

2.0 EXISTING CONDITIONS & ANALYSIS



This chapter summarizes the existing conditions for bicycling and walking in Shelby County. A comprehensive analysis was conducted by the project team to understand the existing conditions within the county. The evaluation included: data collection and a review of plans, ordinances, and programs related to bicycling and walking; an inventory and summary of existing bicycle and pedestrian facilities; analysis of key destinations and existing connectivity; and the condition of existing infrastructure.



Shelby County offers many opportunities for outdoor recreation, and all of the parks include a number of recreational options to satisfy both residents and visitors to the county. The better known parks include Clear Creek Park, Red Orchard Park, Shelby Trails Park, Finchville Park, and the Skate Park in Shelbyville.

Other recreation areas include the Greenway Trail, the Lake Shelby Campground, and several smaller parks such as Stratton Bottom Park and Elmo Head Park. In all,

Shelby County and the City of Shelbyville operate 12 parks that cover roughly 800 acres.

The City of Simpsonville has the Fred Wiche Park and may soon expand that facility with a recent adjacent land acquisition. Simpsonville was awarded a “Playful City USA” designation in 2015 by KaBoom!, a national non-profit organization that encourages communities to increase “playability” and to foster family-friendly environments that promote play everywhere. At that time, it was the smallest city in the nation to have received the award.

Shelby County does not have a large, active community of recreational and non-recreational cyclists/pedestrians. This is likely resulting from the lack of connectivity within the county and from the fact that most workers travel longer distances for work. From observations during field investigations and interviews with local residents, very few people commute to work using a mode of transportation other than a single-occupancy vehicle (car, truck, SUV, etc.).



A general assessment was conducted of the existing bicycle and pedestrian networks by gathering data concerning existing infrastructure, bicycle and pedestrian travel, roadway characteristics, and connectivity. This section of the Master Plan describes key findings in those areas.

2.1 EXISTING BICYCLE AND PEDESTRIAN FACILITIES

The baseline for pedestrian needs and issues in Shelby County included a targeted review of public perceptions and existing conditions for walking. Key takeaways from this review are presented below.

Pedestrian and Bicycle Travel

The levels of commuting by walking or biking as a means of travel to work are relatively low in Shelby County. According to [American Community Survey](http://www.census.gov) (www.census.gov, 2014) data (a product of the United States Census) from 2014, approximately 94% of the residents use a car, truck or van to travel to work. Only 2.3% walk to work, and less than 0.1% use a bicycle as transportation to work (see Figure 2.1 below).

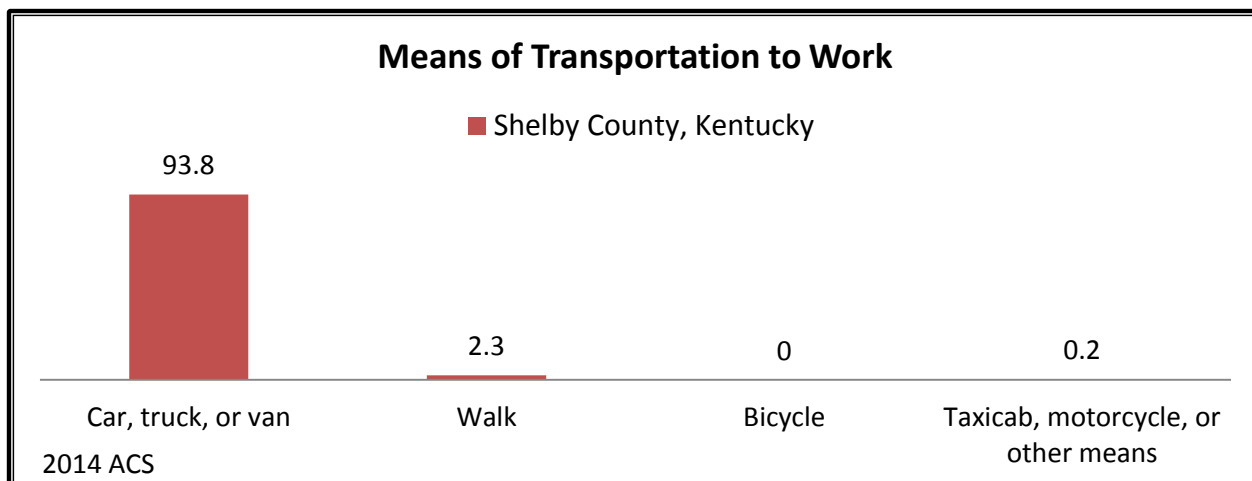


FIGURE 2.1

Pedestrian Facilities

The existing pedestrian infrastructure in Shelby County consists of roughly 90 miles of sidewalks along over 50 miles of roadway (sidewalks exist on both sides of many roads). Pedestrian facilities are primarily concentrated in the incorporated cities (Shelbyville and Simpsonville), with some sidewalks in the smaller communities of Bagdad, Finchville and Waddy. Recreational trail networks exist near Clear Creek Park, at Lake Shelby, as the Clear Creek Greenway along portions of Clear Creek itself, and in Red Orchard Park. There are two locations where a multi-use trail runs alongside a roadway: on a section of KY 2861/Mack

Walters Road and on KY 1848 (from US 60 to Rolling Ridge Way). The existing pedestrian networks in each city and in the three other communities mentioned are depicted in **Appendix A on Maps 2.1 through 2.7**.

An analysis was done to determine the condition of the existing sidewalk infrastructure. Overall, Shelby County sidewalks are in “good” condition, with a few segments along the Seventh Street corridor rated in “poor” condition. The sidewalks in downtown Shelbyville and in Simpsonville are generally new or have been well-maintained, and the sidewalk segments noted previously are isolated and do not suggest a systemic problem on a greater scale.



A public sidewalk must meet the *Americans with Disabilities Accessibility Guidelines* (ADA) standards, which include having a firm, even, slip-resistant surface (typically asphalt or concrete), and a maximum grade of 8.2%. More details regarding compliance with federal standards and policies can be found through the Federal Highway Administration (FHWA) [Bicycle and Pedestrian Program](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/) (https://www.fhwa.dot.gov/environment/bicycle_pedestrian/).

The Kentucky Transportation Cabinet’s [Highway Design Guidance Manual](http://transportation.ky.gov/Highway-Design)

(<http://transportation.ky.gov/Highway-Design>) suggests the following guidelines for providing pedestrian accommodation in urban areas:

- 5’ sidewalks with 2’ buffer strip on both sides of the roadway (desirable)
- 5’ minimum, 6’-10’ desirable for sidewalks in heavily traveled pedestrian areas, Central Business Districts (CBDs), and other special applications

- 10' desirable, 8' minimum shared use path (two-way directional travel)
- Shoulders (for rural cross-section in urban areas): minimum width based on KYTC policy as stated in HD-700, "Geometric Design Guidelines"
- 10' shared use path with 5' sidewalk on opposite side

The KYTC's [Highway Design Guidance Manual](#) suggests the following guidelines for pedestrian accommodation in rural areas:

- Shoulders: minimum width based on KYTC policy as stated in *Highway Design Guidance Manual*, HD-700, "Geometric Design Guidelines"
- 10' desirable, 8' minimum shared use path (two-way directional travel)
- 5' sidewalk with 2' buffer strip on both sides of the roadway (desirable for urban cross-section in rural areas)



Bicycle Facilities

Although there are a number of cyclists throughout the community, Shelby County has no bike lanes, side-paths, or shared/paved shoulders designated for bicycle usage. The only facilities both alongside a roadway and used by bicyclists are multi-use paths on a section of KY 2861/Mack Walters Road in Shelbyville and on KY 1848 (from US 60 to Rolling Ridge Way) in Simpsonville.

Bicycle Facilities along State-maintained roads across the state include bike lanes, side-paths, paved shoulders, and shared lanes denoted with the use of pavement

markings. KYTC issued the *Pedestrian & Bicycle Travel Policy* in 2002 to guide an increase in the development of bicycle and pedestrian facilities on or along State roads. The policy requires the review of bicycle accommodation on all new or reconstructed state-maintained roadways. KYTC will also consider accommodating bicycle transportation when planning the resurfacing of roadways, including shoulders.



Multi-Use Paths

Currently, Mack Walters Road and KY 1848 are the only roads in Shelby County that have multi-use paths running parallel to the roadway. A multi-use path can serve as part of a transportation circulation system, and supports multiple modes such as walking, bicycling, and skating. It typically has a surface that is asphalt, concrete, or firmly packed aggregate. The [AASHTO Guide for the Development of Bicycle Facilities](https://safety.fhwa.dot.gov/ped_bike/docs/b_aashtobik.pdf) (https://safety.fhwa.dot.gov/ped_bike/docs/b_aashtobik.pdf) defines a shared use (multi-use) path as being physically separated from motor vehicular traffic with an open space or barrier. Shared use paths are best utilized in areas where driveway and road access crossings are limited in order to minimize the number of motor vehicle/path-user conflicts. KYTC's [Highway Design Guidance Manual](#) suggests that multi-use paths in urban areas be a minimum of eight (8) feet wide, with a desirable width of ten (10) feet.



2.2 CRASH DATA

During the four (4) year period from 2012-2105, there were 17 crashes reported in Shelby County involving a bicyclist and a motor vehicle. Over the same period of time, 35 crashes involving motor vehicles and pedestrians occurred in the County. As could be reasonably expected, the majority of the crashes occurred on some of the most heavily-travelled routes such as US 60, KY 55 and KY 53. However, local roads in the community represent hazardous situations for both pedestrians and cyclists as well. Safety considerations should be paramount in any improvement scenario going forward.

2.3 CONNECTIVITY

There are both obvious and not-so-obvious gaps in the bicycle and pedestrian network in Shelby County. The maps depicting the existing facilities readily reveal the shorter gaps, but a further analysis of the lack of connectivity between important community destinations should be made. A well-connected transportation network reduces the distances traveled to reach destinations, increases the options for routes of travel, and can facilitate walking and bicycling. Well-connected, multimodal networks are characterized by seamless bicycle and pedestrian infrastructure, direct routing, accessibility, few dead-ends, and few physical barriers. Increased levels of connectivity are

How can it benefit my community?

In addition to reducing Greenhouse Gas (GHG) emissions, greater bicycle and pedestrian connectivity can:

- » Encourage physical activity and promote a healthy lifestyle
- » Increase transit ridership
- » Provide equal access to destinations for users of all modes
- » Increase safety for bicycles and pedestrians
- » Increase community involvement and activity in developing policy and promoting projects

associated with higher levels of physical activity from transportation. Connectivity via transportation networks can also improve health by increasing access to health care, goods and services, etc. Strategies to improve pedestrian and bicycle connectivity include:

- Short block lengths
- Implementation of a Complete Streets policy
- Bicycle/pedestrian outlets for cul-de-sacs and dead ends
- Safe and visible bicycle and pedestrian facilities
- Prioritization of multimodal access to public transportation

