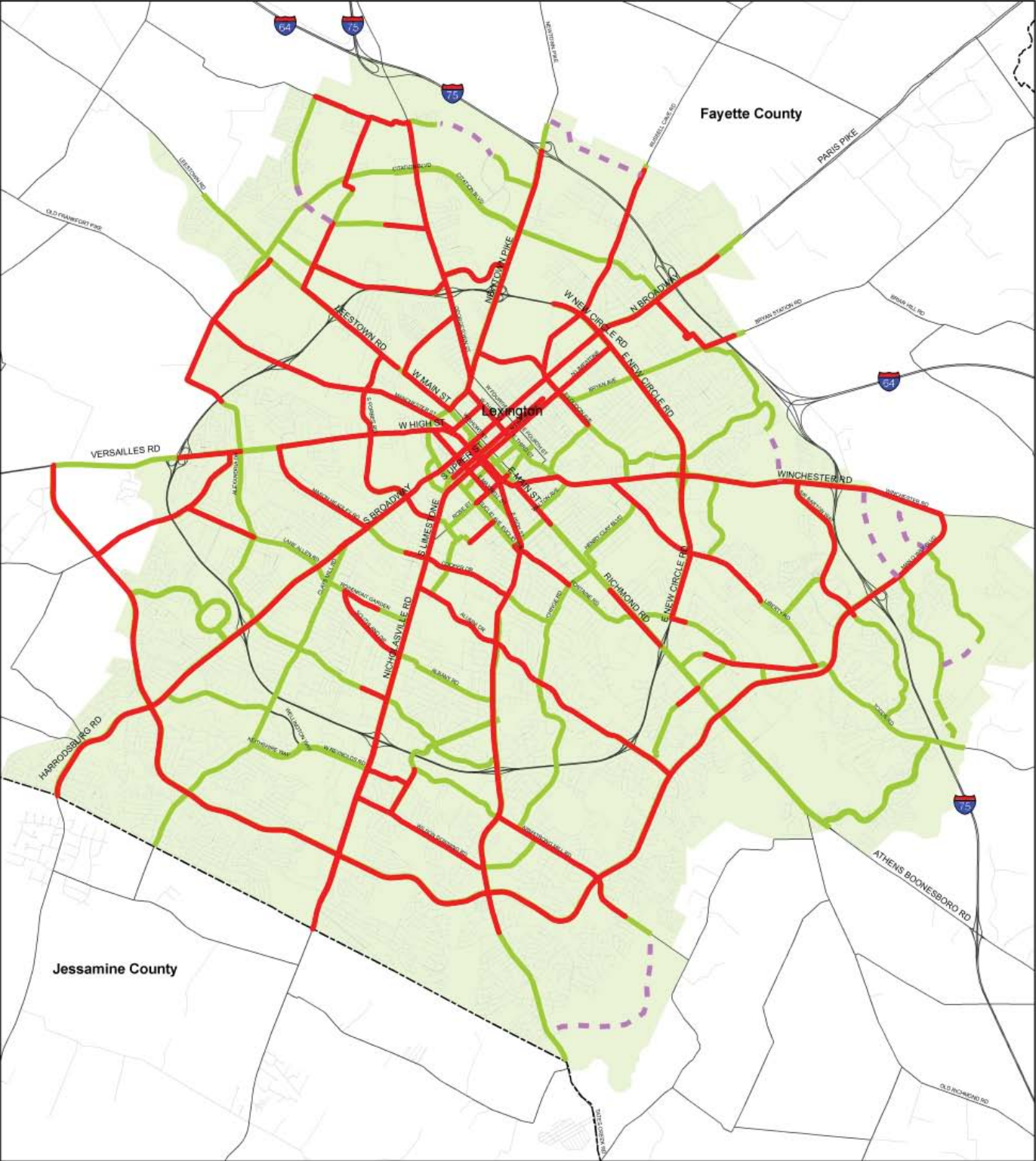


Figure 20. Arterials and Major Collectors in Fayette County with Adequate and Inadequate Accommodation for Pedestrians and Bicyclists



**Legend**

- Adequate Facility
- Inadequate Facility
- Proposed Road
- Urban Service Area
- Arterial/Collector Road
- Other Roads

Source: KYTC, KYGEONET, NTAD (2005), LFUCG (2006) and PB Analysis (2006)

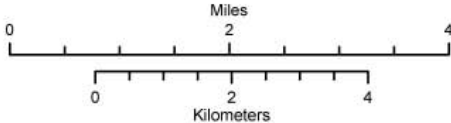
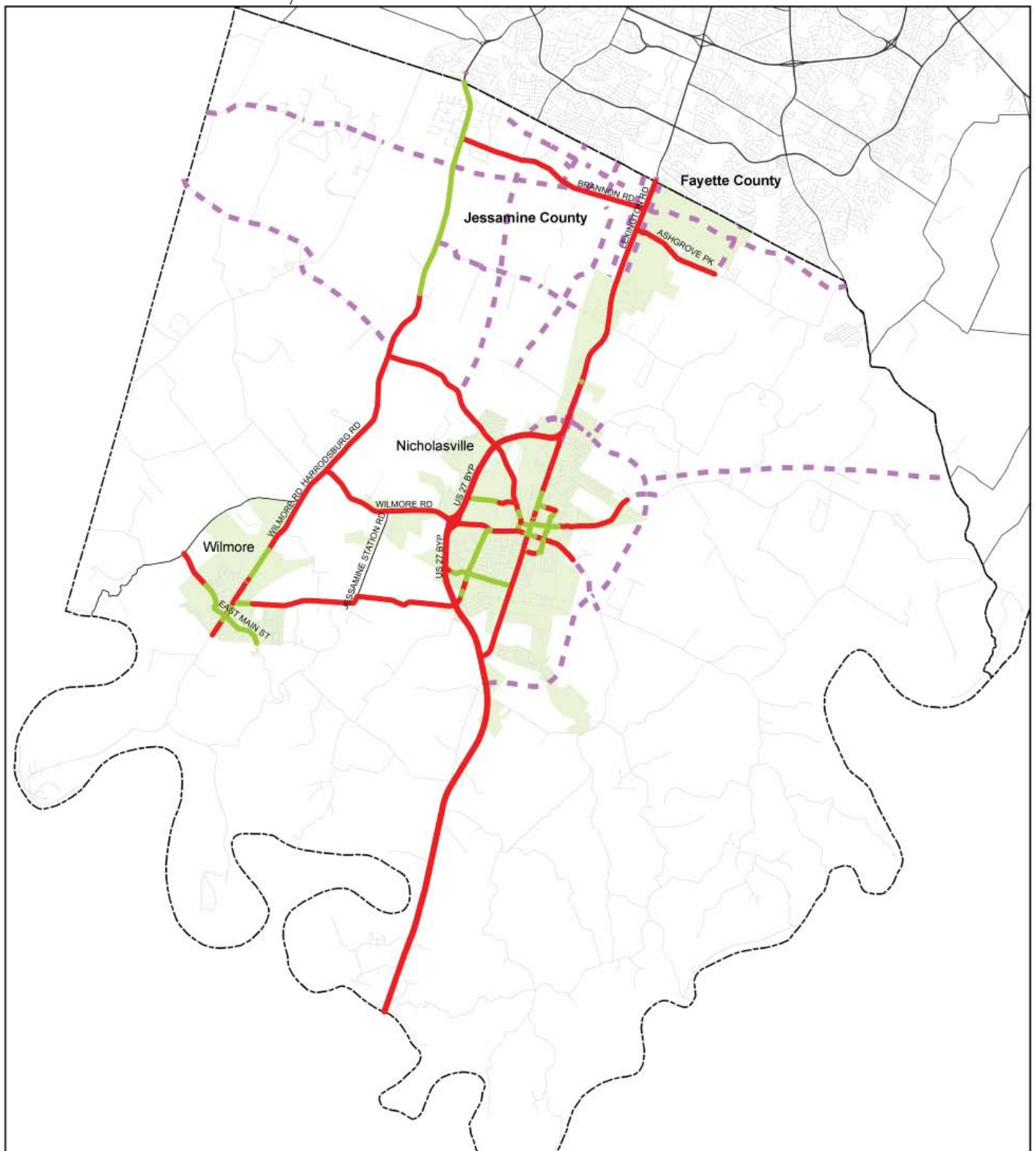




Figure 21. Arterials and Major Collectors in Jessamine County with Adequate and Inadequate Accommodation for Pedestrians and Bicyclists



#### Legend

- Adequate Facility
- Inadequate Facility
- Proposed Street
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and PB Analysis (2006)

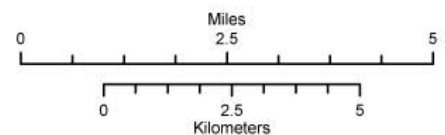
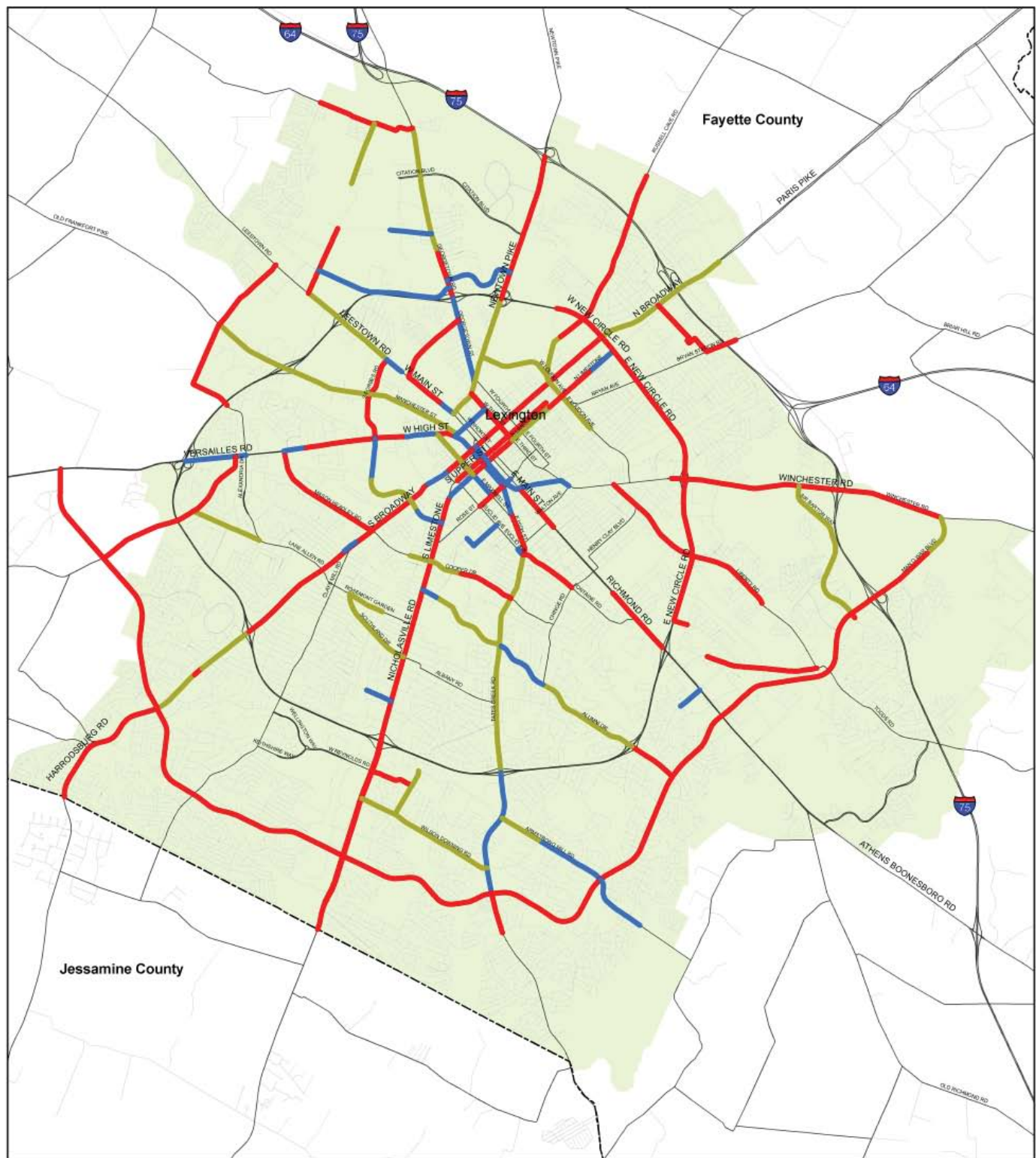


Figure 22. Complete Streets Improvement Plan for Fayette County



### Legend

- Feasible Project (1-5 yrs)
- Moderately Constrained Project (1-10 yrs)
- Constrained Project (10+ yrs)
- Urban Service Area
- Arterial/Collector Road
- Other Roads

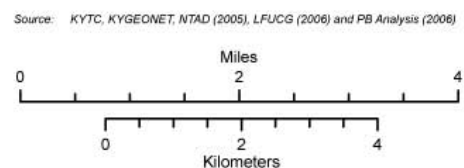
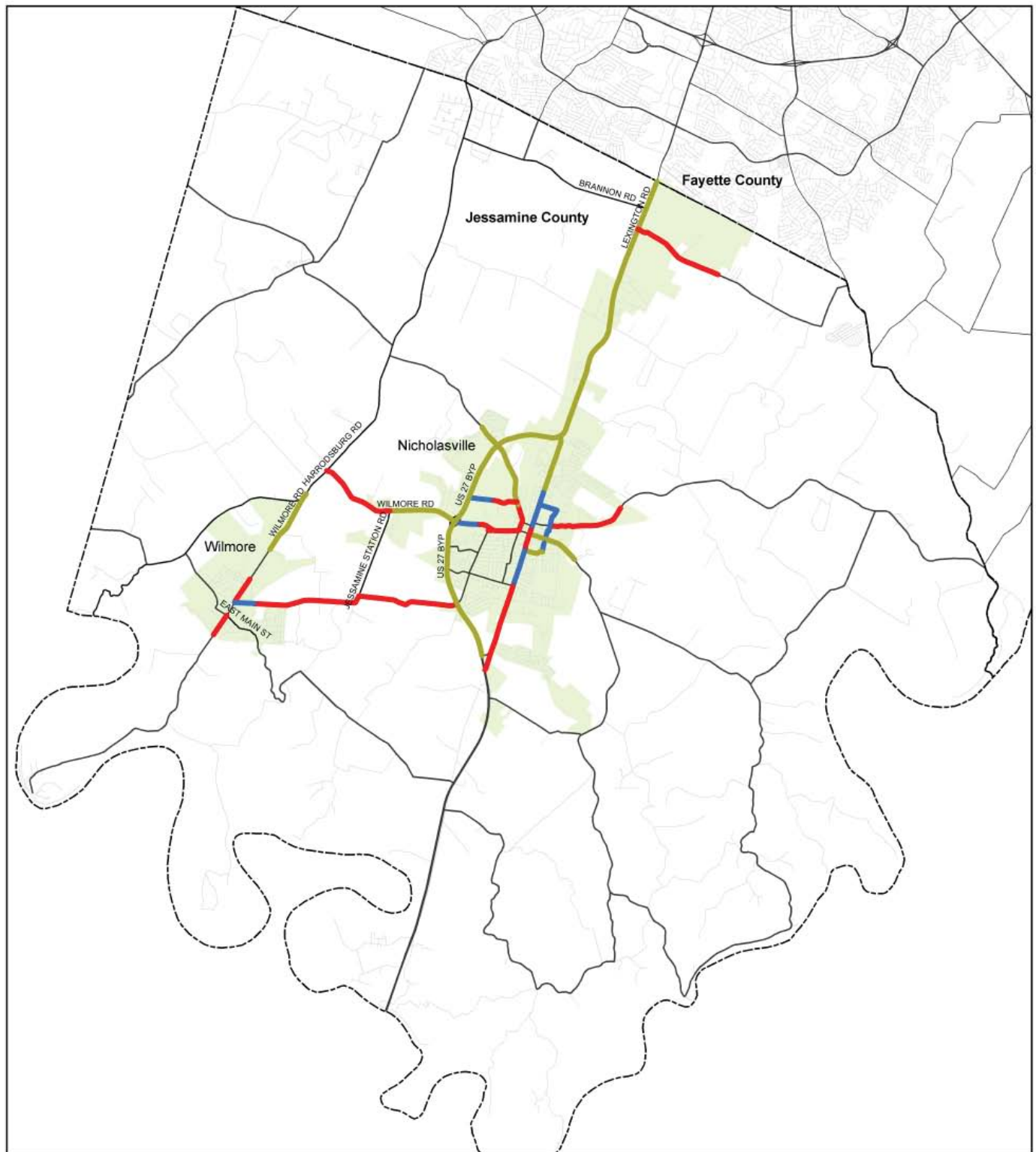




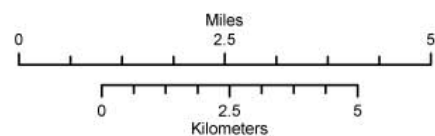
Figure 23. Complete Streets Improvement Plan for Jessamine County



### Legend

- ~ Feasible Project (1-5 yrs)
- ~ Moderately Constrained Project (1-10 yrs)
- ~ Constrained Project (10+ yrs)
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and PB Analysis (2006)



### 5.B.6 Project Feasibility

Projects shown in the Improvement Plan are classified by feasibility. Feasibility was determined by field review and was based on factors such as existing pavement widths; right-of-way widths; property acquisition needs; the location of utilities, trees or other barriers; drainage and slope; on-street parking demand and other factors. Obvious barriers to project implementation were noted during the field reviews, however, more detailed engineering studies will be required for projects identified in this plan.

‘Feasible’ projects have few constraints and are recommended for short-term completion (one to five years). ‘Moderately constrained’ projects are more challenging and are recommended for completion on a mid-term basis (one to ten years). ‘Constrained’ projects are recommended for completion on a long-term basis (10+ years). A complete list of all feasible, moderately constrained and constrained projects is located at the end of this chapter in tables 8, 9 and 10. Major transportation improvement projects identified in the 2030 Long Range Transportation Plan provide ideal opportunities to implement ‘constrained’ bicycle and pedestrian projects. The 2030 Transportation Plan roadway improvement projects should be evaluated and prioritized in relation to bicycle and pedestrian needs and priorities.

### 5.B.7 Project Prioritization

The priority of projects presented in the Complete Streets Improvement Plans for Fayette and Jessamine County (and the Trail Plans on the following pages) were evaluated based upon the criteria listed below.

- **Access & Planned Projects** – Projects were ranked higher if the property is already owned by a government agency. Projects associated with planned capital improvements or transportation projects in the 2030 Long Range Transportation Plan also ranked higher.
- **Safety** – Projects ranked higher if known safety issues exist. This included high traffic volumes, dangerous intersections, poor bicycle level of service, high crash frequency or the absence of sidewalks.
- **Connectivity** – Projects ranked higher if they will extend the length of an existing or funded facility. Higher scores were assigned to projects that will link to (rather than extend) adjacent facilities. Projects also scored higher if they are part

of an existing bike/pedestrian plan including the Greenway Master Plan and University of Kentucky Bicycle Plan. Higher scores were assigned to projects that provide connectivity to transit routes.

- **Destinations** – Projects ranked higher if shopping, schools, parks, employment centers, tourist attractions or civic destinations exist along the route. Projects also received higher scores, but to a lesser degree, for destinations nearby (within ¼ to 1 mile).

These criteria and a point value for each are shown on the Project Scoring Sheet found on the following page. A Project Scoring Sheet was completed for each project to assign a numerical value to the projects. Numerical scores were arranged from high to low and grouped into three categories (high, medium and low priority). Generally, projects should be implemented according to priority unless other opportunities for completion come about (such as a roadway resurfacing project, an adjacent private or public improvement, unforeseen funding sources, etc.)

### 5.B.8 Project Implementation

It is recommended that all ‘feasible’ projects be implemented within a five-year time frame. The general priority of projects, as shown in the project table, should be followed, except in cases where there are opportunities to combine bike/pedestrian improvements with other capital improvement projects (such as bike lane installation and crosswalk/curb ramp improvements completed in conjunction with resurfacing projects).

Many of the ‘moderately constrained’ and ‘constrained’ projects will require additional study to further establish feasibility, design alternatives and project costs. High priority projects in each of these categories represent those that will have the greatest impact on safety and connectivity. Design and cost studies should be conducted in the near-term for the high priority projects that are constrained, but integral to achieving a cohesive network of facilities.

### 5.B.9 Greenway Trail Plans

Greenway trails provide enjoyable opportunities for bicycling and walking away from traffic and can create important connections between on-road facilities. Greenway trails for Fayette and Jessamine County are shown in figures 24 and 25. These plans were developed from the Fayette County Greenway Master Plan and Jessamine County Concept Greenway/Trail Plan. Proposed trails follow each





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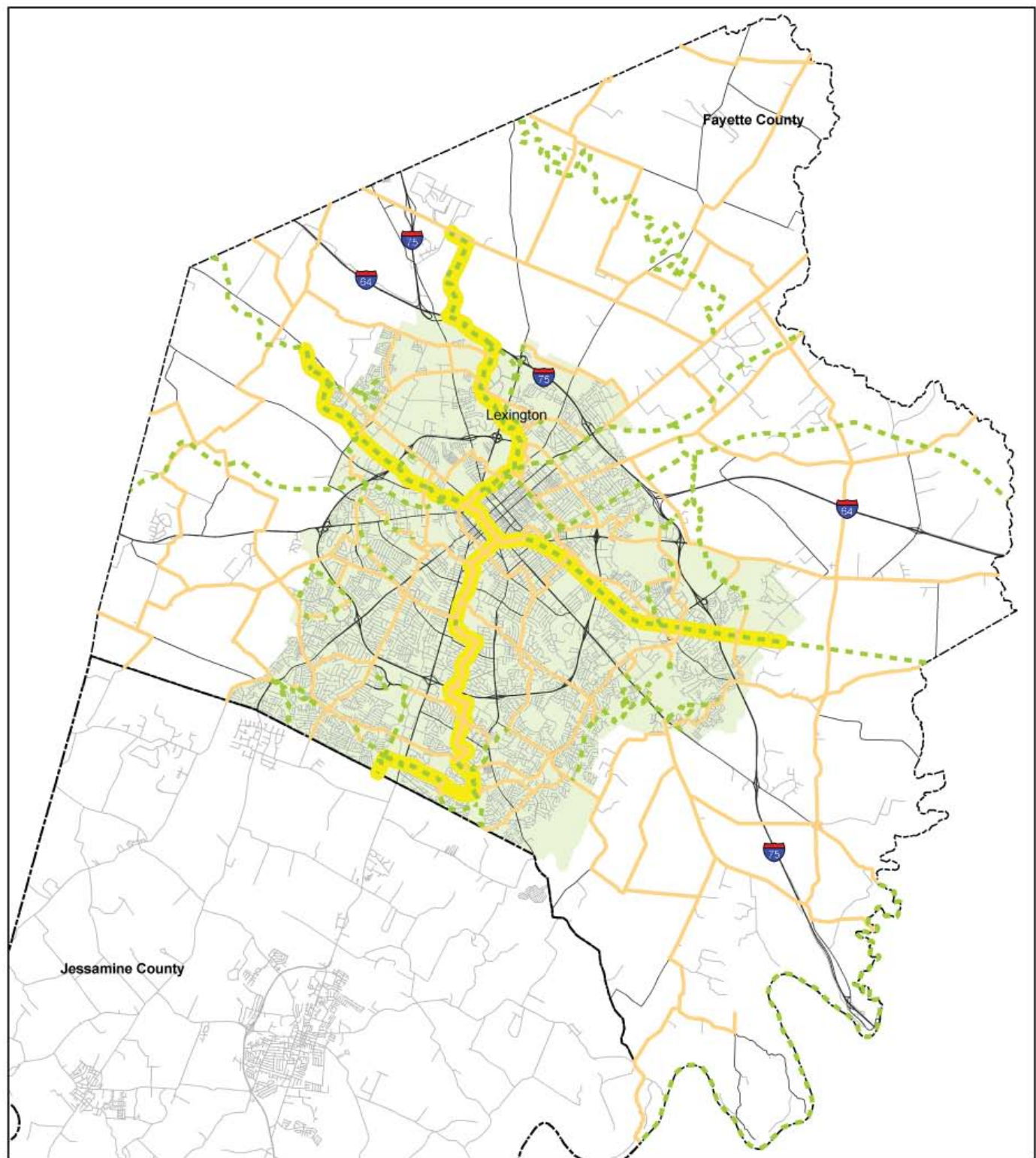
Type:

(Ped, Bike, Bike/Ped, Trail)

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Figure 24. Greenway Trails Plan for Fayette County



**Legend**

- Off-Road Trail
- On Road Trail Connection
- Priority Trail Corridor
- Urban Service Area
- Arterial/Collector Road
- Other Roads



Source: KYTC, KYGEONET, NTAD (2005), LFUCG (2006) and PB Analysis (2006)

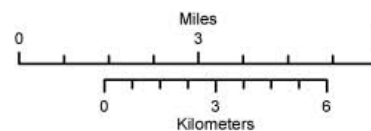
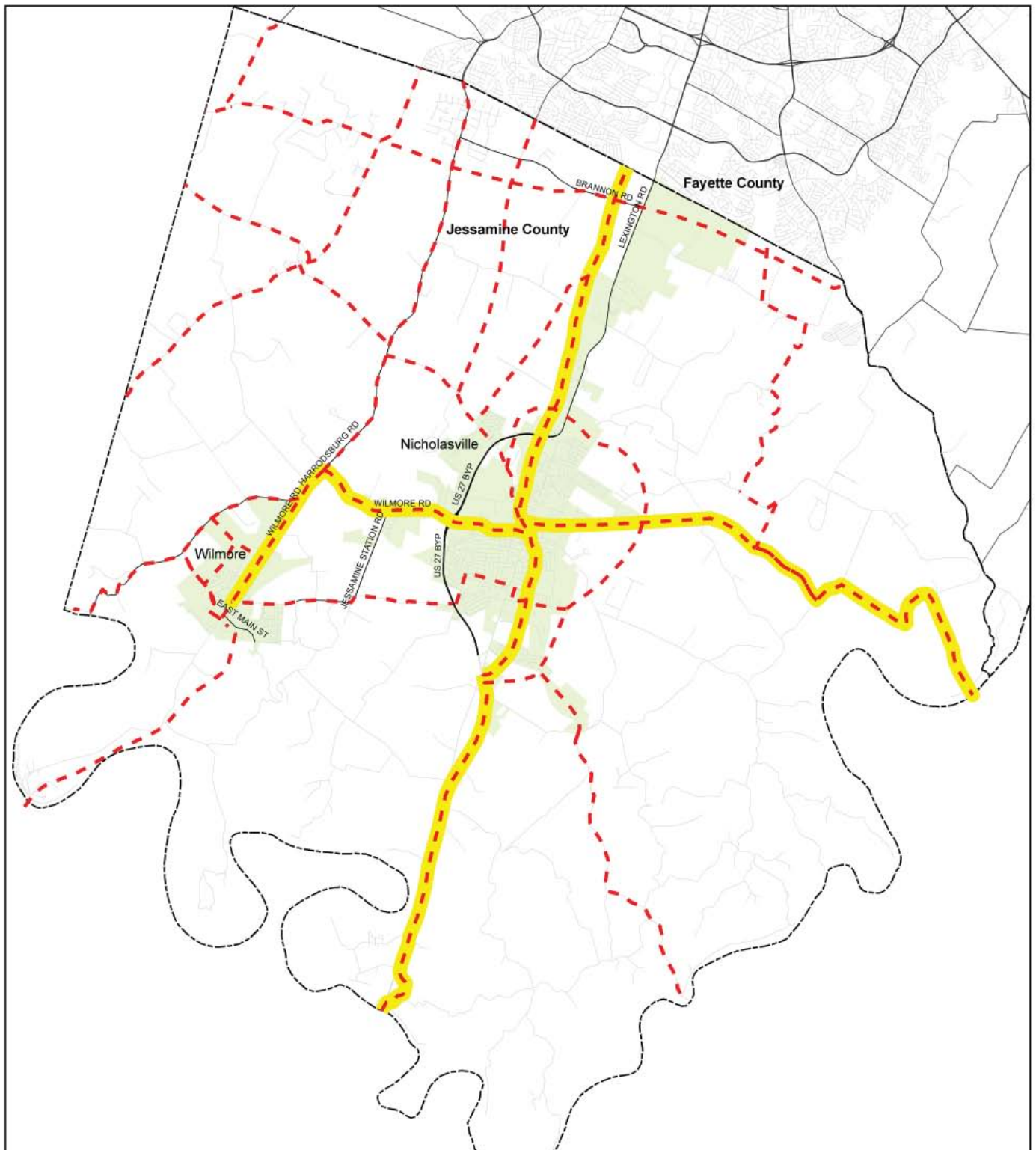


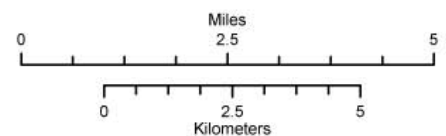


Figure 25. Greenway Trails Plan for Jessamine County



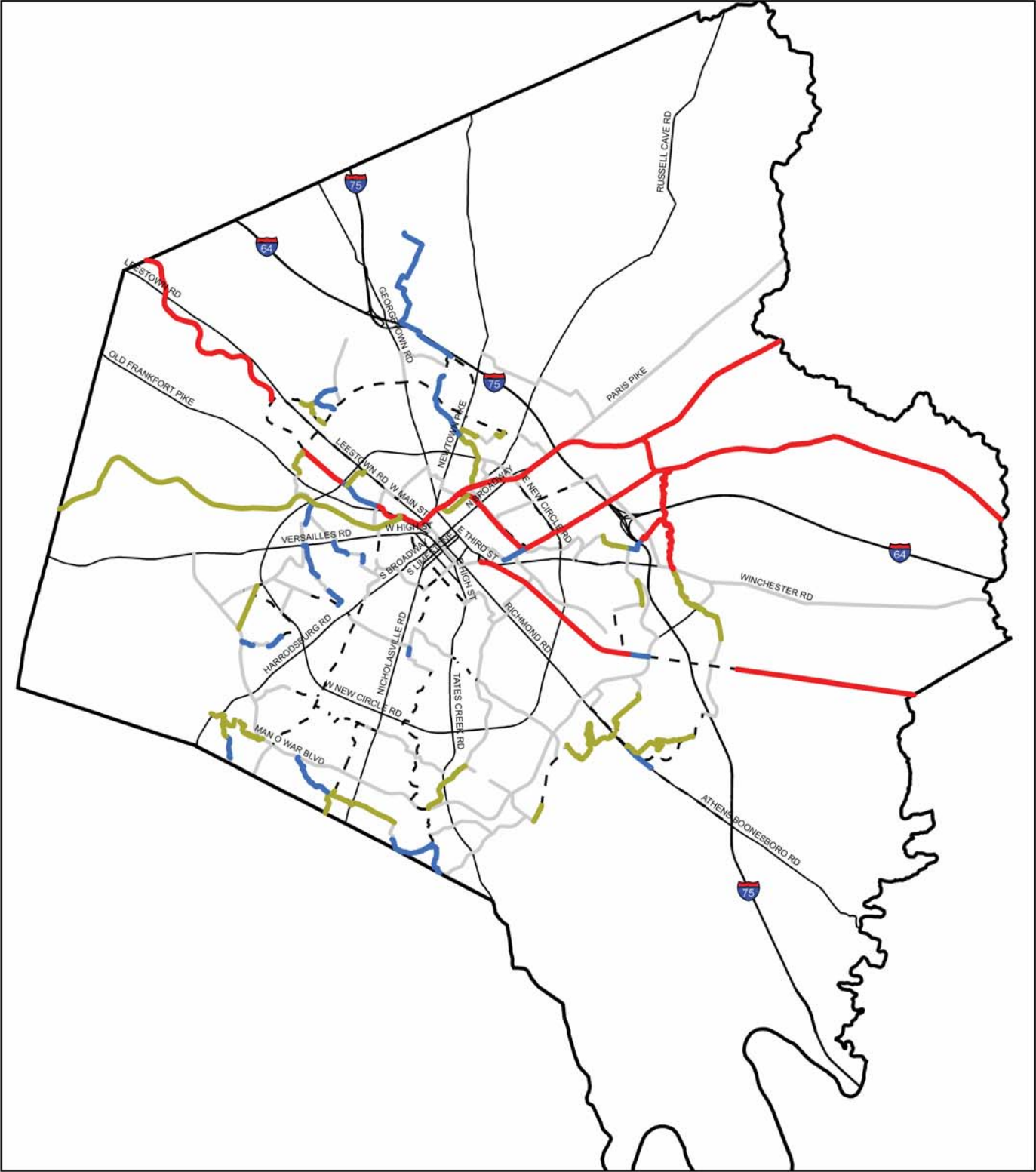
# Legend

- - - On-Road / Off-Road Trail
- Priority Trail Corridor
- Urbanized Area
- Arterial/Collector Road
- Other Road



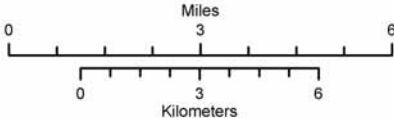
Source: Jessamine County Parks and Recreation, KYTC, KYGEONET, NTAD (2005), BGADD (2006) and PB Analysis (2006)

Figure 26. Feasibility of Trail Projects for Fayette County



**Legend**

- Feasible
- Moderately Constrained
- Constrained
- Existing/Funded Trail
- Major Road
- On Road Connection



Source: KYTC, KYGEONET, NTAD (2005), LFUCG (2006) and PB Analysis (2006)

master or concept plan to the greatest degree possible, except where alternative routes have been recommended for those segments determined during this planning process to be extremely constrained.

### **5.B.10 Trail Feasibility**

The feasibility of trail segments in Fayette County, presented in figure 26, were examined by field review and determined using similar criteria listed for roadway projects. The feasibility of Jessamine County trail segments was not established during this planning process. The Jessamine County network is considered conceptual at this time and will require further development and investigation at the local level to determine feasible trail alignments.

### **5.B.11 Trail Prioritization**

Priority corridors, shown in yellow, were identified during this planning process. Priority corridors were recommended for implementation based upon public input and the cross-county and regional opportunities they present for bicycle and pedestrian travel. The corridors create north-south and east-west connections in Fayette and Jessamine County. The corridors contain trail segments that are both relatively feasible and segments that are considered more constrained.

Fayette County trail segments were prioritized based upon similar criteria as listed above for roadway projects. Trail segment priorities are shown in tables 8, 9 and 10 with roadway projects. A similar prioritization process should be completed for Jessamine County trail projects once specific trail alignments are established.

### **5.B.12 Trail Implementation**

Greenway trail projects typically re-establish abandoned right-of-ways or establish new public right-of-ways along stream or utility corridors. Like roadway projects, most trails require an engineering design phase and right-of-way acquisition. Few projects are prepared to move directly to construction.

Trail projects determined to be 'feasible' and considered ready for final design and construction should be funded and built within a five-year time frame. Project priorities established in tables 8, 9 and 10 should be followed. Studies to determine feasibility, trail alignment, land acquisition needs, design and project costs should be completed on priority trail segments within the 'moderately constrained'

and 'constrained' project categories. Performing necessary design work will identify project needs and make them stronger candidates for competitive grant funding often utilized for off-road trail construction.

### **5.B.13 Tertiary Greenway Trails and Recreational Walking Paths**

Walking paths and tertiary (i.e. neighborhood-level) greenway trails also contribute to creating a more walkable and bicycle-friendly community. While this Bicycle and Pedestrian Master Plan primarily addresses commuter and cross-county greenway trails, the benefit of neighborhood trails and recreational walking paths should not be overlooked. These trails contribute to the transportation network by providing neighborhood connectivity to parks, schools, shopping centers and the county-wide bike network. They also create opportunities for people to recreate and engage in physical activity close to where they live. Any opportunities to construct trails in parks, near schools and in newly developing neighborhoods, should be explored by local governments within the MPO region. These projects should be planned, prioritized and funded based on similar criteria outlined for trail projects in this plan.

### **5.B.14 Regional Rural Bike Routes**

The Bluegrass Region is lauded as one of the most scenic and beautiful places in the country for bicycling and there are many opportunities to promote and market the region as a destination for bicycle tourism. The scenic terrain, view sheds, rolling hills, horse farms and small towns (such as Wilmore, Midway and Georgetown) are attractive to day-long and weekend bicycle tourists alike.

Currently, most bicycling takes place on low-volume rural roads throughout the region. Bicyclists typically ride 25 to 100 miles during one-day or two-day trips. The routes that are currently utilized by local bicyclists were identified during this planning process. Rural bike routes in Fayette and Jessamine Counties are shown in figure 27.

A regional effort to identify and officially designate a system of rural bike routes and tours (similar to driving tours) should undertaken. Joint marketing efforts should also be developed to promote the region to bicyclists across Kentucky, in adjacent states and at the national level. It is anticipated that designating and promoting these routes would be relatively low-cost and could contribute significantly to local economies through tourism dollars generated by bicyclists staying at local hotels and bed and breakfasts, visiting eateries and shops, and seeking entertainment in local towns and cities.





Figure 27. Regional Rural Bike Routes

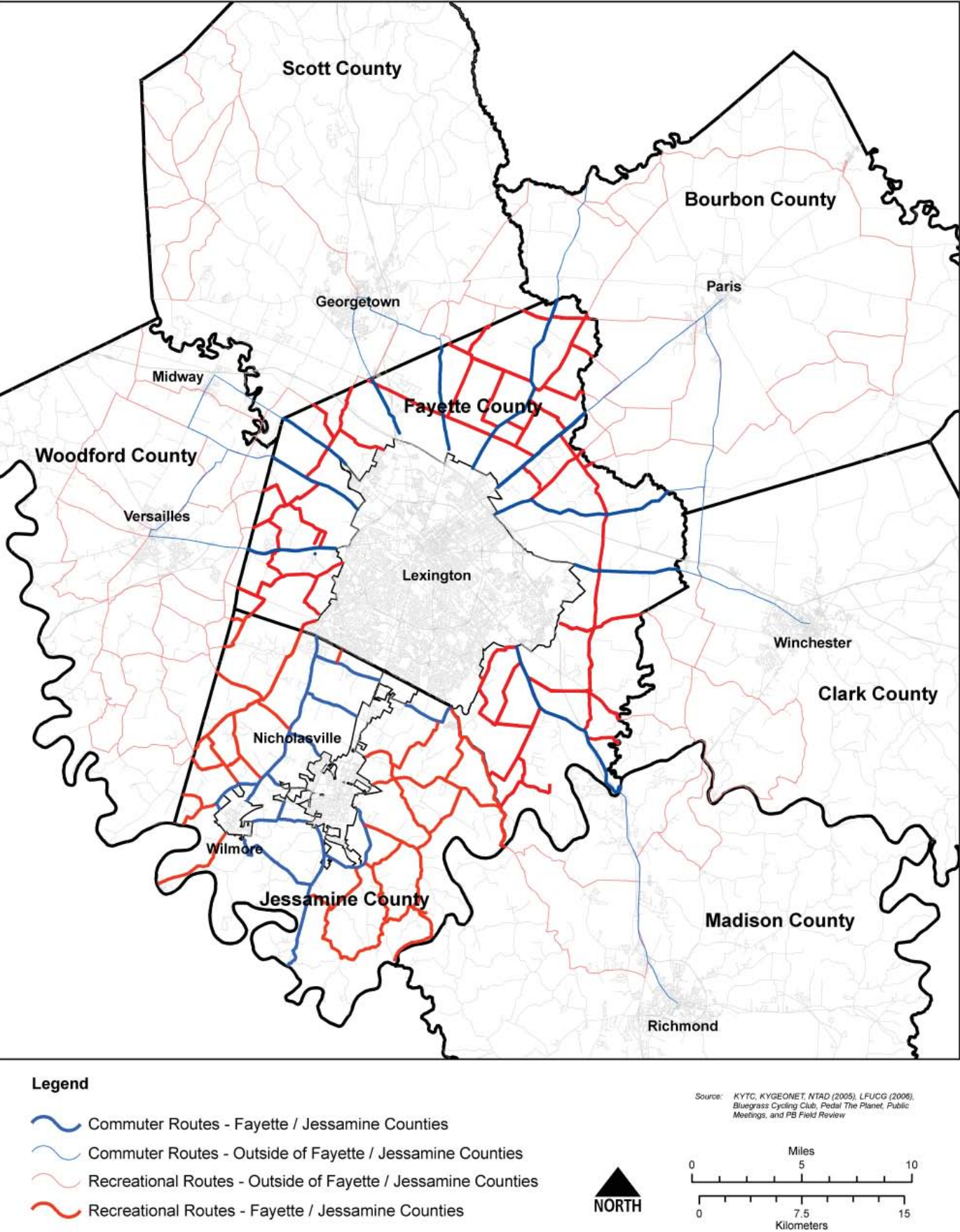




Table 8. Feasible Projects - High Priority and Medium Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
HIGH PRIORITY				
	S Limestone	Scott Street	Maxwell Street	Bike/Ped
	Vine Street	S Broadway	Main Street	Bike
	Rose Street	Vine Street	Main Street	Bike
	Alumni Drive	University Drive	Nicholasville	Ped
	Veterans Trail	University Drive	Bellefonte Drive	Trail
	Tates Creek Road	New Circle Road	Man O War Blvd.	Bike/Ped
	High Street	Woodland Avenue	Jefferson Street	Bike/Ped
	Cane Run Trail	Iron Works PB	Newtown Pike	Trail
	Midland Avenue	Main Street	Third Street	Bike
	Virginia Avenue	Export Street	S Limestone	Bike
	Wolf Run Trail	Lane Allen Road	Cardinal W Primary	Trail
	E Maxwell Street	Limestone	Rose Street	Bike/Ped
	Jefferson Street	W Main Street	Third Street	Bike
	Georgetown Road	Newtown Pike	New Circle Road	Bike/Ped
	Woodland/Hilltop Avenue	University Drive	Euclid Avenue	Bike
	Phoenix Trail	Seventh Street	Midland Avenue	Trail
	Picadome Trail	Lafayette Primary	Cardinal W Primary	Trail
MEDIUM PRIORITY				
	Euclid Avenue	S Ashland Avenue	High Street	Bike
	Jefferson Street	W High Street	W Main Street	Bike
	S Elkhorn Trail	Man O War Blvd.	Lafayette Trail	Trail
	Alumni Drive	Chinoe Road	Tates Creek Road	Ped
	Red Mile Road	Versailles Road	Horseman's Lane	Ped
	Veterans Trail	Veterans Park		Trail
	Big Sandy Trail	Man O War Blvd.	Liberty Road	Trail
	Cane Run Trail	Existing Trail in Park	Newtown Pike	Trail
	Beaumont Trail	Existing	Man O War Blvd.	Trail
	N Limestone	Withers Avenue	New Circle Road	Bike/Ped
	Mercer Road	Georgetown Road	Greendale Road	Bike
	Armstrong Mill Road	Man O War Blvd.	Appian Way	Bike/Ped
	S Broadway	Bolivar Street	Angliana Avenue	Bike
	Lakeside Trail	Lakeside Richmond Road	Chilesburg Road	Trail
	Winchester Road	Third Street	Walton Avenue	Bike
	Leestown Road	Buchanan Street	Newtown Pike	Bike

Table 8. Feasible Projects - Low Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
LOW PRIORITY				
	Versailles Road	Alexandria Drive	New Circle Road	Bike
	Eastland Trail	Executive Drive	I-75	Trail
	Harrodsburg Road	Della Drive	Shaker S RD	Ped
	Town Branch Trail	New Circle Road	Forbes Road	Trail
	Leestown Road	Forbes Road	Thompson Road	Bike
	Mt Tabor Road	Patchen Drive	Richmond Road	Bike/Ped
	Versailles Road	Angliana Avenue	Pine Street	Bike
	Armstrong Mill Road	Man O War Blvd.	Kenesaw Drive	Bike
	Cardinal Waverly Trail	Valley Park	Valley Park	Trail
	Nandino Blvd.	Georgetown Road	Newtown Pike	Bike
	S Elkhorn Trail	Brookridge Drive	Veterans Park	Trail
	Masterson Hills Trail	Sandersville Road	Masterson Primary	Trail
	Sandersville Road	Norfolk-Southern RR	Georgetown Road	Bike/Ped
	Versailles Road	Mason Headley Rd	Oxford Circle	Bike
	Dogwood Park Trail	Dogwood Park		Trail
	Pasadena Drive	Nicholasville Road	Regency Road	Bike



Table 9. Moderately Constrained Projects - High Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
HIGH PRIORITY				
	Alumni Drive	Tates Creek Road	University Drive	Bike
	Cooper Drive	Nicholasville Road	PBS Drive	Bike/Ped
	Tates Creek Road	Montclair Drive	New Circle Road	Bike/Ped
	Newtown Pike	Main Street	Loudon Avenue	Bike/Ped
	Virginia Avenue/Red Mile Road	Horsemans Lane	Export Street	Bike/Ped
	Wilson Downing Rd.	Tates Creek Road	Nicholasville Road	Bike/Ped
	E Loudon Avenue	Shropshire Avenue	N Broadway	Bike/Ped
	Tates Creek Road	Fontaine Road	Montclair Drive	Bike
	West Hickman Trail	Veterans Park	Armstrong Mill Road	Trail
	N Limestone	Third Street	Seventh Street	Bike
	Newtown Pike	Loudon Avenue	New Circle Road	Bike/Ped
	Liberty Park Trail	Existing	Sir Barton Way	Trail
	Waller Avenue	S Limestone	Crescent Avenue	Bike
	W Loudon Avenue	N Broadway	Newtown Pike	Bike/Ped
	Manchester/McConnell Trail	Town Branch Trail	New Circle Road	Trail
	Cardinal Waverly Trail	Cardinal Run Park	Man O War Blvd.	Trail
	Armstrong Mill Road	Appian Way	Tates Creek Road	Bike/Ped
	Leestown Road	Greendale Road	Forbes Road	Ped



Table 9. Moderately Constrained Projects - Medium Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
MEDIUM PRIORITY				
	Mapleleaf Trail	Richmond Road	Man O War Blvd.	Trail
	Sir Barton Way	Winchester Road	Man O War Blvd.	Bike
	Coolivan Park Trail	Castlewood Primary	Constitution Primary	Trail
	W Maxwell Street	Versailles (High St.)	Limestone	Bike/Ped
	Southland Drive	Nicholasville Road	Rosemont Garden	Bike/Ped
	Citation Trail	Alexandria Drive	Manchester Tr.	Trail
	N Broadway	New Circle Road	Kingston Road	Bike/Ped
	Masterson Station Trail	Masterson Station	Citation Blvd.	Trail
	Lane Allen Road	Alexandria Drive	Parkers Mill Road	Bike/Ped
	Manchester Street	Driscoll Street	Forbes Road	Bike/Ped
	Harrodsburg Road	Man O War Blvd.	Cave Hill Lane	Bike/Ped
	Georgetown Road	Oakwood Drive	Spurr Road	Ped
	Harrodsburg Road	Ft. Harrods Drive	New Circle Road	Ped
	Manchester Street	Jefferson Street	Driscoll Street	Bike
	Russell Cave Road	Loudon Avenue	Park Place	Bike/Ped
	Cane Run Trail	Coldstream Park	Constitution Trail	Trail
	Rosemont Garden	Southland Drive	Edison Drive	Bike/Ped
	Squires Trail	Summerhill Drive	Armstrong Mill Road	Trail





Table 9. Moderately Constrained Projects - Low Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
LOW PRIORITY				
	S Elkhorn Road	Man O War Blvd.	Old Harrodsburg Road	Trail
	Easthills	Squires existing	Lakeside Primary	Trail
	Citation Village	Citation Blvd.	Masterson Primary	Trail
	Alumni Dr.	New Circle	Chinoe Road	Bike/Ped
	Lakeside	Jacobson Park	Hays Blvd.	Trail
	Eastland Drive	Executive Dr.	Eastland Parkway	Trail
	Lansdowne Drive	Redding Rd.	E Reynolds Road	Bike
	Green Acres Park	Newtown Pike	Dawson Springs	Trail
	Sharkey Way	Treatment plant	Town Branch Trail	Trail
	Manchester/ McConnell	New Circle Road	County line	Trail
	S Elkhorn Road	Nicholasville Rd.	Brookridge Dr.	Trail
	S Elkhorn Road	Lafayette Trail	Nicholasville Rd.	Trail
	Old Frankfort Pike	Forbes Road	Alexandria Dr.	Bike/Ped
	Lafayette	S Elkhorn Trail	County line	Trail
	N Elkhorn Road	Hayes Blvd.	Winchester Road	Trail
	Greendale Road	Citation Blvd. Extension	Spurr Road	Bike
	Man O War Blvd.	Winchester Rd.	Blackford Pkwy	Bike/Ped
	Dogwood Park	S Elkhorn Rd.	Dogwood Park	Trail



Table 10. Constrained Projects - High Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
HIGH PRIORITY				
	Rose Street	Euclid Avenue	Vine Street	Bike/Ped
	N Broadway	Main Street	Northland Drive	Bike/Ped
	Constitution Trail	Phoenix Trail	Paris Pike Trail	Trail
	S Limestone	Alumni Drive	Scott Street	Bike/Ped
	Big Sandy Trail	Liberty Road	Phoenix Trail	Trail
	Man O War Blvd.	Sir Barton Way	Armstrong Mill Road	Bike
	Town Branch Trail	Forbes Road	Rupp Arena	Trail
	Harrodsburg Road	New Circle Road	Lane Allen Road	Bike/Ped
	Harrodsburg Road	Lane Allen Road	Mason Headley Road	Bike/Ped
	Forbes Road	Leestown Road	Versailles Road	Bike/Ped
	S Upper Street	Main Street	Winslow Street	Bike
	N Limestone	Seventh Street	Withers Ave.	Bike/Ped
	W Third Street	Newtown Pike	N Limestone	Bike/Ped
	N Limestone	Main Street	Third Street	Bike
	S Broadway	Main Street	Bolivar Street	Bike
	Newtown Pike	New Circle Road	I-75	Bike/Ped
	E/W New Circle Road	Winchester Road	Old Paris Road	Ped
	Nicholasville Road	New Circle Road	Man O' War Blvd.	Bike/Ped
	Liberty Road	New Circle Road	Winchester Road	Bike/Ped
	Man O War Blvd.	Armstrong Mill Road	Nicholasville Road	Bike
	Phoenix Trail	Seventh Street	Briar Hill Trail	Trail
	S Limestone	Maxwell Street	Main Street	Bike
	Man O War Blvd.	Nicholasville Road	Harrodsburg Road	Bike
	Castlewood Trail	Phoenix Trail	Constitution Trail	Trail
	N Upper Street	Main Street	Third Street	Bike
	Cooper Drive	PBS Drive	Tates Creek Road	Bike



Table 10. Constrained Projects - Medium Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
MEDIUM PRIORITY				
	Russell Cave Road	Park Pl.	Winburn Drive	Bike/Ped
	S Broadway	Angliana Avenue	Mason Headley Road	Bike/Ped
	E Main Street	Hanover Avenue	Vine Street	Bike
	Versailles Road	Oxford Circle	Forbes Road/Red Mile Road	Bike/Ped
	E New Circle Road	Woodhill Drive	Winchester Road	Ped
	N Broadway	Northland Drive	New Circle Road	Bike/Ped
	Nicholasville	Southland Drive	New Circle Road	Bike/Ped
	Man O War Blvd.	Harrodsburg Road	Versailles Road	Bike
	Nicholasville Road	Alumni Drive	Southland Drive	Bike/Ped
	W New Circle Road	Old Paris Road	Boardwalk	Bike/Ped
	Todds Road	Liberty Road	Catera Trace	Bike/Ped
	E High Street	Euclid Avenue	Woodland Avenue	Bike/Ped
	Richmond Road	New Circle Road	Shriners Lane	Ped
	Liberty Road	Grafton Mill Lane	New Circle Road	Bike/Ped
	Parkers Mill Road	Lane Allen Road	Man O War Blvd.	Bike/Ped
	Mason Headley Road	Versailles Road	Harrodsburg Road	Bike/Ped
	Price Road	Leestown Road	Georgetown Road	Bike/Ped
	Briar Hill Trail	Constitution PT	County line	Trail
	High Street	Jefferson Street	Pine Street	Bike
	Fontaine Road	High Street	Chinoe Road	Bike
	Harrodsburg Road	County Line	Man O War Blvd.	Ped
	Parkers Mill Road	Versailles Road	Lane Allen Road	Bike/Ped
	N Upper Street	Third Street	Seventh Street	Bike
	Alexandria Drive	Citation Blvd Extension	Viley Road	Bike/Ped



Table 10. Constrained Projects - Low Priority

	STREET/TRAIL	FROM	TO	FACILITY TYPE
LOW PRIORITY				
	Bryan Station Road	Hermitage/Anniston Drive	Preakness Drive	Bike/Ped
	Greendale Road	Sandersville Road	Leestown Road	Bike/Ped
	Man O War Blvd.	Blackford Pkwy.	Sir Barton Way	Bike/Ped
	Georgetown Road	New Circle Road	Oakwood Drive	Bike/Ped
	Hermitage/ Wickland/Winston	Old Paris Road	Bryan Station Road	Bike/Ped
	Tates Creek Road	Man O War Blvd.	Hartland Pkwy/ Saron Dr.	Ped
	Town Branch Trail	Alexandria Drive	New Circle Road	Trail
	Versailles Road	Forbes Road/Red Mile Road	Angliana Ave	Bike
	Winchester Road	Helm Street	Elkhorn Road	Ped
	Spurr Road	Georgetown Road	Sandersville Road	Bike
	Constitution Trail	Paris Pike Trail	County Line	Trail
	E Reynolds Road	Lansdowne Drive	Nicholasville	Bike
	Leestown Road	Price Road	Buchanan Street	Bike
	Alumni Drive	Man O War Blvd	New Circle Road	Bike
	Pleasant Ridge Drive	Plaudit Pl.	Man O War Blvd.	Bike
	Big Sandy Trail	Deer Haven Pk.	County Line	Trail
	Harrodsburg Road	Cave Hill Ln	Ft. Harrods Drive	Bike/Ped
	Town Branch Trail	Bracktown Road	County line	Trail
	N Elkhorn Trail	Winchester Road	Briar Hill Road	Trail
	Woodhill Drive	Codell Drive	New Circle Road	Bike
	Winchester Road	Elkhorn Road	Man O War Blvd.	Ped
	Russell Cave Road	Winburn Drive	Urban Service Boundary	Bike/Ped
	Eastland Trail	I-75	N Elkhorn Primary	Trail





# *Chapter 6*

## Implementation



## Chapter 6.

# Implementation

This chapter presents implementation strategies for the Bicycle and Pedestrian Master Plan ranging from planning, funding, project implementation and public support. It also presents ways in which the MPO and local governments can gauge the success of bicycle and pedestrian efforts.

### 6.1 Planning Strategies

#### Lexington Area Metropolitan Planning Organization

As the transportation planning and funding agency for Fayette and Jessamine County, the MPO is integral to successfully implementing the Bicycle and Pedestrian Master Plan. Two key documents are developed by the MPO and need to fully incorporate the recommendations presented in this plan:

##### *MPO Long Range Transportation Plan (LRP)*

The Bicycle and Pedestrian Master Plan will be adopted as an element of the LRP; however, strategies to fully integrate bicycle and pedestrian projects into the transportation planning process should be evaluated and reemphasized in the LRP (scheduled for update in 2008). For example:

- A “complete streets” approach to transportation planning should be the foundation of the LRP.
- Prioritization of roadway improvement projects should favor projects that will enhance bicycling, walking and transit.
- Projects intended to decrease vehicular demand on the roadway system (bicycle, pedestrian, transit, etc) should be given equal consideration to roadway capacity expansion projects.

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

The TIP is updated every two years and identifies transportation projects that will receive state and federal

funding for the following 4-year time frame. During TIP updates, the MPO should consult the Bicycle and Pedestrian Master Plan and Bicycle Pedestrian Advisory Committee to determine priority projects for inclusion in the TIP.

#### Local Planning Jurisdictions

Support from local planning jurisdictions is critical to successful implementation of this Master Plan. First, local planning commissions can require the provision of bicycle and pedestrian infrastructure in new development and redevelopment projects to proactively eliminate the need for costly retrofit projects in the future. Second, bicycling and walking rates are directly influenced by land use patterns and community designs regulated by local planning commissions.

The MPO should work with local planning agencies and commissions to:

- Adopt the MPO Bicycle and Pedestrian Master Plan as an element of local comprehensive plans.
- Develop and adopt Greenway/Trail Plans as elements of local comprehensive plans.
- Require that greenway trails be built during development, or assess exactions in lieu of construction for use by local governments for trail construction at a later date.
- Revise Subdivision Regulations to require the construction of “complete streets” during new development.
- Incorporate more walkable and bicycle-friendly development patterns in local land use plans as described in Chapter 5.
- Revise zoning ordinances and/or develop design guidelines to provide for more bicycle and pedestrian-friendly site designs as described in Chapter 5. Consideration should be given to the development of form-based zoning codes which can be more conducive to pedestrian-friendly development.



- Work with local school district planners to develop neighborhood-oriented schools that encourage bicycling and walking.

## 6.2 Project Implementation Strategies

### Shared Use Trail Projects

Trail projects constructed in existing neighborhoods can be challenging due to a lack of publicly owned property or opposition from adjacent property owners. The acquisition of property or easements requires coordination, public support and funding. Environmental constraints can also complicate projects constructed in floodplains or other environmentally sensitive areas. The timing of trail construction projects can be impacted if constraints are not identified early in the process. For example, LFUCG has previously received funding for trail projects through grant sources before engineering design studies have been completed. In some case, this has resulted in funding shortages and extended project completion schedules that may jeopardize grant funds.

The Greenway Master Plan recommends that trail corridor master plans be completed for all primary trails to determine alignments, identify constraints and opportunities. Preliminary engineering and design work is also necessary for all trail segments (primary, secondary or tertiary trails) to ensure that safe facilities are built in a cost-effective manner.

The following recommendations will aid in trail implementation:

- Complete trail corridor master plans for the North-South and East-West Corridors in both Fayette and Jessamine County.
- Provide engineering and design funding for high priority trail projects through MPO or local government sources.
- Do not pursue or allocate construction or right-of-way funds for trail projects until design phases are complete and accurate cost estimates can be obtained.
- Identify the agency(ies) responsible for trail project coordination and construction in Jessamine County and/or Nicholasville.

- Assign or establish a Greenway/Trails Coordinator position at LFUCG, as recommended in the LFUCG Greenway Master Plan. The coordinator should oversee greenway development and management including planning, property acquisition, construction, etc. The position should also coordinate public relations, marketing and fundraising.

### On-Road Projects

There are many low-cost ways in which bicycle and pedestrian improvements can be made to existing roadways. The cost of adding bike and pedestrian facilities during roadway widening and reconstruction projects is relatively small compared to overall project costs. Resurfacing projects may also provide opportunities for bicycle and pedestrian improvements through bike lane striping, wide curb lane striping and the addition of enhanced crosswalks and curb ramps.

However, it should be noted that most roadways in the region will never be widened and streets are generally only resurfaced every 10-15 years. In cases where no roadway improvements are scheduled in the near future, independent bicycle and pedestrian projects will be necessary for successful plan implementation.

The following recommendations will aid in the implementation of on-road projects:

- Include appropriate bicycle and pedestrian facilities in all local and state roadway construction and reconstruction projects.
- Allocate funds to begin engineering and design work for high priority (stand-alone) bicycle and pedestrian projects as identified in Chapter 5.
- Review local and state resurfacing projects for potential pedestrian improvements such as curb ramp installation/repair and improved crosswalk markings.
- Review local and state resurfacing projects for potential bicycle improvements such as bike lanes, wide curb lanes, bicycle detection devices and bicycle-friendly drainage grates.
- Include cost estimates for bicycle and pedestrian improvements in resurfacing budget requests.



- Conduct a bike lane restriping study for all projects identified as potentially 'feasible' in Chapter 5.
- Restripe bike lanes on roadways not scheduled for resurfacing within five years if determined to be feasible and if no known safety impacts exist.

### 6.3 Policy Implementation Strategies

Implementing plan recommendations will require the involvement of many individuals, organizations, government agencies and decision-making bodies. It is important for all stakeholders to be knowledgeable of our community goals and the solutions presented for making our region more bicycle and pedestrian-friendly. Each party must understand their role in achieving these goals and should be held accountable for improvements needed in their respective areas. It is therefore recommended to:

- Develop a 'Plan of Action' for Fayette and Jessamine Counties. This working document should include the recommended actions set-forth in this plan, the responsible party (individual, division, government official, etc.), next steps and any known barriers to moving forward. The document should be used to guide the work of appropriate agencies, committees or organizations. The document will also help the MPO evaluate progress made over time and may serve as a public information tool.
- Conduct training sessions on improving the bicycle and pedestrian-friendly qualities of our community. Make these available to professional staff and appropriate committees, boards, commissions or councils.
- Build public and government support for needed policy changes by conducting an education campaign on the benefits of bicycle and pedestrian-friendly communities.

### 6.4 Funding Strategies

Communities may use a wide array of funding sources for bicycle and pedestrian projects ranging from local, state and federal dollars to private or corporate donations. There are often rules and procedures that must be followed to obtain and utilize each funding source. A discussion of these sources and recommendations for their use follows.

#### Local Funds

Local funding sources that may be utilized for bicycle and pedestrian improvements include:

- **General funds** - Tax revenue allocated annually through local government budgeting processes.
- **County & Municipal Road Aid Funds (MAP)** - State gas-tax funds allocated by the state and budgeted annually through city or county governments.
- **Municipal bond fund** - Bonds available to local governments for capital improvement projects. For example, Fayette County allocated \$2 million for trail projects in FY 2008 using bond funds.

Funds for bicycle and pedestrian facilities are currently included in many local budgets, particularly when improvements are incidental to other capital or maintenance projects. However, independent bicycle and pedestrian improvement needs exist as well. Departments responsible for such improvement projects must anticipate the needs and be aware of priorities so that funds can be requested during annual budgeting processes. For instance, the following LFUCG agencies may be responsible for project identification, prioritization and funding requests for the following:

- **Division of Parks & Recreation** - Walking/bike path construction and/or maintenance.
- **Division of Engineering** - Sidewalk installation, shared use trail construction, roadway widening for bike lane installation.
- **Division of Streets, Roads & Forestry** - Curb ramp repair/installation, bicycle and pedestrian improvements incidental to resurfacing.





- **Division of Traffic Engineering** - Crosswalk markings, bike lane pavement markings, pedestrian signals, mid-block crossing improvements.
- **Division of Planning** - Bicycle and pedestrian plans and studies, public information materials.
- **Division of Code Enforcement** - Sidewalk Maintenance Assistance Program, sidewalk enforcement funding.
- **Division of Police** - Bicycle and pedestrian enforcement activities and personnel.

Due to the extensive number of divisions responsible for implementing bicycle and pedestrian improvements, an annual process for identifying bicycle and pedestrian needs and priorities should be developed and coordinated to ensure that funding requests are submitted and allocated appropriately.

## State/Federal Funds

State and federal transportation funds are administered through the KY Transportation Cabinet and local MPOs. To be eligible for funding, projects must be included in local and state long range transportation plans. As an adopted element of the Lexington Area MPO Long Range Transportation Plan, all projects identified in the Bicycle and Pedestrian Master Plan are eligible for the following main funding sources:

- **Surface Transportation Program (STP)**  
The majority of transportation projects are funded with STP funds that are allocated by the state through the State 6-Year Highway Plan. STP funds have traditionally been used for the construction, reconstruction and maintenance of roadways. These projects benefit bicyclists and pedestrians if facilities are included in the scope of projects. Stand-alone bicycle and pedestrian projects are eligible, but have not typically received funding through this source in the past.

- **Surface Transportation Program (Lexington) (SLX)** - The Lexington Area MPO receives an annual allocation of STP funds (called SLX) that can be used for transportation projects at the discretion of the MPO. Due to more local control, these funds are an ideal funding source for stand-alone bicycle and pedestrian projects.

Federal transit funds that are apportioned to local transit agencies and include:

- **Federal Transit Administration (FTA) funds** - Urbanized Area Formula Transit Grants and Transit Enhancements that may be used for improving bicycle and pedestrian access to transit.

A number of federal transportation grant programs are also administered by the KY Transportation Cabinet and Governors Office for Local Development. Grant funds generally require that local governments provide funding for 20 to 50% of project costs. The following grant programs provide funding for bicycle and pedestrian projects:

- **Safe Routes to School (SR2S)**
- **Transportation Enhancement (TE)**
- **Congestion Mitigation & Air Quality Improvement (CMAQ)**
- **Recreational Trails Program (RTP)**
- **Land and Water Conservation Fund (LWCF)**
- **Scenic Highways and Byways**
- **Hazard Elimination Safety (HES) Grants**
- **Transportation Community and System Preservation (TCSP)**

Funding through these grant programs is awarded on a competitive basis throughout the state. Funding agencies receive 10 to 20 times more requests than funds are available. Therefore, while these sources can supplement local and other state/federal funds for bicycle and pedestrian projects, they should not be relied upon as the main funding source for such projects.



Federal funds administered through grants have specific rules, regulations and reporting requirements. Projects constructed with federal grant funds typically take two to three years to reach completion.

Grant applications for federal funds are strongest when projects have been prioritized and supported by local governments. Localities must demonstrate community support through financial contributions, resolutions and letters of support. Projects that are ready for construction are usually looked upon more favorably by state funding agencies (i.e. design work and/or property acquisition is complete). Cash contributions versus local in-kind contributions may also make grant applications stronger candidates for funding.

In the past, LFUCG has submitted a large number of projects for these grants despite limited funding. It is recommended that local governments should identify high priority projects and allocate local funds to complete engineering and design work prior to grant submittals. Local governments should then allocate local funds for (at a minimum) the required grant match and begin focusing grant writing efforts on top priority projects. It is recommended that grant requests not be submitted for more projects than the locality can reasonably expect to receive funding for. This will allow focus to be placed on developing strong applications for priority projects and to present a clear message of priority to state funding agencies.

## Other Funding Sources

There are many other ways in which other communities have provided funding for bicycle and pedestrian projects. These include:

- **Legislative allocations** - Federal and state funding may also be allocated to local governments by legislative action. For example, the City of Louisville, KY and Owensboro, KY have secured significant federal funds through such processes for bicycle and pedestrian improvements.
- **Private donations** – Corporate investments and private donations from individuals or foundations may be used for bicycle and pedestrian improvements. Some cities have used private dollars in conjunction with local, state or federal funds to construct city-wide greenway

trail systems, especially through non-profit groups dedicated to greenway development.

- **Local improvement districts** – Sometimes referred to as urban renewal districts or economic/business improvement districts, these funds are provided through assessments levied on a group of property owners by a local government. Such funding sources have been used in communities, particularly in downtown areas, for streetscape and other pedestrian improvements.
- **Levies or user taxes** – These funds are provided through assessments levied on property owners, through a local sales tax or vehicle registration fees. Local governments must pass a resolution (voted on by the public) and develop related local ordinances for these funds to be assessed and used for bicycle and pedestrian projects.

In summary, the following recommendations would improve funding opportunities for bicycle and pedestrian projects:

- Conduct an audit to determine current funding levels for bicycle and pedestrian-related projects; present findings to local governments and/or the MPO.
- Develop a multi-year funding strategy based upon priorities and known funding sources.
- Work with the KY Transportation Cabinet and the MPO to ensure bicycle and pedestrian projects are included in the TIP and State 6-Year Highway Plan.
- Ensure funding requests for priority bicycle and pedestrian projects are submitted by local government divisions on an annual basis.
- Prioritize and submit grant funding applications; allocate local matching funds on an annual basis to ensure that grant funding opportunities are maximized.
- Determine if private dollars will be sought for bicycle and pedestrian projects. If so,



identify a government agency or non-profit organization responsible for receiving and administering funds; identify an official government liaison/spokesperson for soliciting private funds.

- Investigate the level of public support for local levies, taxes or fees for bicycle and pedestrian improvements.

## 6.5 Partnerships

Partnerships will be a powerful tool for developing a more walkable and bicycle-friendly community and in creating a local culture supportive of bicycling and walking. There are many organizations that have special abilities to help local governments achieve the goals outlined in this plan while, at the same time, achieving their own missions. For example, local safety coalitions and bicycle clubs can provide public safety education and outreach. Advocates, clubs and non-profit organizations can organize and promote local bicycling and walking events with the support of local governments. Local tourism agencies can develop marketing materials and promote local events and attractions to the public at-large. The Bluegrass Area Development District can help to foster the development of regional bicycle and pedestrian initiatives. In particular, increased collaboration with Fayette and Jessamine County Public Schools will be necessary to change attitudes and trends related to bicycling and walking to school.

Local governments should work to identify these potential partners and to provide support (financial and other) to organizations that can better achieve, or can assist local governments in achieving, the goals established in this Master Plan.

## 6.6 Public Support and Involvement

Public support and involvement is critical to the successful implementation of and any major community initiative. This Master Plan is the result of public interest and support for bicycling and walking initiatives and the following actions will help ensure that the public remains engaged in both decision-making processes and in the plan's implementation:

- Form citizen-based bicycle and pedestrian groups to be the “face” of bicycling and walking initiatives in the region and to assist governments in implementing the Master Plan.
- Host bicycle and pedestrian “summits” to increase public awareness of local plans and to develop priorities and implementation strategies.
- Conduct public information campaigns to increase awareness of bicycle and pedestrian issues, projects, programs and policies. This may include a website, event displays, speaking engagements, annual reports, etc.
- Institute a “Bike Ambassador” program (and similar pedestrian program) with a network of volunteers who are knowledgeable of current bicycle and pedestrian safety issues, plans and projects. Ambassadors should work to educate large audiences by making appearances at public events (such as student orientations, run/walk/bike events, employee health fairs, etc).
- Periodically survey citizens to monitor bicycling and walking activity and issues.

## 6.7 Oversight and Evaluation

The status of the recommendations presented in the Bicycle and Pedestrian Master Plan should be monitored and evaluated over time. Local governments and the MPO must be periodically informed of progress made and potential barriers to implementation. The following actions will assist in the successful implementation of the plan:

- The Lexington Area MPO Bicycle & Pedestrian Advisory Committee (BPAC) should provide a bi-annual report to the MPO of progress made in relation to the performance measure listed below.
- Local citizen-based bicycle and pedestrian groups in Fayette and Jessamine Counties (such as a Mayor's Task Force) should be formed to provide for public oversight and involvement in plan implementation.



- Baselines should be established for performance measures listed below in order for progress and outcomes to be tracked effectively over time.

## Performance Measures

- Percentage of trip made by bicycling, walking and transit.
- Number of bicycle and pedestrian crashes and fatalities compared to bicycling and walking rates.
- Mileage of shared use trail facilities.
- Percentage of major streets (including intersections) that adequately accommodate bicyclists and pedestrians, including persons with disabilities.
- Percentage of transit stops that are accessible to pedestrians, including persons with disabilities.
- Dollars invested in bicycle and pedestrian projects and maintenance.
- Number of public requests for bicycle and pedestrian information.
- Number of people reached through bicycle and pedestrian education efforts.
- Number of maintenance complaints for bicycle and pedestrian facilities.
- Number of local and regional bicycling and walking events.
- Percentage of schools with a Safe Routes to School program.
- Percentage of children who bicycle and walk to school.
- Street and intersection design policies, standards and guidelines include provisions for pedestrians and bicyclists.
- Local planning regulations require street connectivity and bicycle and pedestrian connections within developments and to adjacent existing or planned developments.
- Greenways and trails are routinely dedicated and built in new developments.
- Park and recreation facilities have good bike and pedestrian access.
- Traffic calming requests for streets in new developments have been eliminated through improved design; traffic calming requests in existing developments have been addressed.
- Vehicles speeds are generally within 5 mph of posted speed limits on local, collector and arterial streets.
- Adequate bicycle parking is provided at most destinations such as schools, parks, employment sites and businesses.
- Pedestrians are given priority in downtown areas and there are pleasant pedestrian streetscapes.
- Urban land adsorption rates and impervious surfaces have been reduced due to the development of more compact, walkable communities.
- Local air quality ratings have stabilized or have been reduced below current levels.
- Public health has improved and there are lower rates of overweight and obesity due to a more physically active population.







# *Appendix A*

## Existing Conditions



## Appendix A: Existing Conditions

A detailed analysis of the existing conditions was performed to determine current deficiencies, problems, and/or gaps for pedestrian and bicycle accommodation in Fayette and Jessamine Counties. This included an analysis of current facilities, routes, land use, levels of service, crash rates and intersection audits. In support of the analysis, various data was collected from the following sources:

- Kentucky Transportation Cabinet (KYTC);
- Kentucky Geography Network (KYGEONET);
- National Transportation Atlas Database (NTAD);
- Lexington-Fayette Urban County Government (LFUCG);
- Bluegrass Area Development District (BGADD);
- United States Census Bureau; and
- PB analysis.

### Study Area Characteristics

Fayette and Jessamine Counties form the Lexington Area Metropolitan Planning Organization (MPO) and are the primary study area; all analysis and mapping are focused on these two counties. Maps showing existing conditions information such as land use, public transportation, schools, and other destinations throughout the two counties are depicted in chapter 4 of this document.

Identifying population and employment center density provided an additional means of evaluating the study area. The MPO travel demand model (TDM) was used as the source for population and employment data because the model provides a consistent source of information for both counties. Figure A-1 shows population density in Fayette County. A concentration of population can be seen in the central business district (downtown). Figure A-2 depicts the population density of Jessamine County. Population concentrations can be seen in the cities of Nicholasville and Wilmore. It should be noted that the data shown is for the year 2002 and does not reflect the most recent growth in

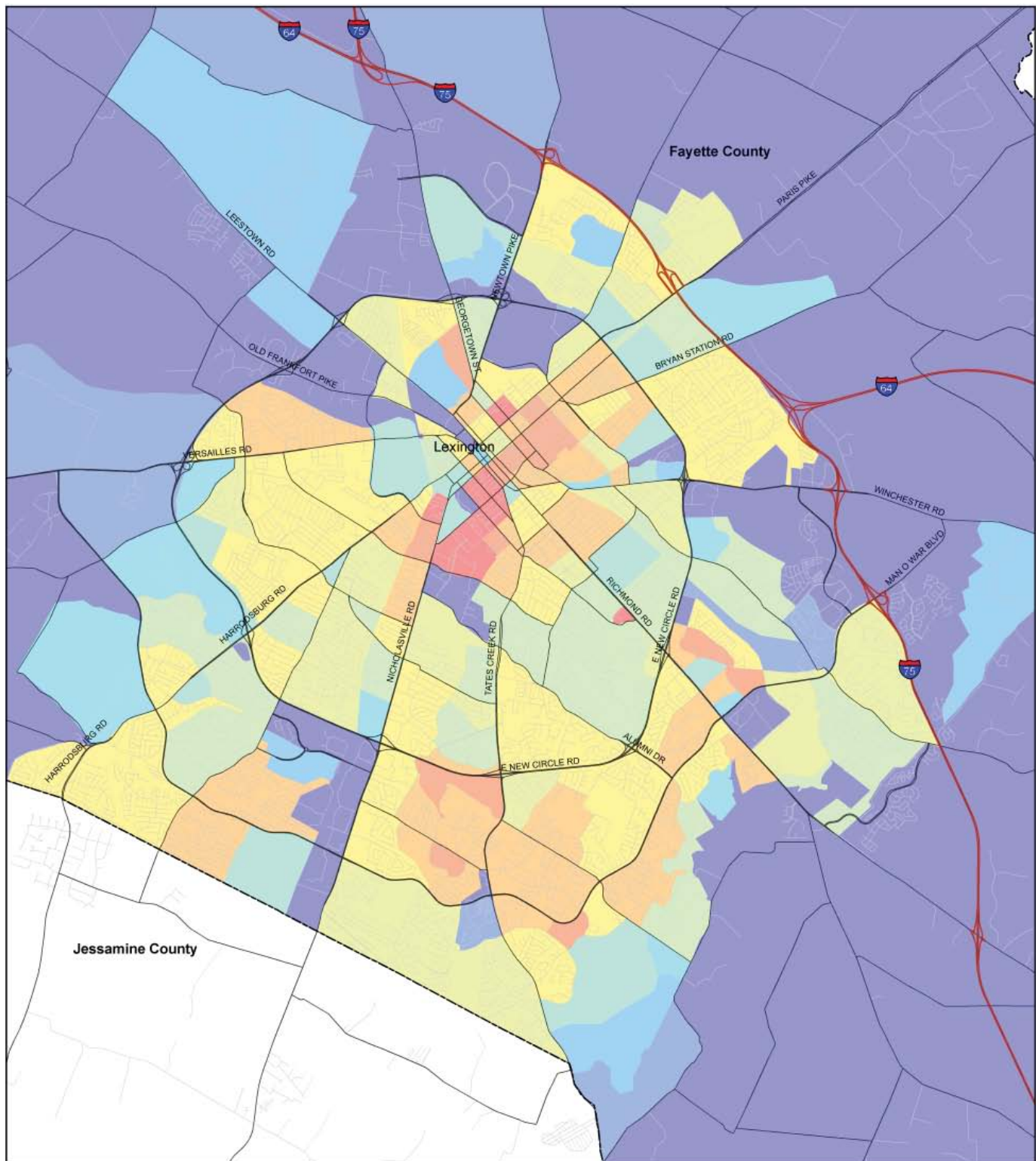
areas such as Hamburg Pavilion in Fayette County and Brannon Crossing in Jessamine County.

Employment density is useful in determining the highest concentrations of workplace destinations and other trip attractions. Figure A-3 depicts the employment density based on the MPO TDM for Fayette County. Concentrations of employment can be seen in the central business district as well as along Harrodsburg Road, Nicholasville Road and Richmond Road corridors. Figure A-4 shows employment density in Jessamine County. Concentrations can be seen in the city of Wilmore and the city of Nicholasville extending along Lexington Road up through Brannon Crossing to the Fayette-Jessamine County border.

Utilizing journey to work data from the U.S. Census Bureau, additional maps were developed showing where people walk or bicycle for work purposes. Figure A-5 represents the number of trips reported by those who walk from home in the study area. Concentrations can be seen in the central business district of Fayette County and the city of Wilmore in Jessamine County. Figure A-6 shows the number of trips by those who bike from home in the study area. Concentrations can be found in the general vicinity of the University of Kentucky campus and downtown Lexington.



Figure A-1. Population Density in Fayette County - Persons per Square Mile



**Legend**



\* Persons Per Square Mile

Source: KYTC, KYGEONET, NTAD (2005), LFUGG (2006) and Lexington MPO Travel Demand Model (Base Year 2000 Data)

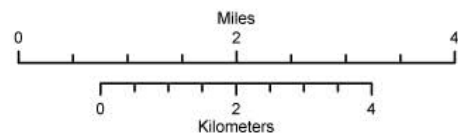
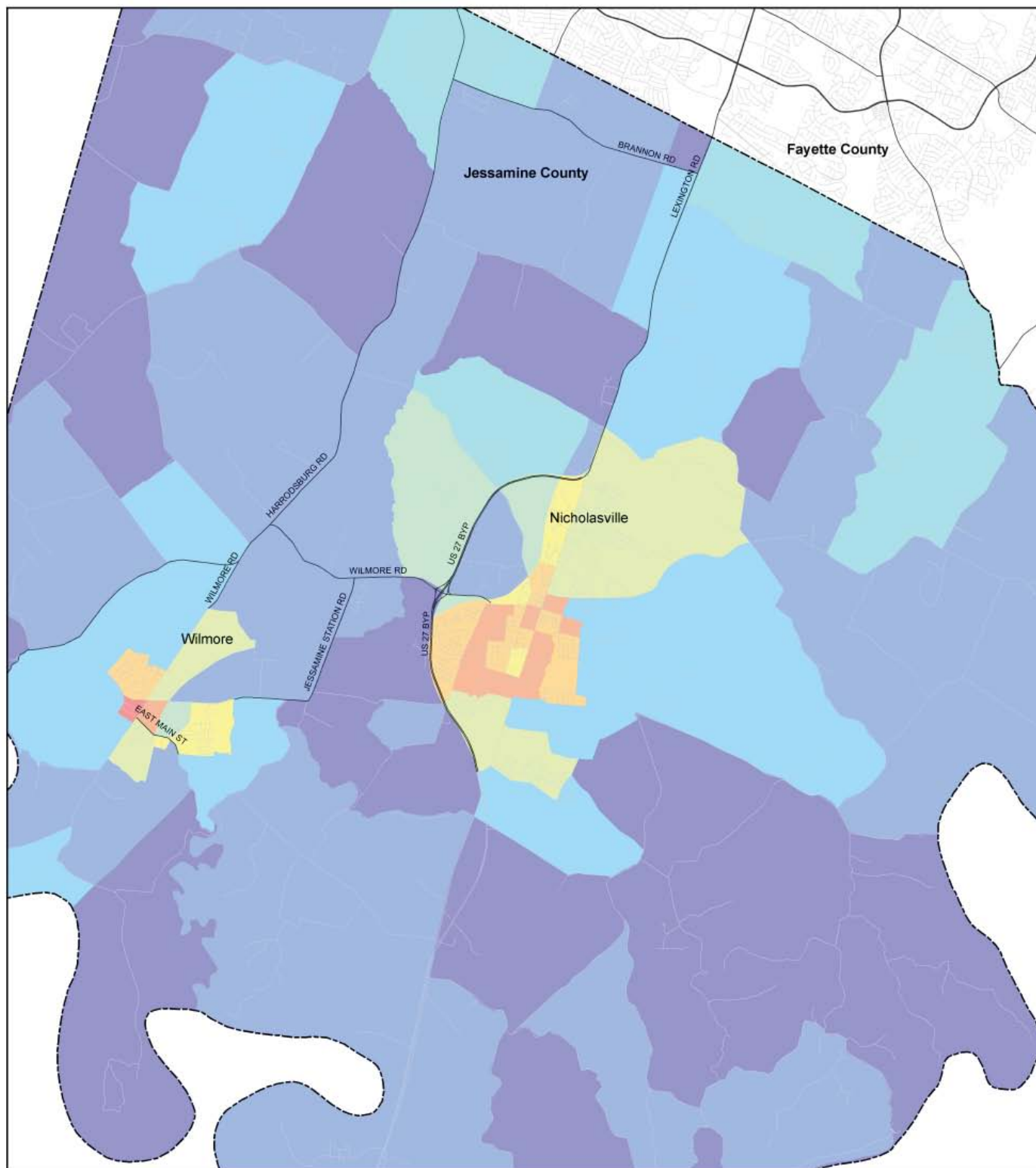
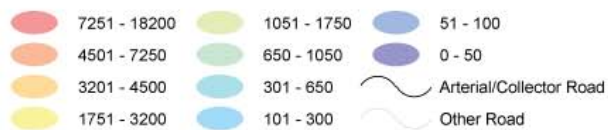




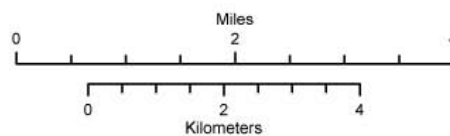
Figure A-2. Population Density in Jessamine County - Persons per Square Mile



**Legend**

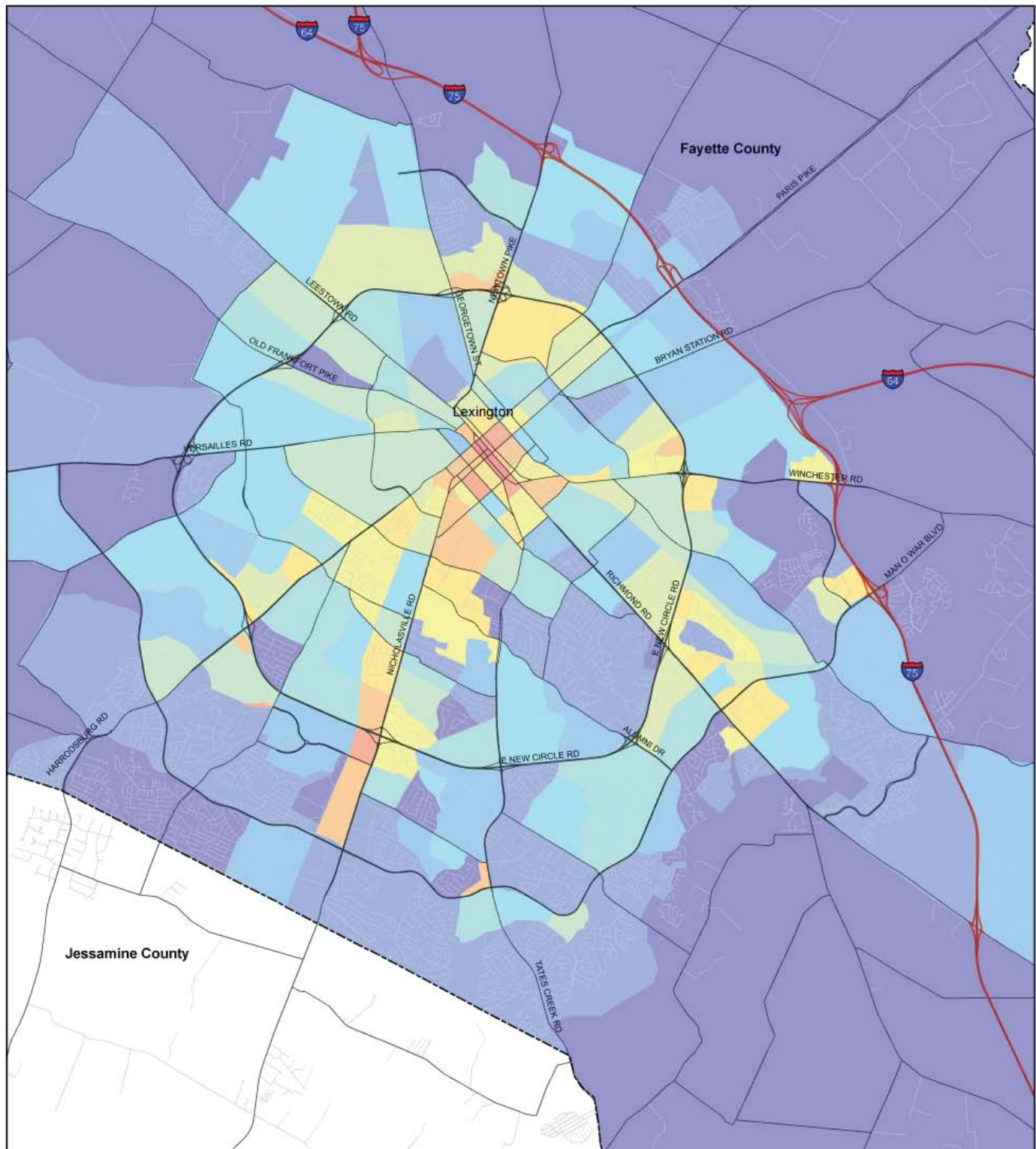


Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and Lexington MPO Travel Demand Model (Base Year 2000 Data)

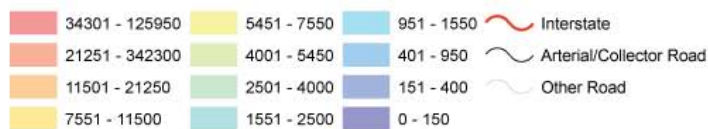


\* Persons Per Square Mile

Figure A-3. Employment Density in Fayette County - Employees per Square Mile



### Legend



\* Employees Per Square Mile

Source: KYTC, KYGEOTNET, NTAD (2005), LFUGG (2006) and Lexington MPO Travel Demand Model (Base Year 2000 Data)

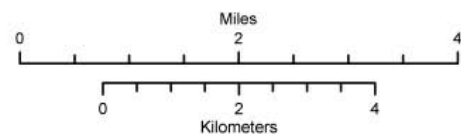
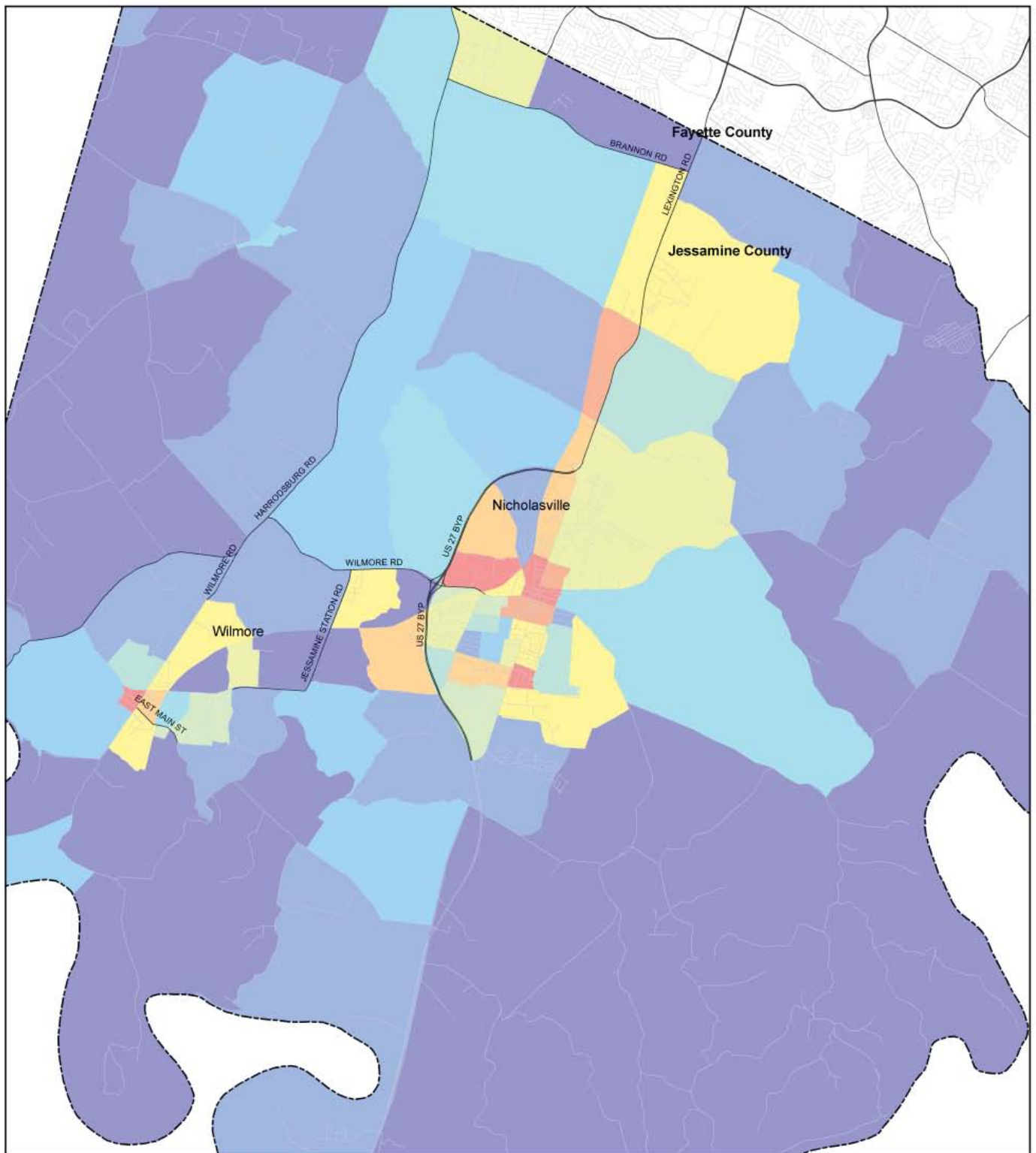
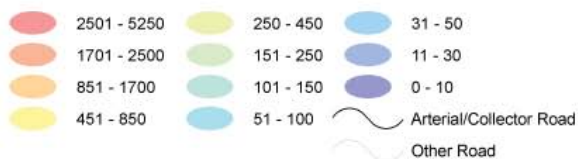


Figure A-4. Employment Density in Jessamine County - Employees per Square Mile



**Legend**



\* Employees Per Square Mile

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and Lexington MPO Travel Demand Model (Base Year 2000 Data)

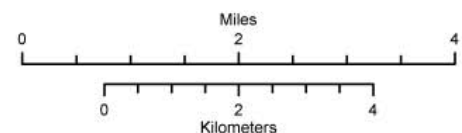
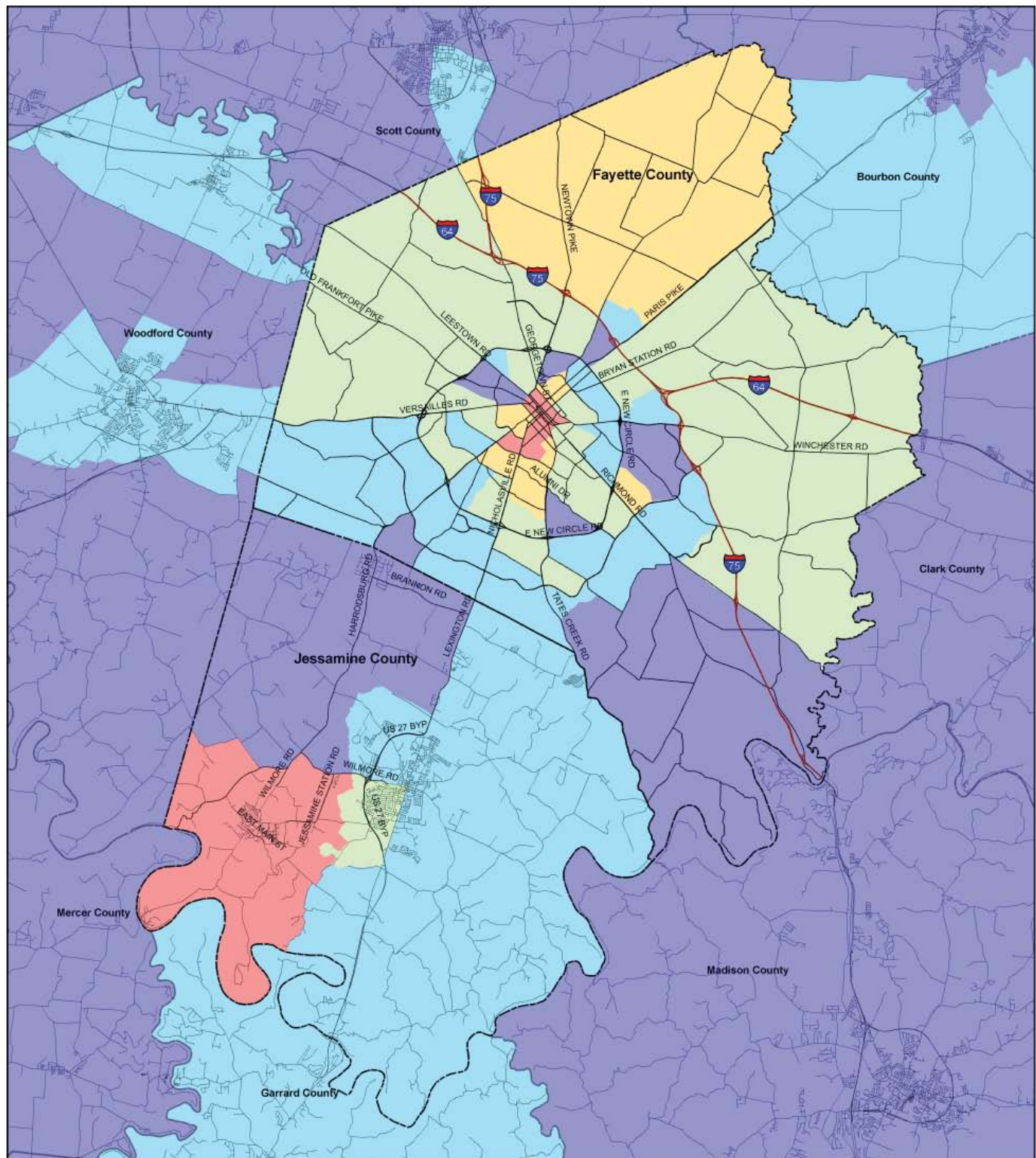




Figure A-5. Journey to Work - Walking from Place of Residence



**Legend**

- |  |   |  |
|--|---|--|
| <span style="color: red;">■</span> 218 - 1025  | <span style="color: lightblue;">■</span> 1 - 39 | <span style="color: red;">—</span> Interstate                |
| <span style="color: yellow;">■</span> 95 - 217 | <span style="color: darkblue;">■</span> 0       | <span style="color: black;">—</span> Arterial/Collector Road |
| <span style="color: green;">■</span> 40 - 94   |   | <span style="color: gray;">—</span> Other Road               |

\* Trips

Source: KYTC, KYGEONET, NTAD (2005) and U.S. Census Bureau

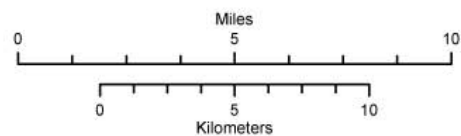
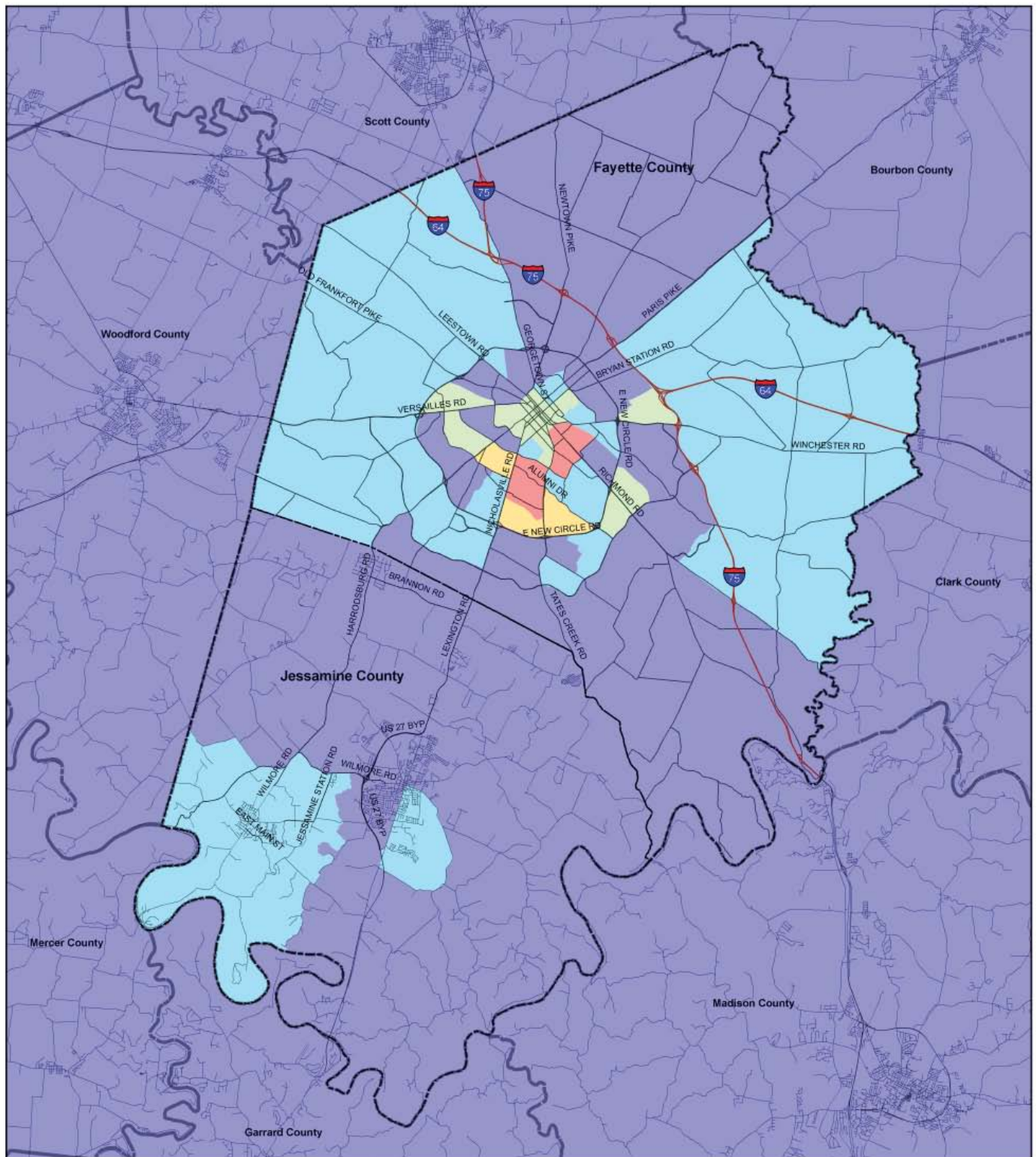
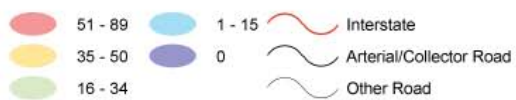




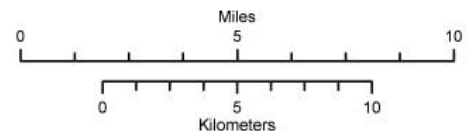
Figure A-6. Journey to Work - Biking from Place of Residence



# Legend



Source: KYTC, KYGEONET, NTAD (2005) and U.S. Census Bureau



\* Trips

## Pedestrian Environment

The pedestrian environment in the study area was assessed through feedback from the first four public meetings and open houses, intersection audits, and a crash data analysis. Graphic representations of the existing pedestrian environment are shown in Chapter 4. As depicted there, the majority of absent links in sidewalks occurs on major roads such as Harrodsburg Road, Nicholasville Road, Richmond Road, Bates Creek Road, Winchester Road, Newtown Pike, Leestown Road and Versailles Road. Similarly, major deficiencies in linkages can be found along the major corridors in Jessamine County.

## Intersection Audits

The locations selected to perform the intersection audits were chosen to provide the most diverse range of situations that could occur. Figures A-7 and A-8 show the locations where audits were performed in Fayette and Jessamine Counties, respectively. The following types of intersection environments were included in the sampling:

- Local street crossing a local street
- Local street crossing a collector street
- Local street crossing an arterial street
- Collector street crossing a collector street
- Collector street crossing an arterial street
- Arterial street crossing an arterial street

The intersections selected for sampling also represented a sampling of various environments including rural, suburban commercial, suburban non-commercial, urban commercial and urban non-commercial. The criteria for the intersection audits included items such as:

- Number of driving lanes and intersection crossing distances;
- Presence of crosswalks, pedestrian signage or signals;
- Presence of sidewalks and curb ramps; and
- Compliance with ADA standards.

The methodology and spreadsheets used for performing the audits are available from the MPO;

they can be used to complete additional intersection audits performed in the future.

In a comparison of the intersections, those intersections located along major arterials such as at Nicholasville Road and Reynolds Road; Man O War and Harrodsburg Road; and Bates Creek Road and Cooper Drive were found to be more pedestrian and bicycle-friendly as opposed to intersections located along lower volume roads such as Paris Pike and Parkside Drive. However, it should be noted that while the intersections located along major arterials may be safer from an infrastructure standpoint, they may not necessarily be perceived as safe intersections by the walking public. The audit did not take into consideration traffic volumes along the arterial roadway and the risk associated with crossing these major arterials. For example, while the intersection of Nicholasville Road and Reynolds Road scored the highest with regard to pedestrian infrastructure (signals, markings, etc.), public perception is that it is not safe to cross Nicholasville Road at this point because of very high traffic volumes, multiple travel lanes to cross, and general driver distraction in this area of Lexington.

## Crash Data

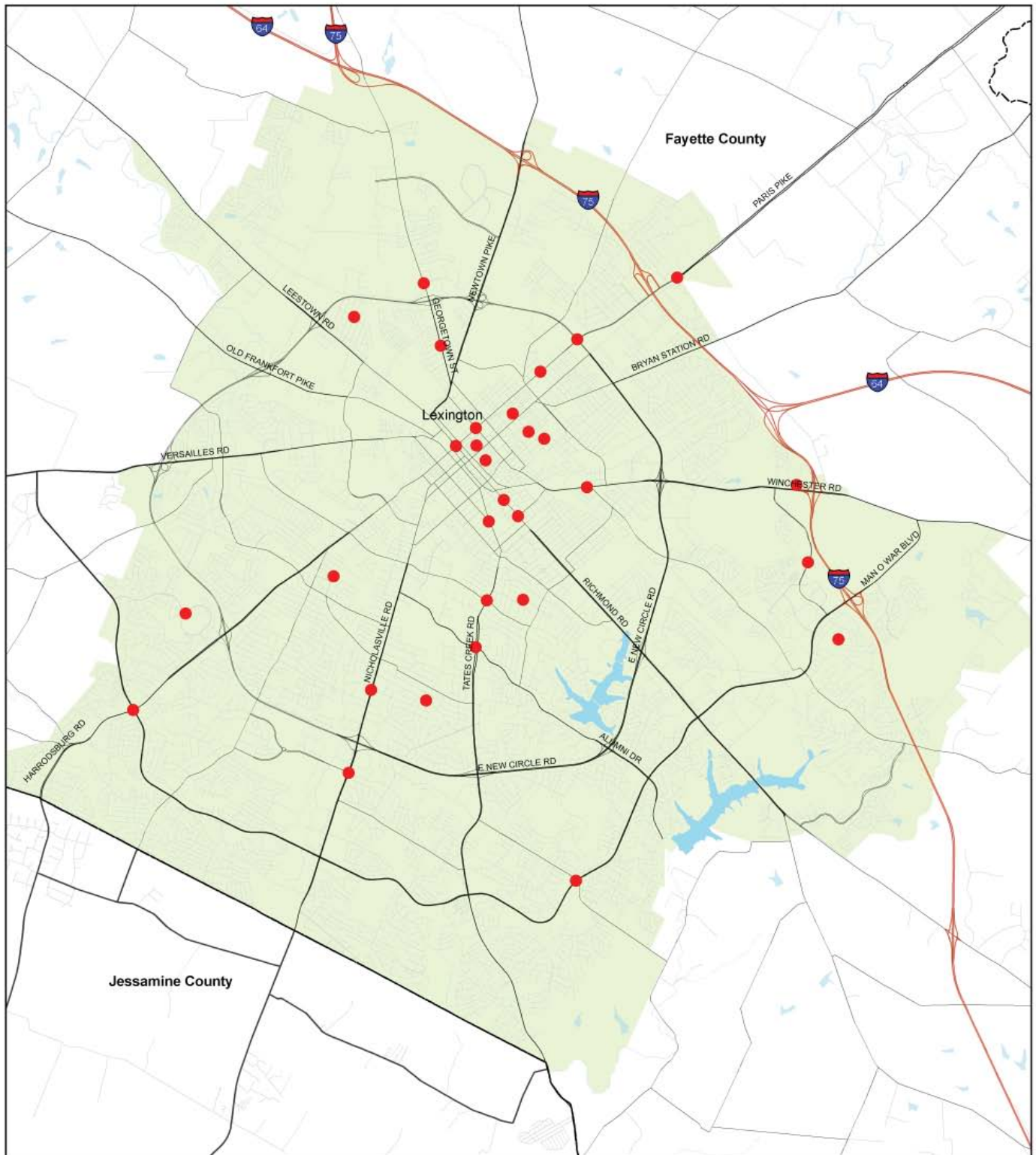
A review of crash data was performed for both Fayette and Jessamine Counties. Crash data was provided by the Lexington Area MPO for a three-year period from January 1, 2003 through December 31, 2005. During this time period, there were a total of 404 motor vehicle crashes that involved a pedestrian in Fayette County and 23 crashes that involved a pedestrian in Jessamine County. Overall, there were 11 fatal crashes in Fayette County and one in Jessamine County. The percentage of injury crashes was very high for both counties – 90% of all pedestrian crashes resulted in an injury in Fayette County and 87% of all pedestrian crashes in Jessamine County resulted in an injury.

Figure A-9 shows pedestrian-motor vehicle crashes in Fayette County from the years of 2003 through 2005. Figure A-10 focuses on pedestrian-motor vehicle collisions in downtown Lexington. Concentrations of collisions have occurred in the central business district and along Nicholasville Road, adjacent to the University of Kentucky's campus. Figure A-11 depicts pedestrian-motor vehicle collisions in Jessamine County from the years 2003 through 2005. Figure A-12 focuses on pedestrian-motor vehicle collisions in the city of Nicholasville. The majority of collisions occurred in downtown Nicholasville.





Figure A-7. Intersections Audited in Fayette County



**Legend**

- Intersection Audits (30)
- Water
- Urban Service Area
- Interstate
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2006)

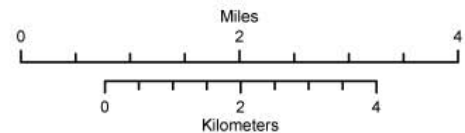
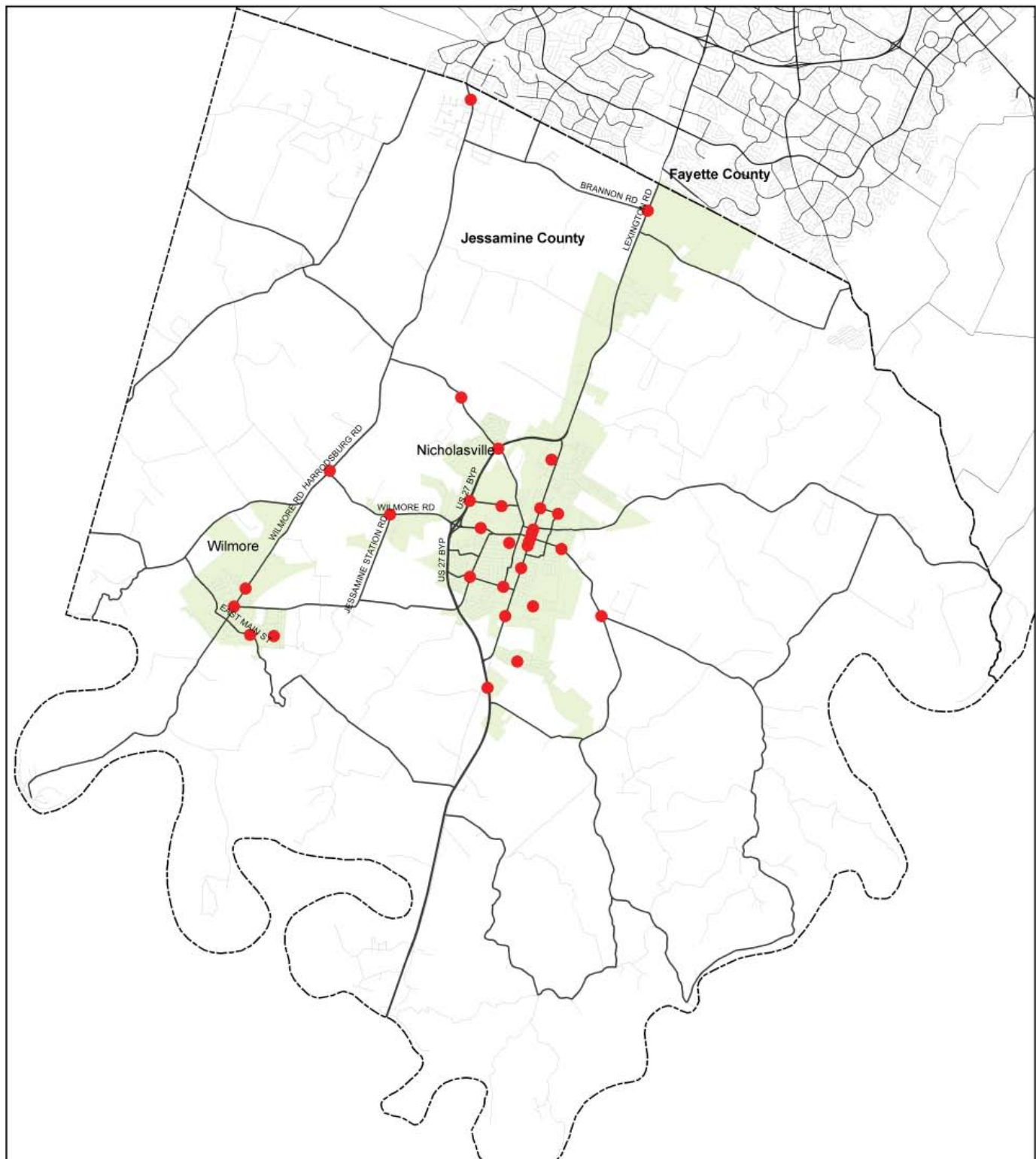


Figure A-8. Intersections Audited in Jessamine County



### Legend

- Intersection Audits (30)
- Urbanized Area
- Arterial/Collector Roads
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and BGADD (2006)

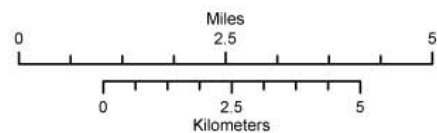
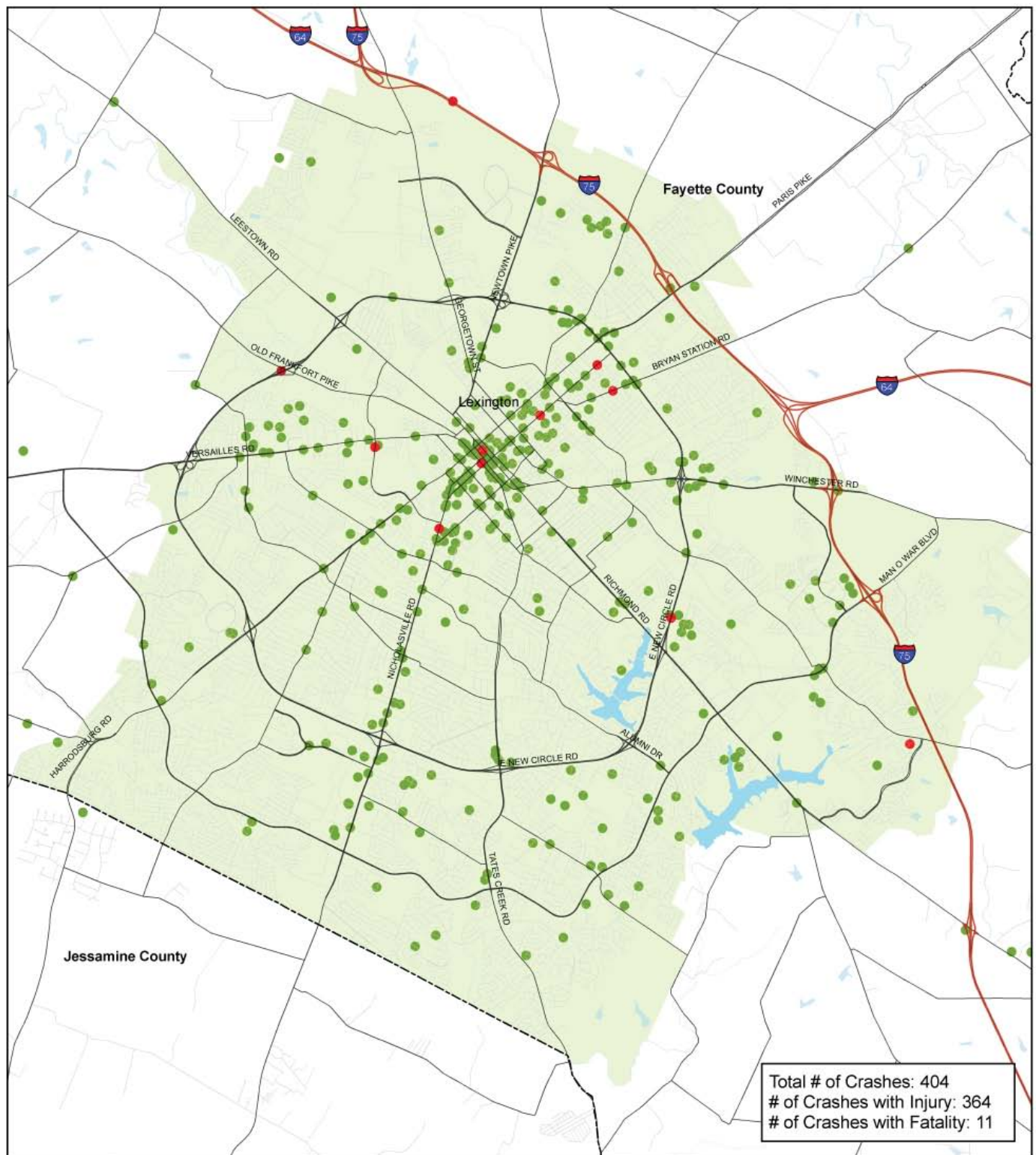




Figure A-9. Pedestrian-Motor Vehicle Crashes in Fayette County



**Legend**

- Fatal Crash
- Other Crash
- Water
- Urban Service Area
- Interstate
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2006)

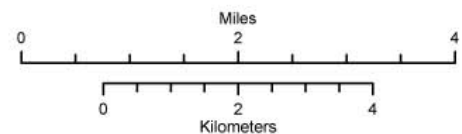
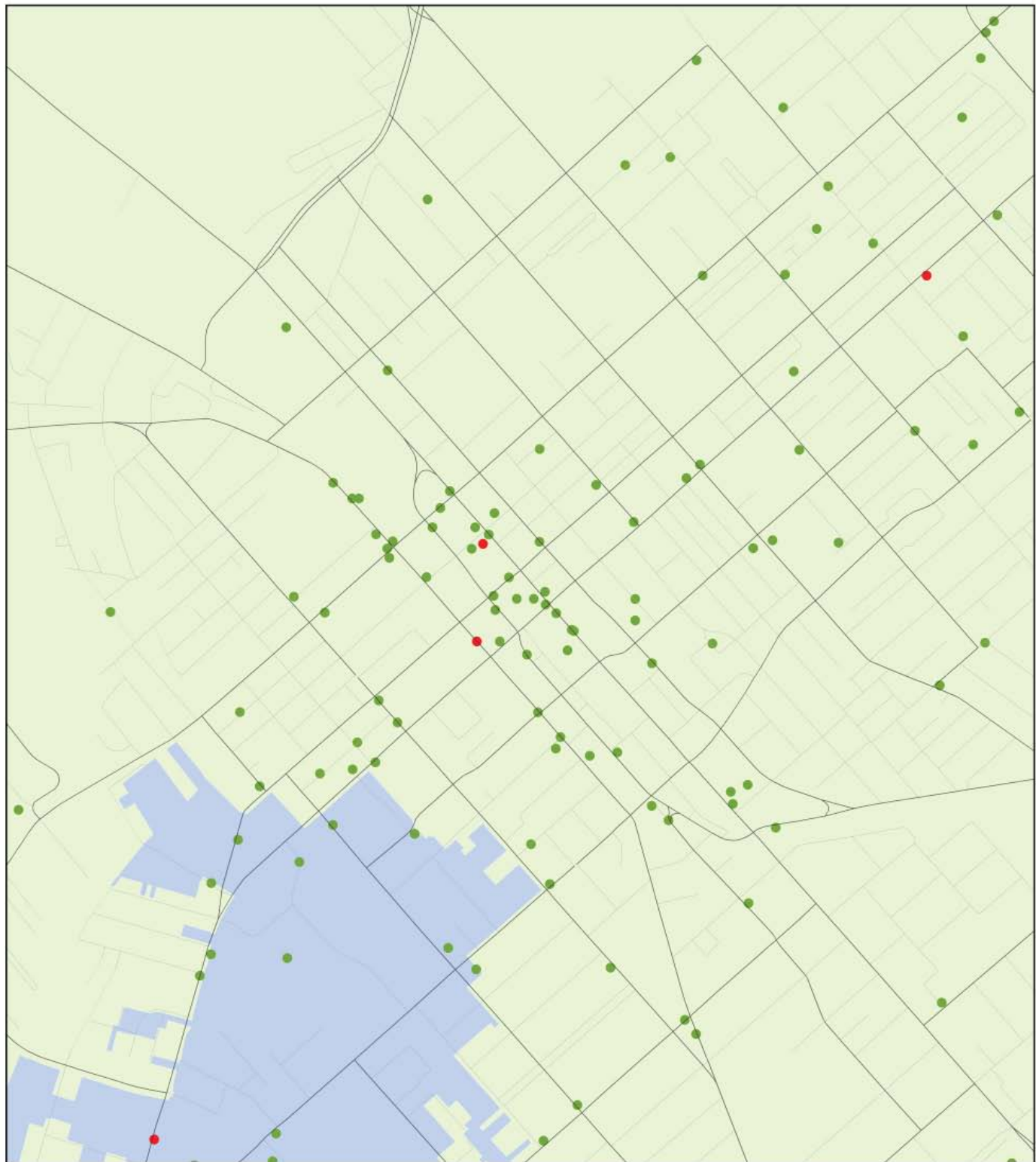


Figure A-10. Downtown Lexington Pedestrian-Motor Vehicle Crashes



**Legend**

- Fatal Crash
- Other Crash
- University of Kentucky Campus
- Urban Service Area
- Collector/Arterial Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and LFUGG (2006)

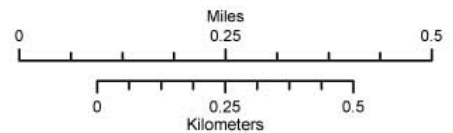
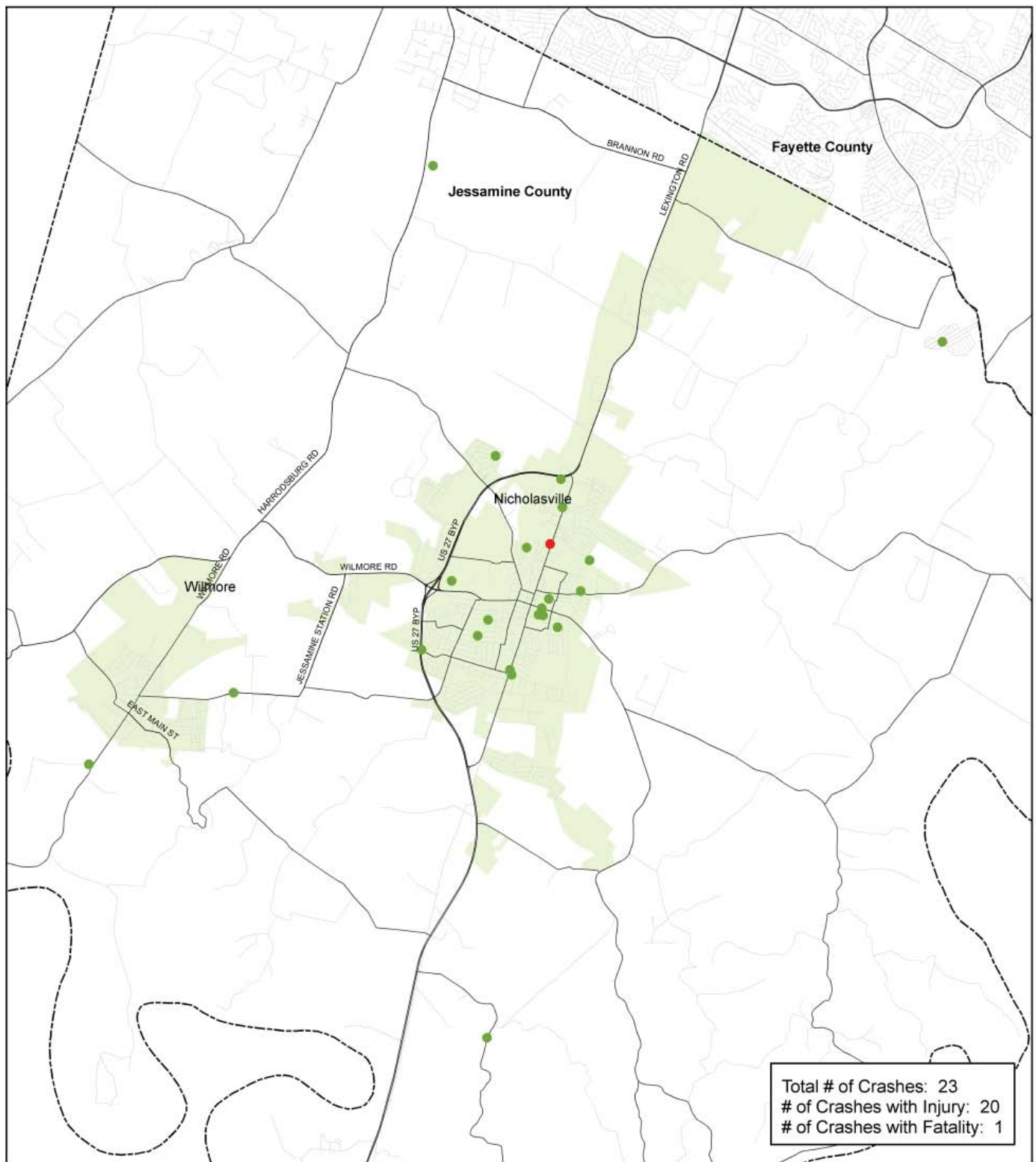


Figure A-11. Pedestrian-Motor Vehicle Crashes in Jessamine County



**Legend**

- Fatal Crash
- Other Crash
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and LFUCG (2006)

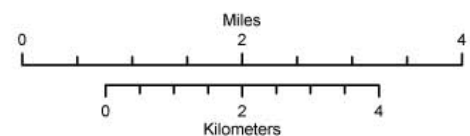




Figure A-12. Downtown Nicholasville Pedestrian-Motor Vehicle Crashes



**Legend**

- Fatal Crash
- Other Crash
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005), BGADD (2006) and LFUCG (2006)

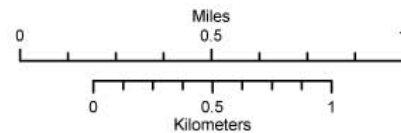




Figure A-13. Pedestrian Crashes per Year

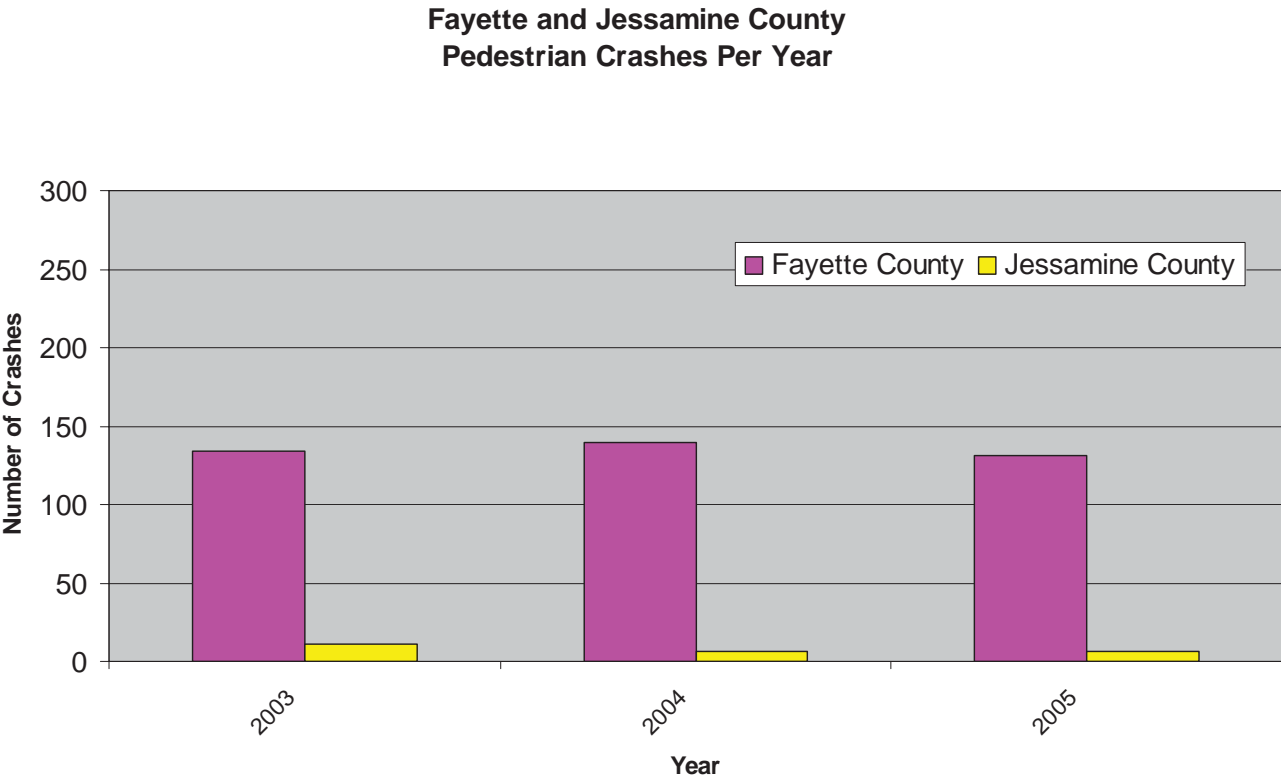


Figure A-14. Pedestrian Crash Types

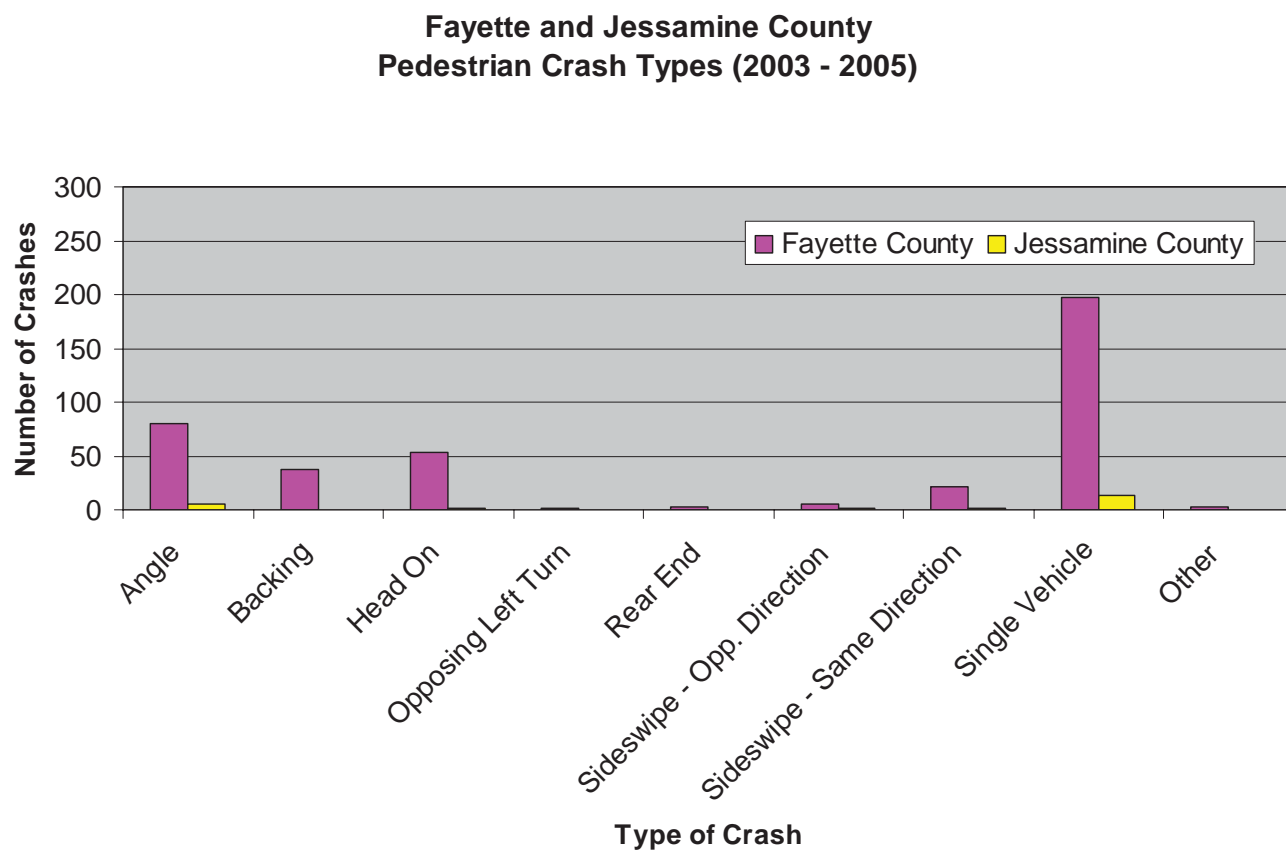


Figure A-15. Weather During Pedestrian Crashes

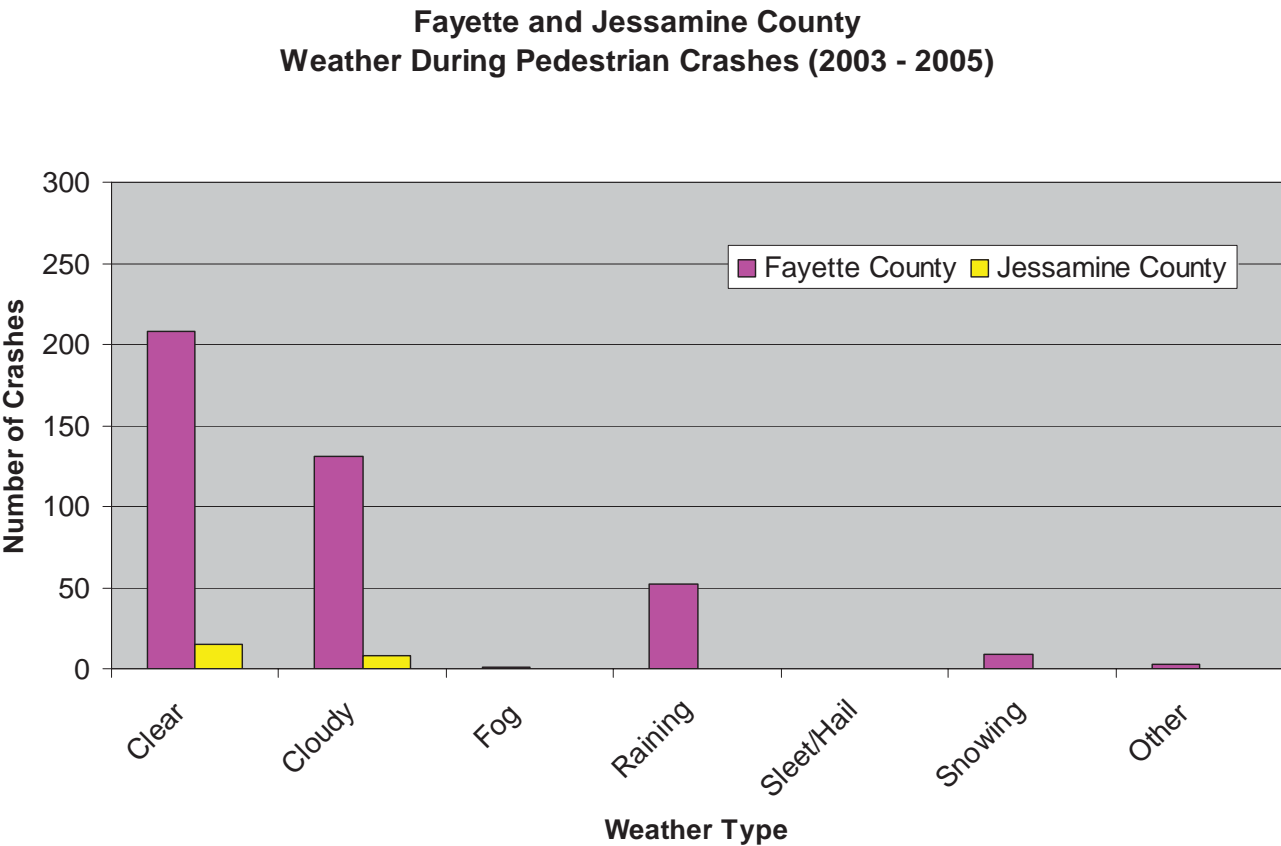


Figure A-16. Lighting Conditions During Pedestrian Crash

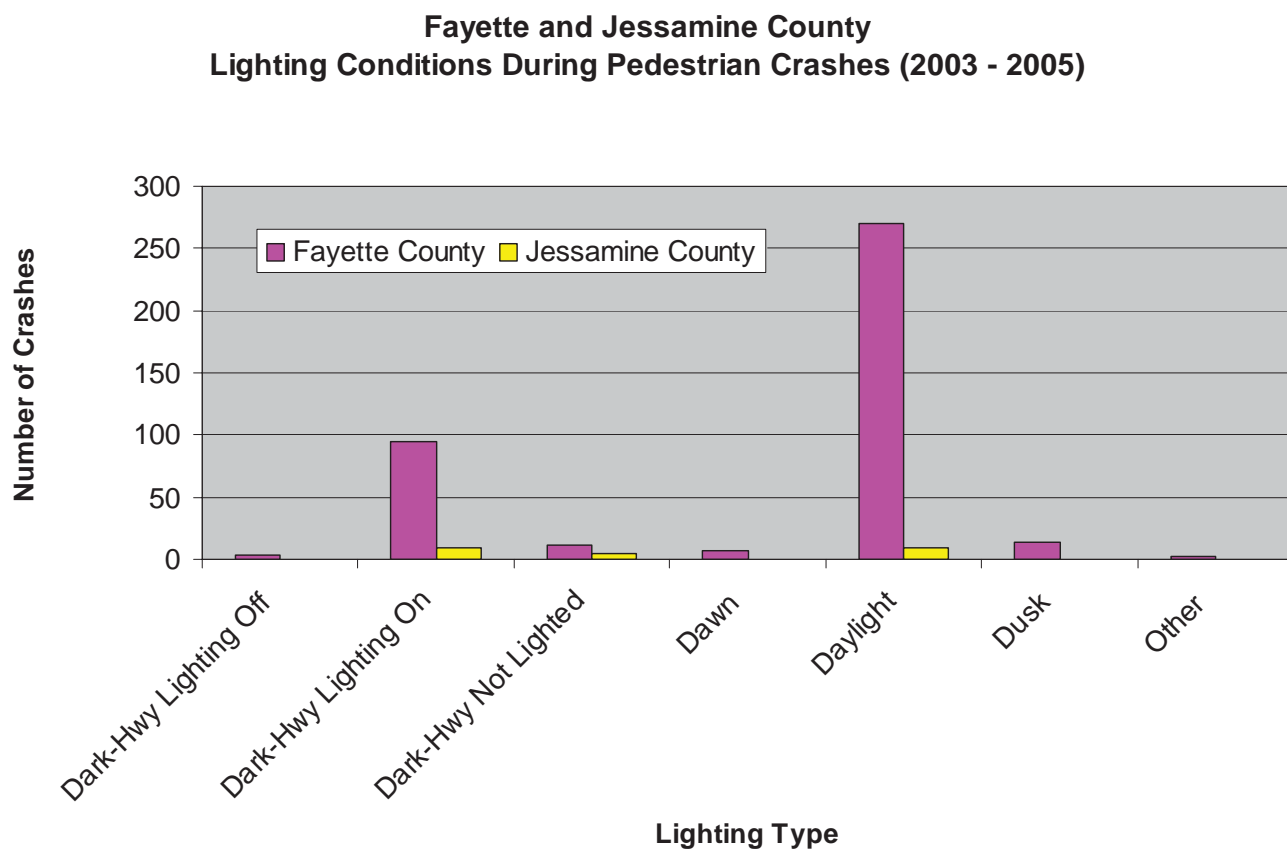
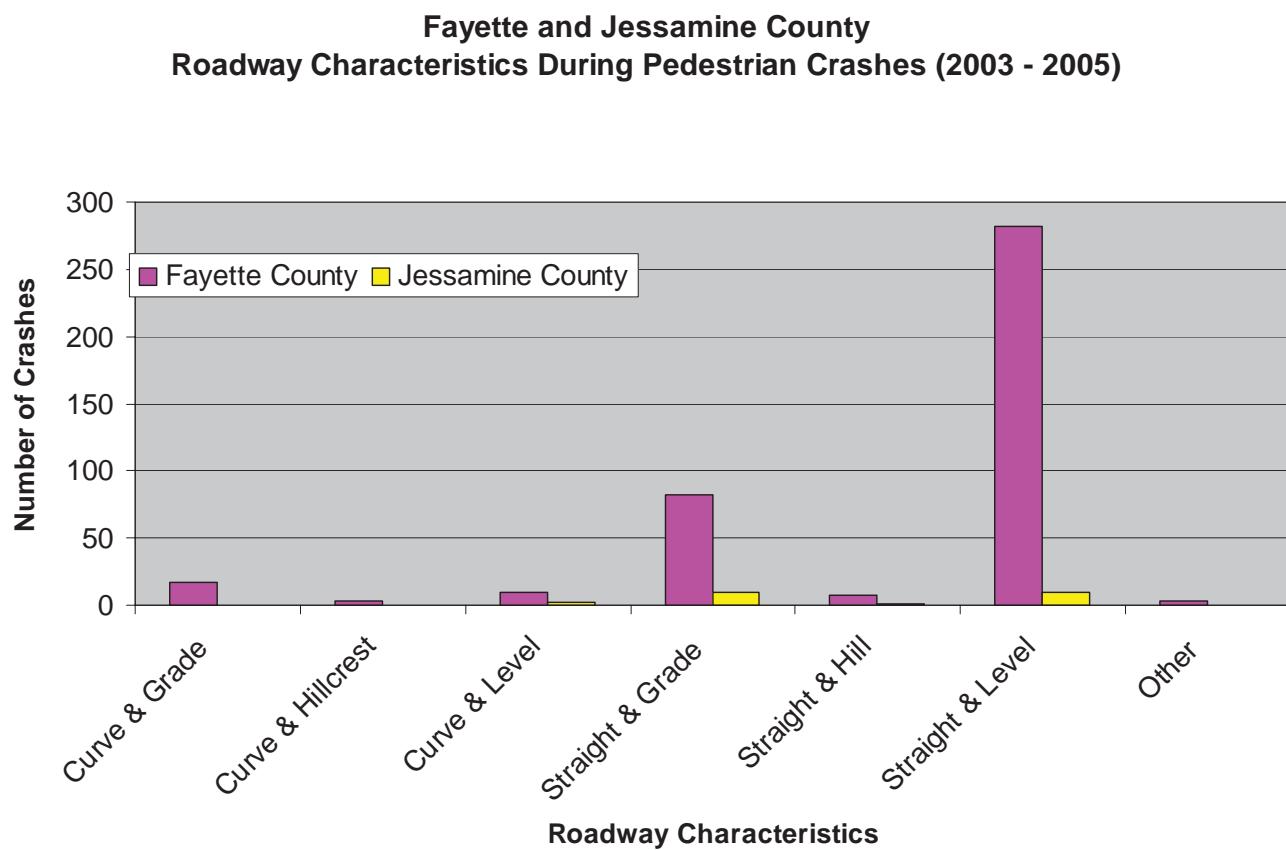




Figure A-17. Roadway Characteristics During Pedestrian Crashes



In addition, a review was performed of factors related to the crashes to determine if any trends could be identified. Figures A-13 to A-17 (previously, on pages A-15 to A-19) show the number of crashes per year, crash types, weather, lighting conditions, and roadway characteristics, respectively. Generally, the same number of crashes was observed during each of the three years, single vehicle crashes were the most common, most crashes occurred when the weather was clear in the daylight, and the roadways were predominately straight and level.

## Bicycle Environment

The bicycle environment was assessed during the initial public meetings and open houses, through the bicycle level of service analysis, and through a crash analysis. Figures 16 and 17 in Chapter 4 show the existing network of programmed and committed bicycle facilities in Fayette and Jessamine Counties, respectively.

Bicycle level of service (BLOS) is a means for rating the adequacy of bicycle facilities. Bicycle level of service is described according to a letter rating system ranging from BLOS A (best conditions) to BLOS F (worst conditions). For many of the segments within Fayette County, the BLOS had already been determined prior to this report. For the segments without a BLOS, field data was collected and entered into a database spreadsheet that calculates BLOS. Input data necessary to calculate the BLOS included traffic volumes, speed, travel lane width and pavement condition. BLOS for Fayette and Jessamine Counties is depicted in Chapter 4; information indicates that many roads downtown and along many major arterials have poor BLOS ratings (below a BLOS D).

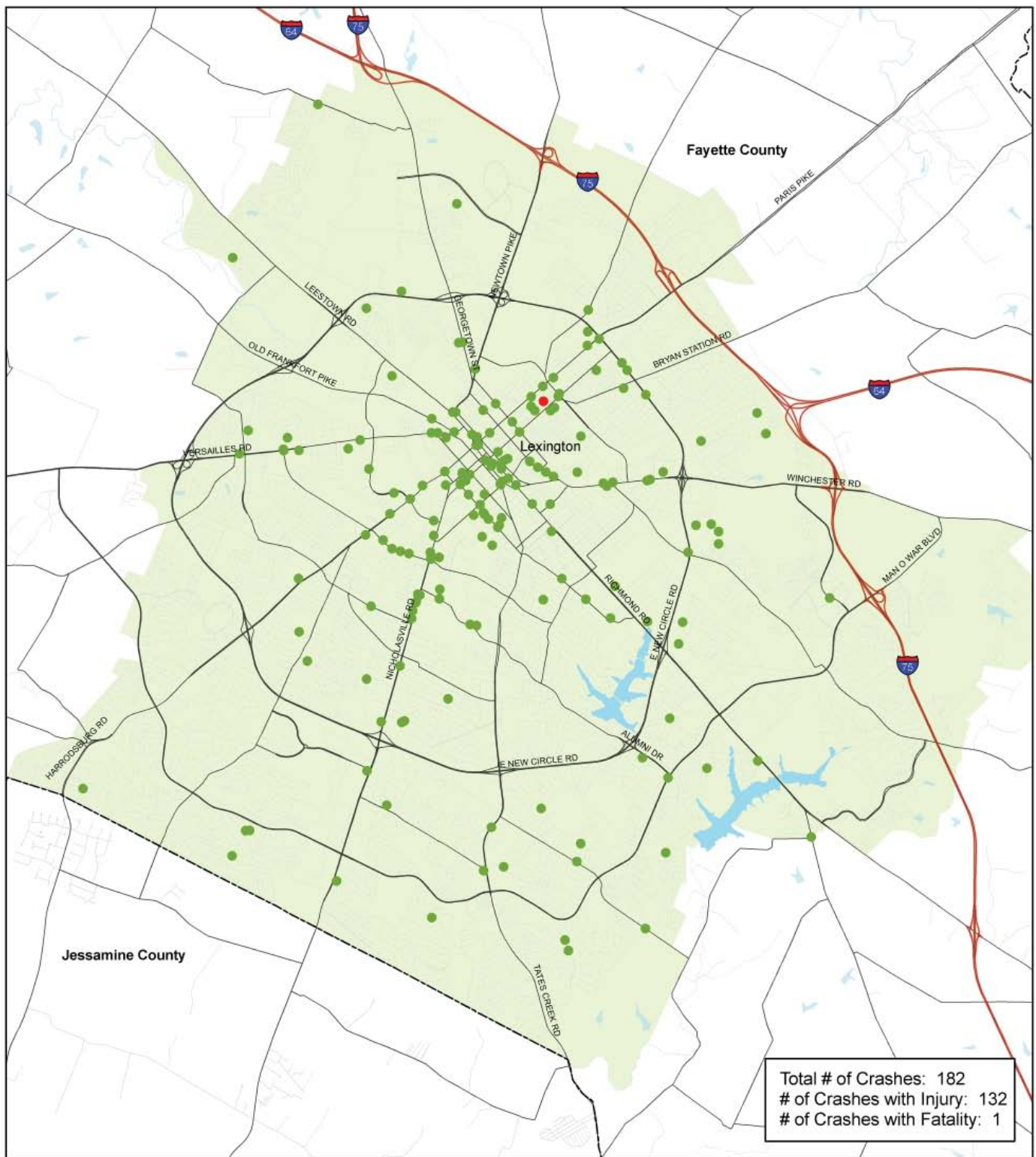
A review of crash data was also performed related to bicycle and motor vehicle crashes for both Fayette and Jessamine Counties. Crash data was provided by the Lexington Area MPO for a three-year period from January 1, 2003 through December 31, 2005. During this time period, there were a total of 182 motor vehicle crashes that involved a bicycle in Fayette County and 13 crashes that involved a bicycle in Jessamine County. Overall, there was one fatal crash in Fayette County and two in Jessamine County. The percentage of injury crashes was very high for both counties – 73% of all bicycle crashes with a motor vehicle resulted in an injury in Fayette County and 69% of all bicycle crashes with a motor vehicle in Jessamine County resulted in an injury. This is slightly less than the injury percentages for each county resulting from motor vehicle crashes with pedestrians.

Figure A-18 shows bicycle-motor vehicle crashes in Fayette County from the years of 2003 through 2005. Concentrations of incidents can be seen in downtown Lexington and along major arterials. Figure A-19 depicts bicycle-motor vehicle collisions in downtown Lexington. Figure A-20 depicts bicycle-motor vehicle collisions in Jessamine County from the years 2003 through 2005 and Figure A-21 focuses on bicycle-motor vehicle collisions in the city of Nicholasville. As shown in these figures, the frequency of crashes in Jessamine County and Nicholasville is much less than Fayette County; however, this could be due to a variety of reasons including the fact that Fayette County has a higher population and higher traffic volumes on major roads.

Finally, a review was performed of factors related to the crashes to determine if any trends could be identified. Figures A-22 to A-26 show the number of crashes per year, crash types, weather, lighting conditions, and roadway characteristics, respectively. Generally, the same number of crashes was observed during each of the three years, angle vehicle crashes (when a vehicle strikes another object or vehicle at an angle) were the most common, most crashes occurred when the weather was clear in the daylight, and the roadways were predominately straight and level.



Figure A-18. Bicycle-Motor Vehicle Crashes in Fayette County



**Legend**

- Fatal Crash
- Other Crash
- Water
- Urban Service Area
- Interstate
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2008)

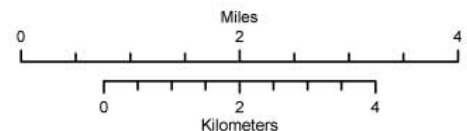




Figure A-19. Downtown Lexington Bicycle-Motor Vehicle Crashes

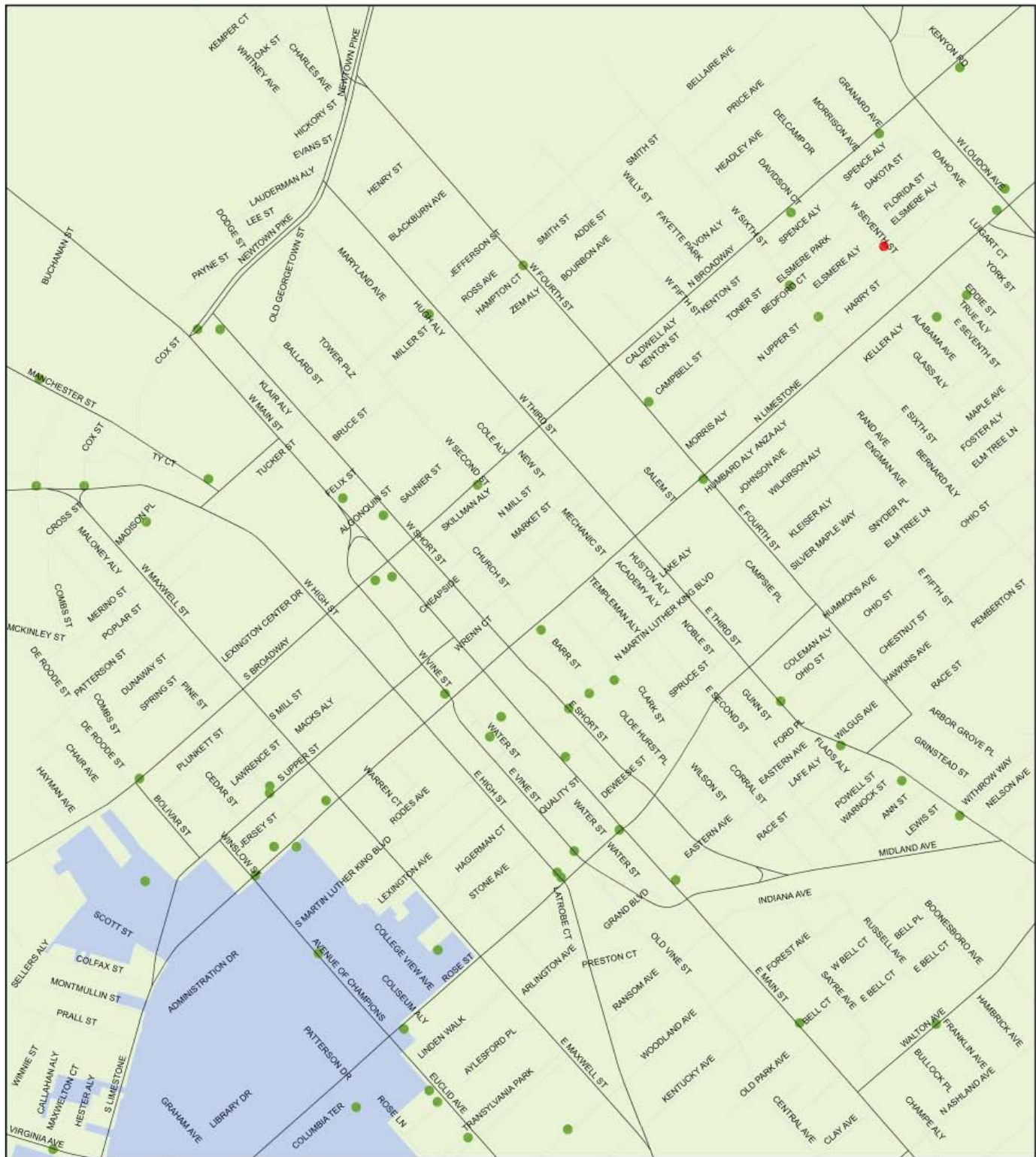
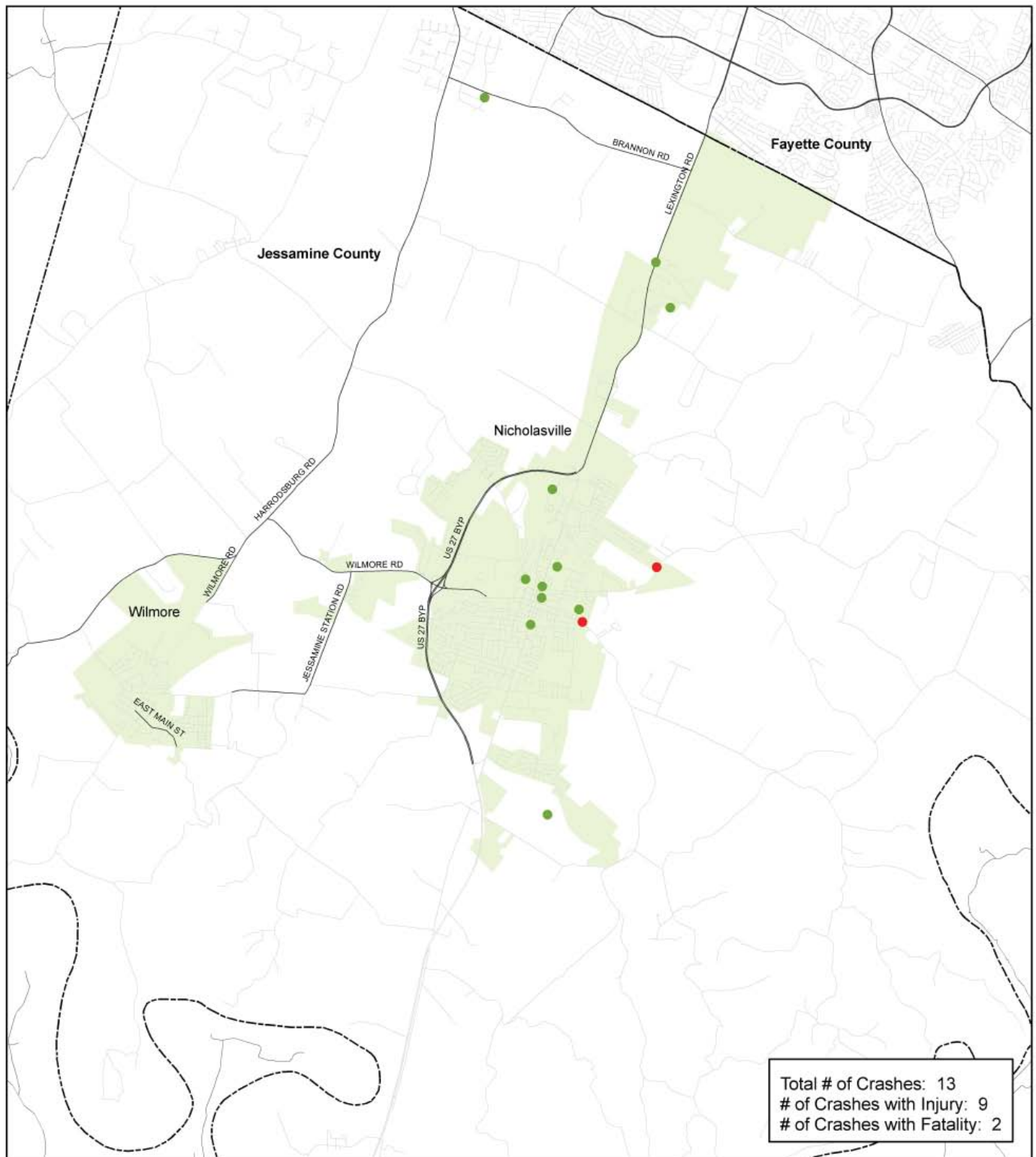




Figure A-20. Bicycle-Motor Vehicle Crashes in Jessamine County



Source: KYTC, KYGEONET, NTAD (2005) and LFUCG (2005)

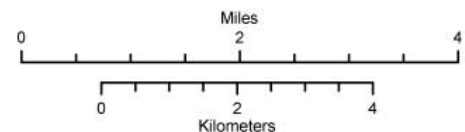
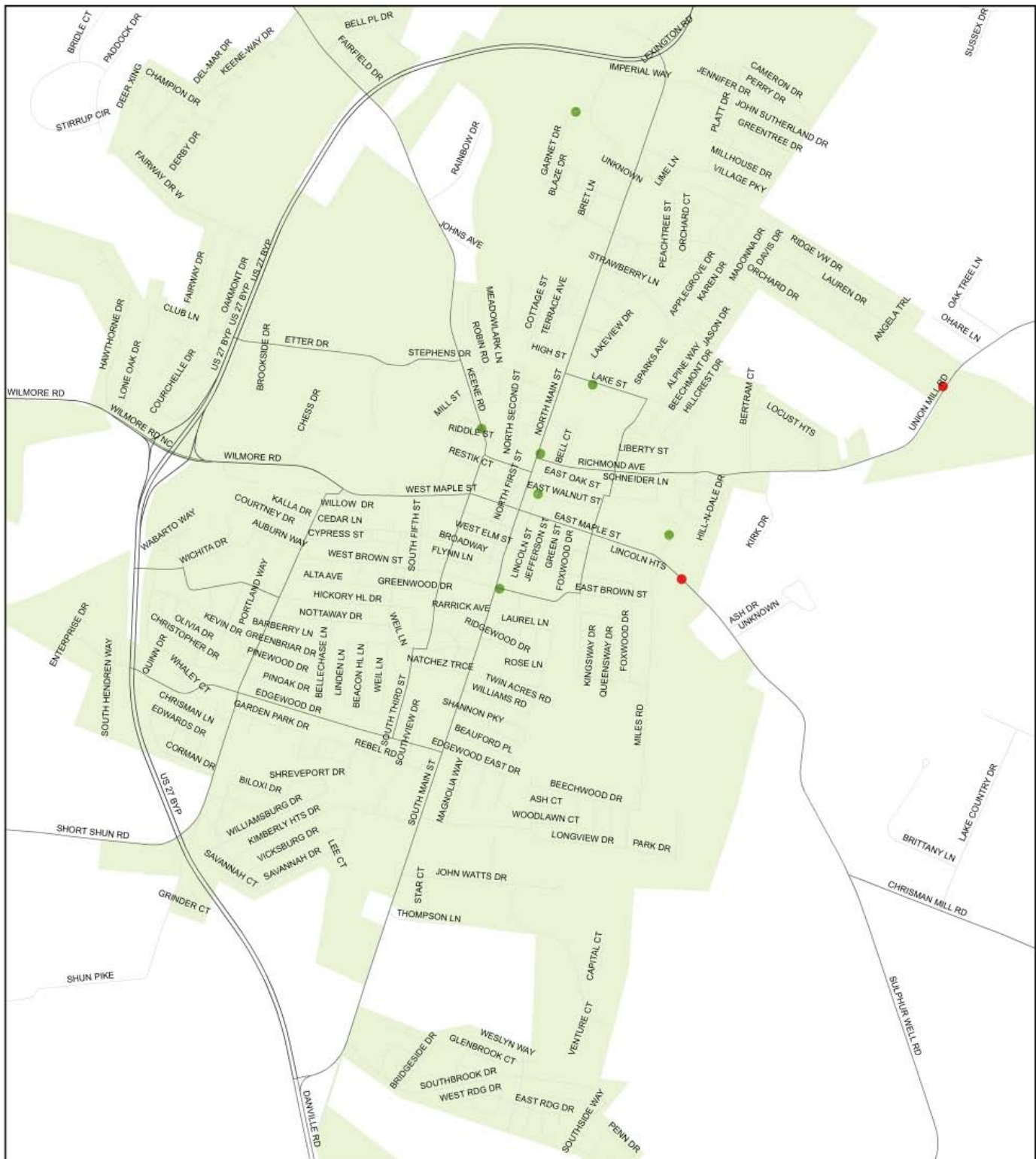


Figure A-21. Downtown Nicholasville Bicycle-Motor Vehicle Crashes



### Legend

- Fatal Crash
- Other Crash
- Urbanized Area
- Arterial/Collector Road
- Other Road

Source: KYTC, KYGEONET, NTAD (2005) and BGADD (2006)

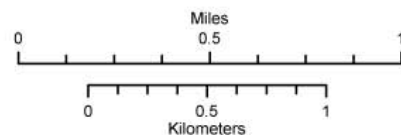


Figure A-22. Bicycle Crashes per Year

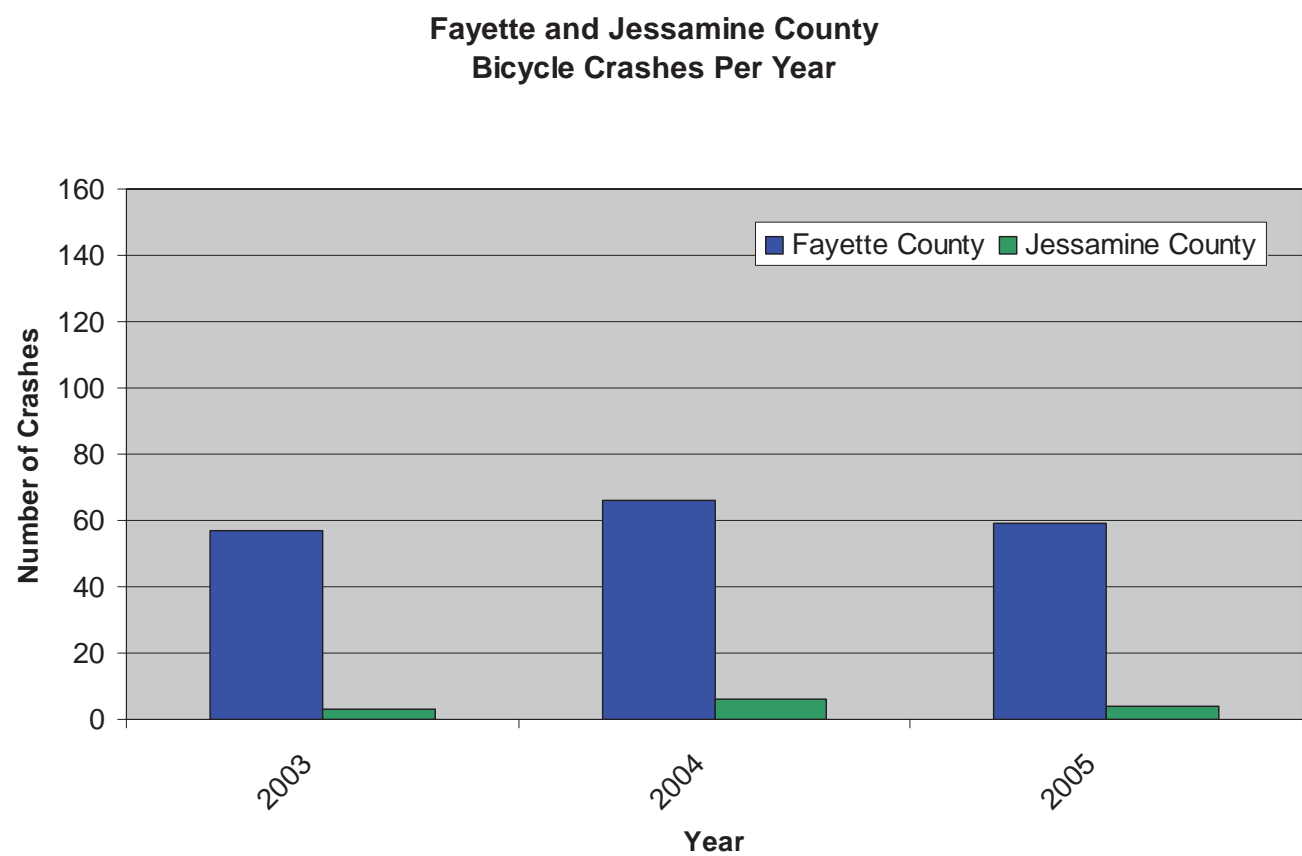


Figure A-23. Bicycle Crash Types

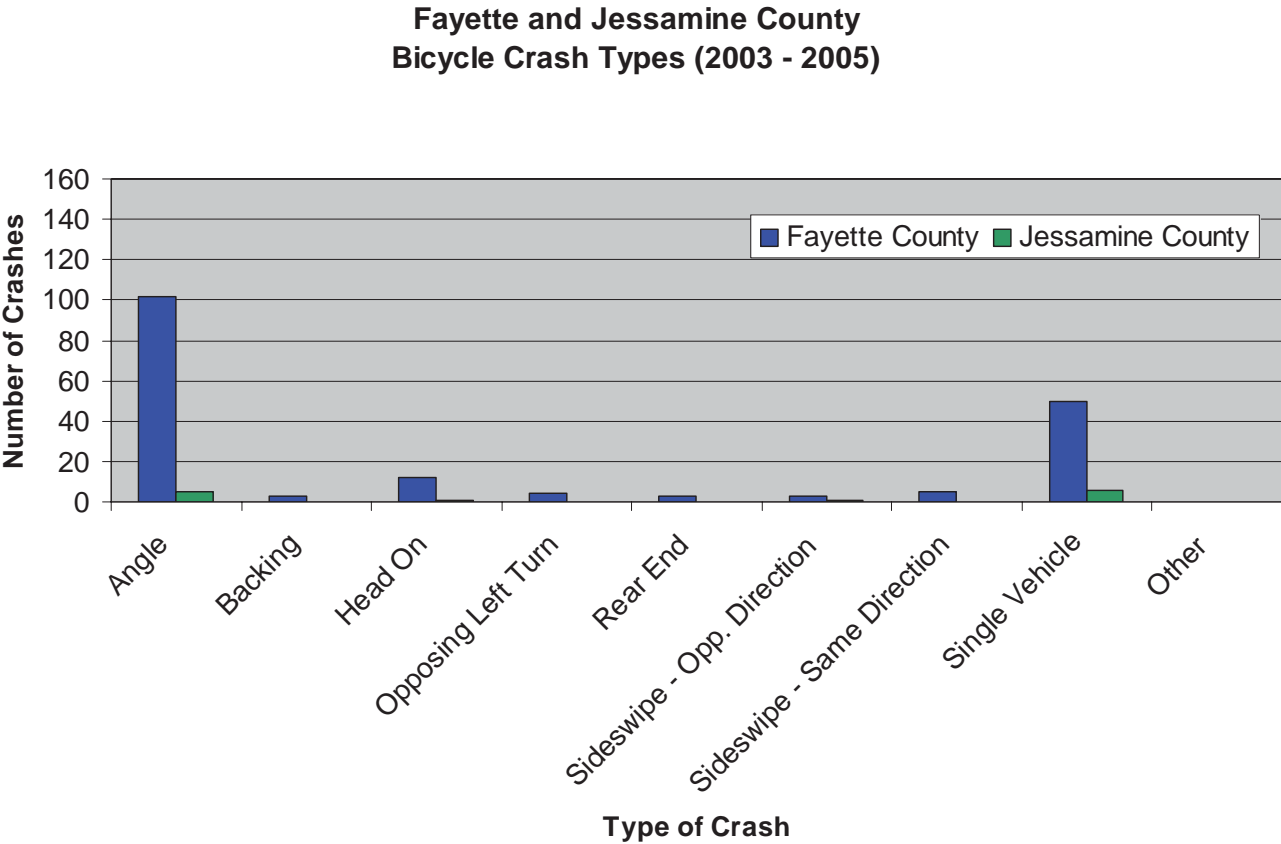




Figure A-24. Weather During Bicycle Crashes

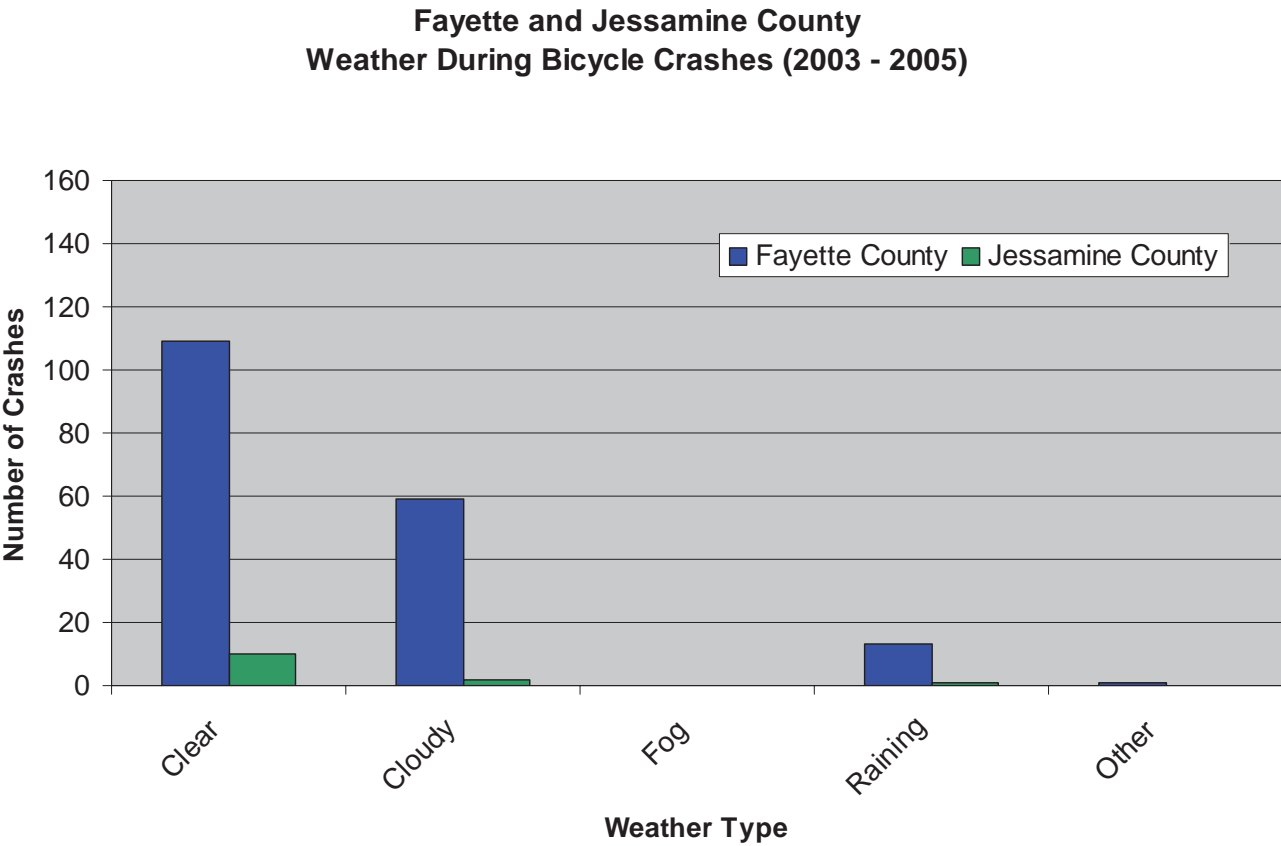


Figure A-25. Lighting Conditions During Bicycle Crashes

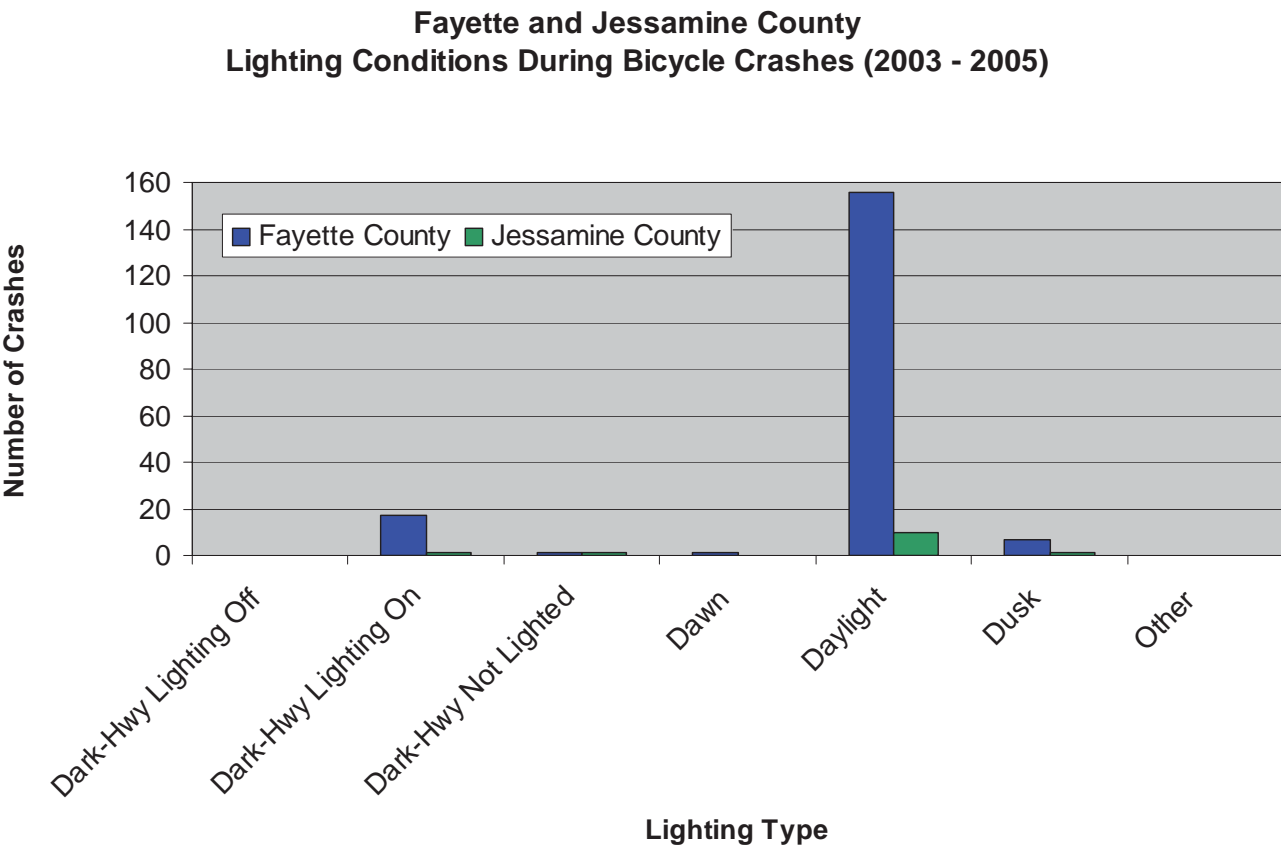
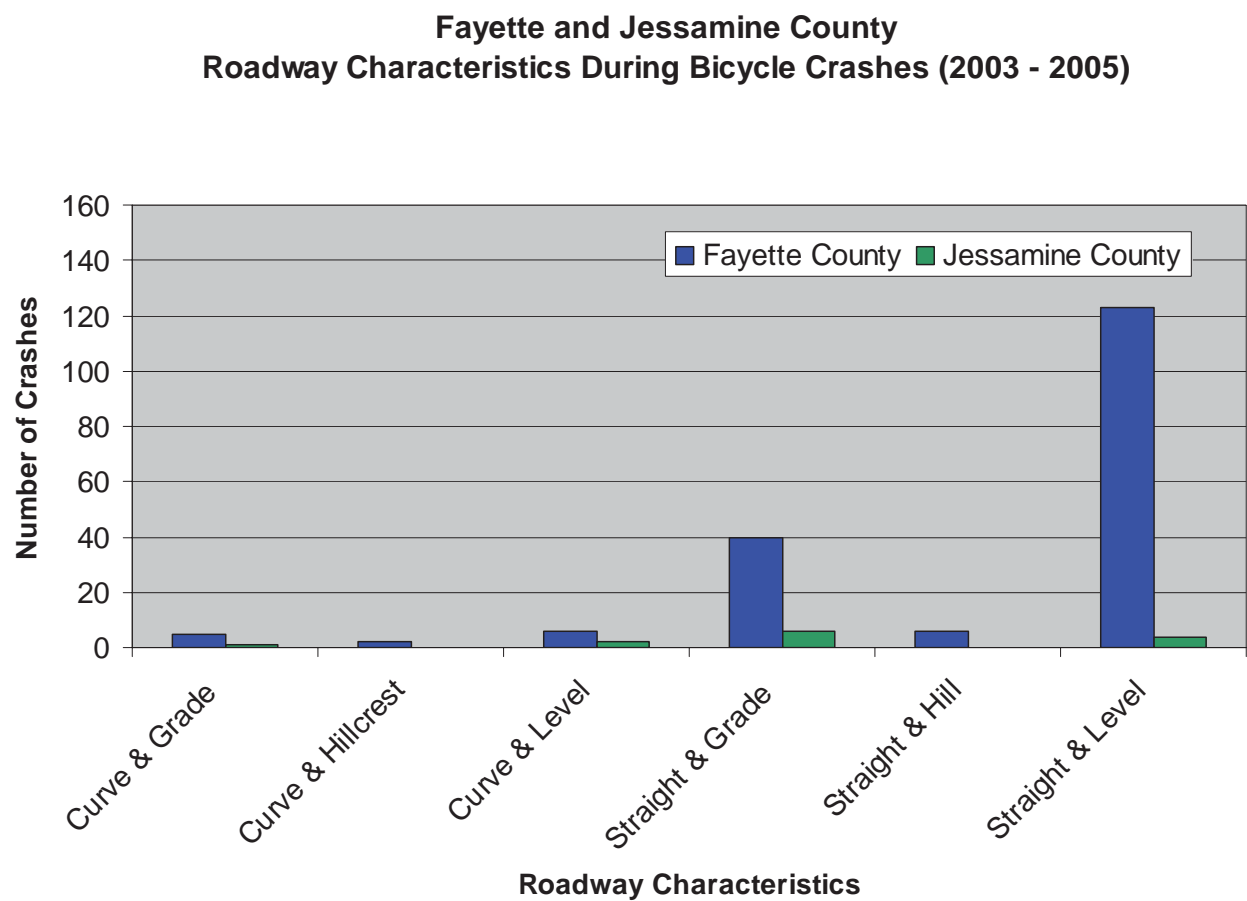


Figure A-26. Roadway Characteristics During Bicycle Crashes



# *Appendix B*

## Survey







## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

The Lexington Area Metropolitan Planning Organization (MPO) is the regional transportation planning agency for Fayette and Jessamine Counties. Under the direction of this organization, a regional Bicycle and Pedestrian Plan is being developed for these counties. Your responses to the following survey questions will be used as input into the Bicycle and Pedestrian Plan.

You don't need to be a bicyclist or a dedicated walker to answer this survey. The survey is also available online at: [www.bluegrassbikewalksurvey.com](http://www.bluegrassbikewalksurvey.com).

All responses are welcome!

### PARTICIPANT INFORMATION

#### 1. What is your age? (Select one)

- ☐ Under 16
- ☐ 16 – 20
- ☐ 21 – 29
- ☐ 30 – 39
- ☐ 40 – 49
- ☐ 50 – 59
- ☐ 60 years or older

#### 2. What is your gender?

- ☐ Male
- ☐ Female

#### 3. What is the address where you live?

Street: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip code: \_\_\_\_\_

#### 4. What is the address where you work or go to school? (Optional)

Street: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip code: \_\_\_\_\_

#### 5. Check all that you are a member of:

- ☐ Bluegrass Cycling Club
- ☐ Kentucky Rails to Trails
- ☐ Walking / Running Club
- ☐ Other Bicycling Group
- ☐ None



## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

### QUESTIONS RELATED TO WALKING

---

(We're interested in how you walk to and from destinations. So, if you walk only between your parked car and the entrance to a building, please go to Question 11.)

**6. How often do you walk between home and work (or school)? (Select one)**

- ☐ Every day
- ☐ 3 or more times per week
- ☐ 1 – 2 times per week
- ☐ 1 – 2 times per month
- ☐ Never or almost never

**7. How often do you walk to destinations other than work or home (errands, shopping, etc.)? (Select one)**

- ☐ Every day
- ☐ 3 or more times per week
- ☐ 1 – 2 times per week
- ☐ 1 – 2 times per month
- ☐ Never or almost never

**8. How often do you walk for recreation or exercise purposes? (Select one)**

- ☐ Every day
- ☐ 3 or more times per week
- ☐ 1 – 2 times per week
- ☐ 1 – 2 times per month
- ☐ Never or almost never

**9. Where do you go when you walk? (Check all that apply)**

- ☐ To work
- ☐ To do errands or shopping
- ☐ To the park
- ☐ To my school
- ☐ To the library
- ☐ To a recreation or community center
- ☐ To a bus stop
- ☐ To the home of a family member or friend
- ☐ For recreation / exercise purposes



## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

### 10. Where do you primarily walk? (Check all that apply)

- ☐ On Sidewalk
- ☐ On Street
- ☐ Off-street Trail / Path
- ☐ Other (walking track, arboretum, shopping mall, etc.)

### 11. What prevents you from walking more or at all?

(Check **NO MORE THAN 3 items** that prevent you the most)

- ☐ Concerns about personal safety in traffic
- ☐ Concerns about personal safety regarding crime
- ☐ Live too far away from anything I want to walk to / Takes too long to walk where I want to go
- ☐ Can't carry things
- ☐ Not enough sidewalks
- ☐ Sidewalk obstructions (low tree limbs, Herbies left on curb, telephone poles, etc.)
- ☐ Sidewalks in poor condition or hazardous (cracked, heaving, etc.)
- ☐ Sidewalks are too narrow
- ☐ Not enough trails
- ☐ Intersection crossings (not enough time to cross, not accessible, not enough, etc.)
- ☐ Illness, injury, or physically unable
- ☐ Don't want to get myself or my clothing sweaty or dirty
- ☐ Weather (rain, snow, ice, etc.)
- ☐ Not interested in walking
- ☐ Other \_\_\_\_\_

### 12. What would encourage you to walk or to walk more?

(Check **NO MORE THAN 3 items** that would encourage you the most)

- ☐ Wider sidewalks
- ☐ More connected sidewalks
- ☐ Sidewalks in better condition
- ☐ Better network of trails or paths
- ☐ Safer crossings at intersections
- ☐ Shopping, schools, parks closer to where I live
- ☐ Less traffic or slower moving traffic
- ☐ Showers available at destination
- ☐ Other \_\_\_\_\_



## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

**13. How would you rate the conditions for recreational walking or walking for exercise in your county?**

☐ Good

☐ Poor

☐ Fair

☐ I don't know

**14. How would you rate the conditions for walking to work / school / shopping / the library in your county?**

☐ Good

☐ Poor

☐ Fair

☐ I don't know

**15. When you walk in your neighborhood or to work or to other destinations, are there places where sidewalks or connections between existing pedestrian paths are missing?**

☐ Yes

☐ No

☐ Don't know

**If so, where? (Please be as specific as possible)**

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**16. If you consider your community as a whole, are there places where new sidewalks are needed?**

☐ Yes

☐ No

☐ Don't know

**If so, where? (Please be as specific as possible)**

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**17. Please provide any additional comments you may have about walking in your county that have not been addressed.**

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## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

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### **QUESTIONS RELATED TO BICYCLING**

**(If you don't ride a bicycle please go to Question 26)**

**18. How often do you bike between home and work (or school)? (Select one)**

- ☐ Every day
- ☐ 3 or more times per week
- ☐ 1 – 2 times per week
- ☐ 1 – 2 times per month
- ☐ Never or almost never

**19. How often do you bike to other destinations (errands, shopping, etc)? (Select one)**

- ☐ Every day
- ☐ 3 or more times per week
- ☐ 1 – 2 times per week
- ☐ 1 – 2 times per month
- ☐ Never or almost never

**20. How often do you bike for recreation or exercise purposes? (Select one)**

- ☐ Every day
- ☐ 3 or more times per week
- ☐ 1 – 2 times per week
- ☐ 1 – 2 times per month
- ☐ Never or almost never

**21. What skill level do you consider yourself as a bicyclist? (Select one)**

- ☐ A – Advanced or experienced riders comfortable riding with motor vehicle traffic.
- ☐ B – Comfortable riding on neighborhood streets and shared use paths; prefer designated facilities such as bike lanes or wide shoulder lanes on busier streets
- ☐ C – Child or pre-teen



## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

### 22. How often do you wear a helmet? (Select one)

- ☐ Always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Never

### 23. Where do you go when you bike? (Check all that apply)

- ☐ Work
- ☐ Shopping
- ☐ Parks
- ☐ School
- ☐ Libraries
- ☐ To a recreation or community center
- ☐ Bus Stop
- ☐ Family or Friend's Home
- ☐ I primarily bike for recreation / exercise purposes

### 24. Where do you primarily bike?

(Check **NO MORE THAN 3 places** that you bike most often)

#### Fayette County

- ☐ On sidewalks
- ☐ On major urban streets
- ☐ On neighborhood streets
- ☐ On rural roads
- ☐ On off-street trails or paths

#### Jessamine County

- ☐ On sidewalks
- ☐ On major urban streets
- ☐ On neighborhood streets
- ☐ On rural roads
- ☐ On off-street trails or paths

### 25. Where would you like to bike more?

(Check **NO MORE THAN 3 places** where you would most like to bike more often)

#### Fayette County

- ☐ On sidewalks
- ☐ On major urban streets
- ☐ On neighborhood streets
- ☐ On rural roads
- ☐ On off-street trails or paths

#### Jessamine County

- ☐ On sidewalks
- ☐ On major urban streets
- ☐ On neighborhood streets
- ☐ On rural roads
- ☐ On off-street trails or paths



## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

**26. What prevents you from bicycling or bicycling more in your county?**

(Check **NO MORE THAN 3 items** that prevent you the most)

- ☐ Don't have a bike
- ☐ Bike needs to be fixed
- ☐ Don't know how to ride a bike
- ☐ Concerns about personal safety in traffic
- ☐ Concerns about personal safety regarding crime
- ☐ Concerns about bicycle theft
- ☐ Live too far away to bike / takes too long
- ☐ Can't carry things
- ☐ Illness, injury, or physically unable
- ☐ Don't want to get myself or my clothing sweaty or dirty
- ☐ Lack of bike lanes
- ☐ Lack of bike trails
- ☐ Weather
- ☐ Streets are too narrow
- ☐ Speed of traffic
- ☐ Number of major intersections on my route
- ☐ Amount of traffic
- ☐ Aggressive drivers
- ☐ Other \_\_\_\_\_

**27. What would encourage you to bike or to bike more?**

(Check **NO MORE THAN 3 items** that would encourage you the most)

- ☐ Dedicated bike lanes
- ☐ Paved shoulders
- ☐ Bike trails
- ☐ Better connectivity of bike facilities
- ☐ Bicycle detection at intersections
- ☐ Shopping, schools, parks closer to where I live
- ☐ Showers at destination
- ☐ My employer provided a car for work-day trips
- ☐ Financial incentives, such as a tax deduction
- ☐ Better bike parking was available
- ☐ Better street lighting
- ☐ Better enforcement of traffic laws for drivers

**28. How would you rate the conditions for recreational biking in your county?**

- ☐ Good                      ☐ Poor



## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

\_\_\_ Fair

\_\_\_ I don't know

**29. How would you rate the conditions for biking to work / school / shopping / the library in your county?**

\_\_\_ Good

\_\_\_ Poor

\_\_\_ Fair

\_\_\_ I don't know

**30. Are there missing links / connections between the existing bicycle lanes, shoulders and trails?**

\_\_\_ Yes

\_\_\_ No

\_\_\_ Don't know

**If so, where? (Please be as specific as possible)**

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**31. Are any new bike lanes, shoulders or trails needed?**

\_\_\_ Yes

\_\_\_ No

\_\_\_ Don't know

**If so, where? (Please be as specific as possible)**

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**32. Please provide any additional comments you may have about bicycling in your county that have not been addressed.**

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## Lexington Area MPO Bicycle and Pedestrian Plan Survey Questions

### ADDITIONAL COMMENTS

33. Please provide any additional comments you may have about walking and/or biking in your county that have not been previously addressed.

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### Thank you very much for your participation!

For additional information about the **Bicycle and Pedestrian Plan**, please attend one of the **upcoming public meetings**. The dates and locations for the meetings are:

#### Fayette County:

**June 1, 2006, 4 – 8 PM**

**Northside Branch, Lexington Public Library**

1737 Russell Cave Road (231-5590)

Presentations at 5 and 7 PM

**June 3, 2006, 10 – 2 PM**

**Joseph-Beth Booksellers – Mall at Lexington Green**

off Nicholasville Road (273-2911)

Presentations at 11 AM and 1 PM

#### Jessamine County:

**May 31, 2006, 4 – 8 PM**

**Jessamine County Public Library – Nicholasville**

Presentations at 5 and 7 PM

**June 2, 2006, 4 – 8 PM**

**Luce Activity Center – Asbury College – Wilmore**

Presentations at 5 and 7 PM

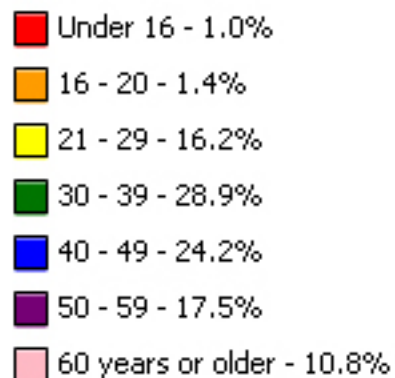
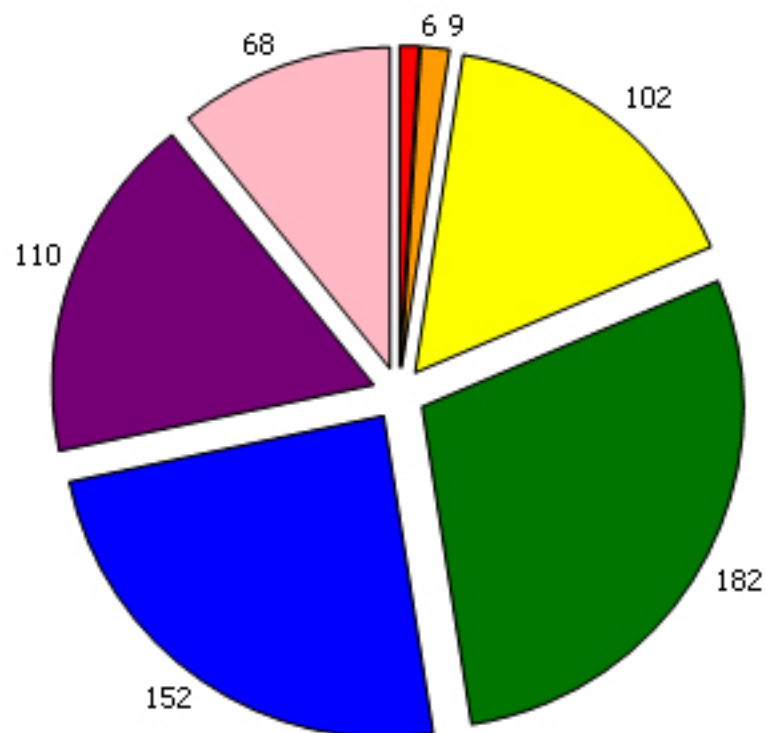
You may sign up to join an e-notification list which we will use to provide **further information about the meetings and the plan**. We will only use this information to notify you of the bicycle / pedestrian plan; we will not share this e-mail list with any organizations.

**To receive e-mail notification about the plan, please provide your e-mail address:** \_\_\_\_\_

#### To return this survey or for additional information contact:

Ms. Kenzie Gleason, Bicycle and Pedestrian Coordinator  
Lexington Fayette Urban County Government  
200 East Main Street, Lexington, KY 40507  
(859) 258-3605

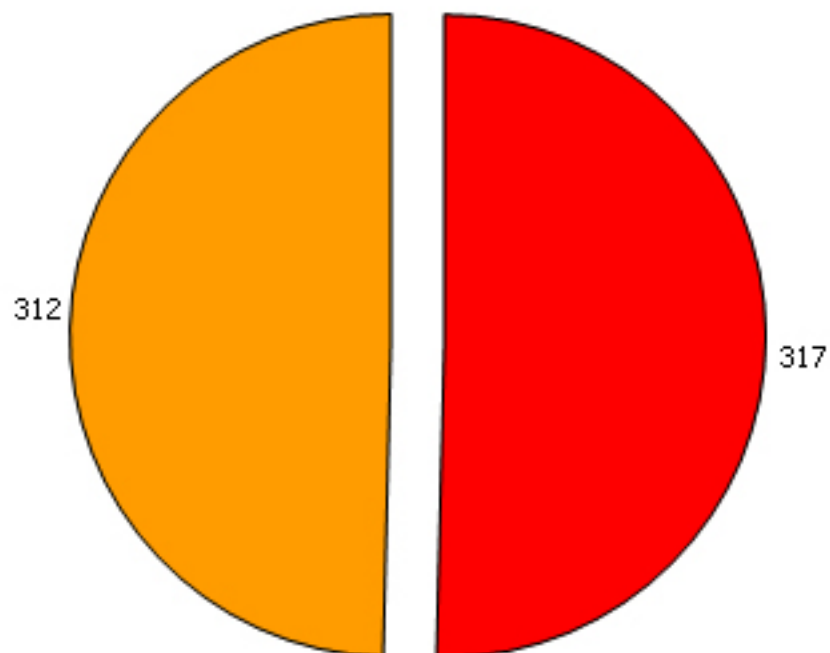
What is your age? - 629 Responses



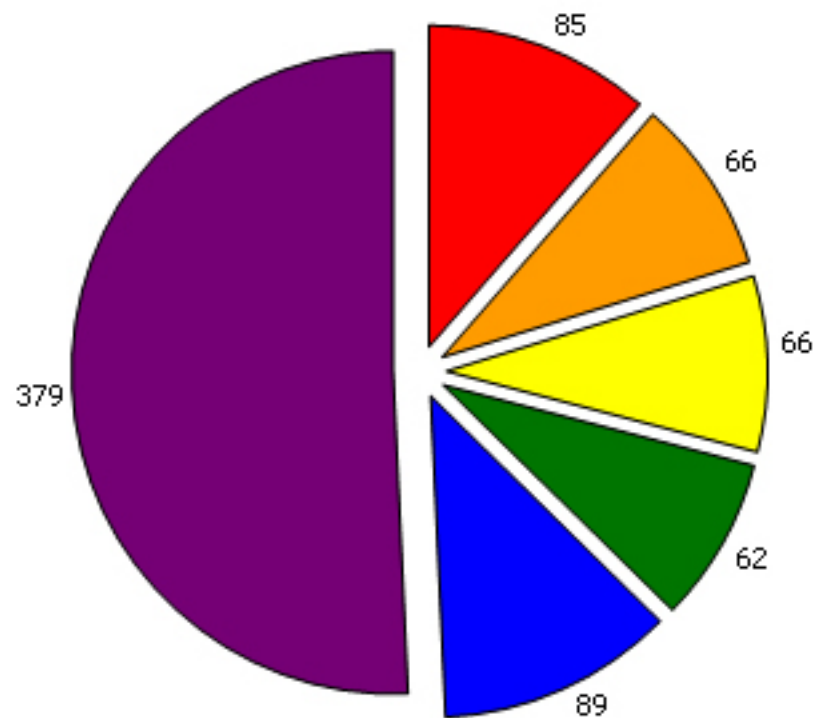
What is your gender? - 629 Responses

Male - 50.4%

Female - 49.6%



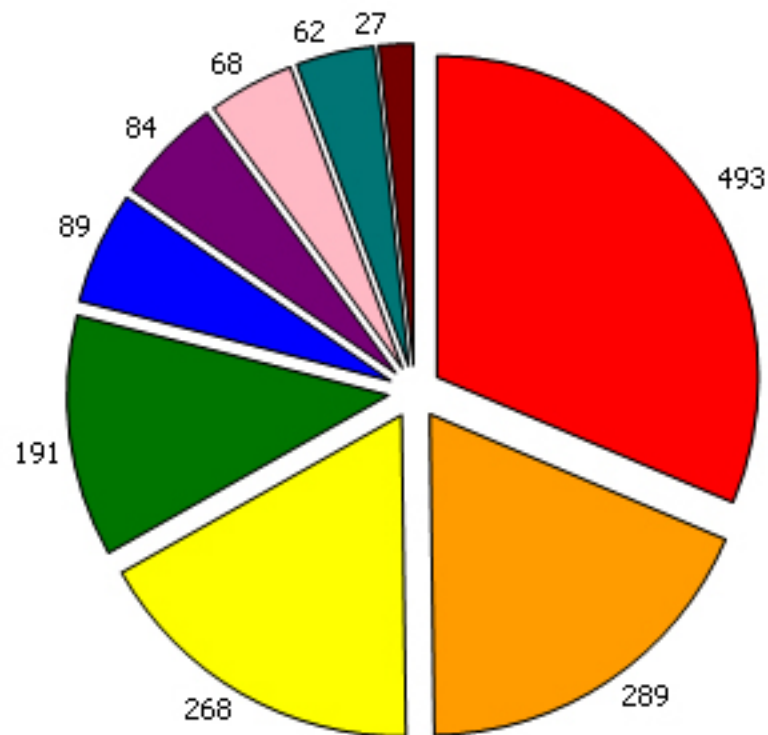
Check all that you are a member of: - 629 Responses



- Bluegrass Cycling Club - 13.5%
- Kentucky Rails to Trails - 10.5%
- Walking / Running Club - 10.5%
- Other Bicycling Group - 9.9%
- Other Outdoors Group - 14.1%
- None - 60.3%

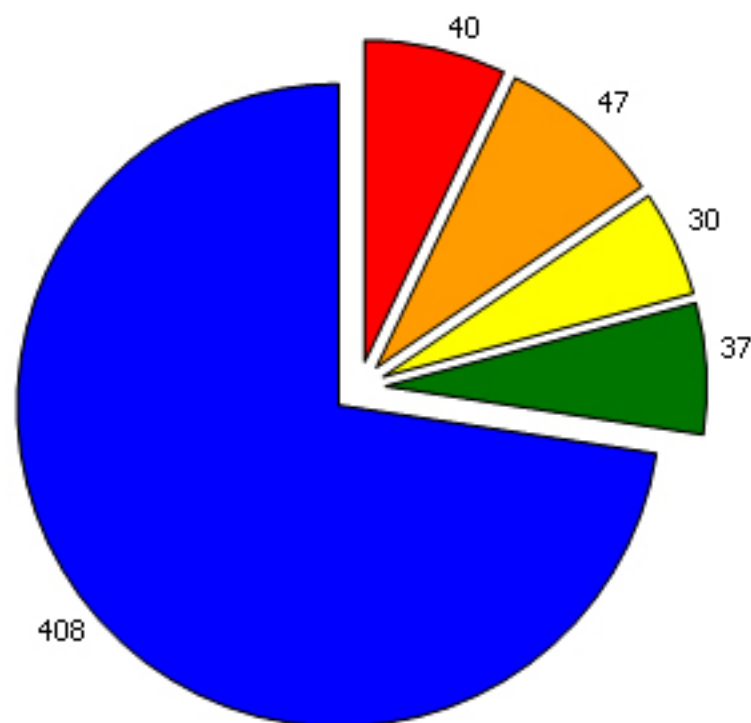


Where do you go when you walk? - 583 Responses



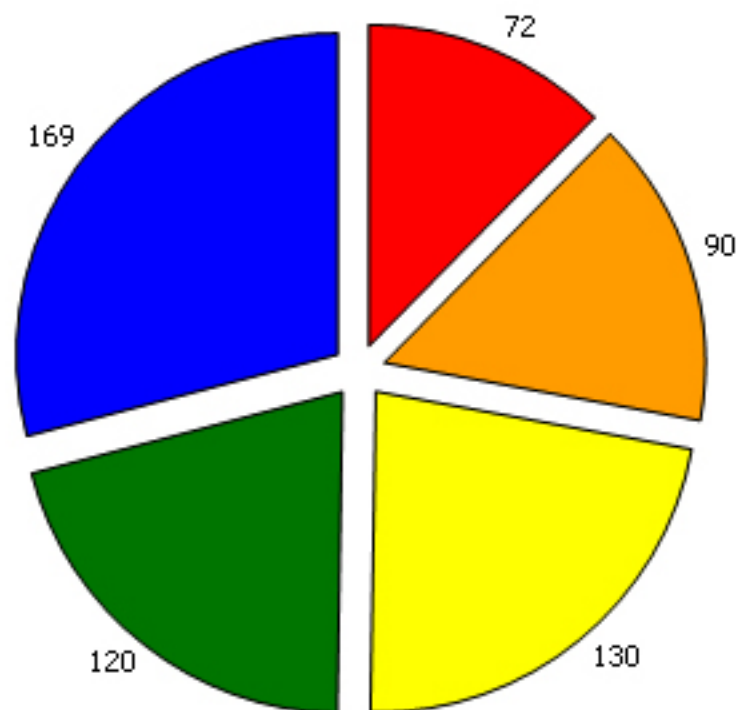
- For recreation / exercise purposes - 84.6%
- To the park - 49.6%
- To do errands or shopping - 46.0%
- To the home of a family member or friend - 32.8%
- To work - 15.3%
- To the library - 14.4%
- To a recreation or community center - 11.7%
- To my school - 10.6%
- To a bus stop - 4.6%

How often do you walk between home and work (or school)? - 562 Responses



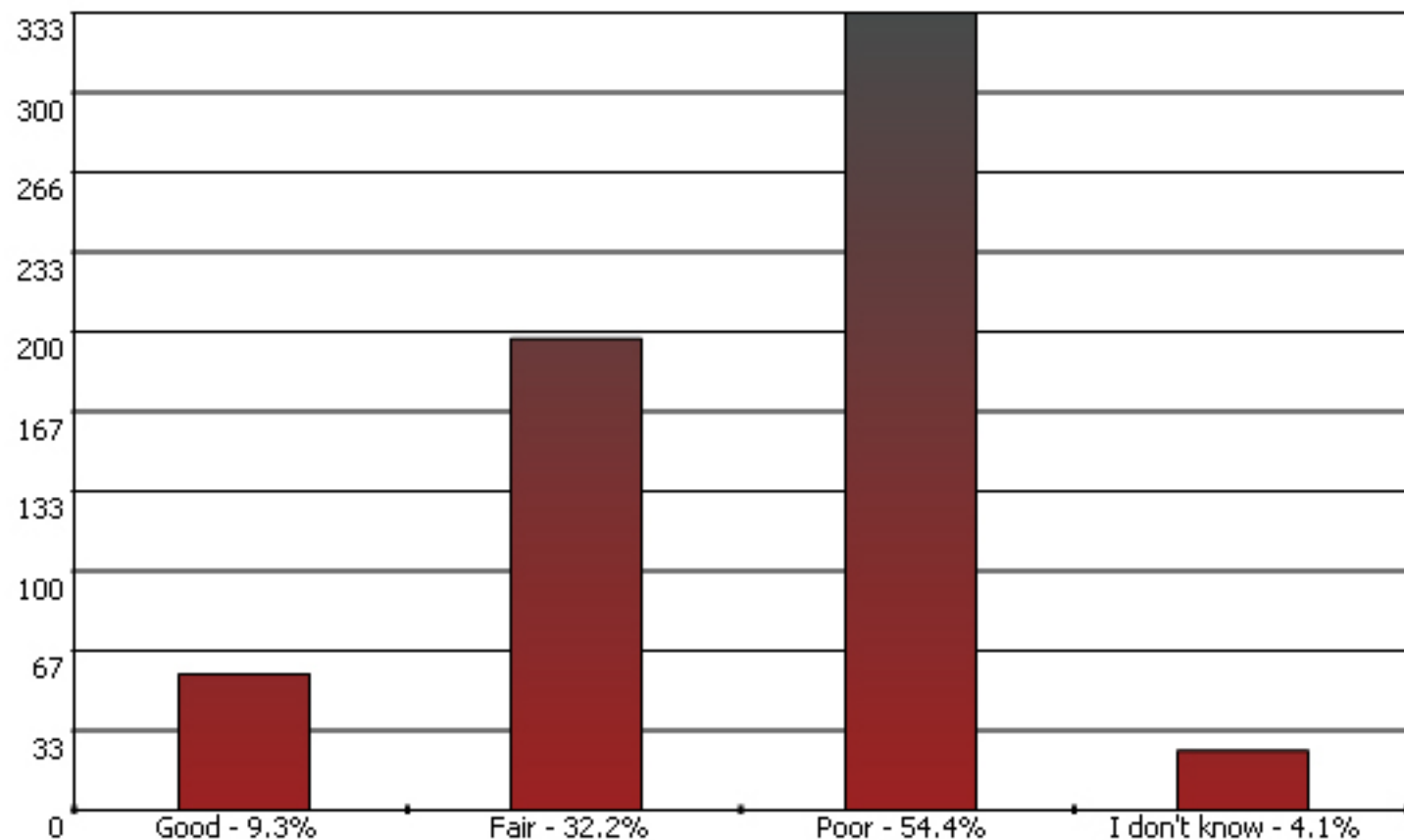
- Every day - 7.1%
- 3 or more times per week - 8.4%
- 1 - 2 times per week - 5.3%
- 1 - 2 times per month - 6.6%
- Never or almost never - 72.6%

How often do you walk to destinations other than work or home (errands, shopping, etc.)? - 581 Responses



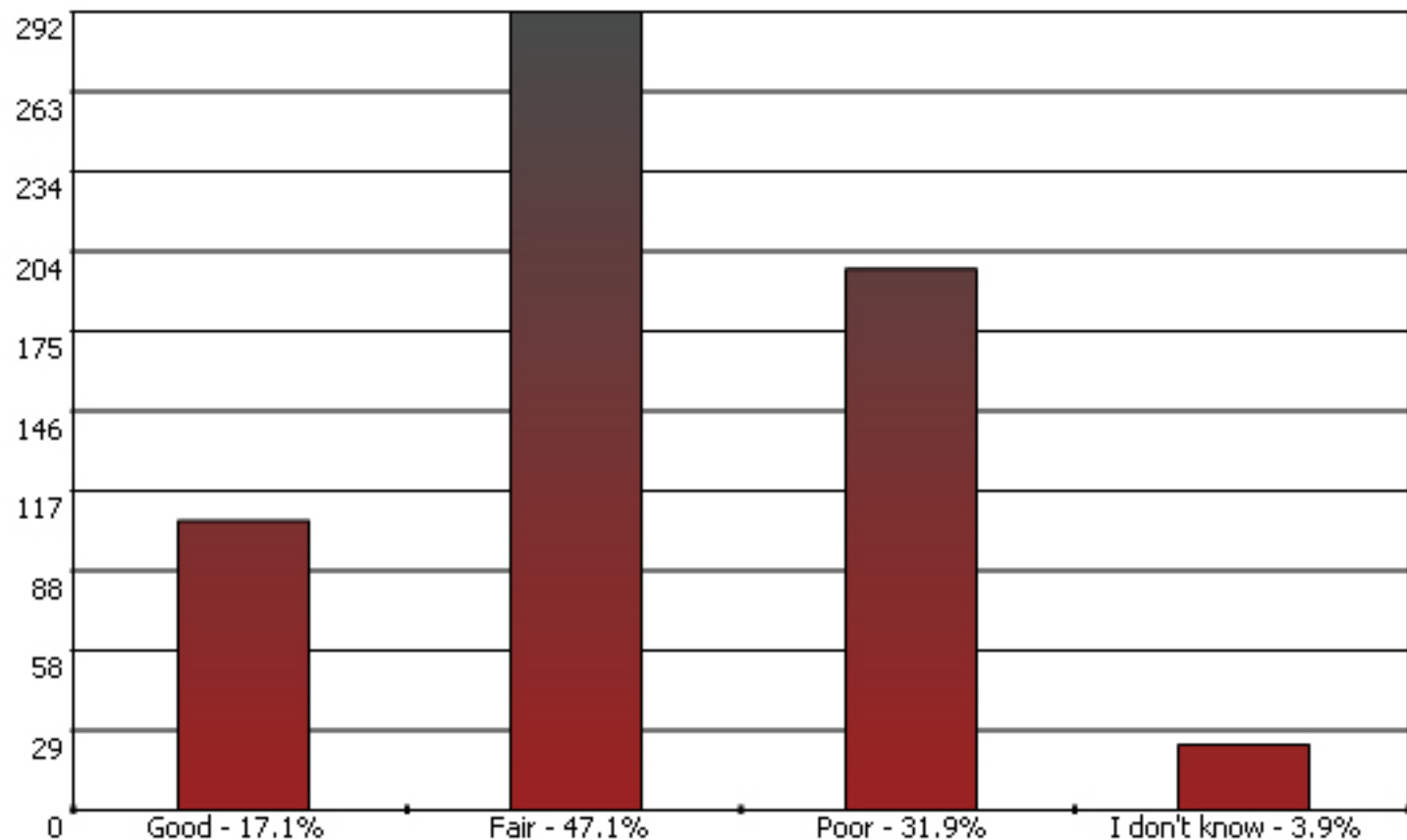
- Every day - 12.4%
- 3 or more times per week - 15.5%
- 1 - 2 times per week - 22.4%
- 1 - 2 times per month - 20.7%
- Never or almost never - 29.1%

How would you rate conditions for walking to work / school / shopping / library in your county? - 612 Responses

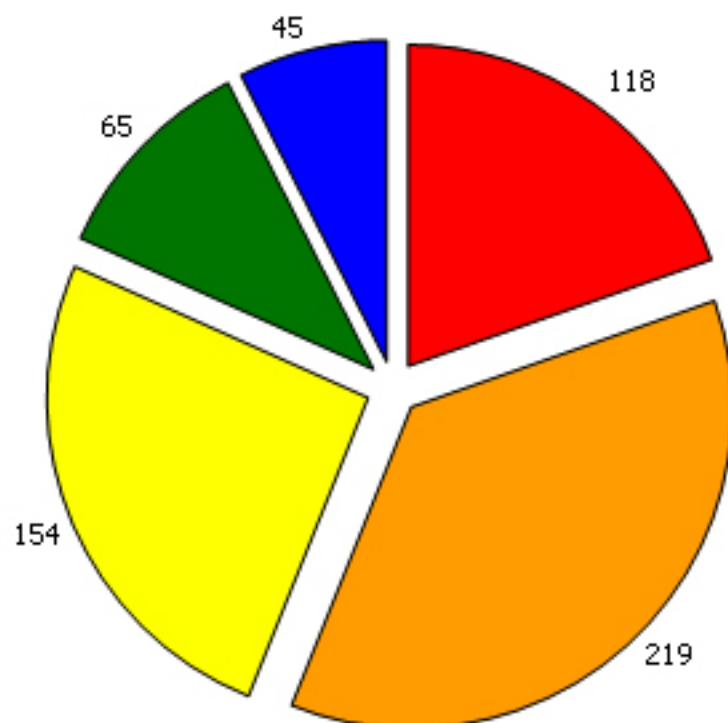




How would you rate the conditions for walking for exercise or recreation in your county? - 620 Responses

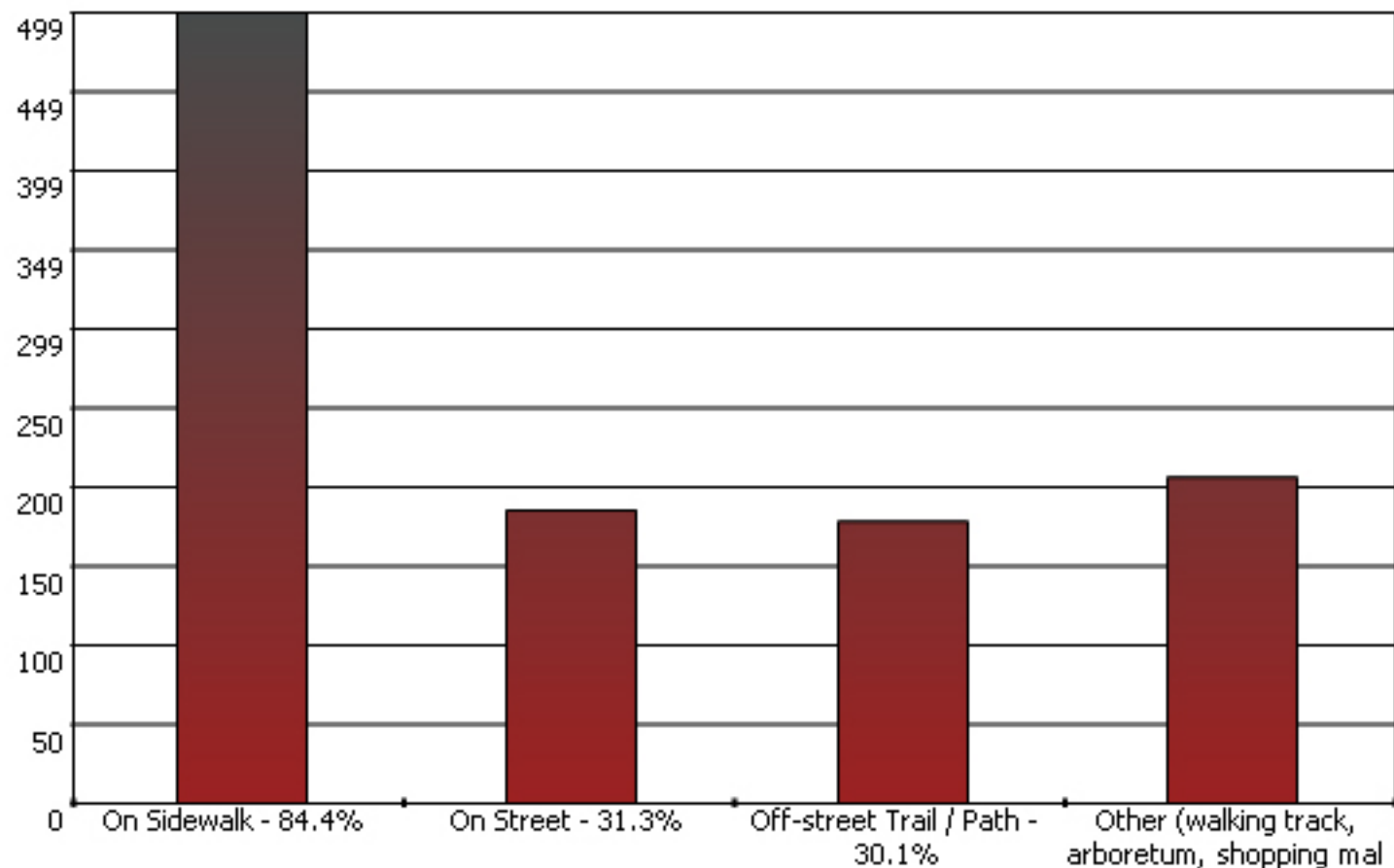


8. How often do you walk for recreation or exercise purposes? - 601 Responses

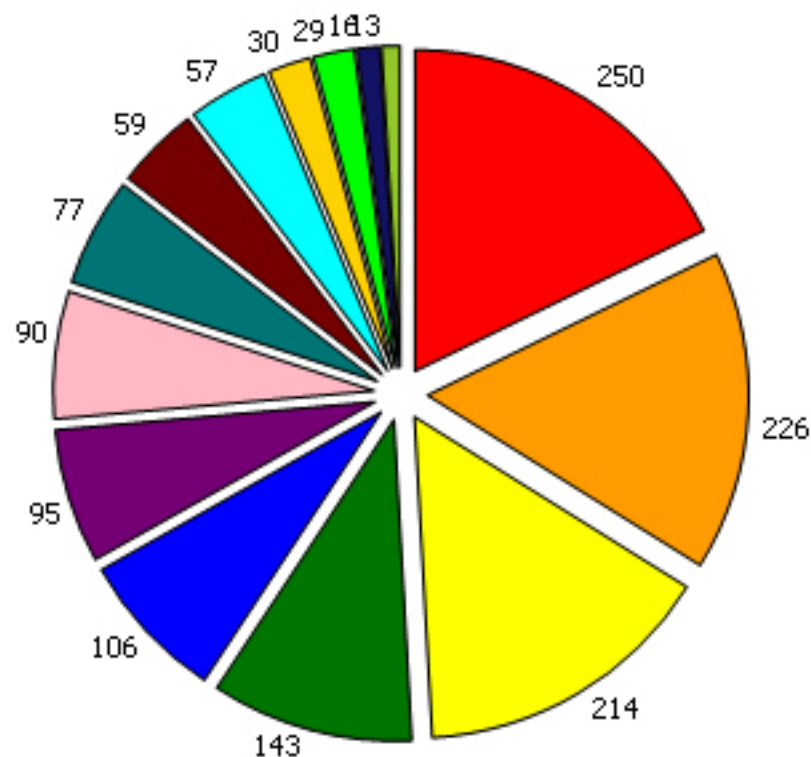


- Every day - 19.6%
- 3 or more times per week - 36.4%
- 1 - 2 times per week - 25.6%
- 1 - 2 times per month - 10.8%
- Never or almost never - 7.5%

Where do you primarily walk? - 591 Responses



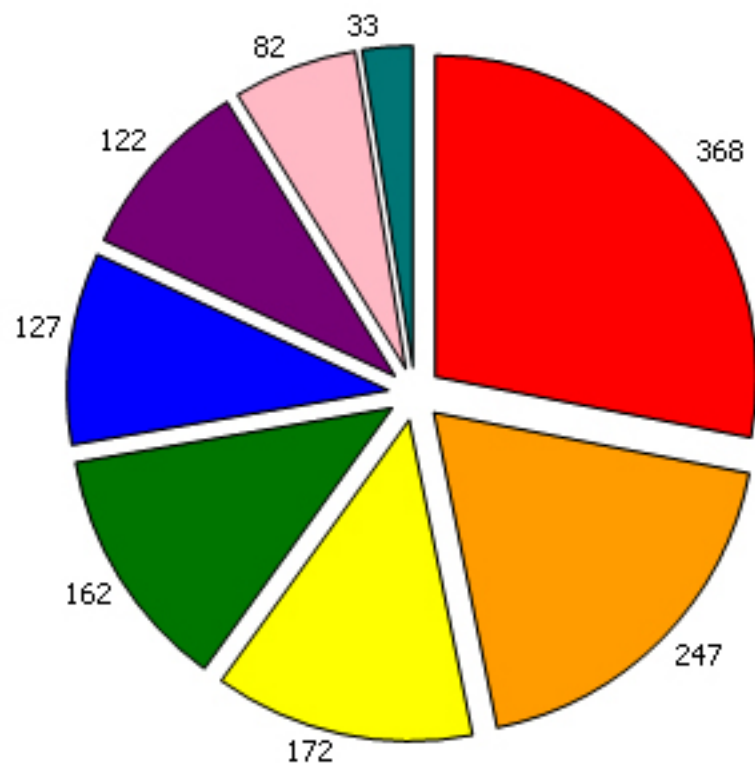
What prevents you from walking more or at all? - 601 Responses



- Live too far away/Takes too long - 41.6%
- Concerns about traffic - 37.6%
- Not enough trails - 35.6%
- Not enough sidewalks - 23.8%
- Weather - 17.6%
- Intersection crossings - 15.8%
- Sidewalks poor condition - 15.0%
- Can't carry things - 12.8%
- Concerns about crime - 9.8%
- Sidewalk obstructions - 9.5%
- Sidewalks too narrow - 5.0%
- Don't want to get sweaty - 4.8%
- Illness, injury, unable - 2.7%
- Not interested - 2.2%

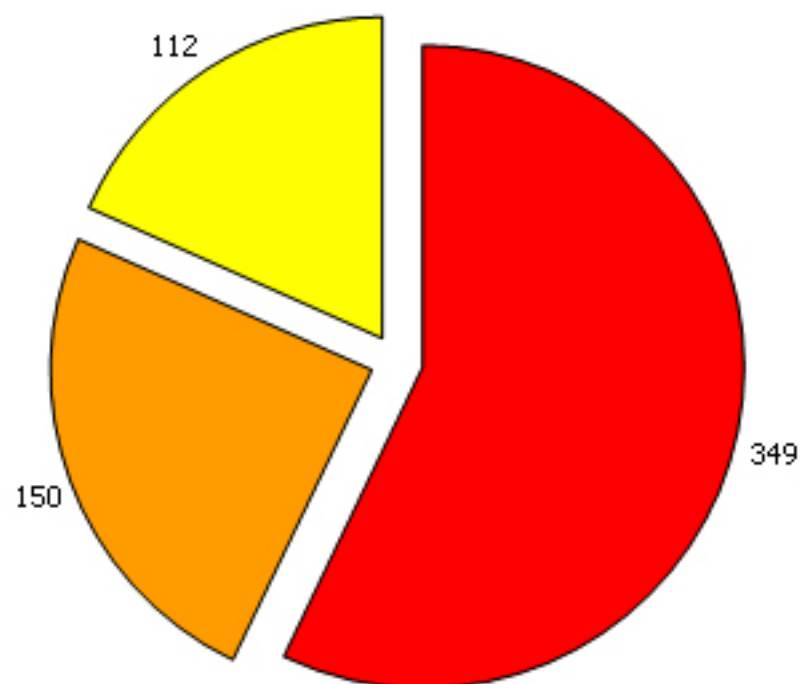


What would encourage you to walk or to walk more? - 583 Responses



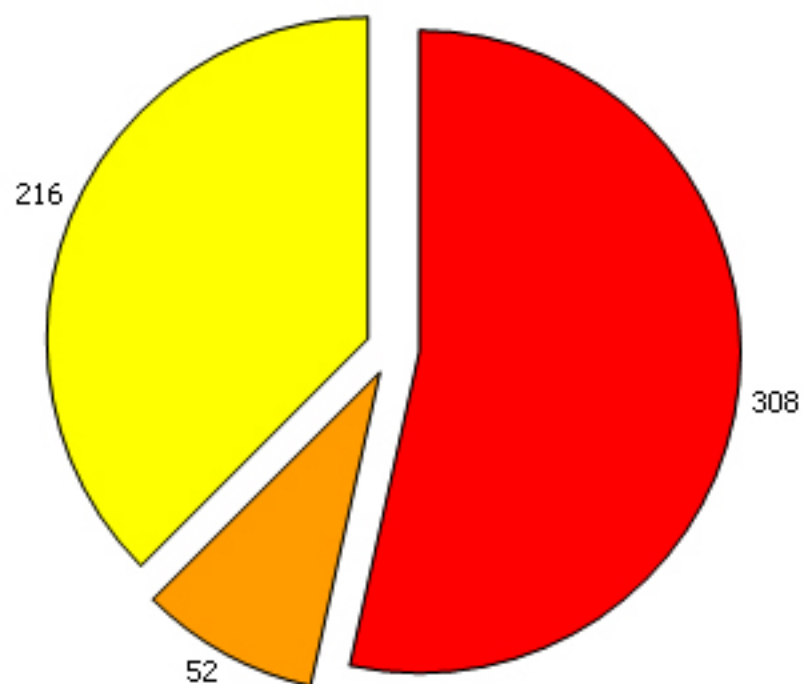
- Better network of trails or paths - 63.1%
- More connected sidewalks - 42.4%
- Safer crossings at intersections - 29.5%
- Shopping, schools, parks closer to where I live - 27.8%
- Less traffic or slower moving traffic - 21.8%
- Sidewalks in better condition - 20.9%
- Wider sidewalks - 14.1%
- Showers available at destination - 5.7%

Are there places where sidewalks or connections between existing paths are missing? - 611 Responses



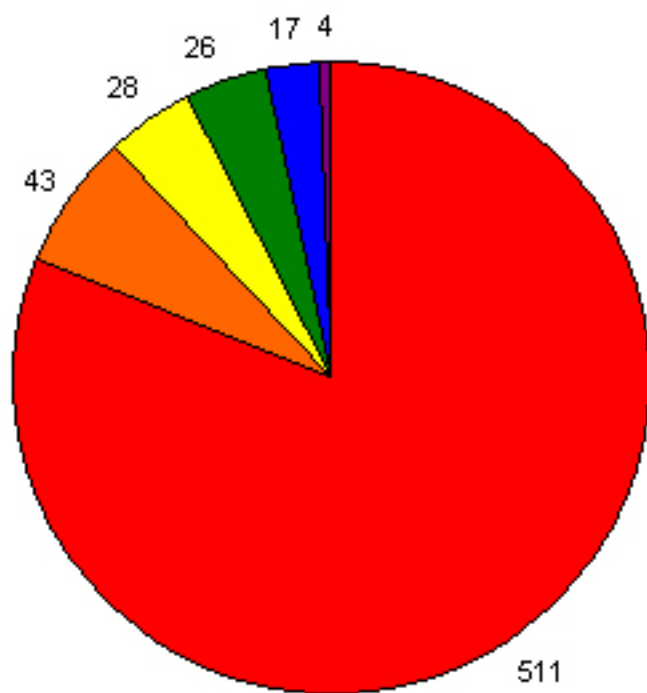
- Yes - 57.1%
- No - 24.5%
- I don't know - 18.3%

If you consider your community as a whole, are there places where new sidewalks are needed? - 576 Responses



- Yes - 53.5%
- No - 9.0%
- I don't know - 37.5%

Where do you live?



■ Lexington - 81.2 %

■ Nicholasville - 6.8 %

■ Wilmore - 4.5 %

■ Other - 4.1 %

■ Other / Work in area - 2.7 %

■ No response - 0.6 %

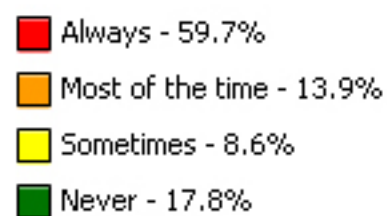
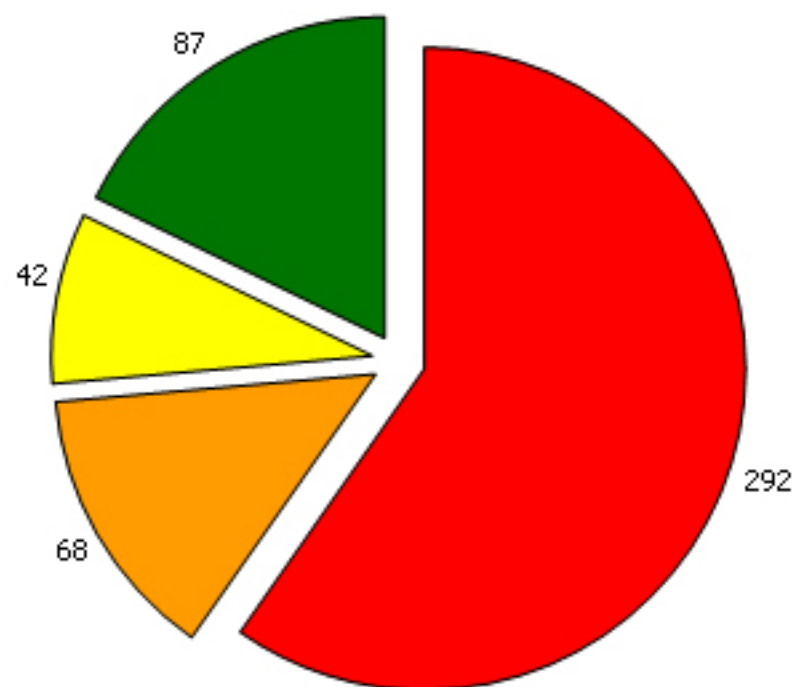


What skill level do you consider yourself as a bicyclist? - 489 Responses

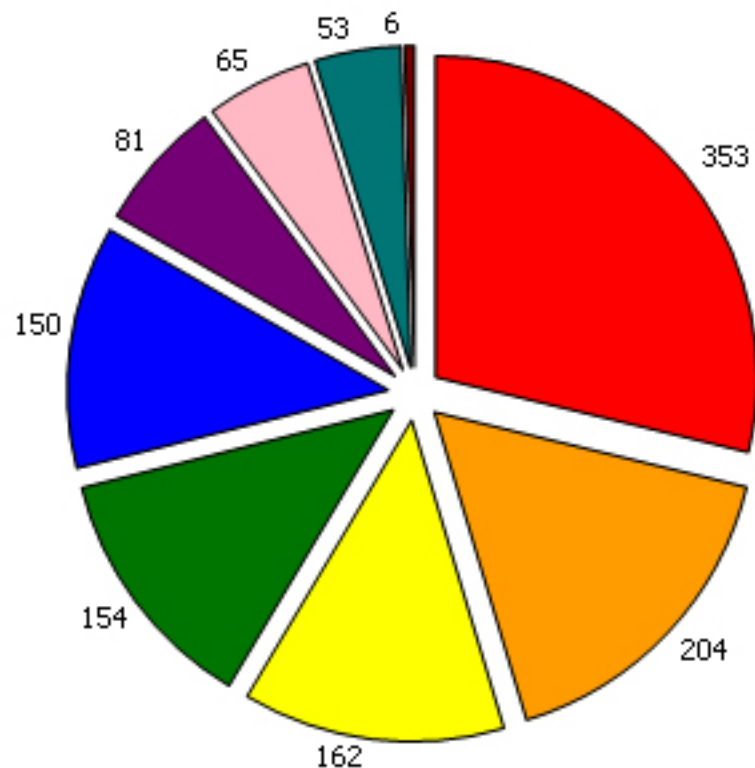


- A – Advanced or experienced riders comfortable riding with motor vehicle traffic. - 45.0%
- B – Comfortable riding on neighborhood streets and shared use paths; prefer designated facilities such as bike lanes or wide shoulder lanes on busier streets - 54.2%
- C – Child or pre-teen - 0.8%

How often do you wear a helmet? - 489 Responses

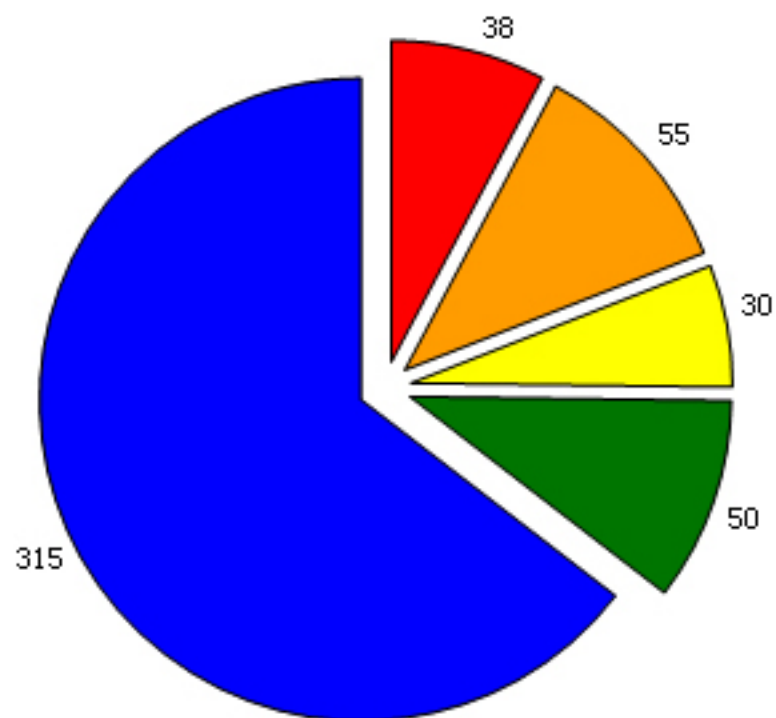


Where do you go when you bike? - 477 Responses



- I primarily bike for recreation / exercise purposes - 74.0%
- Parks - 42.8%
- Shopping - 34.0%
- Family or friend's home - 32.3%
- Work - 31.4%
- Libraries - 17.0%
- Recreation or community center - 13.6%
- School - 11.1%
- Bus stop - 1.3%

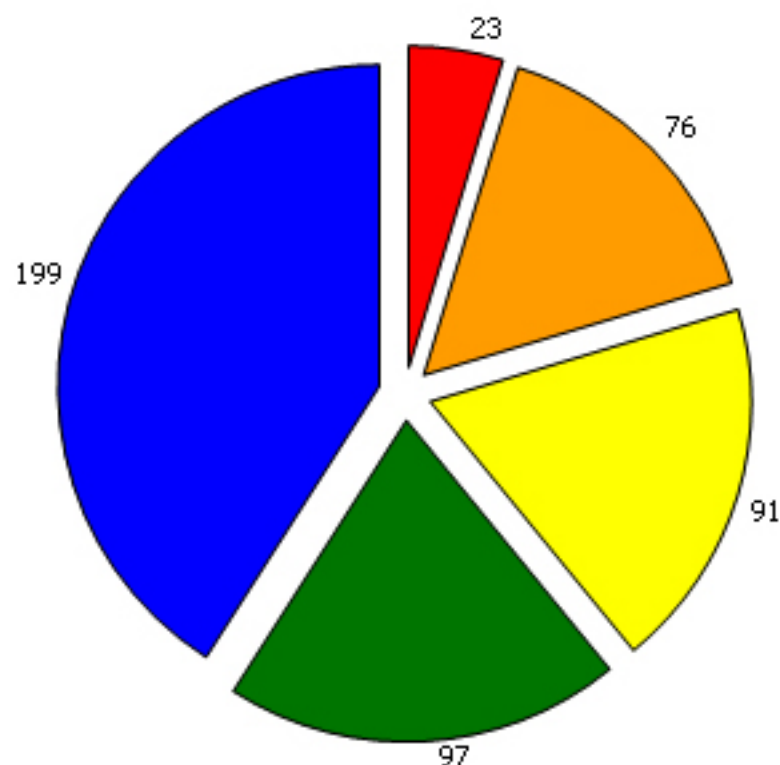
How often do you bike between home and work (or school)? - 488 Responses



- Every day - 7.8%
- 3 or more times per week - 11.3%
- 1 - 2 times per week - 6.1%
- 1 - 2 times per month - 10.2%
- Never or almost never - 64.5%

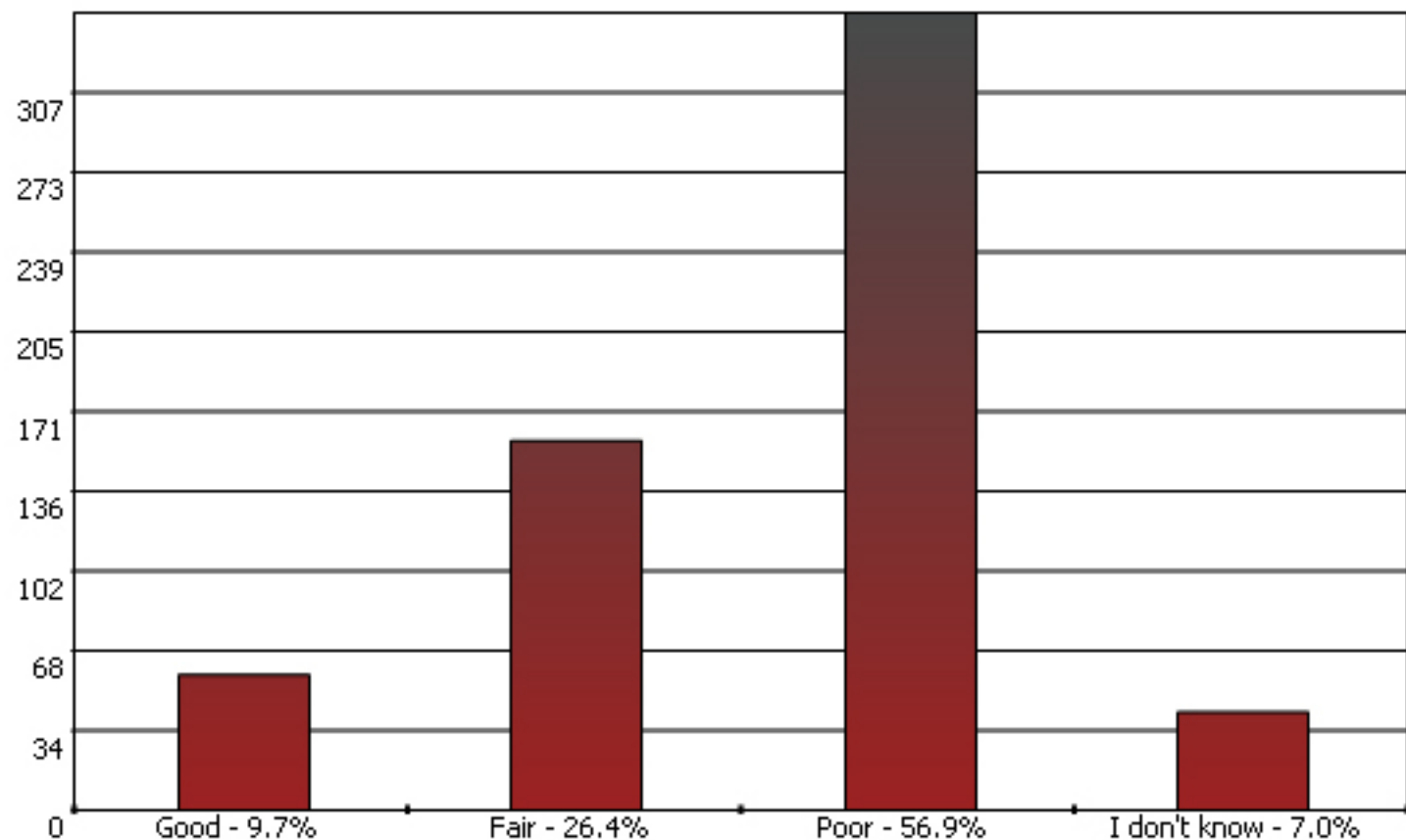


How often do you bike to other destinations (errands, shopping, etc.)? - 486 Responses

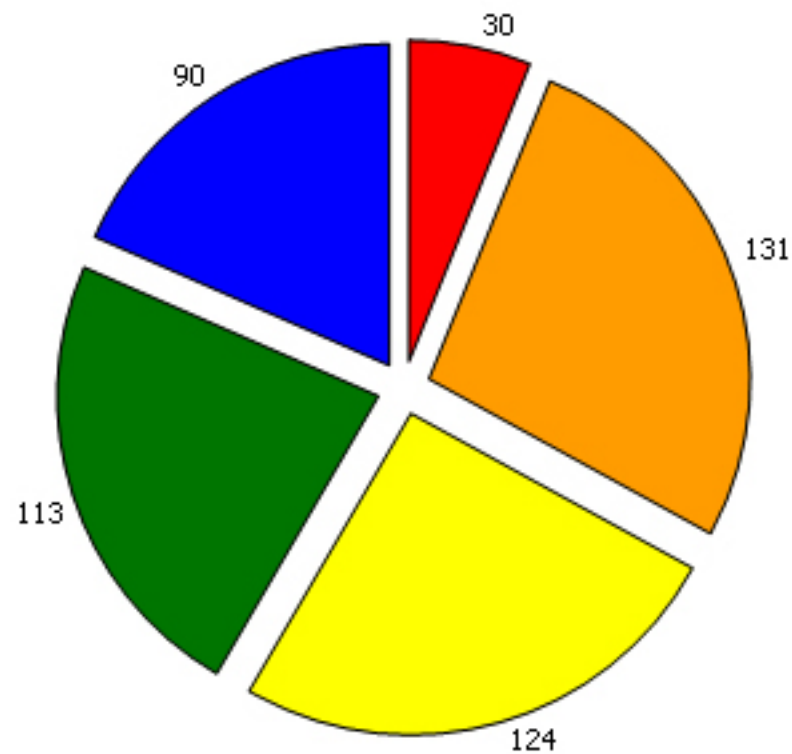


- Every day - 4.7%
- 3 or more times per week - 15.6%
- 1 - 2 times per week - 18.7%
- 1 - 2 times per month - 20.0%
- Never or almost never - 40.9%

How would you rate the conditions for recreational biking in your county? - 599 Responses

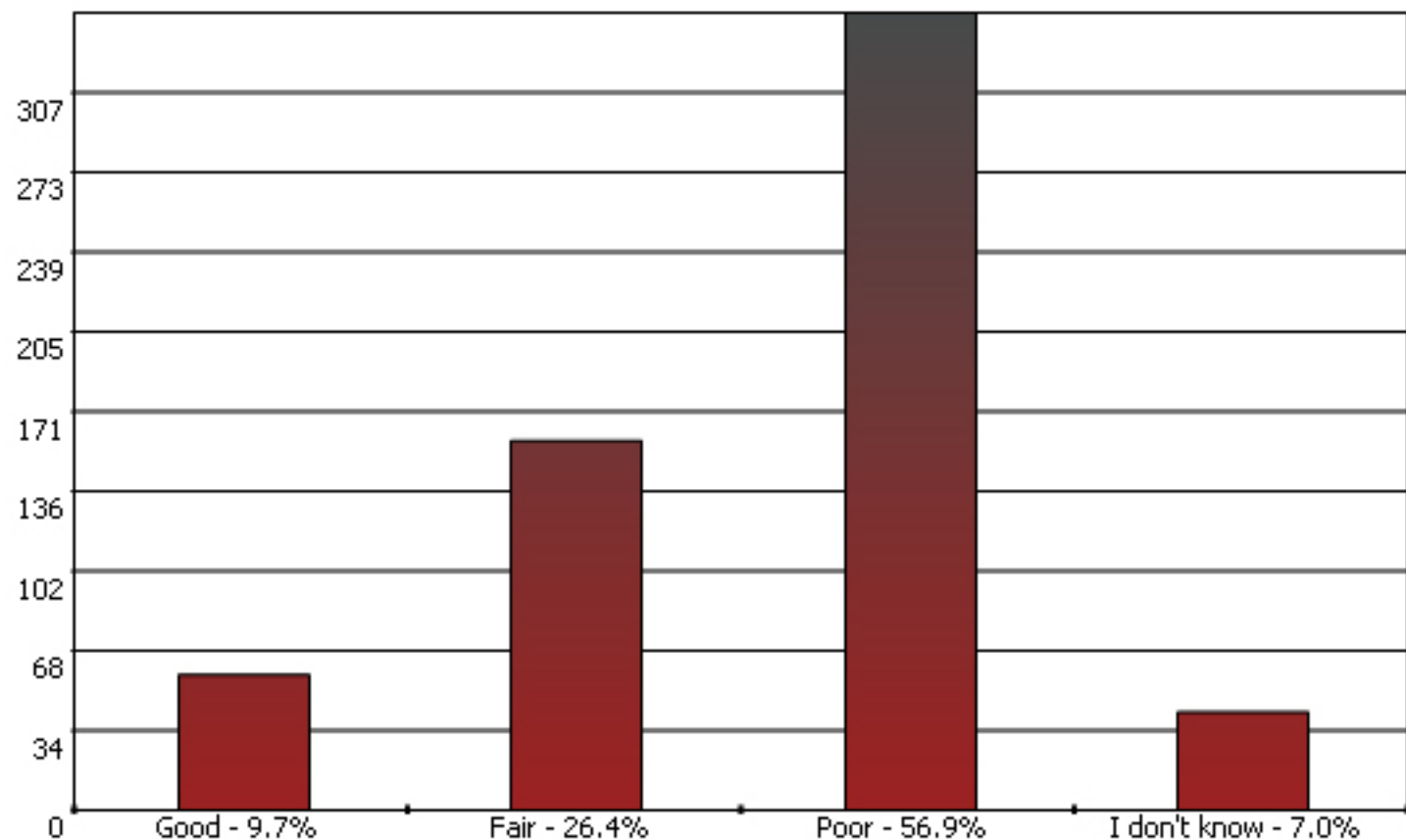


How often do you bike for recreation or exercise purposes? - 488 Responses

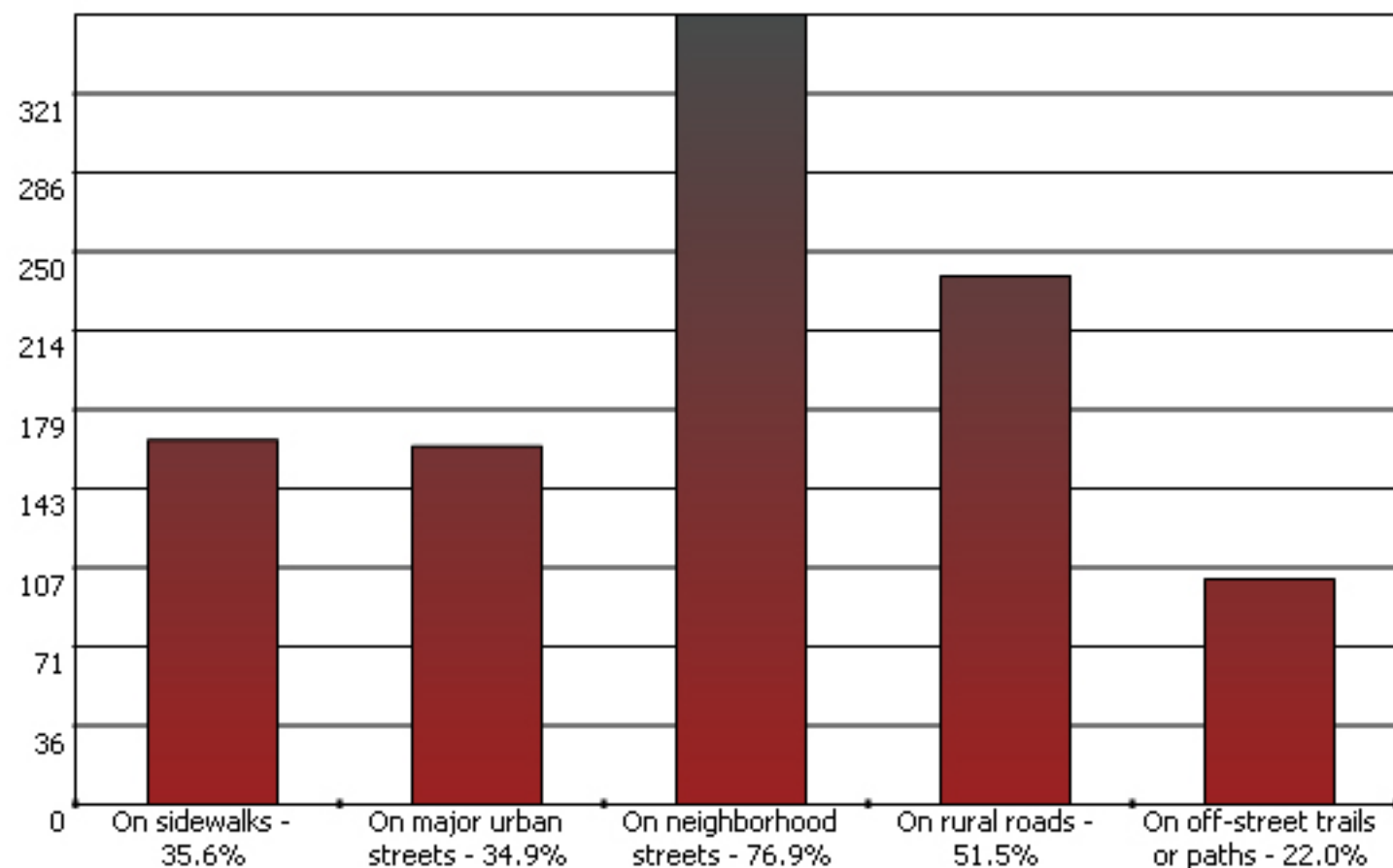


- Every day - 6.1%
- 3 or more times per week - 26.8%
- 1 - 2 times per week - 25.4%
- 1 - 2 times per month - 23.2%
- Never or almost never - 18.4%

How would you rate the conditions for recreational biking in your county? - 599 Responses

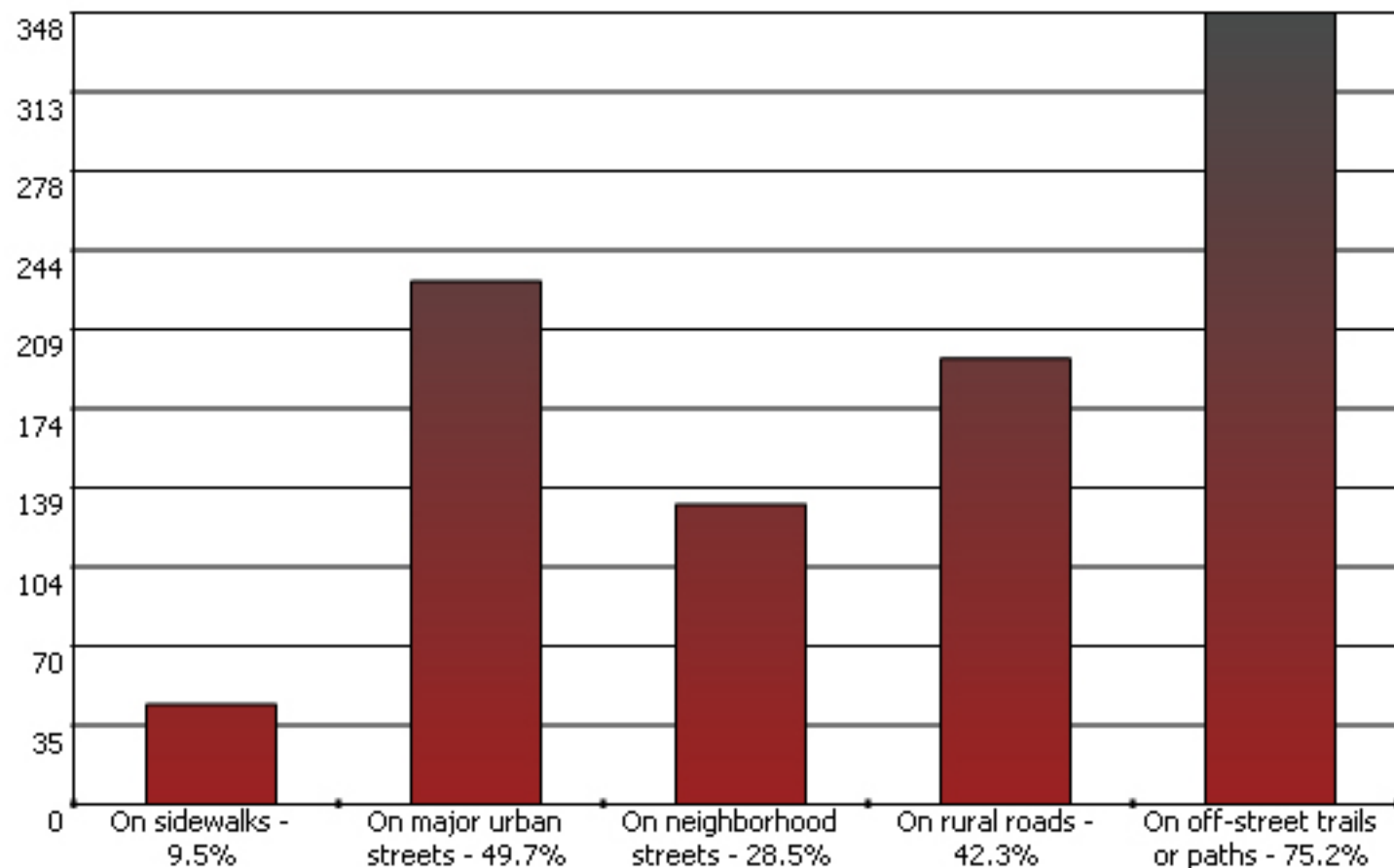


Where do you primarily bike? - 464 Responses

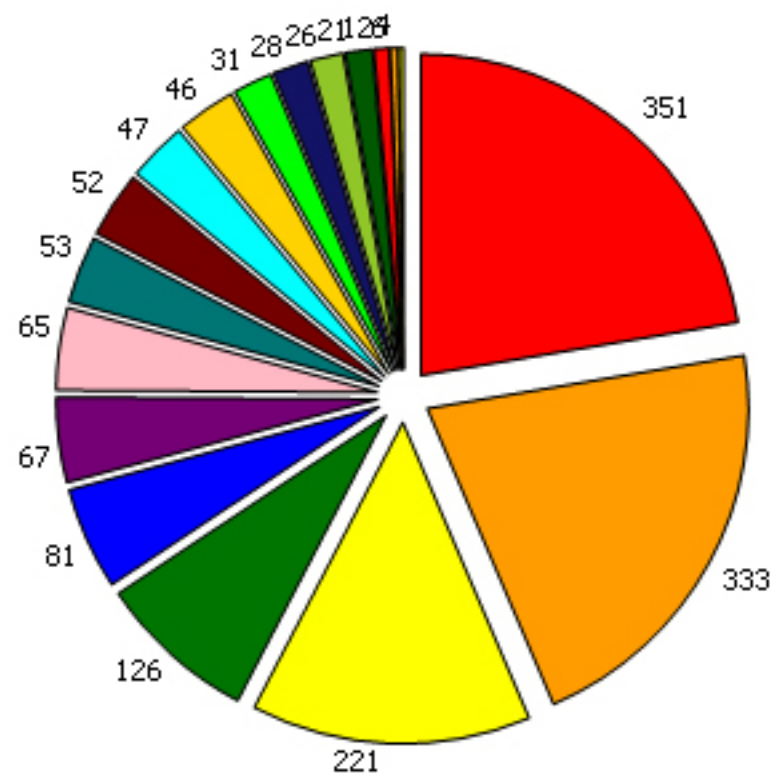




Where would you like to bike more? - 463 Responses

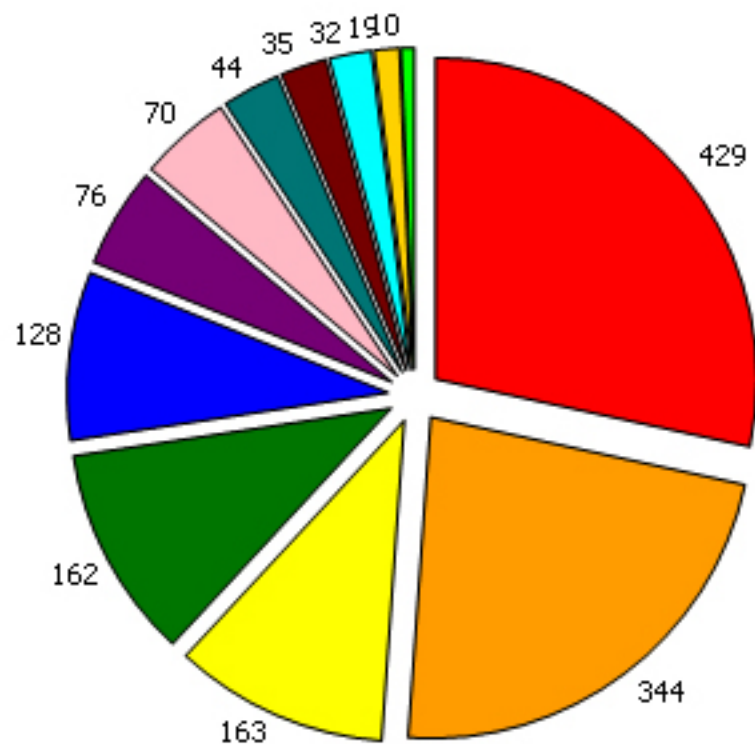


What prevents you from bicycling or bicycling more in your county? - 602 Responses



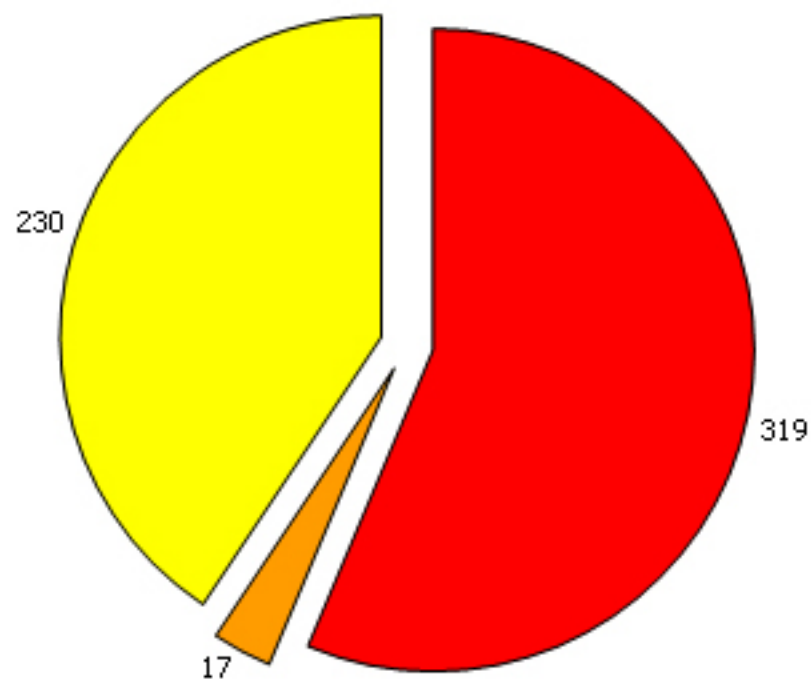
- Concerns about traffic - 58.3%
- Lack of bike lanes - 55.3%
- Lack of bike trails - 36.7%
- Aggressive drivers - 20.9%
- Speed of traffic - 13.5%
- Amount of traffic - 11.1%
- Don't have a bike - 10.8%
- Streets are too narrow - 8.8%
- Too far/takes too long - 8.6%
- Weather - 7.8%
- Can't carry things - 7.6%
- Major intersections - 5.1%
- Don't want to get sweaty - 4.7%
- Concerns about theft - 4.3%
- Bike needs to be fixed - 3.5%
- Illness, injury, or unable - 2.0%
- Concerns about crime - 1.0%

What would encourage you to bike or to bike more? - 578 Responses



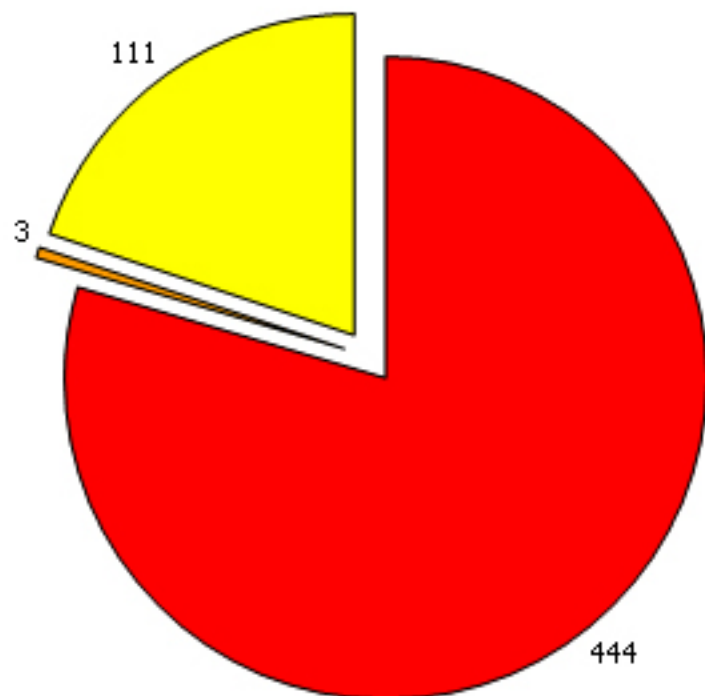
- Dedicated bike lanes - 74.2%
- Bike trails - 59.5%
- Connected bike facilities - 28.2%
- Paved shoulders - 28.0%
- Better enforcement for drivers - 22.1%
- Financial incentives - 13.1%
- Bicycle detection at intersections - 12.1%
- More bike parking - 7.6%
- Shopping, schools, parks closer to where I live - 6.1%
- Showers at destination - 5.5%
- Better street lighting - 3.3%
- Employer car for work-day trips - 1.7%

Are there missing links / connections between the existing bike facilities? - 566 Responses



- Yes - 56.4%
- No - 3.0%
- I don't know - 40.6%

Are any new bike lanes, shoulders or trails needed? - 558 Responses



- Yes - 79.6%
- No - 0.5%
- I don't know - 19.9%



# *Appendix C*

## Public Meetings and Stakeholder Interviews





Mayor Teresa Ann Isaac

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT  
Division of Government Communications

May 25, 2006

**MEDIA CONTACT**

Contact: Kenzie Gleason  
Phone: 519-8494 (anytime)

**Residents asked to help make area more walkable and bike friendly**

The Lexington Area Metropolitan Planning Organization (MPO), the regional transportation planning agency for Fayette and Jessamine Counties, is asking area residents to help in creating a plan to make the cities of Lexington, Nicholasville and Wilmore more pedestrian and bike-friendly.

The agency will host several open-house meetings beginning on May 31. "We want to hear from parents who would like their kids to be able to walk to school, and from commuters looking for a better way to get to work," said Kenzie Gleason, a planner for the agency.

Two meetings will be held in each county. Fayette County meetings will be held June 1, from 4 – 8 p.m., at the Northside Public Library and June 3 from 10 a.m. to 2 p.m. at Joseph Beth Booksellers.

Jessamine County meetings will be held May 31, from 4 – 8 p.m. at the Jessamine County Public Library and on June 2, from 4 – 8 p.m. at the Luce Activity Center at Asbury College in Wilmore.

The firm of Parsons Brinckerhoff and the National Center for Bicycling and Walking (NCBW) are assisting the Lexington MPO in developing the community plan. The NCBW has helped hundreds of communities to become great places to bike and walk, and even better places to live. Executive Director, Bill Wilkinson said the agency "believes communities should be planned, designed and managed so that people of all ages and abilities can walk and bike easily, safely, and regularly."

An on-line survey is also available for those wishing to provide input on the plan. The survey is located at [www.bluegrassbikewalksurvey.com](http://www.bluegrassbikewalksurvey.com).



# Summary of Public & Stakeholder Meetings

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## *In Their Own Words*

### **What the People of Fayette and Jessamine Counties Have to Say About a Plan for Bicycling and Walking**

#### **Public Meeting Highlights**

A series of public meetings were conducted in late May and early June 2006, to give residents of Fayette and Jessamine Counties an opportunity to talk about their experiences walking and biking in their communities—what they do now, what they can't do, and what they'd like to be able to do. These activities were undertaken as part of an ongoing project to develop a Bicycle and Pedestrian Plan for the Lexington Area Metropolitan Planning Organization (MPO). These are some highlights of what folks had to say about ....

#### **Who the plan is for:**

- *We need champions for kids and seniors.*
- *My son is trapped in our neighborhood because there's no connectivity.*
- *I get tired of sitting in my car every day—it's boring (second grader's comment)*
- *Combining bike and pedestrian access to mass transit for those who can't or don't drive.*
- *I want to run on wider sidewalks—so I don't have to run in the grass or the street when I meet someone on the sidewalk.*
- *I'd ride a bike if there was a bike lane or wide shoulder*
- *I've lost 100 pounds by walking on the walking track here at Asbury. I don't know what I'm going to do now that the walking track's been closed.*
- *I'd be a lot more comfortable with my family riding their bikes if there were designated places for them on rural roads.*
- *I'd like to see places to walk in Wilmore.*
- *I'd like to see more places for mountain biking and off-road trails.*
- *I'd like to be able to ride my 3-wheeled bike.*
- *I'd like to see more multi-use trails and rail trails.*
- *I'd like to be able to walk during the work day [in Nicholasville]—there's no place to go to*
- *It becomes a frightening demographic to think about the increasing needs of people who can't drive—they can't 'Age in Place' or 'Age in Community' the way things are now. People dealing with social services for seniors call losing the ability to drive 'the great divide'—the number one fear of the aged is losing independence and mobility when you can't drive. There should be more transportation options for seniors.*

## Summary of Public & Stakeholder Meetings

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### What the problems/challenges are:

- *More traffic and higher speeds make it unsafe. Rural roads not upgraded when development takes place. The attitude of motorists is very anti-bike—cars go very fast. Speed and amount of traffic. Driver inattention to pedestrians. Speed of traffic in neighborhood streets is scary. I don't know what you can do other than put someone on watch or install speed humps.*
- *Schools built in rural areas—you can't walk to them (Jessamine County). Neighborhood schools have given way to schools located far away from homes. Kids can't walk or bike to school. Everybody used to walk to school. Operating school buses takes a lot of the schools' budget.*
- *People feel like they have to watch their kids 24 hours a day. People don't feel comfortable letting their kids go unwatched—if you don't know where your kids are you're called a negligent parent.*
- *Lack of connectivity. The only way to access retirement developments and community centers is by car. No neighborhood connections to parks. No access to parks and schools. Barriers to facilities—they may be there, but we can't get to them because of obstacles or poor conditions for getting to them. Major roads/crossings are unfriendly—New Circle Road is a barrier.*
- *I rode my bike in heavy traffic in Atlanta and Raleigh for 25 years, so I'm very comfortable riding anywhere, but I don't feel safe on these country roads.*  
*Wife of man quoted above says: He rides the country roads here and it terrifies me—I'm not worried about him, he rode 62 miles on his 60th birthday! It's the cars and the curves in the road that I worry about when he rides. We rode bikes together when we lived in Florida, but I won't do that here.*
- *I love walking to the VA center (in Wilmore) but then you have to turn around and come back the same way. I like some variety when I walk and this route gets boring—but it's the only paved dedicated route in Wilmore. There's no way to walk to High Bridge safely, we just walk on the road and it's dangerous. You're really a captive in this town, you don't have any way to walk to places outside Wilmore. The nice thing is there are lots of 'spokes' emanating from the center of town. But there's no way to do a loop, you always have to come back into town the same way, and walking on the same road gets boring.*
- *You have to ask for pedestrian and bike facilities—cars get accommodated automatically.*
- *Sidewalks are not wide enough to accommodate two people walking side by side—or for one person to pass another. Lack of accessible sidewalks (narrow, obstructions).*
- *There are no bike racks at destinations. Maintenance of bike facilities is poor.*
- *This plan has no funding associated with it.*
- *We need a demonstration project.*
- *What percentage of the population has to say 'we want sidewalks and bike lanes' for it to happen?*

## Summary of Public & Stakeholder Meetings

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### What are the kinds of outcomes they want:

- *A nice place for biking and walking without getting hurt (fifth grader).*
- *Seeing less car crashes in the news.*
- *Drivers, pedestrians and cyclists need to respect the rules.*
- *A thriving downtown where you can eat outside, but not block sidewalks or slow traffic.*
- *I want to be able to walk to something if I can see it.*
- *I want our community to be a place where people WANT to bike and walk.*
- *Economic development that is related to increasing places to walk and bike*

### What needs to be done:

- *Encourage developers to better accommodate pedestrians and bikers.*
- *Incorporate Parks and Recreation plans with current plan.*
- *Work with water and sewer departments on storm grates.*
- *Tie this plan together with transit (i.e., as part of this Bicycle and Pedestrian Plan, transit should be integrated with recommendations made during this project).*
- *More opportunities [to walk and bike] downtown.*
- *New development should include bike/pedestrian connections (built at time of development) to shopping and other destinations.*
- *Think ahead! (i.e. when design takes place, incorporate all facilities, including bike and pedestrian so retrofitting isn't necessary).*
- *Connectivity between places, for example between home and school.*
- *A plan to overcome physical barriers, for example getting over railroad tracks.*
- *Getting kids to ride their bikes and/or walk to school.*
- *Provide shoulders on rural roads.*
- *Raise awareness of all rural road users—drivers, walkers and bikers.*
- *Raise awareness of existing facilities that are out there (trails, parks, health department wellness programs, etc.) and available for use, so that more people ride and walk.*
- *There needs to be more trail development that doesn't require driving to get to.*
- *We need more accessible sidewalks.*
- *We need off-road facilities.*
- *We need sidewalks.*
- *We need accessible shopping areas.*
- *Consider putting wide curb lanes on arterial roads.*
- *Design roads for lower speeds and lower speed limits.*
- *Enforcement is a big issue, especially in rural areas.*



## Summary of Public & Stakeholder Meetings

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### What a successful plan will do:

- *Helps tell public officials what citizens they want, i.e. places to walk, to go to the grocery, etc.*
- *Makes sure the planning and zoning codes make it easy for developers to incorporate facilities for pedestrians and bicyclists.*
- *Transportation and land use planning need to go hand-in-hand.*
- *We need to market our trails, greenways and parks.*

### And, some specifics ...

- *I'd like to see a paved trail between Nicholasville and the Fayette/Jessamine County line that runs parallel to Nicholasville Road.*
- *I'd like to see a bike lane on Main Street in Nicholasville from one end of the bypass to the other. Perhaps turn a parking lane on Main Street into bike lanes (cars could park at the rear of buildings) – or bring the speed limit down to 20mph.*
- *Congestion on Main Street (Nicholasville) is extensive in the afternoons.*
- *We want bike trails to the new YMCA at Riney Park, but we need to be able to get across the railroad tracks.*
- *I've been told bikes aren't allowed on Main Street in Nicholasville—is this true?*
- *The kids in the poorer sections of town deserve access to trails as much as any other kids.*
- *What are developers required to do in Nicholasville? In Jessamine County? I want to see sidewalks in all new residential and commercial areas.*
- *The gaps in the sidewalks should be filled in. Put sidewalks in more places where there aren't any—have you tried walking on Nicholasville Road?*

## ***Summary of Public & Stakeholder Meetings***

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### **June 2006 BPAC Meeting Highlights**

#### **The Bicycle/Pedestrian Advisory Committee's thoughts on a successful plan:**

1. A successful plan gets people excited
2. People see themselves in the plan
3. It removes barriers to walking and biking
4. It advises people how to address problems
5. It says new development must be bike and pedestrian friendly, and it offers suggestions for making existing development bike and pedestrian friendly
6. It addresses land use and community design
7. It offers exceptions and/or incentives
8. It identifies gaps and problems in the existing system
9. It's a user-friendly tool that you can hand to a developer
10. It incorporates what's in the best interest of the community as a whole
11. It incorporates land conservation—preserving the rural landscape
12. It incorporates rails to trails concepts

### **Stakeholder Meeting Highlights**

#### **Bluegrass Council of the Blind**

1. *"City engineers tell us it's "too dangerous" to cross where we need to cross—thus out of direction travel is forced as a result."*
2. *"Ramps are in wrong places and make it confusing—you don't know when you have entered the street and if you've entered in the right place."*
3. *"Crosswalks often don't align with curb ramps."*
4. *"One wheelchair ramp should not be placed diagonally entering the intersection; there should be two, one for each direction to direct you to the correct place to cross."*
5. *"In older neighborhoods there are cars parked on sidewalks and there's an attitude that it's ok to do this—there's no enforcement of laws against doing this."*
6. *"Much commercial development in Lexington has everything out in huge parking lots without identified accessible routes. Cars seem to come from all directions and it's terrifying."*
7. *"Install accessible signals at time of installation, not as an afterthought."*
8. *"Pedways are helpful to cross roads, but they require going into a building, taking an elevator up, finding the pedway, going across it, finding the elevator in the next building, and getting outside again. It's such an arduous journey that could be avoided with better ways to cross streets at ground level."*
9. *"Tactile strips in islands would be extremely helpful. "*

## Summary of Public & Stakeholder Meetings

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### Disabled Community

1. *"Lexington is hostile for disabled."*
2. *"We can't walk safely today-- we want access now."*
3. *"We want to be included."*
4. *"If the environment were right, there would be more disabled people downtown."*
5. *"This effort (bike and pedestrian plan) needs to start with the disabled and ageing people – what they need to get around."*
6. *"Downtown businesses lack awareness of our needs."*
7. *"We want to be part of the work that the community does. The city needs to decide we are partners."*
8. *"We want to see crosswalks that meet code."*
9. *"We want Lexington to have a 2-block demonstration project downtown."*
10. *"We want Lexington to do things right—meet ADA requirements because they want to, aside from the fact that they're legally obliged to."*
11. *"Brick Squad – we repair sidewalks on our own time, with our own resources. If we can do it, why can't downtown businesses?"*
12. *"The feeling is that the city created the problems, but they are not helping to fix them."*
13. *"Need symbolic opportunities that things are changing."*
14. *"Need to know how we can help you (the city)."*
15. *"Citizenship – we all need to know the details of what being a good citizen involves."*
16. *"What kind of training is required for LFUCG employees having to do with disabilities?"*
17. *"It took a personal experience with the disabled to open my eyes....they are disadvantaged in many ways, not just in the fact they can't walk."*

## Summary of Public & Stakeholder Meetings

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### Seniors Group

1. *"The walking surface is very level and it's safer to walk [at TurflandMall]. Many people walk there because of the surface. In a lot of neighborhoods they don't have accessible curbs. A lot of people have a hard time climbing curbs, but they can still walk and like to."*
2. *"I have lived on Malabu since 1967. I walk to the post office, the grocery, pretty much everywhere."*
3. *"I like to bike in the evening after the rush of traffic dies down or on Saturday and Sunday. I feel safer when the traffic isn't as heavy. I don't ride on major roads, I don't feel comfortable. I would like to bike all the time, but can't because of too much traffic. I go to the Arboretum to walk and I walk in my neighborhood."*
4. *"I live in Headley Green...I walk a lot and invite other people, too, but many just stay in their houses all day and never get out. I don't think it's good for them. "*
5. *"There are lots of good places to walk; people just don't take advantage of the opportunities out there."*
6. *"One problem is transportation or getting to the place where you want to walk [for exercise]."*
7. *"Tripping is a big fear. Drains are placed at the most inopportune places, people are afraid of tripping over them. Curbs are very important for everyone. They really need to be wheelchair accessible because then everyone feels safe."*

### Bluegrass Cycling Club

1. *"We like to say that not every cyclist is the same, not every motorist is the same."*
2. *"[Where I ride] I have the most problems with people in pick-up trucks."*
3. *"Jessamine County is very unfriendly to riders. Bourbon County, Midway, Versailles are friendly communities in which I ride. Clark County is rather indifferent to riders."*
4. *"Shoulders and bike paths are dangerous. Roads are not maintained, trash is pushed onto the shoulder or bike path. Problems like these on bike facilities make me not use them. I go on the roads instead."*
5. *"Education is the number one issue. We have to educate people to be tolerant."*
6. *"Bike lanes can trick you into thinking that's the only place it's ok to ride! People are going to have to expect cyclists everywhere!"*
7. *"We are conditioned to read signs, therefore, signage starts the process of expecting to see cyclists and sharing the road with them."*
8. *"Here's something odd – did you know it's illegal to walk or bike to school in Montgomery County?"*
9. *"We see the first steps of becoming more bike-friendly as implementing a complete streets policy, dealing with speed limits and educating the public."*
10. *"The bottom line is safer conditions for cyclists mean safer conditions for all."*

## July 17, 2007 Meeting Input (Jessamine County)

### Questions / Comments

1	Most neighborhood streets in Nicholasville have cars parked on both sides and it's difficult to navigate streets.
2	Is anything established to accommodate bikes on the proposed by-pass on east side of Nicholasville?
3	Has the state approved an engineering study for the by-pass?
4	One attendee has used Lexington's Beaumont Trail which are a good example of trails that provide access to residential, retail and schools.
5	Current planning and zoning regulations in Jessamine County don't currently allow developers to include bike trails.
6	An abandoned section of Clay's Mill Road should be included in the proposed system of off-road trails.
7	Who will implement this plan? How will the projects be built and who will facilitate the process?
8	It would be great if you could get on your bike in Jessamine County and safely ride to Fayette Mall in Fayette County.
9	How much impact can bike riders make on traffic congestion?
10	As a biker, I request you not put rumble strips at roadway edges.
11	Almost every school in Jessamine County is on Wilmore Road, yet there aren't any sidewalks to get from school to school, or from residential areas to the school.
12	I am afraid Jessamine County's project will not be able to compete with Fayette County projects.
13	This Healthway Trail from the KY Horse Park to the KY River is sorely needed, considering Kentucky's health ranking.
14	I am strongly opposed to a trail being built on my property. I have owned property in Jessamine County, although I now live in Fayette County, and have opposed this for a long time. This property belongs to my family and has since 1933 when it was deeded back by the railroad. People who use these trails are destructive and have vandalized my property. You can't run a farm with people going through it.
15	One attendee commented that a person's heirs may wish to allow a trail through the property in question.
16	Another person commented that some property in the area was still owned by the railroad and it would be wonderful to use it for rail-trails.
17	Are PDR [Purchase of Development Rights] dollars available for the use of trails?
18	The entire Hickman Creek watershed would be a great place to have a trail system.
19	What does this plan do to prevent ATV's from using trails?
20	Safety programs should be the number one priority.



## July 19, 2007 Meeting Input (Fayette County)

### Questions / Comments

1	There are bumps in gutters after pavement resurfacing, especially at drainage inlets.
2	Were parallel routes considered along major roads?
3	What is the timeline for the completion of the trails?
4	What will be the availability of the Bicycle / Pedestrian Plan?
5	Will there be a separation of bicycle / pedestrian issues in the draft report for public review?
6	How can public become more active?
7	How were the rural roads selected? Were connections to surrounding counties considered?
8	What is the relationship of transit and bicycling in the Plan?
9	From what perspective was the plan written? Was it looked at from commuter point-of-view?
10	Is there detailed mapping available for public review?
11	There was concern regarding maintenance on proposed trails. Will there be a budget?
12	There should be consideration of the extension of 5th street at Eastern State Hospital.
13	When the planning commission approves development on an existing road, can sidewalks and bicycles be considered? Can this be a recommendation in the Plan?
14	Have priorities been established in the Draft Plan?
15	The concept of "Complete Streets" was well-liked.
16	Look at different alternatives? Are there options to separate bicycles / pedestrians from traffic?
17	When considering feasibility versus priorities, there were concerns that it will not provide connections that make sense.
18	There are issue regarding long wait times for Transit users. Infrequent transit headways discourage walking and bicycling.
19	Can transit be incorporated in this plan?
20	North Limestone is defined as a constrained project in plan. Recommend splitting the segment into two projects: 3rd to Loudon and Loudon to Withers. Feasibility from 3rd to Loudon should be reconsidered.
21	There was concern over sidewalk widths of 5' in downtown areas when four foot sidewalks currently exist and the need to keep "green strip".
22	Will there be facilities (bathrooms, etc.) at trailheads?
23	With respect to the Rails to Trails Program, does the right-of-way go back to owners?
24	Is it possible to have localized meetings for this Plan? This would allow more specific comments.
25	Was the Plan done in-house (by LFUCG / MPO only)?
26	Planning studies often sit on the shelf -- how can public help get things moving?
27	Can projects be made more visible through booths, informational materials, etc.?

28	Need to start a Share the Road awareness campaign similar to motorcycle ads on the radio.
29	Is there a component in the Plan to <u>educate</u> the public and schools about bicycles / pedestrians?
30	Will mapping be put back into a GIS database?
31	Is slowing down traffic part of this plan?
32	Is the concept of putting cyclists on the busiest streets a current trend?
33	Are there different methods to accommodate bikes on major roads?
34	It is hard to get to the other side of some roads (e.g. Nicholasville Road).
35	There was interest in creating a trail from the rail line near Arcadia Park.
36	Identifying volunteers and specific events to promote bicycling and walking would be helpful.
37	A bike tax or tax incentives for funding bicycling facilities should be considered.
38	Impact fees associated with new development or re-development could be another source of funding.
39	Of the \$2 million set aside for trails, have there been any allocations of this money yet?
40	Have there been any public meetings related to trail funding?
41	New Circle Road NE project is missing from project list
42	This is an excellent first step and I fully support the plan

# Lexington Area Metropolitan Planning Organization

## Regional Bicycle & Pedestrian Plan

### Summary of Written Comments

**Comments received: 31**

Name	Address	County	Comment
Bill Fortune		Fayette	<ul style="list-style-type: none"> <li>• Comments extensive – see attached</li> </ul>
Bill & Leisa Pickering	560 N Limestone	Fayette	<ul style="list-style-type: none"> <li>• Comments extensive – see attached</li> </ul>
Nikiforos Stamatiadis		Fayette	<ul style="list-style-type: none"> <li>• Comments extensive – see attached</li> </ul>
Nancy Sleeth Matthew Sleeth		Jessamine	<ul style="list-style-type: none"> <li>• General support for plan and development of hike and bike trails</li> </ul>
Bruce Rector		Fayette	<ul style="list-style-type: none"> <li>• Like broad view of plan</li> <li>• Recommendations favor bikers to walkers</li> <li>• Quick fixes should include trails in parks, completing gaps in sidewalks</li> <li>• Ensure trails are wide enough for biker and walkers (ex. Veterans Park too narrow)</li> <li>• Separate plan recommendations into quadrants of the city</li> </ul>
Bruce Burris		Fayette	<ul style="list-style-type: none"> <li>• Plan is great</li> <li>• Recommendations favor bikers to walkers (bicycling is choice, walking is necessary, especially for those with disabilities)</li> </ul>
Jeff Pearsons		Fayette	<ul style="list-style-type: none"> <li>• Want to voice support for plan</li> <li>• LFUCG should give strong consideration to implementing plan</li> <li>• Desire for bike lanes and trails</li> </ul>
Ken Liberty		Fayette	<ul style="list-style-type: none"> <li>• Impressed with scope and coverage of plan</li> <li>• Concerned with whether needs of all cyclists being met (ex. Children and bike lanes/paths to school)</li> <li>• Aggressive drivers a problem</li> <li>• Needs signage on bike routes to make drivers aware of cyclists (quick fix until improvements are made)</li> <li>• Need strategy for public outreach to make sure facilities are used and future needs are evaluated on continuum.</li> </ul>

Name	Address	County	Comment
Jane Telfer		Lexington	<ul style="list-style-type: none"> <li>• Opposed to trail behind Fiddler Creek Way</li> <li>• Suggest alternative path: follow Man O War from Clearwater/Man O War intersection. Exit onto Saron Dr near gas station. Follow on-road to Saron Dr to Veterans Park.</li> </ul>
Linda Heister	768 Emmett Creek	Fayette	<ul style="list-style-type: none"> <li>• Opposed to trail between Emmett Creek Lane and Rose Hurst Way due to close proximity to homes.</li> <li>• Prefer alternative on-road trail on Saron Drive.</li> </ul>
Olivia Meck		Fayette	<ul style="list-style-type: none"> <li>• Opposed to trail behind Fiddler Creek Way</li> </ul>
Bill Meck	969 Fiddler Creek	Fayette	<ul style="list-style-type: none"> <li>• Opposed to trail behind Fiddler Creek Way.</li> <li>• Propose on-road alternative on Saron Dr.</li> </ul>
Nancy Crew Jessamine Co Health Dept		Jessamine	<ul style="list-style-type: none"> <li>• Support plan and development of complete streets and trails for physical and environmental health. Agency will do what it can to assist in implementation</li> </ul>
Andrew Wyllie		Fayette	<ul style="list-style-type: none"> <li>• Overall plan is very good</li> <li>• Bike parking needs to be addressed, particularly in high public use areas and at schools</li> <li>• Emphasize getting kids on bikes and making it safe for them</li> <li>• Construction sites should provide alternative pedestrian access</li> <li>• Parking on sidewalks a problem (need public education &amp; enforcement)</li> <li>• Trees and bushes block sidewalks</li> </ul>
John Martin		Jessamine	<ul style="list-style-type: none"> <li>• In support of bike/pedestrian initiatives</li> </ul>
Glen Sharron Helen Sharron		Jessamine	<ul style="list-style-type: none"> <li>• In support of bike/pedestrian initiatives</li> </ul>
Ellen Karle		Fayette	<ul style="list-style-type: none"> <li>• Currently dangerous to bike/walk</li> <li>• Need massive education campaign and signage to alert drivers to pedestrians</li> <li>• Law should require bike helmets (for children in particular)</li> <li>• Enforcement of drivers that endanger pedestrians/bicyclists</li> <li>• Develop method for citizen bicyclists and pedestrians to report drivers to police</li> </ul>

Name	Address	County	Comment
Joni Kling		Fayette	<ul style="list-style-type: none"> <li>• Implement sidewalk and bike lane projects now. Do not wait for road projects.</li> </ul>
Jan Emerson		Fayette	<ul style="list-style-type: none"> <li>• Impressed with mission/goals</li> <li>• Want to be involved in helping</li> <li>• Look to cities like Minneapolis/St Paul for examples of great bike trail systems</li> </ul>
Bob Crovo		Fayette	<ul style="list-style-type: none"> <li>• Clays Mill Road is listed as 'adequate' for bicycling. Is this due to planned roadway project?</li> </ul>
Bill Wilcox		Fayette	<ul style="list-style-type: none"> <li>• Would like to see bike lanes on Mason Headley and Versailles Rd</li> <li>• Thanks for bike lanes on Newtown</li> <li>• Road generally kept clean, but some areas need more attention (Versailles Rd viaduct)</li> </ul>
Kayla			<ul style="list-style-type: none"> <li>• Support bike/pedestrian initiatives 100%</li> </ul>
Mary Henson		Fayette	<ul style="list-style-type: none"> <li>• Expressed support for multi-use trails</li> </ul>
Sandra Kryst		Fayette	<ul style="list-style-type: none"> <li>• Support bike/pedestrian initiatives</li> </ul>
Marshall Wilkinson			<ul style="list-style-type: none"> <li>• Support bike/pedestrian efforts</li> <li>• Current facilities are poor (missing sidewalks, arterials dangerous for cyclists due to lack of bike lanes and aggressive drivers)</li> <li>• Local streets adequate for bicycling except that motorists speed</li> </ul>
Amy Fuller		Fayette	<ul style="list-style-type: none"> <li>• Expressed general support for plan</li> <li>• Prefer bicycling in street, but lack of bike lanes a problem</li> <li>• Inattentive drivers a problem</li> <li>• Need public education campaign</li> </ul>
Greg Guenthner	128 Ransom Ave	Fayette	<ul style="list-style-type: none"> <li>• There is a dangerous pedestrian crossing on the corner of Vine St and Main Street that should be included in the Master Plan.</li> </ul>
Earl Johnson	2005 Parasol Dr	Fayette	<ul style="list-style-type: none"> <li>• Bikers who use paths do not obey the laws</li> <li>• Bikers should have a license plate so drivers can report them and to help pay for cost of facilities.</li> </ul>
Louise Hensley	2174 Azalea Drive	Fayette	<ul style="list-style-type: none"> <li>• Support for Greenway Trail System</li> </ul>
Danny & Libby Barnes	118 ½ N Main Street	Nicholasville	<ul style="list-style-type: none"> <li>• Support greenway trail system and adopting of bike/pedestrian plan.</li> </ul>
Paula Kennoy		Jessamine	<ul style="list-style-type: none"> <li>• Request bike "trail" be deleted: from Harrodsburg Rd to Military Pike to 1267 to 169. Requested due to high traffic volumes.</li> </ul>



# *Appendix D*

## Plan Adoption



**RESOLUTION OF THE  
LEXINGTON AREA METROPOLITAN PLANNING ORGANIZATION (LAMPO)  
AMENDING THE  
2030 LONG RANGE TRANSPORTATION PLAN (LRTP) AMENDMENT NO. 19**

WHEREAS, Section 134, Title 23, USC requires that a continuing, comprehensive transportation planning process be carried out cooperatively in areas of more than 50,000 population and that the urban transportation planning process shall include the development of a Long Range Transportation Plan (LRTP) and the development of a Transportation Improvement Program (TIP) for the metropolitan planning area; and

WHEREAS, the LAMPO Transportation Policy Committee is the designated Metropolitan Planning Organization (MPO) for the Lexington, Kentucky urbanized area; and

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

WHEREAS, the amendment described in this resolution to the LAMPO 2030 LRTP is in compliance with the public review process as prescribed in the LAMPO Participation Plan; and

WHEREAS, it has been determined that this amendment is consistent with the 2030 LRTP for the Lexington Area Metropolitan Planning Organization; and

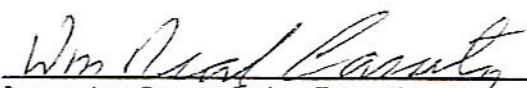
WHEREAS, this amendment will result in a 2030 LRTP that remains fiscally constrained.

NOW, THEREFORE BE IT RESOLVED that the Transportation Policy Committee of the LAMPO hereby amends the 2030 LRTP as listed below:

2030 LRTP Amendment 19: will incorporate the **Regional Bicycle and Pedestrian Master Plan** into the 2030 LRTP and replace existing bicycle and pedestrian sections of the plan. The regional plan includes both Fayette and Jessamine Counties.

COUNTIES AND STATE: Fayette and Jessamine County, Kentucky.

Adopted by the LAMPO Transportation Policy Committee this 22nd day of August, 2007.

  
\_\_\_\_\_  
Jessamine County Judge Executive, Wm. Neal Cassity  
Lexington Area Metropolitan Planning Organization  
Transportation Policy Committee (TPC) Chair

August 22, 2007 8-24-07  
Date

**THIRTY (30) DAY PUBLIC REVIEW OF THE  
LEXINGTON AREA METROPOLITAN PLANNING  
ORGANIZATION REGIONAL BICYCLE AND  
PEDESTRIAN MASTER PLAN**

The Metropolitan Planning Organization (MPO) for Fayette and Jessamine Counties will have a 30-day public review period, starting on July 11, 2007 for the **Regional Bicycle and Pedestrian Master Plan**. The plan includes both Fayette and Jessamine Counties.

Two public meetings will be held:

**Jessamine County**

**Tuesday, July 17, 2007 from 6:00 p.m. to 7:30 p.m.**, at the Jessamine County Chamber of Commerce Office, 517 North Main Street, Nicholasville, KY 40356.

**Fayette County**

**Thursday, July 19, 2007 from 6:00 p.m. to 7:30 p.m.**, at the Central Branch of the Lexington Public Library, 140 East Main Street, Lexington, KY 40507.

The plan and the report can be reviewed at the following web-sites: <http://lexareampo.org/> or <http://www.lfucg.com/bikewalklex/>.

In Fayette County, printed copies and comments sheets are available at the Lexington Public Library Central Branch, 140 East Main Street Lexington, KY 40507 and the Lexington-Fayette Urban County Government, Division of Planning, 101 East Vine St, Lexington, KY 40507, Monday through Friday, between 8:00 a.m. and 5:00 p.m.

In Jessamine County, printed copies and comment sheets are available at the Nicholasville Planning Commission, Nicholasville City Hall, 517 North Main Street, Nicholasville, KY 40356 and the Jessamine County Public Library, 600 South Main Street, Nicholasville, Kentucky 40356, Monday through Friday, between 8:00 a.m. and 4:30 p.m.

Written comments may also be sent by e-mail to [kgleason@lfucg.com](mailto:kgleason@lfucg.com). (SUBJECT: Bicycle and Pedestrian Master Plan).

For questions or concerns, please contact Kenzie Gleason at 859-258-3160.

If you are a person with a disability and require assistance to participate in the review process, contact the Division of Planning at 859-258-3160 or fax 859-258-3163. Please call as far in advance of the meetings as possible, so arrangements can be made.

B8

JULY 12, 2007

[jessamineonline.com](http://jessamineonline.com)

**800 - LEGALS**

**THIRTY (30) DAY PUBLIC REVIEW OF THE  
LEXINGTON AREA METROPOLITAN PLANNING ORGANIZATION  
REGIONAL BICYCLE AND PEDESTRIAN MASTER PLAN**

The Metropolitan Planning Organization (MPO) for Fayette and Jessamine Counties will have a 30-day public review period, starting on July 11, 2007 for the Regional Bicycle and Pedestrian Master Plan. The plan includes both Fayette and Jessamine Counties.

A public meeting will be held in Jessamine County on Tuesday, July 17, 2007 from 6:00 p.m. to 7:30 p.m., at the Jessamine County Chamber of Commerce Office, 508 North Main Street, Nicholasville, KY 40356.

The plan can be reviewed at the following locations:  
Governmental internet sites: <http://lexareampo.org/>  
or <http://www.lfucg.com/bikewalklex/>

Printed copies and comment sheets are available at the Nicholasville Planning Commission, Nicholasville City Hall, 517 North Main Street, Nicholasville, KY 40356 and the Jessamine County Public Library, 600 South Main Street, Nicholasville, Kentucky 40356, Monday through Friday, between 8:00 a.m. and 4:30 p.m.

Written comments may also be sent by e-mail to [kgleason@lfucg.com](mailto:kgleason@lfucg.com). (SUBJECT: Bicycle and Pedestrian Master Plan).

For questions or concerns, please contact Kenzie Gleason at 859-258-3605.

If you are a person with a disability and require assistance to participate in the review process, contact the Lexington Area MPO at 859-258-3160 or fax 859-258-3163. Please call as far in advance of the meetings as possible, so arrangements can be made.

Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan						
Presented to Transportation Policy Committee - August 22, 2007						
#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
<b>General Plan</b>						
		31 written public comments were submitted in support of the overall plan				
		3 written public comments were submitted in non-support of specific trail projects.				
		No public meeting attendees (approx 50 people) expressed non-support of overall plan.				
<b>Recommendations</b>						
1	<b>General</b>	Policy recommendations should be separated by projects, policies and design standards	X			Projects have been separated. Policies and design standards are grouped to avoid overlap. Comment addresses format, more than content change.
2		A summary Plan of Action for policy recommendations should be provided including any recommended order of actions to be taken. Should also include responsible agencies.			X	A recommendation shall be included to develop a summary Plan of Action, including specific tasks and responsible agencies, for submittal to the MPO. This shall occur after plan adoption to allow time for this to be fully vetted amongst government agencies.
3		Document does address subdivision regulations, but also needs to address the need to revise engineering policies and design standards.	X		X	We believe the plan addresses this, however, we will work to emphasize this in appropriate places throughout the document.
4		Specific ways to achieve planning and zoning recommendations would aid P & Z (such as the development of form-based zoning codes, revision of street design standards.)	X		X	Will add recommendation for form-based codes. Street design standards are addressed. Suggest that Planning and Zoning actions be included in Plan of Action as described above.

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

Presented to Transportation Policy Committee - August 22, 2007

#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
5		Recommendations favor bikers to walkers		X		We feel the plan provides a balance between bicycling and walking recommendations. For example, projects were evaluated for complete street upgrades based upon connectivity, safety and destinations served, rather than facility type needed. While majority of projects do include both bike/ped elements, the fact that there are more 'bike only' projects than 'ped only' projects is due to more existing mileage of pedestrian facilities. Shared use trails are considered to benefit both bikes and pedestrians. Without more specific examples of how the plan is unbalanced we cannot address this comment.
6		Recommendations favor bikers to walkers (bicycling is choice, walking is necessary, especially for those with disabilities)		X		Same as above.
7		Will there be a separation of bicycle / pedestrian issues/projects in the draft report for public review?		X		Complete street approach evaluated segments based upon segment safety, connectivity and destinations, rather than facility type needed.
8		Quick fixes should include trails in parks, completing gaps in sidewalks	X			Trail projects in parks that provide transportation opportunities are prioritized as well as sidewalk segments.
9		Ensure trails are wide enough for biker and walkers (ex. Veterans Park too narrow)	X			All trail projects recommended in the plan are shared use.
10		Implement sidewalk and bike lane projects now. Do not wait for road projects.	X			Primary purpose of plan was to identify stand-alone bike/pedestrian projects, however, decisions to upgrade constrained projects should consider cost effectiveness of waiting to perform upgrades during future planned roadway projects.



## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
11		Concerned with whether needs of child cyclists being met (ex. Children and bike lanes/paths to school)	X			Plan has strived to address all cyclist types, however, we agree that some neighborhood level improvements could benefit children. Due to regional scope of plan, our recommendation is to identify and evaluate opportunities to improve child and neighborhood access to schools through implementing Safe Routes to School programs.
12		Needs signage on bike routes to make drivers aware of cyclists (quick fix until improvements are made)	X		X	Plan recommends a Share the Road campaign to raise awareness. A recommendation to develop guidance on the installation of Share the Road signage will be added.
13		Look at different alternatives? Are there options to separate bicycles / pedestrians from traffic?			X	AASHTO provides guidance on when shared use paths versus bike lanes are appropriate along roadways. The plan should clarify that AASHTO standards should be followed.
14	<b>Complete streets</b>	Concept of balanced transportation needs to emphasize that Levels of Service for all modes will need to be balanced and considered. For example, if LOS is A or B for vehicles and LOS is D for bike/peds/transit, need to take away from one mode to improve LOS for other modes.			X	We believe this plan lays the foundation for such engineering policies, however, this will have to be addressed through the development of, or revisions to, local engineering design manuals and/or policies. A recommendation that such revisions be undertaken shall be added to plan.
15		A decision-making process that accounts for all modes is needed.			X	Same as above.
16		When the planning commission approves development on an existing road, can sidewalks and bicycles be considered? Can this be a recommendation in the Plan?	X			This is already included in plan recommendations

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
17		Do not believe that geographic equitable distribution of projects is needed. It is more important to focus on creating a core, rather than quarter mile segments throughout Lexington.		X	X	Agree and disagree. Projects were prioritized based upon connectivity, safety and destinations served, so those segments outside the 'core' with high scores will provide valuable connectivity or safety enhancements to surrounding neighborhoods. Agree that due to large potential population of bike commuters near downtown/UK area, the following projects (that are not currently within the top tier of priority projects) be moved to a higher priority: Waller Ave, Virginia Ave, Woodland Ave, Red Mile Rd. This is achieved by assigning a very high weight to projects serving UK in the prioritization matrix.
18		When considering feasibility versus priorities, there were concerns that it will not provide connections that make sense.	X			The plan prioritizes projects based upon connectivity and destinations served. Feasibility is only an indication of which projects can most easily be achieved.
19		There should be consideration of the extension of 5th street at Eastern State Hospital.		X		The plan emphasizes connectivity, however, the specifics of this project are outside the scope of this plan.
20	<b>On-road bike</b>	Were parallel routes considered along major roads?			X	The plan focused on improvements needed on the collector and arterial system. A recommendation to develop maps indicating available alternative routes on low volume streets will be included.
21		Is the concept of putting cyclists on the busiest streets a current trend?	X			Cyclists may travel on any street. While some cyclists are willing to sacrifice direct routes to travel on low volume streets, other cyclists prefer direct routes on busier street. The trend is to strive to appropriately accommodate cyclists on all streets. Most low volume streets are already adequate for cycling, so were not addressed in this improvement plan.

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
22		Are there different methods to accommodate bikes on major roads?	X			AASHTO define appropriate facility types, but this is typically bike lanes on major roads.
23		There are bumps in gutters after pavement resurfacing, especially at drainage inlets.	X			Plan recommendations address this.
24		Bikeable shoulders on certain rural roads would be great (Winchester Rd, Richmond Rd, Versailles Rd). For those with shoulders, need better maintenance.	X			Plan recommendations address this.
25		Clays Mill Road is listed as 'adequate' for bicycling. Is this due to planned roadway project?	X			Yes. Planned bike/pedestrian improvements were considered adequate for the purposes of this plan.
26		Would like to see bike lanes on Mason Headley and Versailles Rd	X			Plan recommendations address this.
27		Clays Mill 'complete street' should extend to Brannon Road in Jessamine County			X	Agree. Recommend the Jessamine County Complete Street map address this.
28		An abandoned section of Clay's Mill Road should be included in the proposed system of off-road trails.	X			This segment is currently included.
29		All downtown are projects north of Main St are 'constrained.' Suggest re-evaluating North Limestone project between Third Street and Whithers Ave to divide into two separate shorter segments with Loudon as intermediate point. Explore options of parking restrictions for bike lane installation on Loudon to Third St section for more feasible project.			X	Agree. Recommend change on Fayette County Complete Street Improvement Plan map, however, recommend project limits of Third to Seventh and Seventh to Whithers due to roadway configuration. Recommend Third to Seventh be reclassified as 'moderately constrained'
30		Project for New Circle Rd shown on Figure 23, but is not found in Table 9.			X	Agree. This was an oversight.
31		How were the rural roads selected? Were the connections to surrounding counties considered?	X			Yes. Potential routes were identified through discussions with bicyclists and regional connectivity.

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
32		Request bike "trail" be deleted: from Harrodsburg Rd to Military Pike to 1267 to 169. Requested due to high traffic volumes.		X		This route has been identified as a potential rural road bike route, but has not been officially designated as such by signage at this time. As vehicles, cyclists have a legal right to use these roadways.
33		Is anything established to accommodate bikes on the proposed by-pass on east side of Nicholasville?			X	All "proposed" roads in Jessamine County will be added to the Complete Streets map to clarify that these streets shall accommodate bicyclists and pedestrians.
34		As a biker, I request you not put rumble strips at roadway edges.			X	A recommendation regarding the consideration of bicycles and the placement of rumble strips will be added.
35	<b>Trails</b>	Bike paths should be a priority and would help generate pro-biking buzz.		X		Public outreach revealed a desire for all project types. Priority of trail, sidewalk and bike lane projects were evaluated based upon the same criteria including connectivity, safety and destinations served, rather than facility type.
36		There was concern regarding maintenance on proposed trails. Will there be a budget?			X	Such decisions are made at the local level on an annual basis, however, a recommendation regarding adequate trail maintenance budgets should be added.
37						
38		Opposed to trail behind Fiddler Creek Way. Suggest alternative path: follow Man O War from Clearwater/Man O War intersection. Exit onto Saron Dr near gas station. Follow on-road to Saron Dr to Veterans Park.		X		This trail has been approved in the Fayette County Greenway Master Plan and project funds have been allocated in the MPO TIP. Design documents have also been prepared and several meetings have been held with the neighborhood to address their concerns. The greenway in question is part of the north-south corridor trail and has been planned and intended trail development since the land was subdivided.

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
39		Same as above				Same as above.
40		Opposed to proposed trail in greenway behind Emmett Creek Lane. The greenway is very narrow.			X	Agree. This area was developed before the Greenway Master Plan was adopted and adequate width was not obtained for the trail and stream corridor. Propose the trail be rerouted from greenway adjacent to Emmett Creek to on-road at Brookridge Dr to off-road at Highlands greenway (Feasible) to Veterans Park.
41		Interest in creating a trail along the rail line near Arcadia Park (Norfolk-Southern line)		X		The feasibility of constructing a trail along this very active rail line has not been explored at this time.
42		I am strongly opposed to a trail being built on my property. I have owned property in Jessamine County, although I now live in Fayette County, and have opposed this for a long time. This property belongs to my family and has since 1933 when it was deeded back by the railroad. People who use these trails are destructive and have vandalized my property. You can't run a farm with people going through it.		X		Public outreach indicated that there is a need for bike/pedestrian facility to connect Wilmore to High Bridge Park. The plan conceptually recommends a trail on the east side of High Bridge Road. The plan recommends that a study be conducted in Jessamine County to determine more specific trail alignment opportunities.
43		The entire Hickman Creek watershed would be a great place to have a trail system.				
44		This Healthway Trail from the KY Horse Park to the KY River is sorely needed, considering Kentucky's health ranking.	X			This trail is identified as the priority north-south corridor through Jessamine County.
45		What is the timeline for the completion of the trails?	X			This is a 20 year improvement plan.



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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
46	<b>Pedestrian</b>	Construction sites should provide alternative pedestrian access.			X	A recommendation will be added to the plan to address pedestrian and bike access during private development and local capitol improvement projects.
47		Sidewalk widths in new areas should be 6 feet. Eight feet for downtown areas not wide enough for sidewalk activities such as cafes.		X		Current ADA guidelines recommend 5'. The plan recommends 6' in commercial areas. The eight foot width is considered a minimum clearance outside the furniture zones.
48		5' sidewalks in downtown areas would not match existing widths. Loss of narrow planting strip not desirable.			X	Agree. Add language to indicate 5' desirable for new development, but that sidewalk widths should consider context of neighborhood for infill projects.
49		Shorter traffic cycles should be used in high pedestrian areas.	X			This recommendation is included in the plan.
50		Require new development that occurs adjacent to arterial to construct sidewalks on the arterial. Current regulations and recommendations only address sidewalks interior to development.			X	Clarify recommendation in plan applies to exterior and interior sidewalks.
51		Parking on sidewalks and trees and bushes are a problem (need public education &	X			Education and enforcement are addressed in the plan.
52		Need massive education campaign and signage to alert drivers to pedestrians	X			Same as above
53		There is a dangerous pedestrian crossing on the corner of Vine St and Main Street that should be included in the Master Plan.		X		The plan recommends a future effort for a more detailed assessment of bike/pedestrian needs at intersections.
54		Almost every school in Jessamine County is on Wilmore Road, yet there aren't any sidewalks to get from school to school, or from residential areas to the school.			X	Wilmore Road has been further emphasized as a priority by designating it as a section of the 'east-west' priority corridor through Jessamine County.

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
55	<b>Community development and design</b>	Recommendations for pedestrian-oriented development are soft. Pedestrian orientation should be required.	X			This is recommended in the plan, however, local planning jurisdictions must adopt ordinances or design guidelines for this to be required.
56		Connectivity requirements should mandate the provision of bike and pedestrian easements for connections.	X			Same as above
57		Connect existing neighborhoods to adjacent parks.	X			This is recommended in the plan.
58		Identify neighborhoods that should be connected and recommend that the city purchase easements for bike/pedestrian access. Providing access through neighborhoods more appealing to children and casual cyclists.			X	Due to regional scope of this plan, this type of neighborhood level analysis is not feasible at this time. A recommendation to evaluate such opportunities will be added.
59	<b>Schools</b>	Incentives and disincentives for biking and walking to school are discussed but specific actions are not recommended such as parking fees, etc.			X	Due to school and public buy-in needed for such policies, it is recommended that such actions be identified and implemented through Safe Routes to School programs. A recommendation will be added to the plan to develop a 'toolbox' of such policies and actions.
60	<b>Transit</b>	What is the relationship of transit and bicycling in the Plan?	X			The plan contains several recommendation regarding transit and bicycle use.
61		There are issue regarding long wait times for Transit users. Infrequent headways discourage transit use.		X		This is outside the scope of this plan.
62		Can transit be incorporated in this plan?	X			We feel that transit has been incorporated to the greatest degree possible in the policy recommendations and project prioritization matrix.
63	<b>Traffic Calming</b>	Need more emphasis on residential street design. Traffic calming devices should be included at beginning of development.			X	A recommendation to this effect will be added to the plan.
64		Identify streets on which motorists greatly exceed speed limits and stripe traffic calming lines to narrow travel lanes and slow traffic (ex. Lansdowne Dr, Fontaine)	X			The plan recommends the use of traffic calming.

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
65		Is slowing down traffic part of this plan?	X			Same as above
66	<b>Safety</b>	Law should require bike helmets (for children in particular)				The initial public outreach did not identify this as a community-wide concern.
67		Need public education campaign	X			The plan recommends a Share the Road Campaign
68		Need to start an awareness campaign similar to motorcycle ads on the radio.	X			Same as above.
69		Bikers who use paths do not obey the law. Bikers should have a license plate so drivers can report them and to help pay for cost of facilities.	X	X		The plan recommends education and enforcement of rules of the road for bicyclists. The plan does not recommend license plates for bicyclists as this is not national practice.
70		What does this plan do to prevent ATV's from using trails?	X			The plan recommends enforcement of rules of the road.
<b>Implementation (Chapter 6)</b>						
71		Have priorities been established in the Draft Plan?	X			Yes
72	<b>Evaluation</b>	Need strategy for public outreach to make sure facilities are used and future needs are evaluated on continuum.	X			The plan calls for citizen-based oversight groups and for evaluation.
73		How can public become more active?			X	Recommendations regarding ways in which the MPO can better inform the public of projects, programs and ways to get involved, will be added to the "Public Support and Involvement" section. This may include website development, annual reporting documents and presentations and speaking engagements.
73		Identifying volunteers and specific events for promoting bicycling and walking would be helpful.			X	Same as above
74		Planning studies often sits on the shelf -- how can public get things moving?			X	Same as above
76		Can projects be made more visible through booths, materials, etc.?			X	Same as above

## Summary Public Comment & Changes to Draft Regional Bicycle & Pedestrian Plan

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#	Plan Chapter/ Topic	Comment	Plan currently addresses	No Change	Change	Explanation of change / no change
77	<b>Funding</b>	A bike tax or tax incentives for funding bicycling facilities should be considered.	X			A recommendation to explore local support for such a tax is included in the plan
78		Impact fees associated with new development or re-development could be another source of funding.	X			This is recommended in the plan

# *Appendix E*

## Bibliography





## Appendix E: Bibliography

The information in this bibliography follows the suggested practice for reference lists described in *A Manual of Style*, 12<sup>th</sup> Edition, revised (University of Chicago Press). To assist the reader, the resources are divided into the following categories: bicycle and pedestrian planning resources; bicycle and pedestrian accommodation in other communities; regional and local planning documents and other resources; internet sources; and other sources.

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