

2. Policies, Goals, and Objectives

This chapter provides a summary of local, regional, and state planning and policy documents that are relevant to bicycling in Columbus. These plans and policies were used to develop the Policies, Goals, and Objectives for the Columbus Bicentennial Bikeways Plan. This chapter also includes recommended modifications to Columbus City Codes to support bicycling. This chapter consists of the following sections:

2.1. Review of Existing Plans and Policies summarizes relevant plans and policies (Page 2-1)

2.2. New Policies, Goals, and Objectives identifies new policies, goals and objectives established by this bicycle master plan. (Page 2-9)

2.3. Review of Relevant Legislation provides an overview of federal, state and local legislation that is relevant to the Columbus Bicycle Master Plan. (Page 2-16)

2.1. Review of Existing Plans and Policies

2.1.1. Columbus Planning History

The history of planning in Columbus provides important background for framing the current Bicentennial Bikeways Plan. The 1993 Columbus Comprehensive Plan provides the following summary of the planning efforts that took place 100 years ago:

“In 1907, a Plan Commission composed of an architect, landscape architect, a sculptor from New York City, a civic advisor from Rochester, New York, and an architect from Philadelphia, was formed. Within a year, the group had prepared the first known plan for the city. The 1908 Plan was a response to two mounting concerns. The first was what the Plan described as “the unromantic practical necessities of a rapidly growing and prosperous manufacturing city” — water supply and wastewater collection and disposal. The second was the city’s “humiliating position” relative to other cities in its consideration of parks, parkways, and playgrounds.

In both cases, the underlying goal was to secure Columbus’ position as one of the nation’s great cities and to establish a civic environment that recognized its function as Ohio’s governmental and education center.

The Plan Commission recommended that the State Capitol be surrounded by a civic center of great public buildings and open spaces. A parkway was to encircle the city three miles from its center. Diagonal streets would radiate from the parkway, breaking what the plan called the “Maltese Cross” development pattern along the railroads. The streets of Columbus would be adorned by monuments, sculpture, and street furniture, and would be rid of overhead utility poles and wires. Small parks and playgrounds were called for in the neighborhoods, while linear parks were to be developed along the Olentangy and Scioto Rivers.”

This historical view shows that Columbus has a long heritage of visionary planning, and that with the involvement of civic leaders, the potential exists to continue this vision into the future. Columbus started developing its current bikeways system in the 1960's, and even had bike lanes on High Street in the 1970's. While the current system has not lived up to the potential identified in previous decades, that potential still exists, and the current plan should be seen as an opportunity to capitalize on the city's bikeway heritage.

2.1.2. Columbus Comprehensive Plan 1993

The 1993 Comprehensive Plan established a framework for neighborhood and area plans that have been developed throughout the City. The overview of the Plan states: *“The Columbus Comprehensive Plan prescribes development policies for the city of Columbus and an area that may become part of the city of Columbus over the next 20 years. The Plan Establishes policies for Columbus' growth, development and redevelopment to 2010 in the area of land use, infrastructure and community facilities.”*²

In describing the infrastructure of the City, the 1993 Plan provides the following statement:

*“The infrastructure systems of the city of Columbus — streets and highways, public transit, pedestrian facilities, bikeways, sanitary and storm sewers, water system, and street lights — represent a tremendous public investment and provide the many conveniences expected by both city residents and visitors alike. Provision for and maintenance of these systems is one of the primary functions of local government.”*³

This was a progressive statement for planners to make in the 1990's – especially since it included bikeways in the framework of public infrastructure. The last sentence captures a key point for future efforts and strengthens the long-term support of improvements to the bikeways system. Two other key references from the plan include:

Natural Resources and Environmental Quality

- “1. Maintain and improve the environmental quality of Columbus.*
- 2. Protect, expand and enhance the natural features of Columbus.*
- 3. Promote the greening of Columbus.”*

Recreation

*“The quality of life of any city is largely dependent upon its parks and recreation system. Columbus has an extensive system of parks and recreation facilities. Acquisition of these facilities must keep pace with development.”*⁴

These statements are central concerns for bikeways, which provide transportation, recreation and environmental benefits. The Comprehensive Plan goes on to provide detailed sections on Land Use, Development Regulations, General Transportation Recommendations, Streets and Highways, and Functional Classification. The various classifications form a hierarchy of roadways as shown on

² City of Columbus, Neighborhood Plans and Overlays, available at: <http://td.ci.columbus.oh.us/Bizdevelopment/PlanList/index.asp>

³ Source: Columbus Comprehensive Plan 1993, page 23.

⁴ Source: Columbus Comprehensive Plan 1993, page 16.

the 1993 Columbus Thoroughfare Plan. Significantly, the Plan includes a specific section on Bikeways, which is provided below:

Bicycle Facilities

Bicycling offers a healthful, ecological alternative to transportation by automobile and is a recreational activity enjoyed by many. While bicycle transportation is certainly not for everyone, a greater proportion of the population would take part if necessary facilities were available to enhance bicycle safety and convenience. Certainly bicycling has its place in a balanced, coordinated transportation system.

The availability of facilities encourages the use of bicycles. These include bicycle parking, bicycle lockers, and of course, bikeways. A bikeway is defined as any road, path, or way which is in some manner specifically designated as being open to bicycle travel, regardless of whether it is designated for the exclusive use of bicycles or is to be shared with other transportation modes. Bikeways can be paths, lanes, or routes. A bike path is physically separated from motorized vehicular traffic by an open space or barrier. A bike lane is a portion of a roadway which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. Bike routes are designated by signage along existing roads to indicate their appropriateness for bicycle travel, usually with no other bicycle-related improvements.

It is not the intent of the Columbus Comprehensive Plan to determine specific locations for bikeways. However, several recommendations are offered to encourage the use of bicycles in Columbus and promote further planning for bicycles as an effective means of transportation.

It is the recommendation of the Columbus Comprehensive Plan that:

- *the Public Service Department develop a bikeways plan for the city of Columbus and represent bicycle interests to both government and the private sector.*
- *the Columbus bikeways plan 1) pay special attention to establishing east-west bikeway connections, 2) take full advantage of opportunities to provide bicycle facilities within greenways, 3) connect major activity centers by bikeways, 4) address use by bicyclists when improvements are made to arterial roadways, 5) develop signage which helps the bicyclist know the destination points of each particular route, 6) promote bicycle safety issues, 7) address bicycle parking standards and incentives while encouraging provision of bike parking, 8) address bikeway maintenance issues, and 9) champion the education of motorists and bicyclists concerning the shared use of roadways.*
- *the bikeways plan for the city of Columbus be developed concurrently with 1) an update of the 1977 Mid-Ohio Regional Planning Commission Regional Bikeway Plan Update, and 2) revisions, where necessary, of suburban bikeway plans throughout central Ohio.*
- *the responsibility and function of the Columbus Traffic and Transportation Commission be expanded to include bicycle issues and that, if necessary, additional members be appointed so that it can serve as an effective advisory body on bicycle issues to the Public Service Department and City Council.*
- *the city of Columbus, following accepted standards, provide bicycle parking at all its government buildings.*

Source: Columbus Comprehensive Plan 1993, p.31-32

These are still valid points for the current Bikeways planning effort. It is important to note that, as a follow up action to the 1993 Comprehensive Plan, City Council Resolution 23X-93 established a

Bikeways Advisory Committee⁵ to advise the Mayor and City Council “on the *planning, design, construction and installation of bike routes, bikeways, and bike paths in the city of Columbus.*” The mission of the Committee is “*To integrate bicycles into the transportation systems of Columbus and central Ohio, by providing a safe convenient system of bikeways and other bicycle facilities.*”⁶

2.1.3. Columbus Thoroughfare Plan 1993

The Columbus Thoroughfare Plan designates the functional classifications of roads and includes right-of-way requirements for the various classifications. It serves as a tool for local officials to help develop an orderly, efficient, balanced, and coordinated roadway system. Specifically, the Thoroughfare Plan “*designates the functional classification of roads and includes right-of-way requirements for these various classifications.*” Roadway designations are “*closely related to recommendations for land use, community facilities, and other transportation systems.*” The Thoroughfare Plan can be used “*to keep development away from needed future roadway expansions, connections, and extensions*”, to “*help maintain a balance between land use development and the establishment of an adequate roadway system to service that development*” and “*can be used to protect needed rights-of-way for roadways and serve as a basis for requiring that roadway improvements identified be funded before full development of an area takes place.*”

It is important to note that this section of the Thoroughfare Plan also includes specific descriptions of each roadway type by functional class, and includes two primary measures of transportation system performance: Volume-to-Capacity Ratio at signalized intersections and Level-of-Service (Delay) for roadway segments. In general, the roadway classes, typical section descriptions and performance measures do not include bikeways as an integrated element of the on-street transportation system. From a systems perspective, the 1993 Comprehensive Plan / Thoroughfare Plan treats bikeways as an important, but separate infrastructure that is primarily implemented through the development of shared-use paths created along greenway corridors.

2.1.4. Progress since the Comprehensive Plan: 2004 Internal Staff Report

While Columbus did not create the Bikeways Plan recommended in 1993, an internal staff report was developed in 2004 that contains information and resources for the development of the Bikeways Master Plan. That document, entitled *Columbus Bicycle Plan: Bicycle Program Policies*, Public Service Department Transportation Division, Draft for Internal Review February 24, 2004 includes the following sections:

“The Columbus Comprehensive Plan was adopted by City Council in 1993. Our progress with response to each directive is described below.

- *Pay special attention to establishing east-west bikeway connections: Potential alignments for numerous east-west bikeways have been explored. Current efforts focus on 3 bikeways (44, 54 and the Downtown Bikeway Connector). The first is partially done and the others are in development.*

⁵ Recommendations for improving the effectiveness of the Bikeway Advisory Committee are discussed in Chapter 6

⁶ Source: Columbus Bikeway Advisory Committee,
http://pubserv.ci.columbus.oh.us/transportation/GettingAround/columbus_bikeway.htm

⁷ Source: Columbus Thoroughfare Plan, page 26.

- Take full advantage of opportunities to provide bicycle facilities within greenways: Paths are planned, built or under construction in all the stream corridors. The City aggressively seeks right of way for paths.
- Connect major activity centers by bikeways: A system of bikeways connects the downtown to The Ohio State University and Clintonville. These are the largest trip generators. The system is expanding to other areas.
- Address use by bicyclists when improvements are made to arterial roadways: Almost a dozen proposed arterial widening projects incorporate bikeways. Projects completed, under construction or planned as of 2007 include: bicycle lanes on Hard Road and on Morse Road between I-71 and Karl Road.
- Develop signage which helps the bicyclist know the destination points of each particular route: This has been done.

Note: Although a numbered route system was developed and route signs were installed along many routes by 2004, the system does not include destinations, and is difficult to use for people unfamiliar with the numbering system. The Bicentennial Bikeways Plan recommends a wayfinding system to help bicyclists navigate through Columbus.

- Promote bicycle safety issues: Every spring for over 7 years, the City has distributed thousands of bicycle safety flyers. Brochures on proper cycling techniques have also been distributed.
- Address bicycle parking standards and incentives while encouraging provision of bike parking: Draft legislation has been completed.
- Address bikeway maintenance issues: The City hired a full-time maintenance crew, specifically for paths.
- Champion the education of motorists and bicyclists concerning the shared use of roadways: This effort stalled because of 2 problems. These are lack of resources and inconsistent bicyclist behavior. At this time staff could only inform motorists that bicyclists are also entitled to use streets (if resources for publicity were available). Any effort to tell motorists what to expect from bicyclists, will have to be preceded by a massive bicyclist education program.”⁸

Note: This Plan recommends a Share the Road Campaign that is targeted toward motorists and bicyclists and recommends bicycle education in schools in Chapter 6.

2.1.5. “Our Vision for the Future”

A 2004 internal staff report provided a vision for Columbus’ bicycling future. This Internal Staff Report was not adopted or proposed as formal policy, but is described here as a historic step toward the development of the Bicentennial Bikeways Plan.

The internal staff report envisioned a multi-modal transportation system where people have multiple transportation options (walking, bicycling, riding transit, driving). Future development patterns would create neighborhoods where residents could find most of what they need within the neighborhood, thus permitting them to walk, bike, or take transit for most trips, thus reducing

⁸ Source: *Columbus Bicycle Plan: Bicycle Program Policies* Draft for Internal Review February 24, 2004, p.10-11

traffic congestion. Bicycling and walking facilities would be provided in every neighborhood, allowing people to integrate physical activity into their daily lives, and improving health.

The Bicentennial Bikeways Plan incorporates this vision into its goals and policies and recommendations.

2.1.6. I-70/I-71 South Innerbelt Corridor Study

The four-year I-70/I-71 South Innerbelt Corridor Study sought to identify solutions to congestion, traffic delays and safety hazards in downtown Columbus around this crucial freeway interchange.

In the study's final recommendations, one proposal suggests creating two-way collector-distributor roads on Fulton, north of I-70/71, and on Lester, west of I-71. The study concluded that two-way roads offered flexibility and integration with the city's downtown street conversion plans, while also potentially balancing transportation goals of safety and efficiency with community goals, like minimizing environmental impacts and improving connectivity to downtown. Development on both roads could provide an opportunity for the installation of bike lanes, resulting in improved access for bicyclists within the Columbus downtown area.

2.1.7. Columbus Recreation and Parks Master Plan, December 2002

Greenways and trails are an important component of the Columbus Recreation and Parks Department (CRPD) system. CRPD is responsible for developing and maintaining the City's multi-use trails, as well as its parks, playgrounds, lakes, swimming pools, recreation centers, athletic facilities, public gardens, signage and wildlife management areas.

The CRPD's 2002 Master Plan states that "*multi use trails also offer a safe, alternative form of transportation; substantial health benefits; habitat enhancements for plants and wildlife; and unique opportunities for outdoor education and cultural interpretation.*"⁹ In 2002, Columbus had 35 miles of asphalt shared use paths. The CRPD's goal is to have 155 miles of trails eventually.

CRPD recognizes that these trails require significant maintenance efforts:

"Trails have long term maintenance impacts just like any recreational facility. Maintaining trails can cost anywhere between \$10,000 and \$14,000 per mile for 10 foot to 12 foot wide asphalt trails; these figures include staff, equipment and resources such as mowing, trash pickup, brush hogging, repairs to benches, lighting, trail markers and trail repaving / sealing. The long range impact of this trail system could reach more than \$1.5 million in maintenance costs annually when completed. Not only will manpower have to be increased but a strong volunteer base would have to assist wherever possible." p. 5-34

The following bicycle-related recommendations were included in Chapter 5 of the CRPD's 2002 Master Plan:

Recommendation 2: Locate Neighborhood Parks within One-Half Mile of all Neighborhoods

⁹ Columbus Recreation and Parks Department 2002 Master Plan, p. 1-12

“Neighborhood Parks are the backbone of the CRPD system and should be easily accessible to a maximum number of City residents. These parks should be within a reasonable walking distance, which is about one half mile. Currently, CRPD uses as service radius of one-half to one-mile. A new standard based on one-half mile distance would encourage patrons to walk or bike to these parks. The construction of parking lots at neighborhood parks should be discouraged.” p. 5-22

Recommendation 9: Continue Developing Multi-Use Trails throughout the City

“In the Columbus area, the major focus for 2010 will be developing a regional network of greenways and on-street bikeways totaling approximately 165 miles that will link parklands, stream corridors, Metro Parks and surrounding community trail systems into an integrated, easily accessible system. The plan also includes providing greenway corridors along Blacklick Creek, Walnut Creek, Scioto River and Big Run.” p. 5-24

2.1.8. The Downtown Columbus Circulation Study

This recent study included recommendations for conversions of some downtown streets from one-way to two way operations, along with potential on-street Bikeways in the Downtown area. The study is anticipated to be completed by the end of 2007. The project website describes the study as follows:

The Ohio Department of Transportation (ODOT) is conducting a Major Investment Study (MIS) on the I-70/I-71 portion of the innerbelt freeway circling downtown (Innerbelt MIS). Part of the Innerbelt MIS will consider changes to the freeway ramps which access downtown as well as larger capacity issues. The Central Ohio Transit Authority (COTA) is studying the accommodation in downtown of an expanded transit system that includes Light Rail Transit (LRT).

At the same time, the City of Columbus is examining, through the coordination of downtown area plans, changes to the downtown street system as part of its efforts to increase the livability of the downtown environment. As a result, there is a need to coordinate the MIS and COTA’s LRT with the downtown plans and activities of the City of Columbus.

The study, sponsored by the City of Columbus and the Ohio Department of Transportation, has been undertaken by the Mid-Ohio Regional Planning Commission to assist Columbus on various issues to make the downtown more livable and friendly to pedestrians and downtown residents while providing appropriate mobility and safety.

Source: MORPC, Downtown Columbus Circulation Study,
http://transportation.morpc.org/library/dtcircstudy/dccs_home.htm, updated 02.14.06

2.1.9. MORPC Regional Bikeway Plan Goals

The Mid Ohio Regional Planning Council has developed a bikeway plan that provides a framework for the Columbus plan. The goals and objectives of the MORPC 2006 Regional Bicycle Transportation Plan have been developed to support the overall transportation vision goals of the regional agency.

MORPC’s vision for the region’s transportation system is

“A transportation system that enhances environmental, social and economic well being of the region.” This vision includes three goals:

Goal I: Provide a safe, secure and efficient transportation system

Goal II: Provide an accessible transportation system with a range of choices

Goal III: Protect the social, environmental and economic well being of the citizens of the region

To achieve the above transportation goals and objectives pertaining to the bicycle as a mode of transportation, MORPC plans to:

- 1. Give priority to projects that will close gaps in the bikeway system, eliminate barriers; provide linkage, and/or continuity to any existing facilities when planning and programming improvements.*
- 2. Identify federal and state funds for eligible projects.*
- 3. Encourage planners and engineers to include the needs of bicyclists when designing transportation facilities in urban, suburban and rural areas.*
- 4. Encourage the appointment of bicycle coordinators by local member governments.*
- 5. Encourage local jurisdictions to incorporate the regional bikeway plan network as part of its comprehensive plan.”*

Source: MORPC 2006 Regional Bicycle Transportation Facilities Plan

It is important to note that MORPC has been a national leader in developing a “Complete Streets” policy for integrating bikeways into transportation projects. MORPC’s Routine Accommodation Policy is provided in Appendix A: Model Policy Goals.

2.1.10. Mayor’s Green Principles

In addition to these important policy documents, it is significant to reference the Mayor’s Green Team, which is advancing the City’s environmental goals. The Columbus “Green Principles,” dated March 17, 2006, includes the following statement:

Encourage transportation and mobility alternatives that decrease use and dependence on petroleum-based fuels while improving outdoor air quality. Promote energy independence by seeking non-petroleum, renewable fuel sources. Support a variety of choices to the community that promote pedestrian access, transit, bikeways and healthy lifestyles.

Source: Columbus “Green Principles,” March 17, 2006

There are a number of other Columbus program initiatives which support bicycling. A partial listing of these programs includes the following:

Commit to be Fit

This health promotion program was developed in response to Columbus being named among the nation’s five most obese cities in 2001. The program was developed in partnership with 10TV, The

Ohio State University Medical Center, Metro Parks, Donatos, and other partners. After the first 6 years of the program, Men’s Fitness Magazine listed Columbus as one of the top 20 fittest cities in the nation. The program provides a website that individuals can sign on to and monitor their diet and fitness programs. The program provides an opportunity to connect bicycling with a highly visible and successful health promotion effort in Columbus.

Pedal Instead

Pedal Instead provides City-sponsored secure bicycle parking corrals at summer festivals where riders can park their bikes, helping to reduce vehicle emissions, cut demand for parking, and encourage fitness. Pedal Instead is co-sponsored by Get Green Columbus, the Columbus Recreation and Parks Department, Scotts, Batelle, MORPC, the Central Ohio Bicycle Advocacy Coalition, and Safety Town.

Columbus Outdoor Pursuits

Columbus Outdoor Pursuits is a non-profit organization providing outdoor recreational opportunities and training for youth and adults in central Ohio. This organization includes bicycling as one of its program offerings.

Other Organizations

Consider Biking, the Central Ohio Bicycle Advocacy Coalition, and Simply Living are non-profit organizations working to promote bicycling. These and other organizations provide potential partnership opportunities in the Columbus community.

2.2. New Policies, Goals, and Objectives

This section identifies recommended bicycle-related policies, codes and ordinances for the City of Columbus. These recommendations are based on the foundation established in the City’s past planning efforts and informed by models from other communities. Formal adoption of policy changes would need to take place within a General Plan/Zoning Code update process and in consultation with the newly formed Transportation, Pedestrian and Bicycle Commission.¹⁰

2.2.1. Complete Streets

There is a growing movement in the U.S. to integrate non-motorized transportation into the planning, design, and operation of roads, bridges and transit projects. This movement has taken the name of “Complete Streets.” At the national level, the US Department of Transportation developed a model bicycle and policy framework in 2001. This policy is based on the principle that bicyclists and pedestrians have the right to move along or across all roadways unless specifically prohibited from doing so. The national policy has served as guidance for State DOT’s and public works agencies throughout the U.S. It has recently evolved into the concept of “Complete Streets” – the idea that streets are only complete when they address the needs of all modes of transportation,

¹⁰ This plan recommends that the Bikeway Advisory Committee be combined with the Transportation and Pedestrian Advisory Commission, and shared leadership should be established between the Public Service Department and the Department of Recreation and Parks

including walking and bicycling. This approach includes providing for transit, ADA compliance, and facilities for people of all ages and abilities. MORPC has adopted a complete street policy, and the Bikeway Master Plan recommends that the City of Columbus adopt a similar policy.

The USDOT 2001 Policy Statement says that “*Bicycle and pedestrian ways shall be established in new construction and reconstruction projects in all urbanized areas,*” unless specific exceptions can be established. At the state level, the American Association of Highway and Transportation Officials (AASHTO) provides guidelines for State Departments of Transportation which are widely accepted for use throughout the U.S. The AASHTO 1999 *Guide for the Development of Bicycle Facilities* includes the following policy guidance:

“All highways except those where cyclists are legally prohibited, should be designed and constructed under the assumption that they will be used by cyclists. Therefore, bicycles should be considered in all phases of transportation planning, new roadway design, roadway reconstruction, and capacity improvements and highway projects.”

The idea of “Complete Streets” is based on the premise that quality transportation facilities “*are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and bus riders of all ages and abilities are able to safely move along and across a complete street.*” A national coalition of organizations supporting this policy concept has formed to encourage adoption of Complete Streets policies. The City of Columbus has the ability to adopt a Complete Streets policy through the City Council. The following is a proposed “Complete Streets” policy that could be adopted by the City:

Proposed Draft

City of Columbus Complete Streets Policy

Purpose:

A City of Columbus “Complete Streets” policy will ensure consistency of planning, design and operational characteristics of bicycle transportation and recreation facilities as an integral element of roadway, bridge, transit and transportation, recreation and public works projects.

Proposed Policy:

City of Columbus hereby adopts the policy of “Complete Streets” as a guiding principle for our infrastructure. “Complete Streets” are defined as facilities that “*are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street.*”

The City will support the development of a complete system of bikeways, pedestrian facilities and shared use paths, bicycle parking and safe crossings connecting residences, businesses, transit stops and public places. The City will promote bicycling and walking for health, environmental sustainability, exercise, transportation, and recreation.

Bicycle and pedestrian facilities shall be provided in new construction, reconstruction and maintenance projects in the City, including traffic impact mitigations by private developers, unless one of the following conditions is met:

- Bicyclists and pedestrians are prohibited by law from using the roadway. In this instance, bicyclists and pedestrians will be accommodated elsewhere within the right of way or within the same transportation corridor. The same transportation corridor is defined as a parallel route within 1/8 mile.
- The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. Disproportionate is defined as exceeding twenty percent of the cost of the larger project. In cases where cost or right-of-way constraints will tend to prevent improved bicycle and pedestrian accommodation, other measures such as developing strategic crossings, improving bridges and use of parallel street networks should be considered.
- In cases where the existing right-of-way or other constraints do not allow for sidewalks, bike lanes, paths or other improvements, potential alternatives will include the appropriate use of paved shoulders, signage, traffic calming and/or enhanced education and enforcement measures.
- Bicycle and pedestrian facilities will be provided and maintained in accordance with guidelines adopted by the USDOT, ODOT and AASHTO. In cases where established standards cannot be met, professional judgment should be used to determine whether variations from the standard, such as path width, improvements to a parallel facility or other alternatives might be appropriate given adequate safety evaluation.

In addition, private sector development projects will address traffic impacts for all modes of travel, including walking and bicycling. Site plan and subdivision reviews of private sector developments conducted by the City will incorporate facilities for bicyclists and pedestrians. On City maintained roadways, bicycle and pedestrian facilities will be provided in accordance with this policy. City offices and public buildings will provide bicycle parking, lockers and showers in accordance with local zoning and planning regulations.

2.2.2. Proposed Vision, Goals and Objectives

Mayor Coleman provided a vision for the future of Columbus' bicycling environment when he announced the following at the July, 2007 Bikeways Master Plan media event:

"Today, we are launching an all out planning initiative to define how we support biking for the next 20 years. By the beginning of 2008, the City of Columbus will have a comprehensive Bikeway Master Plan to include miles of new off-road trails, on-street bike lanes, and other amenities. I'm calling it the Bicentennial Bikeways Plan, and it will be put together with extensive public outreach, starting with the people here today.

Today, we have some 87 miles of bike trails, bike lanes and posted bike routes in Columbus, but that's just a start. Our current plan would add some 60 miles of trails in the next 4 years, but I want to do more. I want to see more trails and bike lanes in downtown, as well as along major routes from the distant neighborhoods.

Our Bicentennial Bikeways Plan will include:

Adding bike trails, lanes and routes;

Improved street-crossing protection, with signals and signs;

*Adding Bike racks, lockers and showers along routes and downtown;
A public awareness campaign for bicyclists and motorists*

From this planning we will go to the ballot in 2008 as part of the Bicentennial Bond Package and ask voters to support this important Capital investment. This will provide even more funding to built routes and paths citywide.”

With a broad “Complete Streets” approach to infrastructure, there are a range of goals and objectives that can be developed to implement the Bikeways Plan. Each goal presented below includes specific timeframes and targets for measuring success.

The following goals and objectives will help the City guide the implementation process for the Bikeways system and provide measurable benchmarks that are part of the City’s management processes.

Goal 1: Implement the Columbus Bikeway Plan.	
Objective 1-1:	Complete the Phase I projects and programs identified in the Bikeways Plan by 2012.
Objective 1-2:	Complete Phase II projects and programs within 10 years, based on available funding and project costs.
Benchmarks:	Miles of bikeways completed; number of locations improved; number of bike parking spaces installed; percentage of projects completed

Goal 2: Increase the number of people bicycling for transportation and recreation.	
Objective 2-1:	Increase the mode share of trips made by bicycling, transit and walking in Columbus to 10% of all trips in 10 years.
Objective 2-2	Increase the number of trail users by 10% per year as measured through annual count data.
Benchmarks:	Conduct annual counts of pedestrian and bicycle travel at key locations on the trail system using the National Bicycle and Pedestrian Documentation Project methodology. Integrate bicycle counts in vehicle count programs; Number of bicycle-on-bus trips: Utilize U.S. Census data for mode share data.

Goal 3: Improve bicyclist safety.

Objective 3-1:	Reduce the number of injuries and fatalities by 10% by 2013, and maintain a crash rate (number of crashes in relation to bicyclist mode share) that is the same as or lower than the expected crash rate for a City with Columbus' population. ¹¹ Identify areas with high numbers of bicycle crashes on roadways and the bikeway system and develop the means to mitigate the problem.
Benchmarks:	Annual crash data reports; Mitigation of priority crash locations.

These broad goals can be supplemented by specific actions that integrate bicycling with other initiatives and programs, including the following:

Green Goal	
Objective	Make bicycling a major focus of the City's efforts to create energy independence. As climate change becomes a major issue in the national media, local communities are realizing the role that non-motorized transportation can play in reducing energy use and dependence on fossil fuels. "Carbon Neutral" planning has become one of the tools for documenting the pollution reductions that communities can make as a response to creating sustainable solutions.
Benchmarks:	The performance benchmark for environmental quality is an annual calculation of the pollution reduction benefits achieved by bicycle travel in Columbus.

Health Goal	
Objective	Improve the health and physical fitness of Columbus residents. Each trip by bicycle, for either transportation or recreation, results in increased physical activity and related improvements in cardiovascular fitness.
Benchmarks:	A calculation of the numbers of calories used by cyclists can be tracked annually and benchmarked against local health data for obesity, cardiovascular disease and diabetes.

¹¹ According to the National Highway and Traffic Safety Administration, in 2004, crash rates for bicyclists are 140 per million population injured and 2.47 per million killed. NHTSA *Traffic Safety Facts, 2004 Data, Pedalcyclists* Columbus' crash rate for 2000 through 2004 is 368 per million injured and 1.75 per million killed.

Education, Enforcement and Encouragement Goal

Objective	<p>Bicyclists, pedestrians, and motorists will share the road safely.</p> <p>Emphasize education, encouragement and enforcement programs that parallel the development of physical infrastructure. Promote a “Share the Road” program to educate motorists and bicyclists of their rights and responsibilities.</p>
Benchmarks:	<p>Specific benchmarks include the percentage of motorists obeying cyclists’ rights-of-way, surveys of legal bicyclist behavior (riding with traffic, wearing helmets, using night lighting), participation in cycling events (including National Bike Month, races and club rides) and programs (number of League Cycling Instructors, Bicycle Friendly Communities designation, number of cyclists trained in Effective Cycling, police on bikes, recycle-a-bicycle, bicycle registration, etc.).</p>

Economic Goal

Objective	<p>Capitalize on the benefits of bicycling in the local economy.</p> <p>Promote bicycling in economic development, tourism and job creation programs. Identify business benefits including employee health and quality of life.</p>
Benchmarks:	<p>Benchmarks include bicycle related tourism (bike rentals, events, lodging, meals, etc), job creation, new development projects along bikeways and retail activity.</p>

Safe Routes to Schools Goal

Objective	<p>Involve all of the City’s schools in Safe Routes to Schools Programs.</p> <p>The growing national Safe Routes to Schools provides multiple benefits for health, safety, mobility and the environment.</p>
Benchmarks:	<p>Specific benchmarks include the percentage of schools with active Safe Routes to School programs and the mode share of children bicycling to school.</p>

Bicycle Parking Goal	
Objective	<p>Provide bicycle parking City-wide as an integrated element of streetscape design.</p> <p>The Bikeways Advisory Committee's bicycle parking ordinance will be approved by the City Council and implemented. Short term bicycle parking racks will be provided as a typical streetscape feature and at long term locations bike lockers or secure sheltered parking will be provided. The ordinance will include an incentive for private developers to include bike parking by reducing their motor vehicle parking requirements. Worksites of more than 50 employees will provide lockers or secure indoor bike parking and showers for employees.</p>
Benchmarks:	The benchmark for this goal will include the number of bicycle parking spaces installed annually.

Quality of Service Goal	
Objective	<p>Ensure that the City's bikeways are well maintained and operated</p> <p>Once the bikeway system is developed, it requires an ongoing operations and management program. Maintenance of bikeways is a shared responsibility. The Transportation Division is responsible for bike lanes, storm water grates, street sweeping, crossings, and other on-street infrastructure. The Recreation and Parks Department is responsible for maintaining the City's shared-use path system. Operations include safety patrols, security, activity programming, promotional efforts, education and outreach, routine litter patrol, annual safety reporting, and facilities condition management.</p> <p>A thorough management process will include an annual reporting program, assignment of staff responsibilities, interagency coordination, and the development of public-private partnerships. A public request form can be developed as a Bike Spot Improvement program to respond to citizen requests for minor bikeway improvements.</p>
Benchmarks:	The benchmark can be an annual report of the newly established Transportation, Pedestrian and Bicycle Commission, with input from partner agencies including the Departments of Health, Education, Public Safety, and other organizations.

Multimodal Goal	
Objective	<p>Create an integrated transportation system that balances the needs of all modes of travel, including pedestrians and bicyclists.</p> <p>Ensure that bikeways become an integrated element of highway, transit and infrastructure projects. Include bikeways in typical roadway sections and the City's Thoroughfare Plan and functional classifications.</p>
Benchmarks:	<p>Performance measures: multi-modal level of service for roadway segments and intersections, accommodation of bicycles on all buses and future transit systems (e.g. light rail), and secure bicycle parking at all major transit stations and airports.</p>

2.3. Review of Relevant Legislation

The following sections provide an overview of federal, state and local legislation that relates to the Columbus Bikeway Plan. Section 2.3.3 lists recommended bicycle-friendly modifications to Columbus' city codes.

2.3.1. SAFETEA

In the U.S., federal transportation legislation has played a key role in the development of bikeways. In August 2005, the Safe Accountable, Flexible, Efficient Transportation Equity Act, a Legacy for Users (SAFETEA-LU) was signed. Under SAFETEA-LU, federal funding for bicycle and pedestrian facilities and programs has exceeded \$400 million per year. Significant new funding streams established by the legislation include the Safe Routes to Schools program, the Model Communities program, and renewed support for the Transportation Enhancements program.

The SAFETEA-LU legislation has a number of provisions that relate to improving conditions for bicycling and walking and increasing the safety of the two modes. These include policies to increase non-motorized transportation to at least 15% of all trips, and to reduce the number of non-motorized users killed or injured in traffic crashes by at least 10%. The legislation emphasizes that state and local agencies work together to provide a choice of transportation modes. It is the intent of SAFETEA-LU that all transportation projects that receive federal money should give due consideration to bicyclists and pedestrians during planning, design, and construction.

The US Department of Transportation states that "there must be exceptional circumstances for denying bicycle and pedestrian access either by prohibition or by designing highways that are incompatible with safe, convenient walking and bicycling." Further, "even where circumstances are exceptional and bicycle use and walking are either prohibited or made incompatible, States, MPOs, and local governments must still ensure that bicycle and pedestrian access along the corridor served by the new or improved facility is not made more difficult or impossible."

A summary of SAFETEA-LU's provisions for bicyclists and pedestrians is provided below. Full text of the summary, which was written by the US Department of Transportation, is available at <http://www.fhwa.dot.gov/environment/bikeped/bp-guid.htm>

- *The long range metropolitan and Statewide transportation plans, and the Metropolitan and Statewide Transportation Improvement Programs shall "provide for the development and integrated management and operation of transportation facilities (including accessible pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system... (23 U.S.C 134(c)(2) and 135(a)(2))*
- *The process in developing the long-range Statewide and metropolitan transportation plans and transportation improvement plans is to consider "...all modes of transportation..." (23 U.S.C.134(c)(3) and 135(a)(3)*
- *The long-range metropolitan and Statewide transportation plans are to "provide for the development and implementation of the intermodal transportation system" (23 U.S.C. 134(i)(2) and 135(f)(1)*
- *SAFETEA-LU added "representatives of users of pedestrian walkways and bicycle transportation facilities" to the list of "interested parties" with whom metropolitan areas and States must include in the development of the long range metropolitan and Statewide transportation plan (23 U.S.C 134(i)(5) and 135(f)(3)(A)*
- *Bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each metropolitan planning organization and State..." (23 U.S.C. 217(g)(1)*
- *"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)*
- *"Transportation plans and projects shall provide due consideration for safety and contiguous routes for bicyclists and pedestrians." (23 U.S.C. 217(g)(2)*
- *"In any case where a highway bridge deck is being replaced or rehabilitated with Federal financial participation, and bicyclists are permitted on facilities at or near each end of such bridge, and the safe accommodation of bicyclists can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations." (23 U.S.C. Section 217(e))*
- *"The Secretary shall not approve any project or take any regulatory action under this title that will result in the severance of an existing major route or have significant adverse impact on the safety for non-motorized transportation traffic and light motorcycles, unless such project or regulatory action provides for a reasonable alternate route or such a route exists." (23 U.S.C. Section 109(m))*

2.3.2. Ohio Legislation

Through the successful advocacy efforts of the Ohio Bicycle Federation, a "Bill for Better Bicycling in Ohio - House Bill 389" was recently adopted. HB 389 was signed into law during the 2006 GOBA opening ceremonies at the Greene County Fairgrounds in Xenia. The Ohio Bicycle Federation provides the following summary of the new law:

“The Better Bicycling in Ohio bill, known as House Bill 389, makes Ohio laws regarding cycling conform more closely aligned with the Uniform Vehicle Code (UVC). The OBF worked for years as a member of the National Committee on Uniform Traffic Laws and Ordinances to make the UVC more cyclist friendly. Now, Ohio law will follow the UVC. The new laws will:

Substitute "far enough to the right to allow passing by faster vehicles if such passing is safe and reasonable" for "as close as practicable to the right-hand curb" in the "slow-moving vehicle" section of the Ohio Revised Code.

No longer require front and rear wheel reflectors if a red light is used in the rear.

Permit generator-powered lights.

Permit either flashing or steady rear light.

No longer require a bell or horn.”¹²

In addition to the new legislation, the Ohio Bicycle Federation also provides a summary of Ohio legislation related to bicycling. The summary includes the following sections:

4501.01.

Definitions.

As used in this chapter and Chapters 4503, 4505, 4507, 4509, 4511, 4513, 4515, and 4517 of the Revised Code, and in the penal laws, except as otherwise provided:

(A) "Vehicle" means every device, including a motorized bicycle, in, upon, or by which any person or property may be transported or drawn upon a highway, except that "vehicle" does not include any motorized wheelchair, any electric personal assistive mobility device, any device that is moved by power collected from overhead electric trolley wires or that is used exclusively upon stationary rails or tracks, or any device, other than a bicycle, that is moved by human power.

Comment: *A bicycle is defined as a vehicle and thus is governed by a uniform set of rules common to all vehicles and a small set of specific rules for bicycles. (There are other specific rules for other vehicle types, such as trucks or busses.) The annotated list here summarizes the most important parts of the traffic rules and equipment rules that govern bicycle driving. People who try to make up their own rules have an accident rate five times higher than knowledgeable cyclists who follow the rules of the road.*

§ 4511.07. Local traffic regulations.

(A) Sections 4511.01 to 4511.78, 4511.99, and 4513.01 to 4513.37 of the Revised Code do not prevent local authorities from carrying out the following activities with respect to streets and highways under their jurisdiction and within the reasonable exercise of the police power:

(8) Regulating the operation of bicycles: provided that no such regulation shall be fundamentally inconsistent with the uniform rules of the road prescribed by this chapter and that no such regulation shall prohibit the use of bicycles on any public street or highway except as provided in section 4511.051 of the Revised Code;

¹² Source: Ohio Bicycle Federation, A Bill for Better Bicycling in Ohio, <http://www.ohiobike.org/hb389info.html>

(9) Requiring the registration and licensing of bicycles, including the requirement of a registration fee for residents of the local authority;

(B) No ordinance or regulation enacted under division (A)(4), (5), (6), (7), (8), or (10) of this section shall be effective until signs giving notice of the local traffic regulations are posted upon or at the entrance to the highway or part of the highway affected, as may be most appropriate.

Comment: The most important of the reforms passed in 2006 will require that any local regulations be consistent with the uniform rules of the road. In addition, signs are required of such local regulations. Unfortunately, there are still many ordinances inconsistent with uniform laws. Some of these bad ordinances mandate unsafe practices.

Source: Ohio Bicycle Federation, Digest of Ohio Bicycle Traffic Laws, <http://www.ohiobike.org/bicycle-law-digest.html>

2.3.3. Columbus City Codes

The following modifications to city codes are recommended to support bicycling in Columbus.

Table 2-1: Recommended Policy Modifications

2.1. Code Section	2.2. Suggested Modification
<p>Title 9 STREETS, PARKS AND PUBLIC PROPERTIES CODE Article I. Street and Sidewalk Areas Chapter 902 HEALTH AND SAFETY Chapter 905 SIDEWALK AND DRIVEWAY CONSTRUCTION AND REPAIR Chapter 910 COMPREHENSIVE RIGHTS-OF-WAY</p>	<p>Add section on Complete Streets to integrate bikeways within roadway and right-of-way definitions.</p>
<p>Title 21 TRAFFIC CODE Article IX. Pedestrians, Bicycles and Motorcycles Chapter 2171 PEDESTRIANS Chapter 2173 BICYCLES AND MOTORCYCLES</p>	<p>Modify right of way section to include safe passing distance; add requirement to prohibit wrong-way riding in bike lanes and shoulders; require that bike lanes provide safe distance from the ‘door zone’ in areas with on-street parking; clarify code to clearly state it is unlawful for a motorist to strike a bicyclist who has fallen into the roadway; ensure consistency with Ohio HB389; cyclists’ right to ride on city streets should be clarified to expressly allow experienced cyclists the right to utilize travel lanes and turning movements in addition to designated bicycle lanes and routes.</p>

2.1. Code Section	2.2. Suggested Modification
<p>Title 31 PLANNING AND PLATTING CODE Article I. Planning Chapter 3107 PLANNING AND DEVELOPMENT Article III. Planning and Land Development Chapter 3121 LAND DEVELOPMENT; SCHOOLS, PARKS AND RECREATION AREAS Chapter 3123 REGULATIONS FOR LAND SUBDIVISION Chapter 3124 ADEQUATE PUBLIC FACILITIES Chapter 3125 TRAFFIC STANDARDS CODE</p>	<p>Include provision of bikeways in site plan review process; ensure consistency with Traffic Standards Code.</p>
<p>Title 33 ZONING CODE Article II. Traditional Neighborhood Development Chapter 3320 TRADITIONAL NEIGHBORHOOD DEVELOPMENT</p>	<p>Include bikeways in TND code and provide typical sections to ensure consistency with thoroughfare types; include greenway and trail corridors in transect zoning types; add bike lanes to arterial and collector roads.</p>
<p>Article V. Residential Use Districts Chapter 3342 OFF-STREET PARKING AND LOADING</p>	<p>Include Bikeways Advisory Committee’s draft bicycle parking ordinance; ensure that the ordinance applies to residential, commercial and institutional district.</p>

Source: Columbus City Code, available at: <http://www.ordlink.com/codes/columbus/index.htm>