

## Chapter 2

### Existing Walking Conditions

#### Foundation for a Walkable City

Louisville is Kentucky's largest city, offering an array of activities and events that attract pedestrians from local communities and all over the city. Louisville developed as a city where recreational walking is an important aspect of its culture.

#### Parks and Parkways

Walking for recreation was enhanced in the early 1900's when Fredrick Law Olmsted designed a system of parks and parkways. The Olmsted Park System remains intact today and will be augmented with additional park space by the Louisville Loop Trail, a 100-mile continuous paved multi-use trail around Louisville, as it is completed (Appendix O).<sup>1</sup>

#### Louisville's Community Walkability Plan

Public input was a central component of the Walkability Plan process. It was captured in a number of ways, including numerous interviews, public meetings, and an on-line survey focusing on walking in Louisville. Survey results reveals (as of April 22, 2008) over 70% of Louisvillians walk regularly for recreation or enjoyment, and over one-third walk to work, school or for shopping and entertainment. In addition, just over half of respondents walk to these activities at least part of the time. Respondents indicated that more amenities within walking distance would mostly likely encourage walking (20% of responses). Over 15% of responses indicated that off-road walking trails would encourage them to walk for recreation.<sup>2</sup>

#### Barriers to Walkability

Missing connections, roadway facilities, distance and safety concerns create barriers to walking for Louisville residents. The lack of sidewalks to destinations such as parks, shopping and schools was cited as a barrier to walking in the on-line survey (Appendix D and E). Survey respondents also suggested that



<sup>1</sup> See [http://www.louisvilleky.gov/MetroParks/cityofparks/metro\\_loop\\_trail.htm](http://www.louisvilleky.gov/MetroParks/cityofparks/metro_loop_trail.htm) for more information.

<sup>2</sup> The final results of the survey will not be evaluated until the scheduled pedestrian summit, at which point a thorough analysis can be initiated.

complete sidewalk networks are needed to better connect neighborhoods both internally, as well as externally. For example, a respondent who lives in Jeffersontown reports that “sidewalks stop and start, instead of [being] continuous.”

**Sidewalk Network**

Before Step Up Louisville can plan future pedestrian facilities, it is important to determine the location of existing facilities. Louisville’s current sidewalk network on collector street level and above is 384 miles (Figure 2.1). These facilities range from sidewalks to multi-use trails. Table 2.1 describes how many miles of each pedestrian facility. Even though the pedestrian network currently reaches a number of areas, there are many more areas without pedestrian facilities. Understanding these areas will better help Step Up Louisville plan where and what type of pedestrian facilities should be installed. The next step in understanding where and how the pedestrian network is expanded is through Louisville’s crash data and a latent demand analysis.

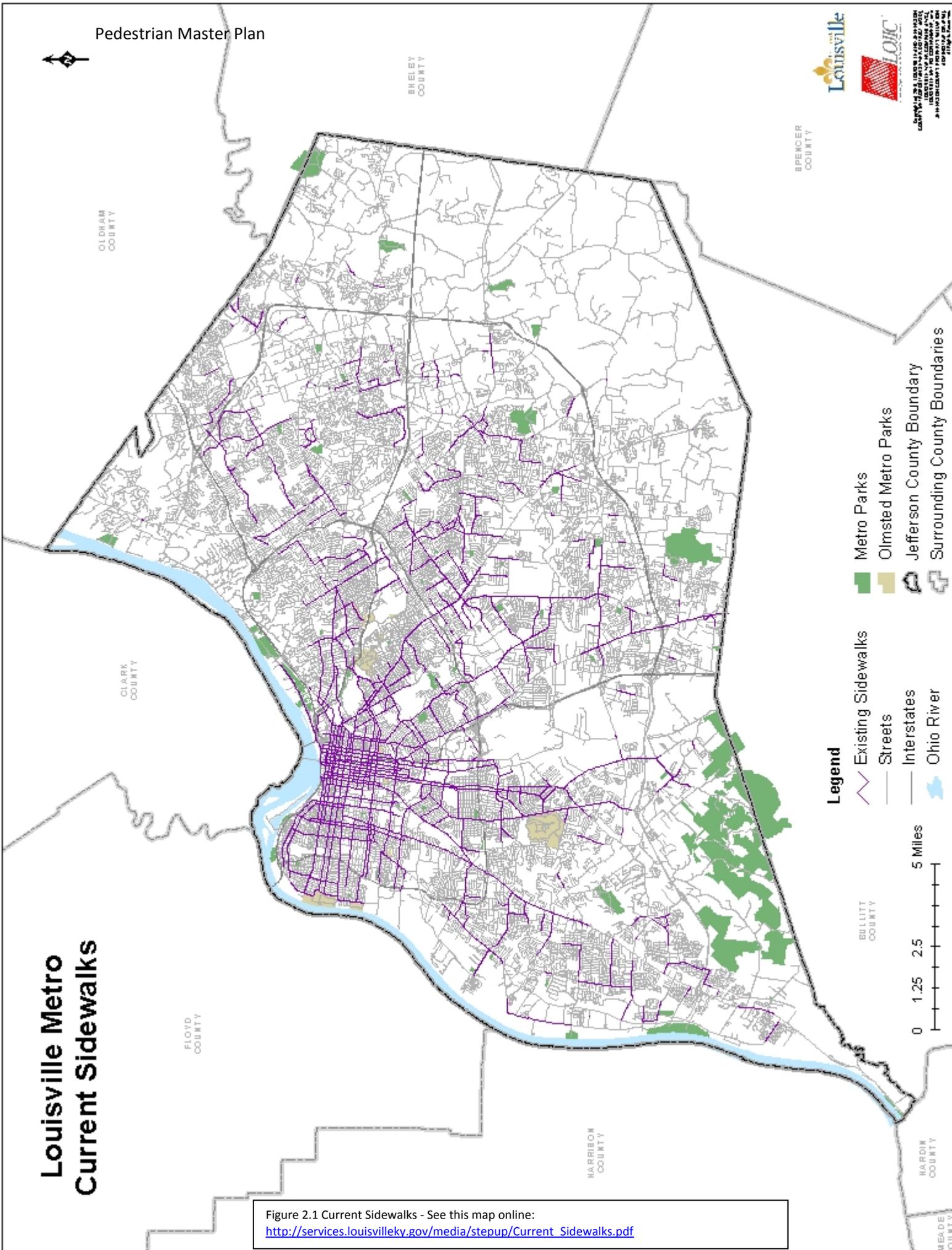
**Table 2.1: Existing Pedestrian System Network**

Facility Type	Existing	
Speed Humps	72	*Assessed mileage based upon, sidewalks along collector streets and larger streets. Neighborhood streets are smaller than collector streets and therefore neighborhood sidewalks were not assessed because they were out side the scope of the study.
Traffic Signals	1000	
School Flashers	27	
Sidewalks	384* miles	
Mayor’s Miles	9 miles	
Multi-use trails	24 miles	
Total Network	417 miles	





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# Louisville Metro Current Sidewalks

### Legend

- Existing Sidewalks
- Streets
- Metro Parks
- Olmsted Metro Parks
- Jefferson County Boundary
- Surrounding County Boundaries
- Interstates
- Ohio River

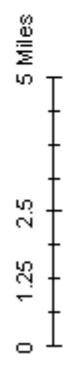


Figure 2.1 Current Sidewalks - See this map online: [http://services.louisvilleky.gov/media/stepup/Current\\_Sidewalks.pdf](http://services.louisvilleky.gov/media/stepup/Current_Sidewalks.pdf)

## Street Crossings

Street crossings present one of the greatest safety hazards for pedestrian travel. Through the public participation process and field observations, a number of concerns were raised related to street crossings in Louisville:

- 🚶 Angled streets create skewed intersections, causing an increase in crossing distance for pedestrians and allowing motorists to make higher speed turns.
- 🚶 Multi-lane arterials carry substantial traffic and create wide intersections and long crossings for pedestrians. Many residents perceive signals to prioritize motor vehicle movement and don't allow enough time for pedestrians to cross.
- 🚶 Most crossing treatments at uncontrolled crossings on Louisville's arterials are limited to high visibility crosswalks. Motorists often fail to yield the right-of-way to pedestrians at these crossings.
- 🚶 Motorist behaviors, including failing to stop for pedestrians in crosswalks, running red lights and exceeding posted speed limits significantly increase safety hazards for pedestrians. Turning motorists are often in conflict with pedestrians crossing major arterials.

Pedestrians often fail to use legal crossings, cross against the light, or step into the roadway without checking for oncoming traffic. These behaviors put pedestrians at risk. Crossing treatments such as high visibility crosswalks, median refuge islands, and curb ramps that meet ADA requirements are lacking in many locations. Additional safety measures are needed around schools (such as crossing guards, signs and traffic calming).

## Accessibility for People with Disabilities

Accessibility is also a critical issue in Louisville. Louisville is committed to providing universal access within the public right-of-way for people with disabilities. This is a challenge in Louisville, where many sidewalks and crossings were built well before the Americans with Disabilities Act Accessibility Guidelines (ADAAG) were introduced. While there are mechanisms in place to ensure new construction meets the latest accessibility



guidelines for the public right-of-way, there are many locations throughout Louisville that are not accessible due to narrow sidewalk widths (i.e. pinch points at obstructions), inadequate or a lack of curb ramps, and inaccessible pedestrian signals, among other deficiencies.

## Pedestrian Crash Data

Crash data obtained from the Kentucky State Police (KSP) Collision Analysis public website from January 1, 2006 to May 31, 2009, was used for these analyses.<sup>3</sup> Maps of the location and severity of crashes can be seen in appendix J.

Pedestrian crashes were reviewed (Table 2.2). Between January 1, 2006 and May 31, 2009, the KSA database reports 1314 pedestrian crashes. These were also fairly consistent, but rising, across the full years reviewed, ranging from 367 in 2006 to 405 in 2008. The highest fatality figure was 24 in 2008.

<sup>3</sup> <http://crashinformationky.org/KCAP/Public/Home.aspx>

As was the case with bike crashes, pedestrian crashes in conditions other than daylight account for a disproportionate share than might be expected relative to the number of trips made at those times. In the case of pedestrians, 41% of reported crashes took place outside of daylight conditions. This disproportionate distribution again suggests that there is a higher risk associated with walking in suboptimal lighting condition. The factors that contribute to this increase are similar to those described in the section about bicycle crashes above: fatigue on the part of either party, a more likely influence of alcohol, and reduced visibility.

Table 2.2 Louisville's Crash Statistics		Bike Data			Pedestrian Data		
Year		2007	2008	2009	2007	2008	2009
Reported Injuries		132	117	104	255	257	224
Fatalities		1	3	2	13	24	8

### Motor Vehicle Speeds

Higher motor vehicle speeds create a less comfortable environment for pedestrians, increase required stopping distance, and increase the frequency and severity of pedestrian crashes. A pedestrian hit by a motorist traveling 40 mph has a slim chance of survival compared to a pedestrian who is hit by a car that is traveling only 20 mph (see Figure 2.2).

Louisville Metro Department of Public Works conducted a speed study in 2008 and 2009 on arterials and collectors throughout Louisville. The 85th percentile speeds on many of Louisville's principal and minor arterials were found to be well over the posted speed limit. Findings of the speed study for the priority corridors identified through this plan can be seen in the table below.

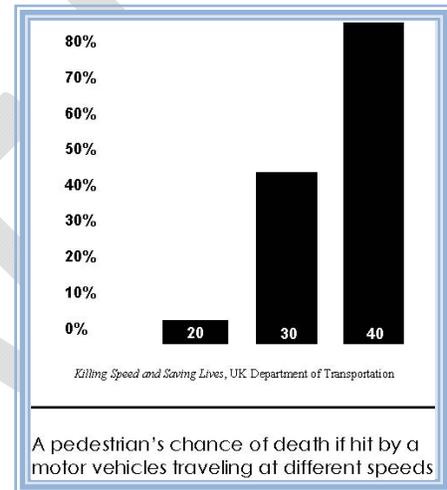


Table 2.3 85th percentile speeds on Louisville's principal and minor arterials						
NAME	BEGINNING	END	POSTED SPEED	85TH %	CLASSIFICATION	MPH>
Whipps Mill	Hurstbourne Lane		35mph	46.11mph	MINOR ARTERIAL	6mph
Portland Ave	23rd St	24th St	35mph	41.86mph	MINOR ARTERIAL	7mph
Chamberlain Lane			55mph	46.64mph	PRIMARY	>8mph
Sheperdsville	Famous Way		35mph	45.32mph	MINOR/EXPRESS	10mph
Old Bardstown			45mph	50.52mph	PRIMARY	6mph
4800 Jennings Ln			35mph	47.23mph	PRIMARY	12mph
St Catherine			35mph	37.90mph	PRIMARY	3mph
Garland	32nd St	Hazel	25mph	36.08mph	PRIMARY	12mph
Rouff Rd	Taylorville Road	Old Rouff Rd	55mph	65.89mph	PRIMARY	11mph

NAME	BEGINNING	END	POSTED SPEED	85TH %	CLASSIFICATION	MPH>
Seneca Park Road			25mph	38.52mph	PRIMARY	14mph
Applegate Ln			25mph	47.87mph	SECONDARY	23mph
Broad Run Road	at Back Run		35mph	30.47mph	SECONDARY	>5mph
Backrun	at Broad Run Road		35mph	31.88mph	PRIMARY COLLECTOR	>3mph
Billtown	Fairground		35mph	49.54mph	MINOR/EXPRESS	15mph
Fairmount			35mph	17.50mph	SECONDARY	>18mph
Deering			25mph	24.21mph	SECONDARY	>1mph
Flower Vale			25mph	24.79mph	SECONDARY	>1mph
Frankfort	at Weikel		35mph	33.86mph	RESIDENTIAL	>3mph
Hubbards In			35mph	36.90mph	MINOR SECONDARY	2mph
Schaffer	Billtown Rd		35mph	47.60mph	RESIDENTIAL	13mph
Vine	Breckenridge		35mph	40.51mph	MINOR	6mph
Shelbyville	E Long Run Rd		45mph	64.69mph	MINOR	20mph
St Andrews Church	St Antonys		45mph	43.41mph	MINOR	>2mph
Vaughn Mill	Pennsylvania		25mph	27.67mph	PRIMARY	3mph
5738 Watterson Trail	Hurstbourne Parkway		35mph	39.82mph	RESIDENTIAL	5mph
River Rd	Avish		35mph	44.08mph	MINOR	9mph
Whipps Mill			45mph	49.14mph	PRIMARY	4mph
Shelby	Camp	Ormsby	25mph	27.90mph	MINOR	3mph
Bank			35mph	39.84mph	MINOR	5mph
Grade	Beanblossom	Fern Grade	35mph	34.10mph	PRIMARY	>1mph
Goss	Logan		25mph	34.27mph	MINOR	9mph
3400 W Virginia Ave	Dumesnil	Hale	35mph	27.94mph	RESIDENTIAL	>7mph

## Pedestrian Safety Innovations

While Louisville has many of the elements needed for a walkable city, there are opportunities to improve conditions for pedestrians. Recommendations in the following chapter to amend Louisville's policies will create standards for facilities that will improve pedestrian safety and comfort. With these benefits in mind, the Pedestrian Master Plan sets forth a series of actions which will improve the walking conditions in Louisville. Implementation of this plan will result in an improved walking environment which will encourage an increase in walking by residents and visitors, improve their safety, and enable additional residents to choose walking as their primary transportation choice.