CHAPTER II. BIKING CINCY: STATE OF THE CITY IN 2010

Prior to developing the plan goals and objectives, an analysis of bicycling conditions throughout the City was undertaken. Additionally, an inventory of bicycle-related programs was compiled along with a list of bicycle advocacy, education and encouragement organizations. A summary of the findings of this existing conditions analysis follows.

GENERAL BICYCLING CONDITIONS

Bicycling conditions in Cincinnati vary considerably throughout the city and its surrounding communities. The Downtown and the central part of the city are fairly amenable to bicycling due to the extensive street grid and diverse mix of land uses. Riverside Drive and a variety of other roadways offer attractive riding conditions due to their level terrain and/or spectacular scenery.

However, neighborhoods to the west, northwest and east have inconsistent street grids and are fairly hilly. In many parts of the city, arterial streets provide the only through routes for medium or longer distance trips, yet they typically have narrow travel lanes and motor vehicle traffic that can be intimidating to most bicyclists, leaving few routes that have low traffic speeds/volumes as well as time-saving directness.

EXISTING BICYCLE FACILITIES

Since the 1976 Bikeway Plan was adopted, the Department of Transportation and Engineering and Department of Parks have implemented a modest number of bicycle facilities and signed a few miles of bike routes. More recently, as the city initiated this planning process, a number of new facilities were installed, most notably including *Shared Lane Markings* (a new facility type finding widespread use across the U.S. in recent years) on portions of Madison Road in O'Bryonville and Clifton and Ludlow Avenues just west of the University of Cincinnati. A summary of existing facilities is provided in Table 2. Figure 1 (p. 16) shows where these facilities are located.

Quantity In Miles	Bicycle Accommodation
5.4	On-street Bike Lanes
1.8	Shared Lane Markings (Sharrows)
18.8	Shared Use Paths (bicycle and pedestrian trails)
23.0	Signed Bike Routes
6.1	Wide Outside Curb Lanes
1.0	Connecting Paths (sidewalk links; bike/pedestrian overpasses; traffic-limited park roads, etc.)
50.0+	Downtown Bike Racks

Table 2: Existing Bicycle Accommodations

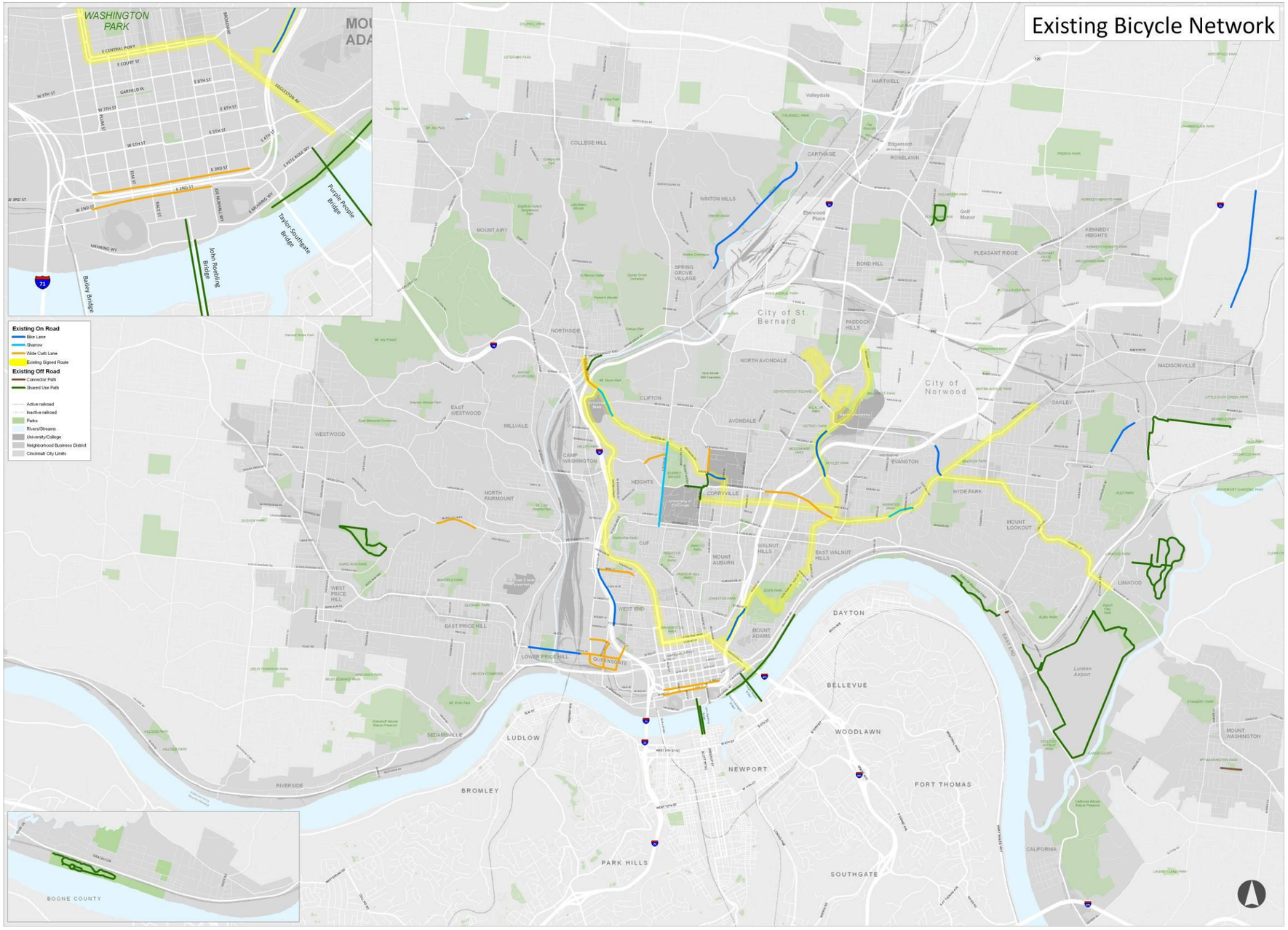
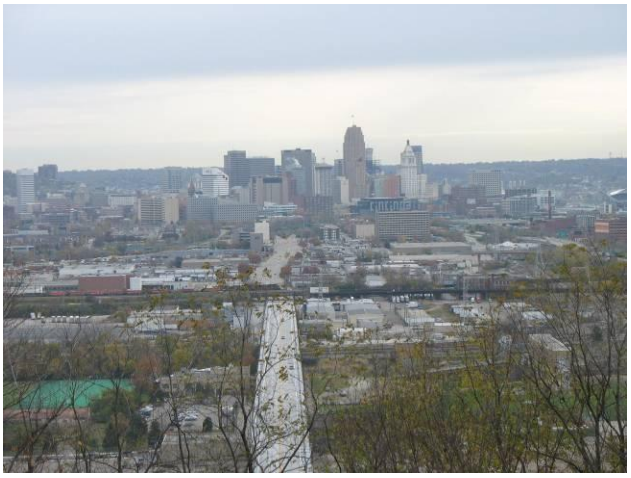


Figure 1: Existing Bicycle Facilities

PHYSICAL BARRIERS TO BICYCLING

In addition to a general lack of on-street facilities for bicycling, a number of physical barriers may deter people from venturing out on two wheels. An analysis of these barriers was developed by the consulting team and augmented by input from the public through a "Community Walk" website. Street discontinuities and separation of neighborhoods are the primary difficulties created by barriers. Figure 2 (p. 18) identifies the most significant barriers, including the following:

- Areas with steep terrain, valleys and large forests
- Major highways and railroad lines that have few or no bicycle-friendly crossings
- Industrial zones and rail yards
- Rivers and streams with few crossings
- Large cemeteries, golf courses and other land uses where bicycle access is limited or prohibited
- Difficult intersections and major arterial roads with challenging traffic conditions



- Poor access on main bridges, including approach sidewalks lacking curb ramps, narrow passageways on the bridges, and discontinuities such as stairs, that force bicyclists to dismount

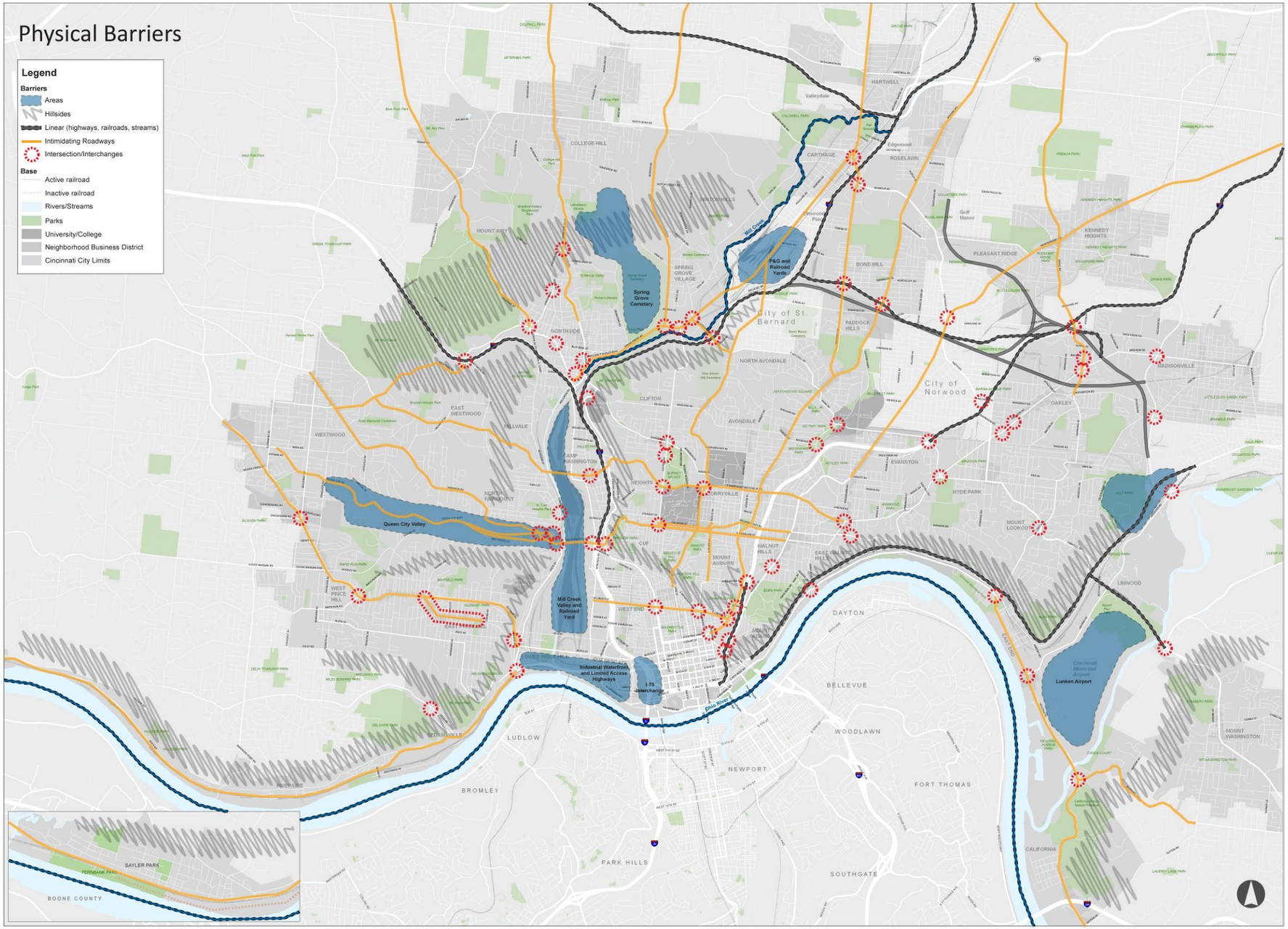
System wide issues include:

- Curbside parking allowed on the preponderance of streets, which frequently places cyclists in the door zone of parked cars
- Conflicts with buses

In addition to these barriers, more than six hundred comments were received from the public on an interactive website. These comments identified both desirable locations for bicycling and those where cyclists find uncomfortable and hazardous conditions. Table 3 shows the number of locations where website users identified one of nine types of physical conditions that act as a deterrent to cycling.

Quantity	Type of Barrier
57	Uncomfortable traffic conditions
37	Complex and difficult intersections
22	Debris in the bicycling area; street sweeping needed
16	Short connector paths are needed
11	Bike parking is needed
10	Dangerous drainage grates
8	In-street signal actuators that do not detect bicycles
4	Bicycle access to public stairway needed
3	Over- or underpasses are needed

Table 3: Barriers Identified Through Public Comment



city of CINCINNATI

Cincinnati Bicycle Transportation Plan

June 2010 DRAFT

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Figure 2: Physical Barriers to Bicycling

SAFETY

Actual safety and the public's perception of safety are both key factors influencing people's decision to ride; and both are important issues for the CBTP to address.

Crashes, Injuries and Fatalities

With regard to bicyclist fatalities resulting from traffic crashes, the Alliance for Bicycling and Walking found Ohio to rank in the better half of all states. Ohio ranks twenty-third best, with an average of 4.8 fatalities annually for every 10,000 regular bicycle commuters.[1] On a national scale, there are 5.2 fatalities per 10k of bike commuters[2].

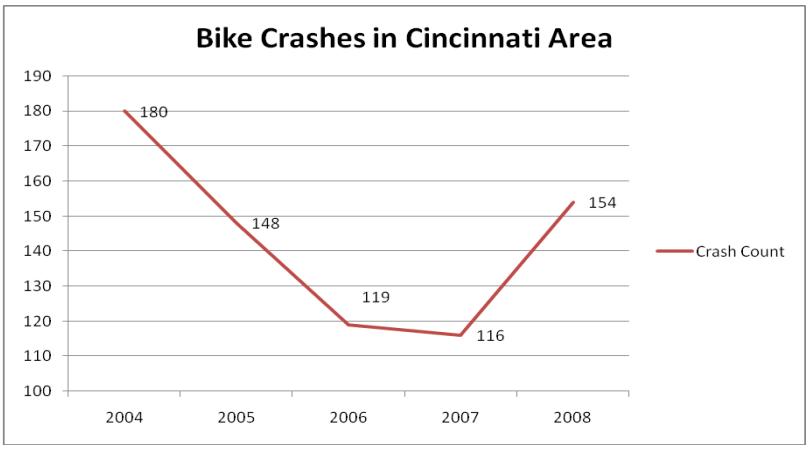


Figure 3: Bike Crash Data (provided by OKI)

Like the state as a whole, the Cincinnati area has a relatively low bicycle crash fatality rate: a total of four fatalities in Hamilton County from 2002-2006.[3] A factor contributing to this low fatality rate is the low level of bike commuters[4].

While fatalities may be low, between 2004 and 2008 Cincinnati had an average of 143 reported bicycle crashes per year; likely many more were not reported. Many of these crashes involve children and youth under age 16.

According to Cincinnati Children's Hospital Medical Center, in 2002 the following data about bicycle injuries to children was collected at the center:[5]

- There were 728 children treated and released from the Cincinnati Children's Emergency Department for bike-related injuries.
- Eighty children were injured severely enough to require hospital admission. Eight of them (10%) reported that they were wearing a helmet. Fifty-three (66%) reportedly were not wearing a helmet. For the remainder, the status of helmet use is unknown.

[1] Using national data from 2005-2007, Bicycling and Walking in the United States: 2010 Benchmarking Report, Alliance for Bicycling and Walking. Using Fatality Analysis Reporting System data from the National Highway Traffic Safety Administration (USDOT), Chapter 3: Safety, ranks all fifty states with regard to exposure and fatality rates; pp. 45-56.

[2] Ibid.

[3] OKI Regional Bicycle Plan, May 2008

[4] The ACS (U.S. Census) bike commute rate is used as a surrogate for exposure in this calculation.

[5] http://www.cincinnatichildrens.org/svc/alpha/r/bike-helmet/facts.htm

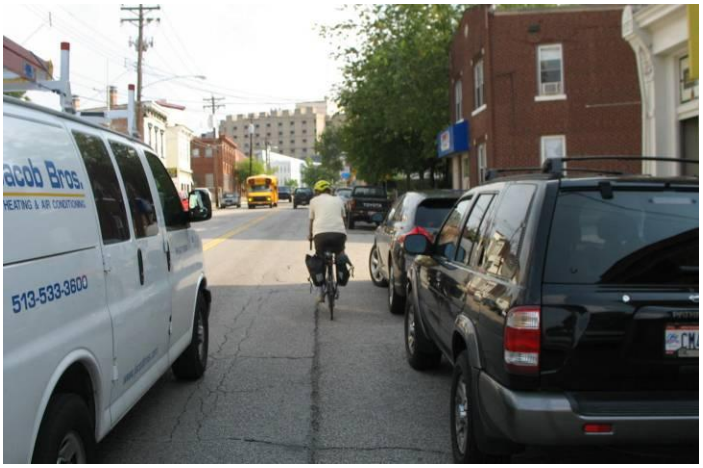
- 85% of the children sustaining head injuries were not wearing a helmet at the time of their bike accident.

To begin to address this issue, in 2004 the City of Cincinnati adopted a mandatory helmet law for children and youth 16 years of age and younger. A mandatory helmet law can help address the problem of serious injuries or fatalities among youth; however, helmet ownership must be high for it to have the intended effect.

What may be most important to child/youth bicycle safety is ensuring that children in the city (and their parents) be instructed in safe bicycle riding skills and habits. The ultimate objective is to ensure that all young people have access to a helmet, that their helmet is fitted properly, and that the social norm is to wear it regularly.

PERSPECTIVES OF THE CYCLING PUBLIC

As noted in the Executive Summary, a survey of over 600 bicyclists was conducted for this plan, and its findings are instructive for understanding how actual conditions in the City are perceived by existing and would-be cyclists.[6]



When asked "What prevents you from cycling more often?" the top 2 of 13 possible reasons selected included:

- Not enough bike lanes -- 61%
- Unsafe/unlawful motorist behavior -- 52%

Survey respondents were also asked to grade various aspects of the City's bicycling environment (on a scale of A+ to F). The following illustrates how the City faired:

- Completeness of the citywide bicycle network – 87% graded as C or worse.
- Cincinnati's street pavement quality – 59% graded as C or worse.
- Respect Cincinnati motorists accord to cyclists -- 72% graded as C or worse.
- Respect Cincinnati cyclists accord motorists – 32% graded as C or worse.
- Feeling of safety in traffic – 57% graded as C or worse (an additional 7% won't ride in traffic).
- Overall city rating for bicycling -- 82% graded the city as C or worse.

Fifty-two percent of the respondents classified themselves as "Skilled" cyclists; thirty-eight percent as "Intermediate," nine percent as "Novice."

[6] Twenty questions were asked including questions about trip frequency, distances and purposes, motivation for bicycling, preferences regarding facility types and grading the city's current conditions on a number of factors important to bicycling—facilities, safety, pavement quality, bike parking, etc.

BICYCLE PROGRAMS AND CULTURE

Despite both the actual and perceived challenges to cycling in Cincinnati, interest in bicycling is growing rapidly. This is evident in the growth of activities such as recreational rides, as well as new initiatives like bicycle co-ops, that offer a variety of services designed to make bicycling accessible to all, regardless of income. Following is a list of ongoing activities and programs that were identified during the planning process.[7]

Education & Outreach

- The Cincinnati Cycle Club offers education at all levels, from children's rodeos, to Road 1 classes. Trained educators offer League of American Bicyclists' Effective Cycling Classes.
- MoBo, a bicycle cooperative in Northside, offers various workshops such as: Winter Cycling, Roadside Repair, etc. It also has an *Open Shop* three days a week where co-op members provide access to tools, parts and repair knowledge.
- In December 2009, a workshop about Safe Routes to School was provided for interested elementary and middle schools. Six schools are expected to submit the City's first ever grant applications for this Federal program, which is administered by the Ohio Department of Transportation.
- Citicable (the City's local public access cable network) periodically shows bicycle education videos.
- The Cincinnati Recreation Commission and Cincinnati Police Department partner together to offer B.I.K.E. (Bicycling Inspires Kids Environmentally). The BIKE program reconnects Cincinnati inner-city youth ages 12-17 with nature through biking. The BIKE program educates participating youth about bike safety and general bike maintenance, and offers multiple rides throughout the year. More than 300 youth were involved in 2009.

Recreational and Encouragement Rides

- The Cincinnati Cycle Club (CCC) sponsors numerous rides every week, special events, and national rides such as the *Ride of Silence*.
- The CCC competes in an annual commuter challenge versus Dayton, OH.
- MoBo offers a *Friday Night Urban Tour - Weekly Group Ride*. This is an adult social ride at a medium pace.
- The *Bike + Dine* is a progressive dinner that is designed to showcase the best in local restaurants and to highlight the ease with which bicycles can be used to get around in the city.

[7] This list, likely, does not include all bicycle related programs currently underway in the city and region, only what was able to be identified during the project planning process.

- *Cincy Bike-Abouts* are sponsored by Bike/PAC and Hamilton County. This series of local tours is designed to show people how easy it is to get around our streets by bike.
- Most local bicycle shops sponsor weekly rides.

Other Encouragement Activities and Resources

- Queen City Bike, Bike/PAC, MoBo, Cincinnati Cycle Club, and DOTE jointly sponsor and organize programs and events for National Bike Month, held annually in May. Programs include a Bike to Work Day, Bike Depot at Findlay Market, Breakfast on the Bridge, and other events.
- Bike/PAC organizes a bicycle contingent every year for the Cincinnati Reds Opening Day Parade.
- The Ohio-Kentucky-Indiana Regional Council of Governments (OKI) produces a Cincinnati Bike Route Guide. The guide ranks different routes based on road condition, traffic volume, and hills.

Law Enforcement

- Of the 1,100 total officers in the Cincinnati Police Department, 290 are trained as bicycle mounted officers. The Downtown police district uses bicycle-mounted officers regularly as part of their routine patrol assignments. In other districts, bicycle mounted officers are used for special operations.
- Bicycle crash data is collected for reported crashes, however the data is not analyzed to identify trends or plan countermeasures.
- Officers provide bicycle safety presentations and rodeos for youth recreation programs, schools or other groups upon request.

Health and Safety

- Boy and Girl Scout programs offer merit badges for bicycle safety.
- Six Cincinnati Public Schools plan to submit grant applications to the Ohio Department of Transportation for Safe Routes to School programs.

Tourism

- The City Recreation Commission rents bicycles at the Lunken Airport Trail, and various private businesses make bicycles available for rent at locations around the city.
- The Cincinnati Park Board is planning a *Bike Center* to be part of the new Riverfront Park along the Ohio River. It will be located near the Walnut Street Fountain and the Grand Stairway and will offer high security bicycle storage and showers for Downtown commuters, a snack bar, and a repair shop and rental area that caters to tourists and riverfront park visitors.

Bicycle Advocacy, Education and Encouragement Resources

The following non-governmental organizations have ongoing programs related to bicycle safety education, and encouragement:

- Cincinnati Bike/PAC – Its mission is to make Cincinnati a bicycle/pedestrian friendly city, thus enhancing the quality of life for its residents and visitors. It recommends public improvements and conducts/supports events that promote

bicycling and walking.

- Cincinnati Cycling Club -- The CCC has been in existence since the 1880's. It organizes group bicycle rides, teaches effective cycling and promotes bicycling for recreation, health and friendship.
- MoBo -- The MoBo Bicycle Co-op is a central place where people can learn how to fix and maintain bicycles and where abandoned bicycles can be recycled. The volunteer mechanics help guide members who are working on their own bicycles. The co-op also works for bicycle advocacy, and organizes rides, social events, and contests.
- Ohio Bicycle Federation (OBF) -- OBF is a state-wide advocacy organization representing Ohio's bicyclists. It provides opportunities for the betterment of bicycle education, engineering, legislation, the encouragement of activities involving the use of bicycles.
- Queen City Bike – A membership-based bicycle advocacy organization that coordinates annual National Bicycle Month events and other encouragement activities throughout the year.
- The nonprofits Mill Creek Restoration Project and Ohio River Way are working to develop off-road shared use trails for bicyclists in the Mill Creek and Eastern corridors of the City respectively.

ROLE OF BICYCLING IN A MULTI-MODAL TRANSPORTATION SYSTEM

To fully assess the potential for increasing bicycle use for transportation and recreation, it is important to consider bicycle use in the context of other available modes of transportation, as well as the history of transportation system development.

Today, Cincinnati transportation options include: walking, biking, personal motor vehicles, motorcycles and scooters, taxis, a public bus system, and/or carpooling/vanpooling. Goods are moved primarily by truck, rail and barge.

However, in the late 19th and early 20th centuries, canals, railroads, streetcars and inclines provided a more diverse set of options. Street systems still played a lead role, but even streets were more multi-modal in purpose and use.

Cincinnati, not unlike most American cities, has lost much of its multi-modal infrastructure. As a result, the arterial roads and major highways that criss-cross the city and the region dominate the landscape and limit transportation choices; the trips taken on this system include predominantly single-occupant autotrips and commercial truck use.

In 2008, the American Community Survey found that sixty-nine percent of working Cincinnatians get to work driving alone; ten percent carpool, ten percent use public transportation (Metro buses), and only 4 percent walk. Less than 0.5 percent bicycle[8]

[8] American Community Survey (ACS) data on journey to work, U.S. Census Bureau.

(see table on page 9). Yet, whenever asked, many City residents express a desire to have bicycling be a safer and more realistic option.[9]

Demand for Bicycle Transportation

While the bicycle may never exceed the automobile in terms of its share of urban trips, it is ideal for many types of trips that urban Americans make daily. Besides commuting to work or school, these trips include shopping and running errands, accessing health care and recreation, visiting friends and relatives, and a host of other activities that are often within the ideal range of a person riding a bike: 1-5 miles.[10]

Despite the dominant use of the automobile for personal transportation, in urban areas the bicycle still holds great potential. And it is increasingly critical that U.S. cities facilitate a greater role for bicycle transportation to address air pollution, congestion, fossil fuel dependency, economic efficiency and personal obesity to ensure that urban life remains sustainable well into the future.

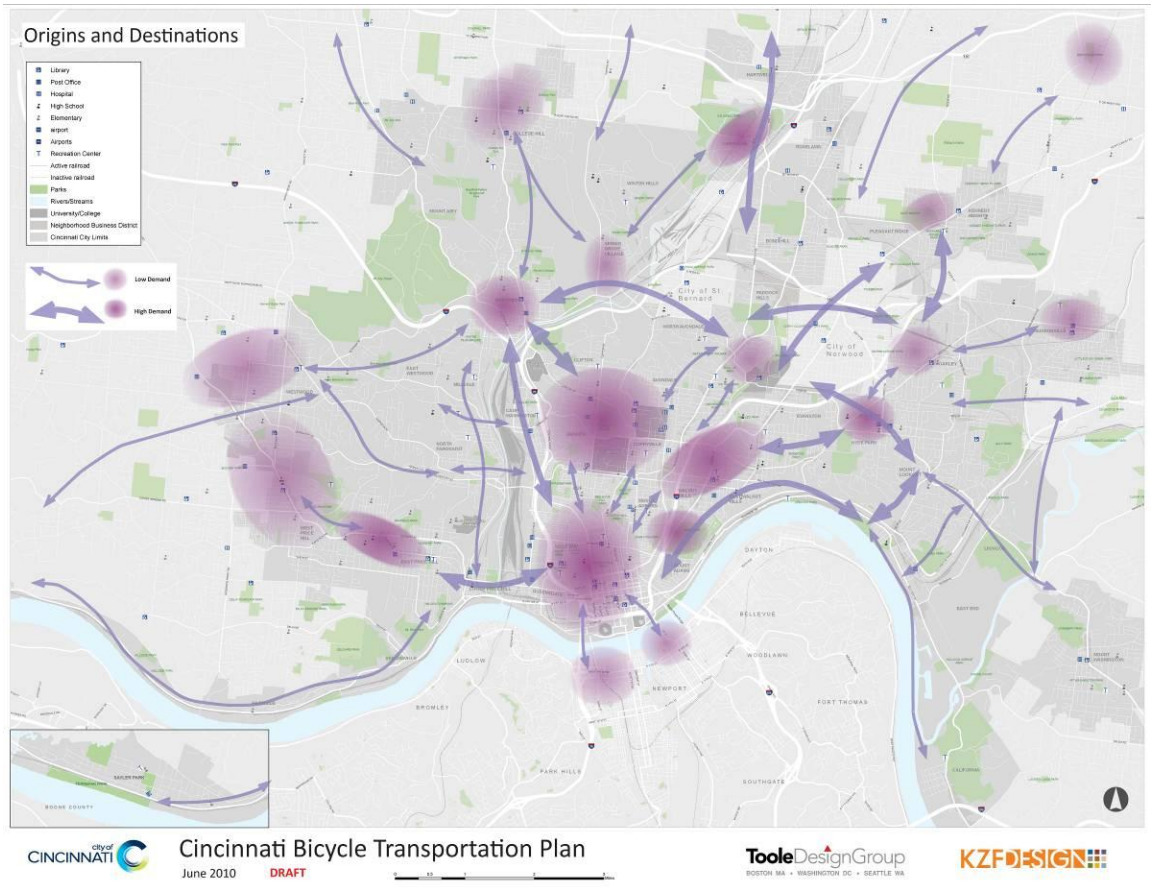


Figure 4: Bicycle Transportation Demand

[9] In a survey undertaken at the 2010 Cincinnati Neighborhood Summit, 68 % of respondents said that creating a walkable and bikeable city is "extremely important" to the future of Cincinnati. Compiled Results from the 2010 Neighborhood Summit, Transportation and Transit Element, page 3; http://www.plancincinnati.org/pages/library.htm

[10] Numerous studies now show that less than half of all personal motor vehicle trips occurring on urban highway and street systems are for the purposes of traveling regularly to and from work or school. Additionally, the NPTS reports that the typical distance of non-commute motor vehicle trips is less than 5 miles.

For this plan, a simple study of future demand for bicycle transportation was conducted to provide some general guidance about where bicycle travel may be most viable and most needed (see Figure 4). This study looked at known residential, employment, commercial and other activity centers, as well as the existing and desired travel patterns of city and regional cyclists and non-cyclists.

While limited resources prevented this study from being highly technical, the findings are useful to illustrate important bicycling corridors and major origins and destinations of existing and future bicycle trips.

An analysis of the findings from this demand study and the prior mapping of barriers allows identification of a network of bikeways and bicycle facility needs that will be both city-wide in its reach, as well as serve the greatest number of existing and future bicycle trips.