

City of Huntsville Bikeway Plan

Huntsville, Alabama



...Developing a safe, continuous and comprehensive bikeway system in the city of Huntsville

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GLOSSARY

Bicycle – Every vehicle propelled solely by human power upon which any person may ride, having two tandem wheels or three to four wheels, with the exception of scooters and similar devices such as tricycles for children.

Source: AASHTO Guide for the Development of Bicycle Facilities, 1999

Bicycle Facilities – A general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including parking facilities, and shared roadways not specifically designated for bicycle use.

Source: AASHTO Guide for the Development of Bicycle Facilities, 1999

Bicycle Route – A segment of a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational markers, with or without specific bicycle route numbers. Bike routes may be a combination of any and all types of bikeways.

Source: AASHTO Guide for the Development of Bicycle Facilities, 1999

Bikeway – Any road, street, path or way which in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Source: AASHTO Guide for the Development of Bicycle Facilities, 1999

Greenway – Corridors of protected open space along natural features, such as streams and ridges, or along man-made features such as abandoned railroad corridors or scenic roadways.

Source: City of Huntsville Greenways Plan, 1993

Roadway – The portion of the highway, including shoulders, intended for vehicular use.

Source: AASHTO Guide for the Development of Bicycle Facilities, 1999

Shared Use Path – A bikeway physically separated from the motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers and other non-motorized users.

Source: AASHTO Guide for the Development of Bicycle Facilities, 1999

Shoulder – The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles for emergency use and for lateral support of sub-base, base and surface courses.

Source: AASHTO Guide for the Development of Bicycle Facilities, 1999

*The AlaBike
Four-Hill Feast Century
Huntsville, AL, June 18, 2005*



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CHAPTER 1

INTRODUCTION

The *City of Huntsville Bikeway Plan* addresses the bicycle transportation needs of citizens within the Huntsville area. With growing interests in cycling and bicycle safety, the city of Huntsville continues to promote bicycle projects and programs that encourage the use of alternative means of transportation which support active transportation, healthy lifestyles, and a healthy environment.

Huntsville, a progressively growing city often named as one of the best places to live and work by a variety of national publications is responding to the increased use of bicycles in the area coupled with the lack of adequate facilities, by developing and maintaining its bikeway plan. As the urbanized area expands, this plan presents a bicycle network that establishes connectivity among local neighborhoods, churches, educational and recreational facilities and commercial areas to provide safe, convenient and sufficient bicycle facilities that will enhance and encourage bicycle travel.

The City of Huntsville Bikeway Plan was last updated in 2001 under the provisions of the Transportation Equity Act for the 21st Century (TEA-21), which required all states and metropolitan areas to plan for bicycle and pedestrian transportation facilities and to incorporate such facilities into their short and long-range transportation plans. After the expiration of the TEA-21 legislation in 2003, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law on August 10, 2005, continuing the efforts to promote bicycle and pedestrian projects and programs in state and local planning. The 2006 bikeway plan update, written under the provisions of SAFETEA-LU, has been developed by the transportation planning staff with input and involvement from city officials, technical city staff members, the Huntsville Bicycle Advisory Committee and the general public.

Bikeway Plan History

Bikeways were first constructed in the Huntsville area during the late 1970's through the development of *A Plan for the Present: Bikeways in Huntsville* in 1976. The plan encouraged local citizens to take action in recognizing the bicycle as a mode of transportation. The bikeway system that was in existence at that time consisted mainly of bike routes, which were marked roadways that were shared by motor vehicles and bicycles. For more than 20 years, the routes were not properly maintained and most of the damaged bike route signs were not replaced, leaving the routes fragmented and incomplete resulting in an inadequate bikeway system.

Since then, the demand for bikeways and pedestrian pathways to serve recreational, fitness and transportation needs has continued to increase. An *Update and Integration of the Bikeway and Pedestrian-way Plans* was completed in 1981. The *Bikeway Design Criteria* was developed in 1992 and later supplemented by the development of the *City of Huntsville Bikeway Plan* which was adopted in June of that same year. The plan served as a guide for improving

bicycle activity and suggested education, promotion, and policy projects to integrate bicycling into the existing transportation environment.

An update to the *City of Huntsville Bikeway Plan* was adopted in September 2001 as a continuation of efforts to promote bicycle projects and programs. The current bikeway system consists of bike routes and shared use pathways that connect residential areas to major employers and shopping centers located throughout the city.

Goals and Objectives

The *City of Huntsville Bikeway Plan* is a tool developed to serve as a guide for improving bicycle activity within the city of Huntsville over the next five years. The purpose of enhancing non-motorized transportation facilities and projects throughout the city of Huntsville will serve as the vision for this plan. The vision, goals and objectives are as follows:

The City of Huntsville will encourage the use of alternative means of transportation to promote active transportation, healthy lifestyles, and a healthy environment. In efforts to become a model bicycle and pedestrian community, the city of Huntsville will feature linked transportation facilities for bicyclists and pedestrians, encourage community wide support of educational programs to increase the awareness of laws governing motorized and non-motorized travel, and promote coordinated bicycle and pedestrian activities among City of Huntsville programs and services.

GOAL 1: To develop a safe, continuous and comprehensive bikeway system.

OBJECTIVES:

- Provide efficient bikeways to enable the public to safely ride bicycles to schools, libraries, parks, other recreational areas and commercial areas such as shopping centers.
- Encourage bicycling for recreation, sport and physical fitness through the development of recreational bikeways.
- Encourage the use of the bicycle as an alternative to the motor vehicle for work trips through the development of commuting bikeways that link the major employment centers with residential areas.
- Minimize the conflict between the bicycle and pedestrian traffic.

GOAL 2: To enhance the existing bicycle and pedestrian programs.

OBJECTIVES:

- Pursue funding for bicycle compatible improvement projects and programs.
- Encourage educational programs to improve bicycle and pedestrian safety.
- Advertise plans and programs that promote bicycling.
- Develop a media campaign to promote bicycling and walking as viable and active alternative means of transportation.
- Install “Share the Road” signs on designated roadways as outlined in the Bikeway Plan.

GOAL 3: To increase community support for bicycle and pedestrian activities.

OBJECTIVES:

- Apply for the LAB “Bicycle Friendly Community” Award.
- Provide presentations and workshops on bicycle and pedestrian transportation.
- Encourage school-based education classes that teach bicycle skills and safety.
- Encourage school-based driver education classes that teach bicycle-sensitive driving skills.

GOAL 4: To increase the number of bicycle and pedestrian trips.

OBJECTIVES:

- Collect and maintain statistical bicycle data within the local area.
- Promote bike racks, lockers and parking at bicycling destinations.
- Promote showers and changing facilities at work destinations.
- Include bike facility projects in roadway improvement designs and funding programs.
- Coordinate bicycle and pedestrian transportation planning with public transportation to develop a bicycle/transit map with detailed route information; establish bike-on-transit policies and appropriately equip transit vehicles.

GOAL 5: To promote police officer and public awareness of bicycle laws and regulations.

OBJECTIVES:

- Promote training programs for law enforcement officers, increasing their awareness of bicyclists’ characteristics and bicycle violations.
- Encourage good bicycling behavior techniques through the local bike patrol unit.
- Publish and circulate applicable traffic laws governing bicycling for public awareness.
- Promote the use of warnings and citations for bicyclists and motorists who commit traffic violations posing safety hazards.



***Aldridge Creek Greenway:** A popular shared use pathway used by pedestrians, cyclists, skaters, joggers and other non-motorized users located in south Huntsville.*

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CHAPTER 2

BICYCLE TRANSPORTATION

As the United States and other countries increase the awareness and benefits of walking and cycling, the city of Huntsville is committed to improving bicycle and pedestrian conditions and increasing bicycle activity within its communities. The many benefits to bicycle transportation include accessibility, mobility, affordability, better health, cleaner environments and economic gain.

According to the National Center for Bicycling and Walking (2003), in areas where bicycle and pedestrian activity is fostered and promoted, and where investments are made in these types of facilities, the economic impact may be greater. Bicycle and pedestrian activity in such areas can attract and revitalize businesses, create jobs, and increase public revenue. Thus, bicycle transportation may be beneficial to many communities in that it can provide the accessibility and connectivity to and between neighborhoods, parks, shopping and other public places through non-motorized modes of transportation while enhancing economic viability.

There are several reasons that people may choose to bike or walk, whether it is for recreation, fitness or transportation. When considering the transportation network in local cities and communities, it is important to provide bicycle and pedestrian facilities that will allow bicyclists and pedestrians to reach the same destinations, in relative time and distance, as those traveling in motor vehicles.

Bicycle transportation also provides mobility to individuals who may not own or operate motor vehicles due to income constraints, age, or physical and medical conditions. In addition, bicycle and pedestrian facilities can reduce traffic congestion, enhance the quality of life of citizens, and benefit the environment by reducing emissions and noise pollution. The city of Huntsville will encourage the use of alternative means of transportation to promote active transportation, healthy lifestyles, and a healthy environment through the presence of bikeways by providing safe communities for people to bike and walk.

Bikeway Transportation System and Cyclists

Nearly 100 million people in the United States own bicycles. The Bicycle Federation of America estimates that fewer than 5 percent would qualify as experienced or highly skilled bicyclists. Since the goal is to accommodate existing bicyclists and encourage increased bicycle use, there may be an increase in novice riders utilizing the bikeway system. Therefore, any roadway treatments intended to accommodate bicycle use must address the needs of both experienced and less experienced riders. One solution to this challenge is to develop the concept of a “*design cyclist*” and adopt a classification system for bicycle users such as the one outlined in the *Guide for the Development of Bicycle Facilities*, American Association of State Highway and Transportation Officials (1999). The bicycle user characteristics are outlined as follows:

Advanced Bicyclist: These are experienced riders who can operate under most traffic conditions. They comprise the majority of the current users of collector and arterial streets and are best served by the following criteria:

- Sufficient operating space on the roadway or shoulder to reduce the need for either the bicyclist or the motor vehicle operator to change position when passing.
- Direct access to destinations usually via the existing street and the highway system.
- The opportunity to operate at maximum speed with minimum delays.

Basic or Novice Bicyclist: These are casual or new riders who are less confident of their ability to operate in traffic without special provisions for bicycles and are served by the following criteria:

- Well defined separation of bicycles and motor vehicles on arterial and collector streets or separate bike paths.
- Comfortable access to destinations, preferably a direct route, using either low-speed, low traffic-volume or designated bicycle facilities.

Child Bicyclist: These cyclists generally ride on their own or under adult supervision. These riders are also less confident of their ability to operate in traffic without special provisions for bicycles and are served by the following criteria:

- Residential streets with low motor vehicle speeds with access to shared used paths, as well as collector streets with clearly marked bikeways that show a distinction between bicycles and motor vehicles.
- Comfortable access to destinations, preferably a direct route, using either low-speed, low traffic-volume or designated bicycle facilities.

According to the American Association of State Highway Transportation Officials (AASHTO), bicycle safety education, training, encouraging bicycle use and the application and enforcement of the rules of the road as they pertain to bicyclists and motorists, should be combined with facilities to form a complete comprehensive approach to bicycle use. The majority of bicycling will take place on ordinary roads with no dedicated space. Bicyclists can be expected to ride on almost all roadways, though sometimes they use sidewalks as joint bicycle and pedestrian facilities.

Most of the local streets in the city have adequate width and low traffic volumes that are not a particular problem for bicycling. However, most of the arterials and major collectors are operating at higher traffic volumes. The emphasis of this plan is placed on the “*design cyclist*” and the location of bike facilities utilizing selected collector and arterial streets. Facilities are only one of several elements essential to Huntsville's overall bicycle plan. Bicycle safety,

education and training, bicycle promotion and the application and enforcement of the rules of the road are all necessary to form a comprehensive community approach to bicycle use.

State and Local Bicycle Legislation

According to the Code of Alabama, traffic laws apply to persons riding bicycles in that, “every person riding a bicycle upon a roadway shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle...” (§ 32-5A-260). This law also applies to the bicyclists who ride upon the local streets of Huntsville, AL as referenced in Section 25-422, Rider responsibility (Code 1982, § 14-300(a)), of the Code of Ordinances for the City of Huntsville adopted March 25, 2004. Federal legislation also recognizes and encourages bicycling and walking through transportation policy and acts that provide funding for such uses. A detailed description of the Code of Alabama can be found in Appendix A.

Federal Transportation Law

The Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is a reauthorization of TEA-21 that was signed into law August 10, 2005. The five year legislation provides funding nationwide for highways, public transit and safety programs. Trail, bicycle and pedestrian provisions in SAFETEA-LU include programs such as Transportation Enhancements (TE), Recreational Trails Programs (RTP), High Priority Projects, Safe Routes to School and the Non-motorized Transportation Pilot Program.

According to the Federal Highway Administration (2005), SAFETEA-LU addresses the many challenges facing the nation’s transportation system – challenges including safety improvements, increasing inter-modal connectivity, and protecting the environment as well as laying the groundwork for addressing future challenges. SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities.

Safety and security are identified as separate items to be considered in both metropolitan and statewide planning processes. Requirements are added for plans to address environmental mitigation, improved performance, multi-modal capacity, and enhancement activities; tribal, bicycle, pedestrian, and disabled interests must also be represented (FHWA, 2005).

The details of the current legislation as well as individual fact sheets regarding the bicycle and pedestrian provisions listed above, can be found at the Federal Highway Administration’s website at: <http://www.fhwa.dot.gov/safetealu/index.htm>

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CHAPTER 3

BIKEWAY PLAN METHODOLOGY

This chapter presents the bikeway plan methodology to ensure effective measures of implementing the recommendations of future projects outlined in the bikeway plan for the city of Huntsville. First, the methodology used in establishing the Huntsville Bicycle Advisory Committee (HBAC) is described. Then the implementation process for constructing the bikeway facilities within the transportation network is presented along with the methodology used in selecting the bicycle routes. Lastly, the funding sources for bikeway facilities in the city of Huntsville are discussed.

Huntsville Bicycle Advisory Committee

The Huntsville Bicycle Advisory Committee was formed in 1992 to assist the City of Huntsville Planning Division in planning and developing non-motorized transportation facilities and programs, including but not limited to, bicycle routes, lanes, paths and bikeway plans. The purpose of this committee is to encourage and coordinate efforts to improve conditions for bicycling within the Huntsville community. These coordinated efforts involve assessing and proposing preliminary plans and standards that will ultimately enhance non-motorized transportation facilities and projects throughout the city of Huntsville.

The HBAC is a collaboration of interested citizens, bicycle organizations, bicycle shops, safety associations, and professional and technical staff members from the city of Huntsville. A meticulous process of establishing members for the committee was taken to ensure that all interested stakeholders had a viable role in implementing plans to improve conditions for bicycling in the city. The HBAC is not a standing committee and its members are selected to serve only during the revision process of updating the City of Huntsville Bikeway Plan. While serving on the committee, members of the HBAC are to fulfill three primary roles:

- Assist in the development of the bikeway plan for approval by the Planning Commission
- Participate in planning sessions in which proposed bikeway facilities are identified and reviewed, and citizens' ideas and concerns are incorporated into the development of the community bikeway plan
- Serve as a liaison between the planning staff and the community to inform citizens of the progress of the bikeway plan and encourage the support of future bikeway projects

Members representing the bicycle organizations, bicycle shops, and citizens at large positions must be residents of the city of Huntsville. The total membership of the committee may not exceed 20 members. Table 3.1 outlines the minimum membership requirements for the Huntsville Bicycle Advisory Committee.

Table 3.1: Minimum Membership Requirements

Number of Members	Affiliation	Description
2	Bicycle Organization	Members who promote bicycling as members of an organized bicycling association
1	Bicycle Shop	Member who sells or repairs bicycles and bicycle safety equipment
5	Citizens at Large	One member per council district within the city of Huntsville
1	Disability Advocate/ Bicycle Education	Member with specialized knowledge and experience regarding the transportation needs of persons with physical and/or sensory disabilities, as well as bicycle safety education
1	Safety Association	Member with an expertise in bicycle and pedestrian safety
1	Planning Commission	Member who is knowledgeable of the growth and development of the city
3	Planning	Prepares and updates plans governing bicycle/pedestrian use
1	Engineering	Offers insight on city policy for roadway infrastructure
1	Legal	Provides legal insight for proposed facilities and programs
1	Police Department (Bicycle Patrol)	Offers knowledge of bicycle and pedestrian accident reports within the city
1	Parks and Recreation	Provides insight on recreational services for facility and program implementation

Through the establishment of the Huntsville Bicycle Advisory Committee, it is the objective of the City of Huntsville Planning Division to encourage citizen participation for the implementation of non-motorized transportation facilities and programs for the city of Huntsville. The City of Huntsville Planning Division encourages communication and cooperation with all citizens expressing interests in the implementation of non-motorized transportation facilities and programs.

Committee Meetings

Once the Huntsville Bicycle Advisory Committee was established, three public meetings were held to facilitate the process of revising the existing bikeway plan. During the initial meeting, members were asked to provide input and suggestions on the goals and objectives of the bikeway plan. Members then evaluated the existing conditions of the bicycle facilities in the area and gave recommendations on existing and proposed routes during the second meeting. Members were encouraged to provide feedback throughout the process. Upon completing a draft of the plan, the final meeting was held to allow committee members to provide comments on the

bikeway plan map. Members were given a two week review period after the last meeting to provide additional comments on the overall plan.

Recommendations

In the past, the needs of bicyclists were not adequately considered. Most planning and construction efforts, parks and roadways were often built without the simple considerations that would allow bicycles access and parking, causing them to be excluded or hindered. To accommodate bicycles after construction often requires costly retrofitting, which sometimes results in a non-standard and an inferior design solution.

Since bicycles are legal vehicles that have economic, environmental and societal benefits, all arterials and collectors are part of the bicycle transportation network. Therefore it is important to institutionalize bicycle transportation into transportation design and planning, construction manuals, and roadway and recreational facilities. The HBAC provided the following recommendations at public involvement meetings held between April and June of 2005:

- All roadways not legally prohibited to bicycles should be considered for bikeway projects.
- Establish a "check-off for bikes" procedure for all design and construction planning of roadways, subdivisions, parks and greenways, with review by the Bicycle Coordinator for bicycle access and travel continuity as part of construction projects, the Huntsville Area Transportation Plan and the Transportation Improvement Plan.
- Design and construction standards codes for roadways for the Huntsville area should be revised to accommodate bicycle use.
- Consider that all transit buses install bike racks on buses to accommodate bicyclists and to increase cycling mobility.
- Encourage and address the "Safe Routes to School" initiative for accessibility to and from local schools.
- Consider connectivity within the transportation network that will allow a combination of walking, bicycling, and driving through the "Complete Streets" initiative.
- Consider adopting an ordinance that would require businesses of a certain square footage to provide adequate bike parking.

The bike routes from the previous plan were taken into consideration as possible signed routes for this plan update. The recommendations presented for the bikeway plan implementation process, with the assistance of the Huntsville Bicycle Advisory Committee, will be effective in ensuring the development of safe, accessible bicycle transportation facilities within the city of Huntsville.

Bikeway Plan Implementation

The bicycle transportation projects and programs recommended in this Bikeway Plan will take place over the next five years. Developing a bikeway plan brochure will be an immediate task performed after the Bikeway Plan is adopted. Because many of the proposed projects in the Bikeway Plan will require further study and the identification of funding sources, the following steps will be taken for implementing future bikeway projects:

- *Supplementary Studies* – When considering areas with a high volume of motor vehicle traffic, smaller road widths and variable speed limits, traffic studies and analyses will be performed to determine the impact of the proposed bikeways.
- *Securing Funding Sources* – The staff will continuously seek methods of identifying additional funding sources and apply accordingly, as the more costly projects such as bike lanes and shared use paths will be secured through federal funding opportunities.

Bikeway Project Prioritization

The City of Huntsville will investigate all possible avenues in designing and implementing bicycle facilities. The recommended bicycle routes are prioritized according to the criteria for corridor evaluation and performance which are discussed below. Bicycle projects such as bicycle lanes and shared use paths are prioritized in conjunction with roadway improvements or through the procurement of transportation enhancement funding. The criteria for corridor evaluation and performance give priority to those projects that will serve the most people and will improve the safety of bicyclists; however, the prioritization of bicycle programs, such as safety education, takes an alternative approach as the aforementioned prioritization criteria are not intended for bicycle programs. City staff will therefore make recommendations as to which bicycle programs to implement first.

Corridor Evaluation

Each bikeway selected as a future project was examined and evaluated by staff to assess its safety and functionality. In accordance to the FHWA publication, “Selecting Roadway Design to Accommodate Bicyclists’,” the following criteria were used in the evaluation process.

- *Traffic Volume*: Higher motor vehicle traffic volumes represent greater potential risks for bicyclists. Novice cyclists are less comfortable with the frequent overtaking from automobiles unless special design treatments are provided.
- *Average Motor Vehicle Operating Speed*: The average operating speed is more important than the posted speed limit, and better reflects local conditions. Here again, motor vehicle speed can have a negative impact on risk and comfort unless mitigated by special design treatments.

- *Traffic Mix:* The regular presence of trucks, buses, and/or recreational vehicles can increase the risks and have a negative impact on comfort. At high speeds, the windblast from such vehicles can create a serious risk of falls. Even at the lower operating speeds, shared lane use is less compatible. All types of bicyclists prefer extra roadway width to accommodate greater separation from such vehicles. Many bicyclists will choose a different route or not ride at all where there is a regular presence of such traffic unless they are able to remove themselves at least several feet from these motor vehicles.
- *On Street Parking:* The presence of on-street parking increases the width needed in the adjacent travel lane or bike lane to accommodate bicycles. This is a primary concern with streets and highways built within the urban area.
- *Sight Distance:* Inadequate sight distance relates to situations where bicycles are being overtaken by motor vehicles and where sight distance is likely less than is needed for a motorized vehicle operator to either change lane positions or slow to the cyclist's speed.
- *Number of Intersections:* Intersections pose special challenges to bicycle and motor vehicle operators, especially when bike lanes or separated bike paths are introduced.
- *Shoulders:* Should be at least 4 feet wide to accommodate bicycle travel. However, where 4 foot widths cannot be achieved, any additional shoulder width is better than none at all. The measurement of usable shoulder width should not include the width of a gutter pan, unless the pan is 4 feet or greater. Shoulder width of 5 feet is recommended from the face of the guardrail, curb or other roadside barriers.
- *Lane Width:* Wide curb lanes for bicycles are usually preferred where shoulders are not provided, such as restrictive urban areas. On highway sections without designated bikeways, an outside curb lane wider than 12 feet can better accommodate both bicycles and motor vehicles in the same lane and thus beneficial to bicyclists and motorists. In general, 14 feet of usable lane is the recommended use in a wide curb lane. On stretches of roadway with steep grades where bicyclists need more maneuvering space, the wide curb should be wider; a practical 15 feet is preferred.
- *Bike Lane Width:* The recommended width of a bike lane is 5 feet from the face of the curb or guardrail to the bike lane stripe. For roadways with no curb and gutter, the minimum width of a bike lane should be 4 feet. Where parking is permitted but parking strips are not utilized, the shared area should be at least 11 feet without a curb face and 12 feet adjacent to a curb face.
- *Grade:* Grades greater than 5 percent are undesirable because the ascents are difficult for many bicyclists to climb and the descents cause some bicyclists to exceed the speeds at which they are comfortable and competent. As a general guide, the following grade restrictions and grade lengths are suggested:

5-6%	for up to 800 ft	7%	for up to 400 ft
8%	for up to 300 ft	9%	for up to 200 ft
10%	for up to 100 ft	11%	for up to 50 ft

Performance Criteria

Performance criteria define the important variables to be considered in determining the effectiveness of the bicycle network. There are seven elements that should be addressed in a comprehensive bikeway plan:

- *Accessibility*: Is measured by the distance a bicycle facility is from a specified trip origin or destination, the ease by which this distance can be traveled by bicycle, and the extent to which all likely origins and destinations are served.
- *Directness*: Studies have shown that most bicyclists will not even use the best bicycle facility if it increases the travel distance or trip time than that which is provided by less desirable alternatives. Therefore, even the novice bicycle routes should be reasonably direct. The ratio of the directness to comfort/perceived safety involved in this tradeoff will vary depending on the characteristics of the bicycle facility.
- *Continuity*: The proposed network should have as few missing links as possible. If gaps exist, traffic environments which are unpleasant or threatening to novice cyclists should be avoided, such as high-volume or high-speed motor vehicle traffic with narrow outside lanes.
- *Route Attractiveness*: Incorporates such factors as separation from motor traffic, visual aesthetics, and the real or perceived threat of personal safety along the facility.
- *Low Conflict*: The route should present few conflicts between bicyclists and motor vehicle operators.
- *Cost*: The cost to both establish and maintain the system.
- *Ease of Implementation*: The ease or difficulty in implementing proposed changes depends on available space and existing traffic operations.

The City of Huntsville will work to include bikeways in roadway improvement designs for local transportation projects, considering the above performance and corridor evaluation attributes. The Alabama Department of Transportation considers bicycle and pedestrian accommodations on new and existing facilities as a routine part of state planning, design, and construction activities. Public hearings are held for State transportation projects that are constructed within the Huntsville area. Details of the evaluated proposed bikeway projects can be found in Chapter 4: City of Huntsville Bikeways.

Major Bicycle Generators

A basic strategy for encouraging bicycle transportation is to create a bicycle network that provides safe and direct access from people's homes to places they want to go on a daily basis. Bicyclists will be less inclined to ride without adequate and safe corridors on which to travel. The HBAC identified major bicycle generators in the city to identify potential bicycle corridors

of travel. The opportunities and constraints for bikeways were determined from an analysis of the suggested major generator locations along with the corridor evaluations and performance criteria outlined above. The major bicycle generators included local colleges and universities, shopping centers, parks, and employment centers that serve both utilitarian and recreation trips.

Bikeway Funding

Funding is available for bicycle and pedestrian projects and programs through local, state and federal financial resources. Local funding for bikeways can be obtained through existing financial resources within the City of Huntsville's Capital Improvement Plan, while other bikeway funding resources may be acquired through donations, dedications, or easements from private sources. Typically, the City of Huntsville incurs an average cost of \$100.00 for materials and the installation of bike route signs. Although there are no existing bike lanes within the municipality, the average cost per mile is generally \$250,000 including cost and labor.

Federal appropriations provide flexibility to States and Metropolitan Planning Organizations in funding bicycle and pedestrian related projects. In August 2005, a new bill reauthorizing TEA-21, the federal surface transportation legislation, was signed into law. This bill, the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is a five year legislation that provides funding nationwide for highways, public transit and safety programs. The current and future programs that are in place through SAFETEA-LU to provide funding to state and local agencies for trail, bicycle and pedestrian provisions are outlined below:

Transportation Enhancement (TE):

This program provides funding resources for trails, sidewalks, and other bicycle/pedestrian and transportation related facilities. Its purpose is to strengthen the cultural, aesthetic, and environmental aspects of the Nation's inter-modal transportation system according to the FHWA. Generally, the Federal share is 80 percent with a 20 percent local match.

Recreational Trails Program (RTP):

The Recreational Trails Program provides funds to States to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. The Federal share is in accordance to the sliding scale provision.

Safe Routes to School:

This new program will enable and encourage primary and secondary school children to walk and bicycle to school. Both infrastructure-related and behavioral projects will be geared toward providing a safe, appealing environment for walking and biking that will improve the quality of our children's lives and support national health objectives by reducing traffic, fuel consumption, and air pollution in the vicinity of schools. The Federal share is 100 percent.

High Priority Projects:

The High Priority Projects Program provides designated funding for specific projects identified in SAFETEA-LU. A total of 5,091 projects are identified, each with a specified amount of funding over the 5 years of SAFETEA-LU. The Federal share is 80 percent.

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CHAPTER 4

CITY OF HUNTSVILLE BIKEWAYS

The Bikeway Plan for the City of Huntsville serves as a guide for improving bicycle activity and promotes safety education and policy projects to integrate bicycling into the existing transportation environment. To insure neighborhood connectivity and a complete transportation system for motor vehicle, bicycle and pedestrian travel, the City of Huntsville has adopted subdivision regulations to provide the most beneficial relationship between the uses of land and buildings and the circulation of traffic throughout the municipality. In efforts to protect and provide for the public health, safety and general welfare, these standards have particular regard to the avoidance of congestion on the streets and highways, and facilitate the bicycle and pedestrian traffic movements appropriate to the various uses of land and buildings.

The *City of Huntsville Bikeway Plan* update will consist of a much broader scope in terms of its function and content, resulting in the placement of signs, bike lanes, and shared use pathways throughout the City of Huntsville (see Figure 4.1). The total bicycle transportation network will include approximately 160 miles of bikeway facilities in addition to the ten existing transit routes, which will encourage and promote bicycling while increasing transit ridership.

Figure 4.1: Illustrations of Bikeway Types in Huntsville

SHARED USE PATHWAY



Aldridge Creek Greenway

PAVED SHOULDER



Cecil Ashburn Drive

BIKE ROUTE



Research Park – Bradford Drive

Existing Bikeway and Pedestrian Facilities

The current bicycle transportation network for Huntsville consists of bike routes and shared use pathways. There are several bike lane projects that have been approved for funding such as the Oakwood Road project, which is scheduled to be completed within the next year. Other bike lane projects, including Meridian St. and Church St., have been integrated into the design work of scheduled roadway improvement projects. The enhanced bicycle transportation network will ultimately feature linked transportation facilities for bicyclists and pedestrians throughout the City of Huntsville.

Bicycle routes are facilities jointly shared with motorists and cyclists and are identified solely by markers, whereas, the greenway and shared use pathways are separated from the motorized vehicular traffic by an open space or barrier to accommodate only non-motorized users. Figure 4.1 shows an existing bicycle route located in the Huntsville area.

There is currently a combination of bicycle routes and shared use pathways that connect residential areas to major employers and shopping centers, covering a total distance of 42.72 miles throughout the Huntsville area. Table 4.1 gives details of the existing bikeway and pedestrian transportation facilities, including greenway and shared use pathways. The Wade Mountain Preserve Greenway is an unpaved trail located in north Huntsville.



Figure 4.2: Signed Bicycle Route – Wynn Drive

Table 4.1: Existing Bikeway and Pedestrian Transportation Facilities

Existing Bikeway and Pedestrian Transportation Facilities City of Huntsville Bikeway Plan					
Route Number	Trail Name	Main Road Facility	From Location	To Location	Trail Length (Miles)
Greenway/ Shared Use Paths					
---	Aldridge Creek Greenway	---	Mountain Gap Road	Ditto Landing	3.5
---	Big Cove Creek Greenway	---	Cranfield Road	Flint River	2.75
---	Eastern Bypass Greenway	Eastern Bypass	Old 431 Highway	Quarter Lane	2
---	Indian Creek Greenway	---	Old Madison Pike	Creekwood Park	2
---	Tennessee River Greenway	---	Ditto Landing	Madison County Marina	0.75
---	Wade Mountain Greenway	---	Spraggins Hollow Road	Devils Race Track	4
Total Miles:					15
Signed Bike Routes					
41	Huntsville Bikeway - Route 41	Wynn Drive	Adventist Boulevard	Old Madison Pike	2
59	Huntsville Bikeway - Route 59	Blue Spring Road	Winchester Road	Monroe Avenue	3.2
60	Huntsville Bikeway - Route 60	Holmes Avenue	Explorer Boulevard	Monte Sano Blvd	11.5
64	Huntsville Bikeway - Route 64	Adventist Boulevard	Oakwood Road	Sparkman Drive	2.02
69	Huntsville Bikeway - Route 69	Meridian Street	Wade Mtn. Greenway	Monroe Avenue	4.5
100	Huntsville Bikeway - Route 100	Old Madison Pike	Slaughter Road	Wynn Drive	4.5
Total Miles:					27.72

Maintenance and Security

It is recommended that prior to opening a facility, the overall responsibility for maintenance of the bikeway system be established; and a program for the control, periodic inspection and maintenance, and policing of the facility be developed. Neglected maintenance will render the facilities unusable or decrease ridership, making them a liability rather than an asset to the community.

According to Federal Highway Administration guidelines, maintenance operations should conform to acceptable standards. Local street maintenance departments should have written procedures to follow in maintaining all highways in reasonably safe conditions for bicycle traffic. Maintenance sensitive design is an important feature as well; as an improperly maintained bikeway will often be avoided by bicyclists in favor of a parallel roadway.

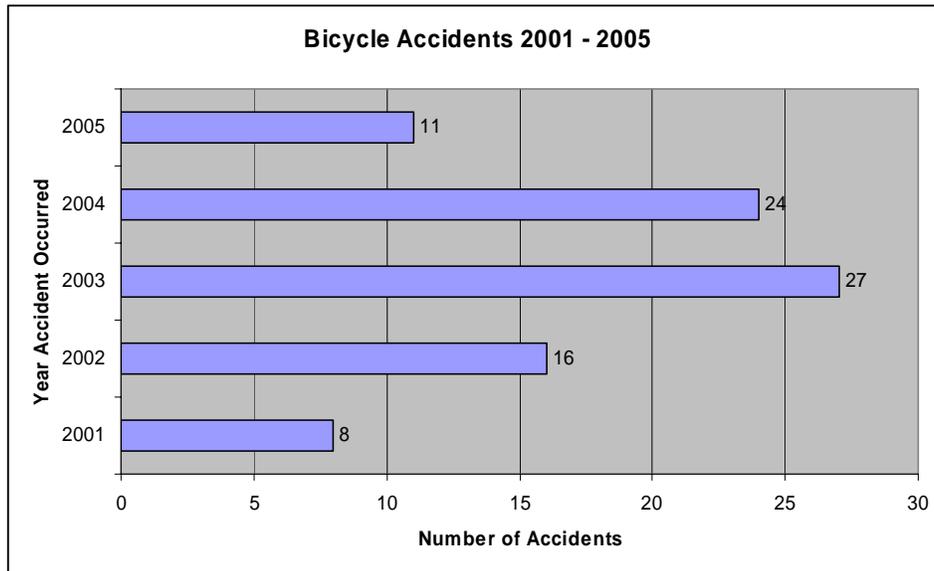
The Maintenance Division of the Public Works Department is responsible for maintaining the safe riding quality of the City's streets, and performs routine maintenance of local roadways. The Department of Recreation Services and Landscape Management performs routine maintenance for greenways and shared use paths. Routine maintenance includes cutting grass, litter and trash pickup, and periodic brush removal. Bicyclists are encouraged to report any bikeway maintenance problems encountered to the appropriate division, and any security issues to the local law enforcement officers.

Bicycle and Pedestrian Accidents

According to a 2003 transportation planning study prepared by the City of Huntsville Planning Division, more than 95 percent of its commuters traveled to work in single occupancy vehicles or by carpool, with less than 2 percent of its total population commuting to work by way of bicycling or walking (Journey to Work Characteristics, 2003). However, as bicycle awareness increases and encourages more bicyclists and pedestrians to commute, necessary safety precautions and measures are needed. The National Highway Traffic Safety Administration states that 622 bicyclists died in traffic collisions in 2003, with almost all serious injuries reported resulting in collisions with motor vehicles. In a recent study of 700 bicycle fatalities, more than 80 percent involved motor vehicles.

The number of bicycle/motor vehicle collision related accidents reported to the Huntsville Police Department between 2000 and 2005 totaled more than 80 incidents. An in-depth analysis revealed that most of the accidents occurred during the summer months at the peak traffic hours of 3:00 pm through 9:00 pm. At least 12 bicycle fatalities occurred on Alabama roadways in 2003; however, locally there has been a reduction in the number of bicycle accidents, as shown in Figure 4.3.

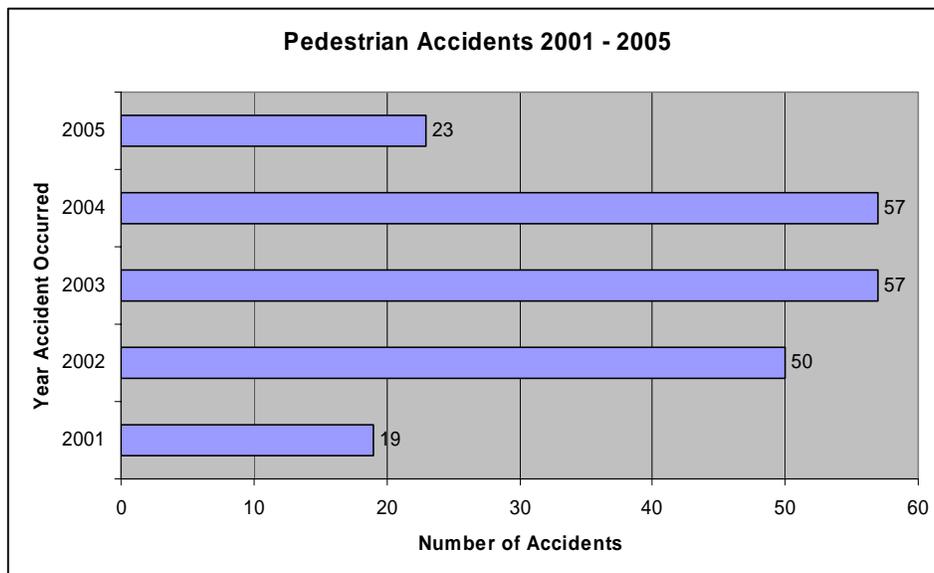
Figure 4.3: Bicycle Accidents in Huntsville, AL from 2001 - 2005



Source: City of Huntsville Traffic Engineering

Pedestrian accidents are usually greater than bicycling accidents. The National Highway Traffic Safety Administration reports that 4, 749 pedestrians were killed in 2003. In the city of Huntsville, over 200 pedestrian accidents have occurred in the area over the past 5 years. Figure 4.4 depicts the number of pedestrian accidents reported to the Huntsville Police Department between 2000 and 2005.

Figure 4.4: Pedestrian Accidents in Huntsville, AL from 2001 - 2005



Source: City of Huntsville Traffic Engineering

Bicycle Transportation Projects

Motorists and cyclists have equal legal access and responsibilities on most roadways in the state of Alabama and in the city of Huntsville, with the exception of interstates and limited access roadways. In addition, cyclists may use bikeway facilities designed for cycling, such as bike lanes, bicycle routes or shared use pathways. In the absence of designated bicycle facilities, paved shoulders improve safety conditions for roadway users. Some basic design classifications used to accommodate bicycle travel within the City of Huntsville are bike lanes, bicycle routes/ shared roadways, shared use pathways and paved shoulders. The following sections provide details on proposed bikeway plan projects for the Huntsville area:

Bike Lanes

A series of striped bike lanes projects on local roadways are proposed to be phased in over the next 5-year period. These projects will enhance the current bikeway system by connecting neighborhoods and schools, as well as employment and retail centers with the bikeway system. The first bike lane project, Oakwood Rd, is scheduled for construction in 2006.

Bicycle Routes

The selected bicycle routes create a network of travel corridors between major points of interest in the community. This is an efficient use of resources and permits people to travel across wide areas of the city, connecting various points of interests. There are 29 bicycle routes outlined in the current bikeway plan, and 6 of those have been previously signed. Even numbered routes traverse East and West, while odd-numbered routes traverse North and South. Where necessary, “share the road” signs will be installed on designated bike routes to safely accommodate bicyclists and motorists.

Bicycle/ Transit Routes

The City of Huntsville Planning Division is currently working with the City of Huntsville Department of Parking and Public Transportation to equip buses with bicycle racks. The bicycle/ transit routes were established to coordinate bicycle and pedestrian transportation planning with public transportation to increase bicycle awareness as well as to increase public transit ridership. Currently there is one bus equipped with a bicycle rack, with typical costs averaging \$2,000.00 per rack for equipment and installation.

Greenways/ Shared Pathways

Greenways are protected corridors of open space along natural features such as streams and ridges or along manmade features such as abandoned railroad beds or scenic roadways. With a total of 15 completed miles, the greenway system will eventually include over 130 miles of interconnected trails, including canoe trails, pedestrian/bike trails, and hiking trails.

The following tables with corresponding maps give details of the proposed bicycle transportation projects scheduled for implementation over the next 5 years.

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Table 4.2: Bikeway Plan Projects

Bike Routes (Standard Signage)										
Route #	Description	Length (miles)	Traffic Volume	Lanes	Speed	Surface Condition	Zoning	Road Grade	Curb/Gutter/Sidewalks	Year of CN
North - South										
11	From Sutton Rd, North on Big Cove Rd to US Hwy 431	1.00	Light/ Moderate	3	40	A	R	NO	NO	2006
15	From Holmes Ave, South on 14th St, East on 10th Ave, South on 12th St, South on Atlantic St, East on Gesman Pl, South on Clopton St, East on Drake Ave, South on Lemley Pl, Southwest on Archer Dr, South on McCalley Pl to Village Dr	3.00	Light	2, 3	35	A	C	NO	YES/ NO	2006
21	From Pratt Ave, South on White St to Echols Ave	1.25	Light	2, 5	25	G	R	NO	YES	2006
25	From Dry Creek Greenway, South on Pulaski Pike, West on Stringfield Rd, South on Rickwood Rd, East on Ellington Rd, South on Rosedale Dr, East on Kyle Ln, South on Angora Dr, East on Grizzard Rd, South on Shady Lane Dr, East on Oakwood Ave to Clubview Dr	3.00	Light	2, 5	25	G	R	NO	YES	2006
31	From Monroe St, South on Green St, East on Williams St, South on Adams St to Lowe Ave	0.75	Light	4, 5, 3	25	G	C	NO	YES	2007
35	From Oakwood Ave, South on Clubview Dr, West on Brookmead St, Southeast on Oster Dr, East on University Dr, Southeast on Meadow Dr, East on Union Dr, South on Cherry Ave to Holmes Ave	2.00	Light/ Moderate	2, 7, 2	25	A	R	NO	YES	2007
41	From Adventist Blvd, South on Wynn Dr to Old Madison Pike	2.75	Moderate	3, 5	35	GOOD	R, RP	NO	YES	2003*
49	From Oakwood Rd, South on Monrovia Rd, South on Wayne Rd, South on Enterprise Way, West and East on Explorer Blvd back to Enterprise Way, South on Voyager Way to Old Madison Pike	2.75	Light/ Moderate	2, 5	35	E	RP	NO	YES	2007
51	From Williams St, South on Washington St, South on Franklin St, West on Marsheutz Dr to Gallatin St	1.25	Light	2, 3	25, 35	G	MD	NO	YES	2007
55	From Monroe Ave, South on Church St, South on Gallatin St, East on Bob Wallace Ave, South on Poinciana St, West on Thornton Ave, South on Lafayette Cir, South on Dupree Rd, East on Drake Ave, South on Riley Rd, East on Homewood Dr, South on Mulberry Ln, West on Teakwood Dr, East on Lakin Dr, South on Chateau Dr, West on Airport Rd, South on Chadwell Rd, South on Sanders Rd, South on Whitesburg Dr, East on Cole Dr, South on Cadillac Dr, East on Suhill Cir, South on Hickory Hill Ln, West on Weatherly Rd, South on Strong Dr, East on Cumberland Dr, South on Crestfield Dr, West on Hillwood Dr, West on Mountain Gap Rd, South on Mountain Gap Tr, South on Chickamauga Tr, East on Hobbs Rd, Southeast on Wynterhall Rd, North on Chaney Thompson Rd, East on Hobbs Rd to Aldridge Creek Greenway	13.00	Light	2	25	G	R	NO	YES	2007
59	From Winchester Rd, South on Blue Spring Rd, East on Oakwood Ave, South on Church St to Monroe Ave	5.00	Moderate	2, 3, 5	35	G	R, C	NO	YES	2002*
65	From Holmes Ave, South on Monroe Ave to Governors Dr	0.75	Light/ Moderate	5	35	E	C	NO	YES	2008
69	From Wade Mountain Preserve, South on Spragins Hollow Rd, East on Hollow Rd, South on Meridian St to Monroe Ave	5.00	Moderate	5	35, 40	G	R, RP	NO	YES	2002*/ 2008
71	From Enterprise Way, Southeast on Explorer Blvd, South on Discovery Dr, West on Explorer Blvd, South on Jan Davis Dr to Old Madison Pike	1.75	Light/ Moderate	5, 2, 5	35	E	RP	NO	YES	2008
81	From Mountain Gap Trail, West on Kohler Rd, South on Memorial Pkwy, West on English Dr, South on Piccadilly Ln, West on Magna Carta Pl, South on Saint Alban Blvd, West on Redstone Rd, East on Hobbs Rd, South on Bell Rd, South on Mariellen Rd, East on Green Cove Rd to Aldridge Creek Greenway	4.50	Light/ Moderate	5, 3, 5	35	A	C	NO	YES/ NO	2008
85	From White St, West on Echols Ave, West on Williams St to Monroe Ave	1.75	Light	2, 5	25	G	R	NO	YES	2008
95	From Oster Dr, West on McDow Ave, North on Jordan Ln, West on Putnam Dr, South on North Loop Rd (UAH Campus), West on Technology Dr, South on Sparkman Dr to Bob Wallace Ave	3.50	Light/ Moderate	2, 3, 5	25	A	R	NO	YES	2009
East - West										
20	From Hickory Hill Ln, East on Sherwood Dr, South on Atwood Dr, East on Mira Vista Dr, South on Bailey Cove Rd, West on Mt. Gap Rd to Aldridge Creek Greenway	5.00	Moderate	5, 2	35, 40	E	MI, R	NO	YES/ NO	2009
24	From Williams St, Southeast on Lowe Ave to Adams St	0.75	Light	4, 5	25, 35	G	C	NO	YES	2006
30	From Meridian St, East on Quietdale Dr, Southeast on Vinyard St, East on Watham Dr, East on Chapman Dr, South on Maysville Rd, West on Clinton Ave to Seminole Dr	4.50	Light/ Moderate	5, 2, 5	35	A	R	MOD	YES	2009
40	From Bob Wallace Ave, East on Governors House Dr, East on 9th Ave, North on Seminole Dr to Clinton Ave	3.50	Moderate	2, 3	40	A	C		YES/ NO	2009
50	From Mastin Lake Rd, North on Kenwood Dr, East on York Rd, North on Force Dr, East on Gilbreath Rd thru A&M Campus, East on Chase Rd, North on Higdon Rd, West on Winchester Rd to Meridian St	4.75	Light/ Moderate	2, 3	25, 35	A	R	NO	YES/ NO	2010
54	From Explorer Blvd, West on Farrow Rd to Slaughter Rd	2.00	Light/ Moderate	2, 5	35	E	RP	NO	YES	2008
60	From Explorer Blvd, East on Bradford Dr, East on Holmes Ave, Northeast on Monroe Ave, Northeast on Holmes Ave, East on Pratt Ave, Northeast on Bankhead Pkwy, West on Fearn St, South on Monte Sano Blvd to US Hwy 431	11.50	Moderate	5, 3, 2	35	G	R, RP	NO	YES	2002*/ 2010
64	From Knox Creek Greenway, North on Wall Triana Hwy, East on Capshaw Rd, East on Old Monrovia Rd, North on Johns Rd, East on Oakwood Rd, Southeast on Adventist Blvd, Northeast on Sparkman Dr, Northwest on Jordan Ln to Grizzard Rd	7.00	Moderate	5, 2	35	E	R	NO	YES	2004*/ 2010
66	From Cole Dr, North on Cadillac Dr, East on Four Mile Post, East on Cecil Ashburn Way, East on Sutton Rd to US Hwy 431	2.00	Moderate/ Heavy	2, 3, 5	35, 45	E	R, C	STP	YES	2010
80	From Patton Rd, East on Telstar Cr, East on Centaur Blvd, North on Squaw Valley Dr, East on Grunden Dr, Northeast on Conger Rd, North on McCalley Pl, East on Village Dr, South on Triana Blvd, East on Johnson Rd, East on Airport Rd, South on Balmoral Dr, South on Breckenridge Dr to Chadwell Dr.	3.50	Moderate	2, 3	25	A	R, C	MOD	YES	2010
100	From Slaughter Rd, East on Old Madison Pike to Wynn Dr	3.00	Moderate	5	40	G	R, RP	NO	YES	2003*
Total Mileage:		100.50								
Shared Bike Routes (Share the Road Signage w/ Standard Signage)										
Route #	Description	Length (miles)	Traffic Volume	Lanes	Speed	Surface Condition	Zoning	Road Grade	Curb/Gutter/Sidewalks	Year of CN
10	From Old Monrovia Rd, North on Indian Creek Rd, East on Plummer Rd, South on Jordan Ln, East on Grizzard Rd to Shady Lane Dr	6.00	Light/ Moderate	3, 2, 5	35, 25	G	R	NO	YES	2008
19	From Johnson Rd, North on Leman Ferry Rd, East on Drake Ave, South on Garth Rd to Four Mile Post Rd	2.50	Light/ Moderate	2, 3	25, 35	G	R	NO	YES	2009
70	From Big Cove Creek Greenway, West on Dug Hill Rd to US Hwy 431	0.50	Light	2	N/A	E	R	NO	YES	2010
Total Mileage:		9.00								
Shared Paths (Greenways)										
Route #	Description - Greenway corridors connecting to bike routes as shown on the Bikeway Plan map	Length (miles)	Traffic Volume	Lanes	Speed	Surface Condition	Zoning	Road Grade	Curb/Gutter/Sidewalks	Year of CN
---	Aldridge Creek Greenway	3.50	---	---	---	---	---	---	---	---
---	Atwood Drive Greenway	1.00	---	---	---	---	---	---	---	---
---	Betts Spring Branch Greenway	---	---	---	---	---	---	---	---	---
---	Big Cove Creek Greenway	2.75	---	---	---	---	---	---	---	---
---	Flint River Greenway	0.75	---	---	---	---	---	---	---	---
---	Indian Creek Greenway	3.00	---	---	---	---	---	---	---	---
---	Little Cove Rd Greenway	4.50	---	---	---	---	---	---	---	---
---	Tennessee River Greenway	0.75	---	---	---	---	---	---	---	---
---	Wade Mountain Greenway	1.00	---	---	---	---	---	---	---	---
Total Mileage:		17.25	<i>*For complete details, please see the City of Huntsville Greenways Plan</i>							
Paved Shoulders - Bike Routes (Standard Signage)										
Route #	Description	Length (miles)	Traffic Volume	Lanes	Speed	Surface Condition	Zoning	Road Grade	Curb/Gutter/Sidewalks	Year of CN
60	From Monte Sano Blvd, South on US Hwy 431 to Eastern Bypass	4.75	Heavy	5	50	E	C	STP	NO	2006
90	From Barren Fork/ Miller Greenway, East on Martin Rd, North on Whitesburg Dr to Cole Dr	8.75	Moderate	5	40	E	MI	NO	YES/ NO	2008
44	From Zierdt Rd, West on Beadle Lane, West on Swancott to Rabbit Lane	5.50	Light	2	40	A	R	NO	NO	2010
Total Mileage:		19.00								
Bike Lanes - Bike Routes (Standard Signage)										
Route #	Description	Length (miles)	Traffic Volume	Lanes	Speed	Surface Condition	Zoning	Road Grade	Curb/Gutter/Sidewalks	Year of CN
59 ALT	From Monroe St to Oakwood Ave (Church St Realignment)	1.25	Moderate	5	35	E	C	NO	YES	2008
49	From Oakwood Rd, South on Johns Rd to Old Monrovia Rd	0.50	Moderate	5, 2	35	E	R	NO	YES	2006
69	From Pratt Ave, North on Meridian St to Oakwood Ave	1.00	Moderate	5	35	E	C	NO	YES	2007
64	From Indian Creek Greenway, West on Old Monrovia Rd, West on Capshaw Rd, South on Wall Triana Hwy to Knox Creek Greenway	3.75	Moderate	5	35	G	R, C	MOD	YES	2009
79	From Capshaw Rd, South on Jeff Rd, South on Slaughter Rd to Old Madison Pike	4.50	Moderate	5	40	E	R	STP	NO	2010
Total Mileage:		11.00								
							Abbreviations			
							A	Average		
							G	Good		
							E	Excellent		
							R	Residential		
							C	Commercial		
							RP	Research Park		
							MD	Medical District		
							MI	Military Installation		
							MOD	Moderate		
							STP	Steep		
							NO	Road Grade is Nearly Flat		
							CN	Construction		
							*	Existing or Partially Signed Route		
Traffic Volume:		Light<500	Light/ Moderate<5000	Moderate<10000	Moderate/ Heavy<15000	Heavy>15000				

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Table 4.3: Bicycle/ Transit Routes

Bike/ Shuttle Route	Description	Points of Interest/ Connecting Bike Route	Bus Route #	Project Type	Year of Installation
Discovery	From Transfer Station, South on Church, Northeast on Monroe, Southeast on Green, Southwest on Randolph, North on Spragins, West on Holmes, South on Gallatin/Church, West on Longwood, South on Harvard, East on Marsheutz, South on Gallatin, West on Bob Wallace, South on L&N, West on Drake, South on Memorial Pkwy, West thru Krogers parking lot, North on Leeman Ferry, South thru Walmart shopping center, West on Drake, North on Ivy, North on 1 st , East on 9 th , North on Seminole, West on Clinton, West on Governors, North on Triana, East on Holmes, North on Pulaski Pike, West on Popular, North on Fairbanks, East on Baird, East on Popular, North on Pulaski Pike, East on Country Club, North on Canary, West then North on Bluebird, East on Oakwood, South on Washington, Southeast on Monroe, North on Church to Transfer Station	WM, HSC, PPM Route 30, 31, 40, 55, 59, 60	1	Bike Rack	2007
Gemini	From Transfer Station, North on Church, East on Wheeler, East on Pratt, North on Washington, West on Oakwood, South on Pulaski Pike, West on Popular, North then West on Beard, South on Fairbanks, East on Popular, South on Pulaski Pike, West on Holmes, South on Triana, East on Governors, Southeast on Clinton, South on Indiana, South on Seminole, West on 9 th , South on 1 st , West on Ivy, East on Drake, North on Artie, West on Winner, North on Leeman Ferry, East on Drake, North on L&N, East on Bob Wallace, North on Gallatin, West on Longwood, North on Harvard, East on Governors, North on Gallatin, East on Clinton, South on Jefferson, East on Southside Square, North on Lincoln, Northwest on Meridian, Southwest on Monroe, North on Church to Transfer Station	DHR, SWM, PPM Route 15, 35, 45, 59	2	Bike Rack	2007
Columbia	From Transfer Station, South on Church, Southwest on Dallas, West on Holmes, North on Wynn, West on Holmes/Sanderson, West to Madison Square, South then East on Sanderson, South on Wynn, East on Holmes, Northeast on Monroe, North on Church to Transfer Station	MSM, UAH, BHS, RSP Route 15, 41, 59, 60, 95	3	Bike Rack	2007
Enterprise	From Transfer Station, North on Church, West on University, North on Perimeter Pkwy, West thru Wal-mart shopping center, South on Wayne, East on University, South on Church St to Transfer Station	MSM, SWM Route 35, 41, 49, 59, 95	4	Bike Rack	2008
Voyager	From Transfer Station, South on Church, Southwest on Monroe, West on Governors, South on Memorial Pkwy, East on Bob Wallace, South on L&N to Parkway Place Mall, North on L&N, East on Bob Wallace, South on Whitesburg, West on Whitesburg, South on Whitesport, East on Hospital, South on Airport, North on Memorial Pkwy, East on Governors, Northeast on Monroe, North on Church to Transfer Station	CRH, PPM, HHM, HPL Route 30, 55, 65, 59	5	Bike Rack	2008
Endeavor	From Transfer Station, South on Church, Southwest on Clinton, South on Triana, West on 9 th , South on 12 th , West on Bob Wallace, South on Fairacres, East on Gesman, East on Dunn, South on Triana, East on Ivy, South on 1 st , West on Drake, South on Cobb, East on Hood, South on Knight, West on Johnson, North on Triana, West on Drake, South on Newson, West on Grunden, South on Squaw Valley, West on Centaur, South on Baldwin, West on Telstar, North on Patton, East on Bob Wallace, North on 12 th , East on 9 th , North on Triana, East on Clinton, Northeast on Monroe, North on Church to Transfer Station	HSC, BSP, RA Route 15, 30, 40, 55, 80, 85	6	Bike Rack	2008
Atlantis	From Transfer Station, East on Monroe, North on Meridian, East on Pratt, North on Andrew Jackson, West on Oakwood, North on Meridian, West on Winchester, South on Pulaski Pike, East on Mastin Lake, South on Verona, North on Elizabeth, East on Mastin Lake, South on Memerial Pkwy, West on Sparkman, South on Blue Springs, East on Max Luther, South on Memorial Pkwy, East on University, South on Church to Transfer Station	JFD, SWM, USPO, JHS Route 25, 30, 59, 60, 69	7	Bike Rack	2009
Mercury	From Transfer Station, North on Church, West on University, North on Memorial Pkwy, West on Max Luther, North on Blue Springs, East on Sparkman, North on Memorial Pkwy, West on Mastin Lake, North on Blue Springs, East on Medaris, South on Griffith, West on Medaris, North on Blue Springs, West on Hilltop Terrace, North on Rolling Hills, East on Winchester, South on Meridian, East on Oakwood, South on Andrew Jackson, North on Pratt, South on Meridian, West on Monroe, North on Church St to Transfer Station	A&M, SWM, JFD, ACC Route 30, 59, 60, 69	8	Bike Rack	2009
Apollo	From Transfer Station, North on Church, West on University, North on Pulaski Pike, West on Oakwood, South on Jordan, West on Putnam, West on Executive Dr, North on Ascent Trail, West on Bonnell, North on Sparkman, West then East on Adventist, Northeast on Sparkman, Northwest on Jordan, North on Elton, East on Grizzard, South on Pulaski Pike, East on Sparkman, South on Washington, West on Monroe, North on Church to Transfer Station	HD, CSC, TRU, BAM, OC Route 10, 25, 35, 59, 64	9	Bike Rack	2010
Challenger	From Parkway Place Mall, South on Memorial Pkwy, West Golf, West then South on High Ridge, East on Hunters Ridge, South on Briar Green, East on Vermont, South on Chris, East on Ashton Place, South on Memorial Pkwy, West on Boulevard, South on Benroya, East on Byrd Springs, South on Memorial Pkwy, West then South then East on Haysland, South on Memorial Pkwy, West on Redstone, South thru Wal-mart shopping center, East on Hobbs Rd, North on Chaney Thompson, East on Mountain Gap, North on Bailey Cove, West on Four Mile Post, Southwest on Cole, North on Whitesburg, West on Airport then North on Balmoral, North on L&N to Parkway Place Mall	PPM, SWM, KG, TG, CRH, HMT Route 19, 20, 55, 81	10	Bike Rack	2010

BICYCLE/ TRANSIT DESTINATION ABBREVIATIONS

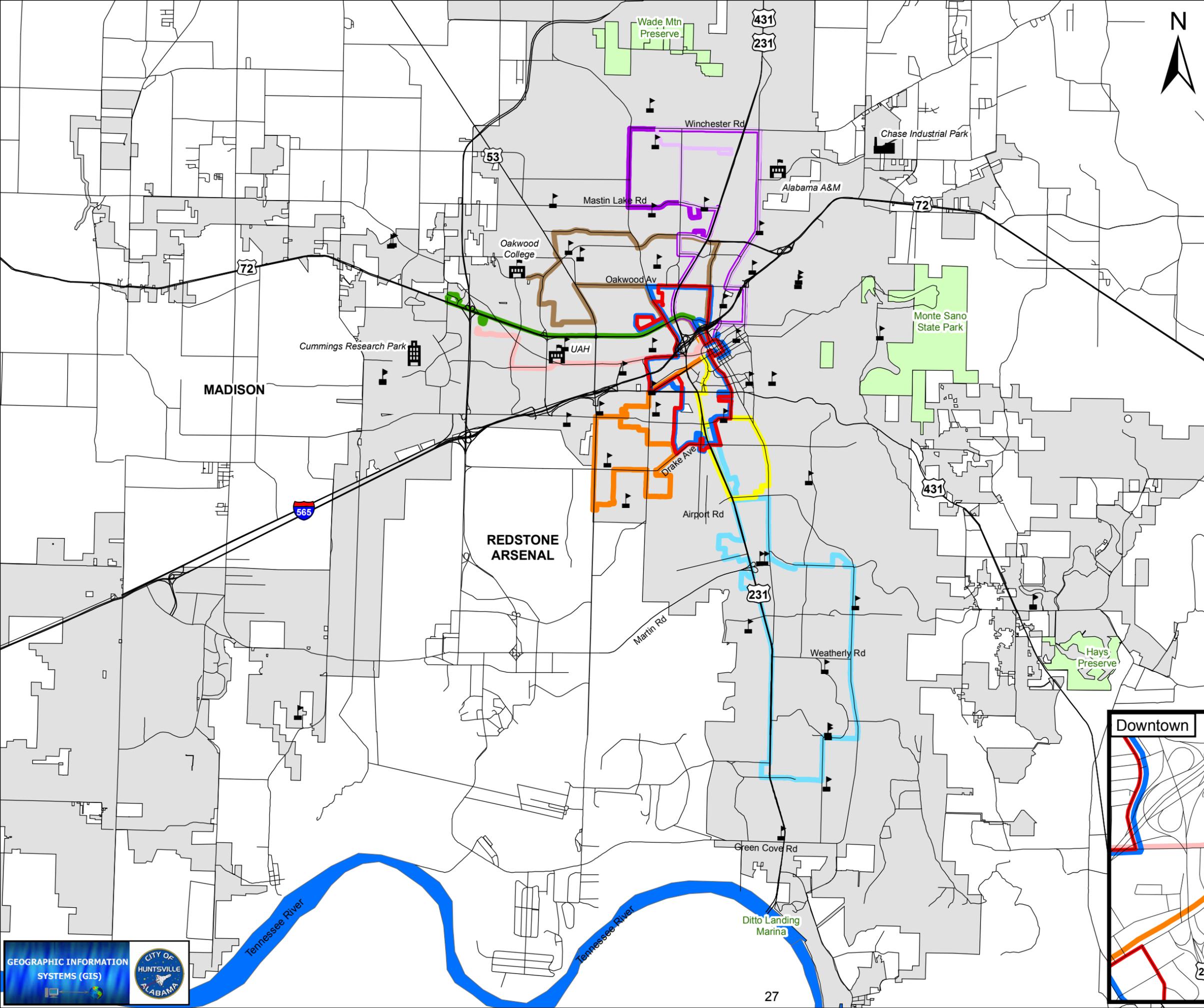
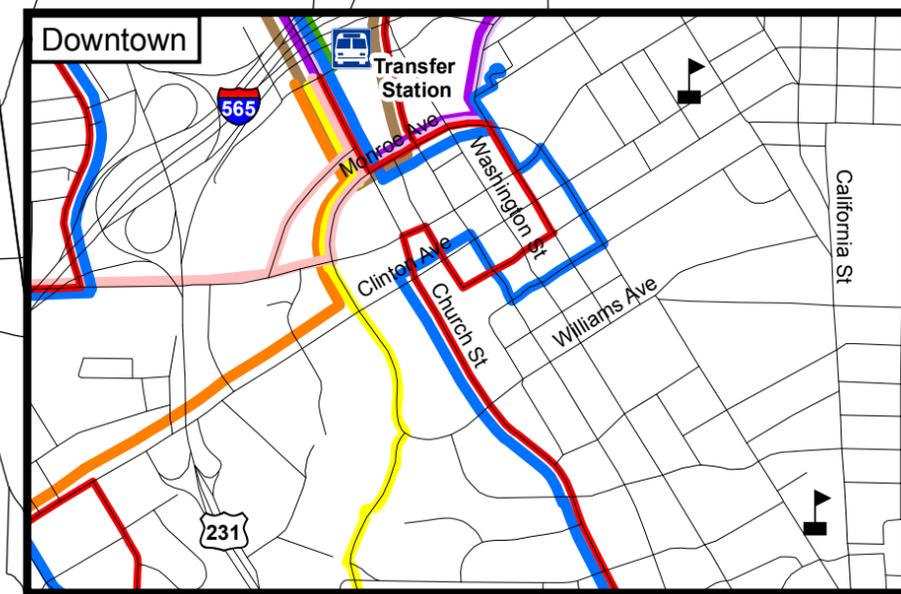
- | | |
|------------------------------------|-------------------------------------|
| BAM: Books-A-Million | JFD: Drake College |
| BHS: Butler High School | JHS: Johnson High School |
| BSP: Brahan Springs Park | KG: Kroger |
| CRH: Crestwood Hospital | MSM: Madison Square Mall |
| CSC: Costco | OC: Oakwood College |
| DHR: Department of Human Resources | PPM: Parkway Place Mall |
| HD: Home Depot | RFCU: Redstone Federal Credit Union |
| HHM: Huntsville Medical Mall | RSP: Research Park |
| HI: Holiday Inn | SWM: Super Wal-Mart |
| HMT: Hollywood Movie Theatre | TG: Target Center |
| HPL: Huntsville Public Library | TRU: Toys R Us |
| HSC: Huntsville Senior Center | USPO: United States Post Office |

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Figure 4.5 City of Huntsville Bicycle/Transit Routes

- Gemini
- Columbia
- Discovery
- Enterprise
- Voyager
- Endeavor
- Mercury
- Apollo
- Atlantis
- Challenger
- Major Roads
- Huntsville City Limits
- Major Parks & Preserves
- ▲ Schools
- Major Colleges/Universities

0 2 4 Miles

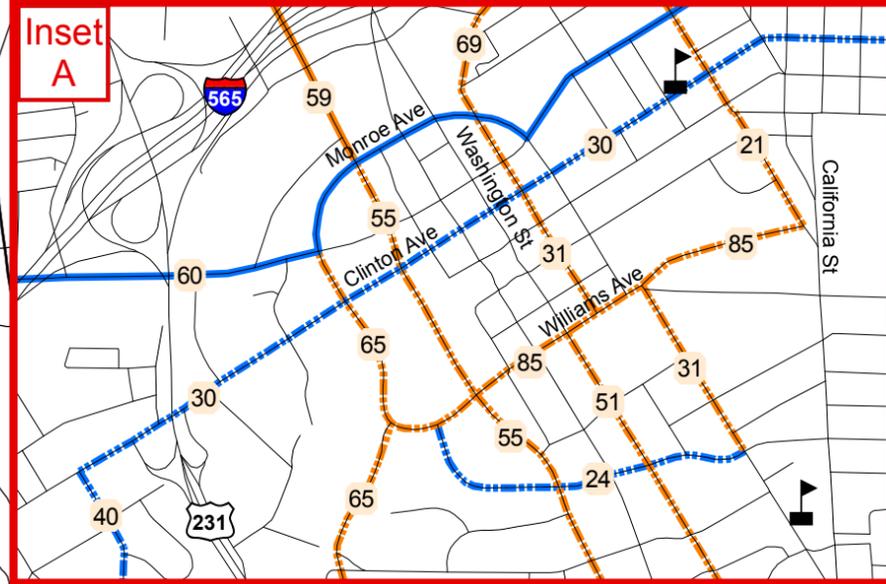
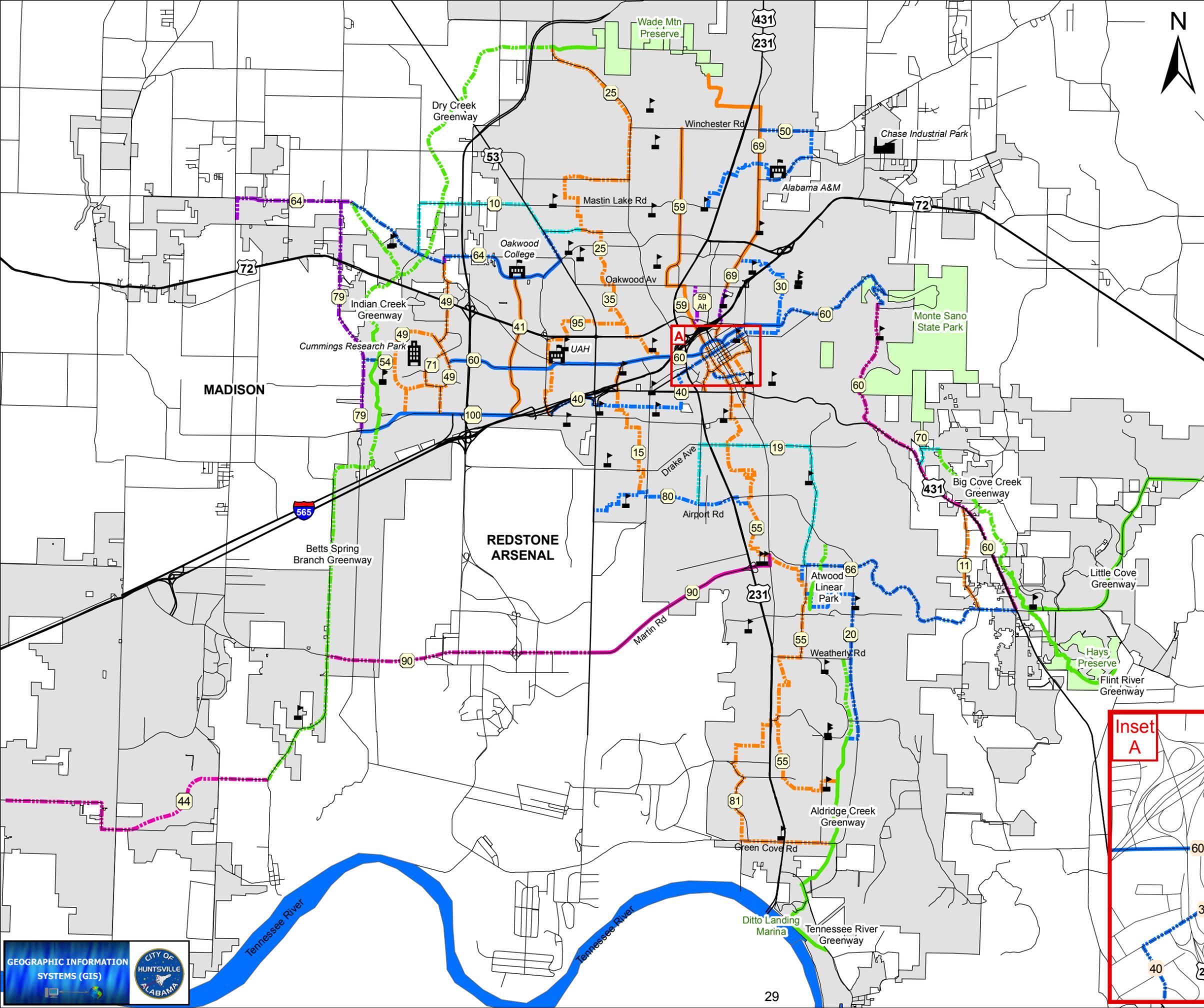


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Figure 4.6 City of Huntsville Bikeway Plan

- Existing Bike Routes - North/South
- Proposed Bike Routes - North/South
- Existing Bike Routes - East/West
- Proposed Bike Routes - East/West
- Proposed Shared Bike Routes
- Existing Paved Shoulders/Bike Routes
- Proposed Paved Shoulders/Bike Routes
- Proposed Bike Lanes/Bike Routes
- Proposed Greenways/Shared Paths
- Existing Greenways/Shared Paths
- Major Roads
- Huntsville City Limits
- Major Parks & Preserves
- Schools
- Major Colleges/Universities

0 2.5 5 Miles



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CHAPTER 5

BICYCLE PROMOTION

As bicycle and pedestrian activity increases within the Huntsville area, so does the demand for appropriate facilities. With more bikeway facilities becoming integrated into the transportation network, several initiatives have been recommended to encourage and promote bicycling and walking. Through the implementation of these bikeway projects and programs, the community will become more aware of cyclists on the road and more citizens will be encouraged and motivated to replace motor vehicle trips with bicycle trips when possible.

Over the next five years, the initiatives aimed at promoting bicycle ridership will include developing a bikeway plan brochure with a pocket sized map, adding adequate parking facilities for bicyclists, and working with the local transit officials to promote bike/transit programs. In addition, the plans and programs that promote bicycling will be published and “Share the Road” signs will be installed on designated roadways outlined in the Bikeway Plan. A media campaign to promote bicycling and walking as viable and active alternative means of transportation will also be developed.

Bikeway Plan Brochure

To promote the use of bicycles to the general public, a bikeway plan brochure will be developed. This will provide a readily available pocket sized map of the bicycle transportation network. The map will display the existing and proposed bicycle routes, shared use pathways, and bike lane facilities. The brochure will be updated in conjunction with the bikeway plan update and disseminated throughout the city for public use.

Bicycle Parking

Providing bicycle parking facilities is an essential element in an overall effort to promote bicycling. Bicycle parking facilities should be provided at both the trip origin and trip destination and should offer protection from theft and damage. The wide variety of bicycle parking devices is generally divided into two classes, long term and short term. The minimum needs of each group differ in their placement and protection.

Long-term bicycle parking facilities provide a high degree of security and protection from the weather. They are intended for situations where the bicycle is left unattended for long periods of time, such as at apartment and condominium complexes, schools, places of employment and transit stops. These types of parking facilities are usually lockers or cages or rooms located in buildings.

Short-term facilities provide a means for locking the bicycle frame and both wheels, but do not provide accessory and component security or weather protection unless covered. Its purpose is for decentralized parking where the bicycle is left for a short period of time and is

visible and convenient to the building entrance. These types of parking facilities are usually bicycle racks.

Bikeway facilities should be able to accommodate a wide range of bicycle shapes and sizes, including tricycles and trailers if used locally. The Bikeway Plan proposes to encourage provisions of bicycle parking facilities at public buildings and parks to accommodate bicyclists utilizing the bicycle transportation network.

Multi-Modal Transportation

Multi-modal transportation is encouraged in federal and state policy to increase the efficiency of the transportation system. An excellent example of multi-modal transportation is the combined use of bicycles and transit. Transit services are highly sensitive to the distance between users' residences and the nearest transit stop. Lower density developments have traditionally been considered poor candidates for transit services because of increased distance to transit stops.

Bicycles can effectively increase the service area for each stop because of the relative ease of cycling. Commuters could easily cycle two to three miles from their homes to a bus stop for transport and use these transit modes to finish the trip to more destinations that are more impractical than cycling alone. This two to five mile radius of service around each transit stop is a considerable increase in area served compared to walking distances, which is usually estimated to be closer than one-half mile.

The Bikeway Plan update calls for a comprehensive bicycle transportation network that links the places where people live to the places where people work, shop, and enjoy recreational activities. It also provides access to and from trip generators and activity centers. In an effort to expand transit ridership, the City Parking and Public Transit Department purchased its first bike rack with local funds last year. Cyclists who prefer to bike into work, onto campus, or for recreation now have the option to ride the bus home during inclement weather.

The City of Huntsville Planning Division along with the City Parking and Public Transit Department plans to implement a strategy to outfit buses with bike racks to support the goal of increasing the number of bicycle and pedestrian trips within the Huntsville area. This bikeway project calls for the installation of bike racks on all 14 transit buses, including back up vehicles. The racks would then be distributed among the 10 transit routes city-wide and integrated with the additional 22 bike routes providing accessibility throughout the Huntsville area.

Another component of this bikeway promotion initiative is to encourage participation by renaming the transit bus routes with the actual names of Space Shuttles. The purpose is to bring attention to the benefits of bike riding along with generating interest for the buses. The addition of bike racks on buses should increase the use of Huntsville's transit system, provide more options for cyclists, and facilitate an effective cycling/transit link.

CHAPTER 6

BICYCLE SAFETY

Safety is an important element of a comprehensive plan to foster bicycling. Nationally, around 800 bicyclists die annually, usually due to collisions that involve motor vehicles. The Huntsville Office of Highway Safety has been in operation since 1983 to address a variety of traffic safety issues through education, awareness, and community involvement. To fully achieve the goals of this Bikeway Plan, the roadways within the bicycle transportation network must be safe for cyclists and pedestrians. Therefore, encouraging and creating informative and instructional programs that teach the road user awareness and bicycle safety skills is essential.

Safety City

Safety City is a two and one-half acre facility located on the southern edge of Brahan Spring Park in the form of a miniature city with real streets, curbs, sidewalks, traffic lights, street signs, and 1/3 scale buildings. The city also houses a full equipped classroom and administrative offices designed for the purpose of training young people in traffic safety education, including basic elements of bicycle, pedestrian, and school bus safety.

Bicycle safety programs are offered to more than 3,000 students each year including every third grade class in the Huntsville City School system, Madison County School system, and all private schools in the area. The program consists of a fifty minute classroom presentation with up-to-date videos and group discussions, followed by a fifty minute outdoor presentation where students are allowed to practice their newly learned techniques as they ride bicycles and wear helmets provided by Safety City.

The classes provide hands-on training in such areas as bicycle safety, helmet safety, rules of the road, hand signals, and interaction with other traffic, sign usage, traffic signals, safe routes and basic bike skills. Children are also allowed to drive electric cars and walk as pedestrians while being coached by a team of uniformed instructors through the miniature streets of the Safety City facility.

Huntsville Police Department - Safety Education Unit

To further safety education and to promote public awareness of bicycle laws and regulations, the City of Huntsville Planning Division plans to coordinate with the Huntsville Police Department in efforts to establish training programs for law enforcement officers to increase their awareness of bicyclists' characteristics and bicycle violations. This bikeway safety initiative is also aimed at encouraging good bicycling behavior techniques through the local bike patrol unit and by publishing and circulating applicable traffic laws governing bicycling for public awareness.

Currently, the Huntsville Police Department Safety Education Unit is responsible for providing school crossing guards at area schools and providing safety education to school children, including bicycle safety education. Their work has included bicycle safety talks in conjunction with other safety topics.



Chief Reynolds with Members of the Huntsville Police Department Bike Patrol

Huntsville Area Safe Kids Coalition

The Huntsville Area SAFEKIDS Coalition, a local coalition of the National SAFEKIDS Campaign, is a non-profit organization, which seeks to reduce unintentional injuries to children ages 14 years and under. Unintentional injuries include motor vehicle accidents, pedestrian injuries, bike accidents, near drownings, burns, poisonings, choking, gun injuries and falls.

SAFEKIDS accomplishes its mission by concerted community action, including prevention programs, which facilitate public appreciation for the safety measures necessary to protect children.

In July 1997, Huntsville Hospital became the Lead Agency for Huntsville Area SAFEKIDS. The Coalition remains active by providing public education and awareness to potentially reduce unintentional injuries to children. Huntsville Area SafeKids periodically sponsors child passenger safety buckle-up events in the community for the purpose of checking and installing car seats, as well as providing education and resources on child passenger safety (Huntsville Hospital, 2002).

League of American Bicyclists

The League of American Bicyclists (LAB) was founded as the League of American Wheelmen in 1880. Bicyclists, known then as "wheelmen", were challenged by rutted roads of gravel and dirt and faced antagonism from horsemen, wagon drivers, and pedestrians. In an effort to improve riding conditions so they might better enjoy their newly discovered sport, over 100,000 cyclists from across the United States joined the League to advocate for paved roads. The success of the League in its first advocacy efforts ultimately led to our national highway system. Today, the League's mission is to promote bicycling for fun, fitness and transportation and work through advocacy and education for a bicycle-friendly America.

The mission of the City of Huntsville Safety City program is to educate, facilitate, and coordinate bicycle, pedestrian, traffic, fire, and child passenger safety to children and adults in the Huntsville community. To encourage bicycle safety, the following courses are currently offered at the Safety City facility from a certified instructor of the League of American Bicyclists:

- **Road I** – Provides instruction and guidance in the implementation of the basic principles of vehicular bicycling. This 9 hour course combines classroom discussion and activities with on-road practice of the principles of vehicular-style bicycling.
- **Road II** – For more advanced students with an understanding of vehicular cycling principles, this 12 hour course includes fitness and physiology, training for longer rides, advanced mechanics, paceline skills, advanced traffic negotiation, foul weather riding and night riding.
- **Commuting** – For adult cyclists who wish to explore the possibility of commuting to work or school by bike, this 3 hour course is a follow-up to the Road I course. Topics include route selection, bicycle choice, dealing with cargo and clothing, bike parking, lighting, reflection and foul weather riding.
- **Motorist Education** – This is a 3 hour classroom session that is directed towards motorists in general and includes topics of roadway positioning of cyclists, traffic signals and hand signals, principles of right-of-way and left/right turn problems.
- **Kids I** – A course designed for parents, this course guides parents in teaching kids how to ride a bike. Parents learn how to perform a bicycle safety check, helmet fitting and bike sizing.
- **Kids II** – This 7 hour class designed for 5th and 6th graders, covers topics mentioned in the Road I course, including on-bike skills as well as choosing safe routes for riding.

As the demand for bikeways and pedestrian pathways to serve recreational, fitness and transportation needs continues to increase in the Huntsville area, the need for more certified bicycle safety instructors is also warranted. To enhance these existing bicycle and pedestrian programs, the City of Huntsville will pursue available funding resources; encourage educational programs to improve bicycle and pedestrian safety; and advertise plans, policies and programs that promote bicycling within the Huntsville area.

The Alabama Bicycle Coalition

The Alabama Bicycle Coalition, AlaBike, formed in September of 2003, is a statewide cyclist and pedestrian advocacy group. AlaBike's mission is to promote cycling safety, education and access. AlaBike has partnered with the Alabama Department of Transportation, federal and local legislators to create and adopt policies for safer road design for all users, motorized or not (AlaBike, 2006).

With more than 25% of AlaBike members residing in the Huntsville area, the organization has a strong presence. AlaBike hosts an annual bike ride, the Four Hill Century Ride, to raise funds and bicycle awareness. In addition, the organization sponsors workshops and safety courses including Safe Routes to Schools in Alabama and LAB courses.

Safe Routes to School (SR2S)

The Safe Routes to School initiative will enable and encourage primary and secondary school children to walk and bicycle to school. The City of Huntsville will work with state and federal agencies, as well as local advocacy groups to ensure the implementation of programs and projects within the Huntsville area.

APPENDICES

Appendix A

State of Alabama Bicycle Law

Alabama Code

Section 32-5A-260

Traffic laws apply to persons riding bicycles.

Every person riding a bicycle upon a roadway shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle by this chapter, except as to special regulations in this article and except as to those provisions of this chapter which by nature can have no application.

Section 32-5A-261

Riding on bicycles.

(a) A person propelling a bicycle shall not ride other than upon or astride a permanent and regular seat attached thereto.

(b) No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped.

Section 32-5A-262

Clinging to vehicles.

No person riding upon any bicycle, coaster, roller skates, sled or toy vehicle shall attach the same or himself to any vehicle upon a roadway.

Section 32-5A-263

Riding on roadways and bicycle paths.

(a) Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, exercising due care when passing a standing vehicle or one proceeding in the same direction.

(b) Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles.

(c) Wherever a usable path for bicycles has been provided adjacent to a roadway, bicycle riders shall use such path and shall not use the roadway.

Section 32-5A-264

Carrying articles.

No person operating a bicycle shall carry any package, bundle or article which prevents the driver from keeping at least one hand upon the handlebars.

Section 32-5A-265

Lamps and other equipment on bicycles.

(a) Every bicycle when in use at nighttime shall be equipped with a lamp on the front which shall emit a white light visible from a distance of at least 500 feet to the front and with a red reflector on the rear.

(b) Every bicycle shall be equipped with a brake which will enable the operator to make the braked wheels skid on dry, level, clean pavement.

Section 32-5A-266

Violations of article as misdemeanor; responsibility of parent or guardian; applicability of article.

(a) It is a misdemeanor for any person to do any act forbidden or fail to perform any act required in this article.

(b) The parent of any child and the guardian of any ward shall not authorize or knowingly permit any such child or ward to violate any of the provisions of this chapter.

(c) These regulations applicable to bicycles shall apply whenever a bicycle is operated upon any highway or upon any path set aside for the exclusive use of bicycles subject to those exceptions stated herein.

Section 32-5A-280

Short title.

This article shall be known and may be cited as the "Brad Hudson-Alabama Bicycle Safety Act of 1995."

Section 32-5A-281

Definitions.

As used in this article, the following words shall have the following meanings:

(1) BICYCLE. A human-powered vehicle with two wheels in tandem design to transport by the act of pedaling one or more persons seated on one or more saddle seats on its frame. "Bicycle" includes, but is not limited to, a human-powered vehicle designed to transport by the act of pedaling which has more than two wheels when the vehicle is used on a public roadway, public bicycle path, or other public road or right-of-way, but does not include a tricycle.

(2) OPERATOR. A person who travels on a bicycle seated on a saddle seat from which that person is intended to and can pedal the bicycle.

(3) OTHER PUBLIC RIGHT-OF-WAY. Any right-of-way other than a public roadway or public bicycle path that is under the jurisdiction and control of the state or a local political subdivision thereof.

(4) PASSENGER. Any person who travels on a bicycle in any manner except as an operator.

(5) PROTECTIVE BICYCLE HELMET. A piece of headgear which meets or exceeds the impact standard for protective bicycle helmets set by the American National Standards Institute (ANSI) or the Snell Memorial Foundation, or which is otherwise approved by the Alabama Department of Public Safety.

(6) PUBLIC BICYCLE PATH. A right-of-way under the jurisdiction and control of the state, or a local political subdivision thereof, for use primarily by bicyclists and pedestrians.

(7) PUBLIC ROADWAY. A right-of-way under the jurisdiction and control of the state or a local political subdivision thereof for use primarily by motor vehicular traffic.

(8) RESTRAINING SEAT. A seat separate from the saddle seat of the operator of the bicycle or a bicycle trailer or similar product that is fastened securely to the frame of the bicycle and is adequately equipped to restrain the passenger in the seat and protect the passenger from the moving parts of the bicycle.

(9) TRICYCLE. A three-wheeled human-powered vehicle designed for use by a child under the age of six.

Section 32-5A-282

Purpose.

The purpose of this article is to reduce the incidence of disability and death resulting from injuries incurred in bicycling accidents by requiring that, while riding on a bicycle on public roadways, public bicycle paths, or other public rights-of-way, all operators and passengers who are under 16 years of age to wear approved protective bicycle helmets, and by requiring that all bicycle passengers who weigh less than 40 pounds or are less than 40 inches in height be seated in separate restraining seats.

Section 32-5A-283

Unlawful for person to use bicycle under certain conditions.

It is unlawful for any person to use a bicycle on a public roadway, public bicycle path, other public rights-of-way, state, city, or county public park under any one of the following conditions:

(1) For any person under the age of 16 years to operate or be a passenger on a bicycle unless at all times the person wears a protective bicycle helmet of good fit, fastened securely upon the head with the straps of the helmet.

(2) For any person to operate a bicycle with a passenger who weighs less than 40 pounds or is less than 40 inches in height unless the passenger is properly seated in and adequately secured in a restraining seat.

(3) For any parent or legal guardian of a person under the age of 16 years to knowingly permit the person to operate or be a passenger on a bicycle in violation of subdivision (1) or (2).

Section 32-5A-284

Duties of person regularly engaged in business of renting bicycles.

(a) A person regularly engaged in the business of renting bicycles shall require each person seeking to rent a bicycle to provide his or her signature either on the rental form or on a separate form indicating both of the following:

(1) Receipt of a written explanation of the provisions of this article and the penalties for violations.

(2) A statement concerning whether a person under the age of 16 years will operate the bicycle in an area where the use of a helmet is required.

(b) A person regularly engaged in the business of renting bicycles shall provide a helmet to any person who will operate the bicycle in an area requiring a helmet, if the person does not already have a helmet in his or her possession. A reasonable fee may be charged for the helmet rental.

(c) A person regularly engaged in the business of selling or renting bicycles who complies with this article shall not be liable in a civil action for damages for any physical injuries sustained by a bicycle operator or passenger as a result of the operator's or passenger's failure to wear a helmet or to wear a properly fitted or fastened helmet in violation of this article.

Section 32-5A-285

Statewide bicycle safety education program; manner violations handled.

It is the legislative intent to implement an effective statewide bicycle safety education program to reduce disability and death resulting from improper or unsafe bicycle operation. Violations of Section 32-5A-283 shall be handled in the following manner:

(1) On the first offense, the police officer shall counsel and provide written information to the child relative to bicycle helmet safety.

The officer shall instruct the child to deliver the written information to the parent.

(2) On the second offense, the police officer shall counsel the child and provide written information on bicycle helmet safety. A warning citation shall be issued to the child to give to the parent. The citation shall instruct the parent or guardian to contact the police department for further information about the law and where to obtain a bicycle helmet.

(3) Beginning on July 1, 1996, upon a third offense, the police officer shall counsel the child, confiscate the bicycle, and take the child to his or her residence. The officer shall then return the bicycle and give a warning ticket to the parent or guardian. If the parent or guardian is unavailable, the ticket shall be left at the residence with instructions to the parent or guardian to pick up the bicycle at the police department.

(4) Beginning on July 1, 1996, upon a fourth offense, the police officer shall confiscate the bicycle, take the child to his or her residence, whereupon a citation for fifty dollars (\$50) will be issued to the parent or guardian of the child. No court costs nor fees may be added to the fine or penalty. The fine or penalty shall be waived or suspended if the operator or passenger presents by the court date, proof of purchase or evidence of having provided a protective bicycle helmet or restraining seat and intends to use or causes to be used or intends to cause to be used the helmet as provided by law.

(5) Any fine or penalty monies shall be earmarked and used separately by the local school system for the purpose of safety education or the local municipality for the purchase of helmets for the financially disadvantaged.

(6) The Traffic Safety Center of the University of Montevallo, in conjunction with the Child Safety Institute at Children's Hospital of Alabama, shall furnish all materials, handouts, brochures, and other information related to bicycle safety used by police departments.

Section 32-5A-286

Establishment of more comprehensive bicycle safety program by ordinance.

A municipality may establish a more comprehensive bicycle safety program than that imposed by this article by local ordinance.

Appendix B

Rules of the Road for Cyclists and Motorists

Sharing Huntsville's Roadways

According to Alabama State Law, “every person riding a bicycle upon a roadway shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle...” Therefore, bicycles and automobiles have equal access, as well as, equal responsibility while using roadways. John Forrester, a noted cycling transportation engineer, stated “cyclists fare best when they act and are treated as drivers of vehicles.”

The following tips were compiled to assist cyclists and motorists while riding on Huntsville's roadways:

Cyclists

When Sharing with Motorists...

- Always obey traffic laws when riding on public roadways.
- Always wear a helmet and light colored, retro-reflective clothing.
- Use a headlight, taillight, and reflectors when riding at night.
- If a bicycle lane or trail exists next to the roadway, use the bicycle lane or trail.
- Never compromise your safety for the convenience of a motorist; ride with confidence and courtesy.
- Never ride against the flow of traffic and where possible, ride in a straight line to avoid weaving in and out of traffic.

When Sharing with Pedestrians...

- Avoid riding on sidewalks unless no other option exists.
- Yield to pedestrians at crossings.
- Use caution where children might be walking.
- Watch for pedestrians on roads that do not have sidewalks.
- When using a recreational trail, always announce yourself when passing a pedestrian and announce your intentions to fellow cyclists.

Motorists

- Always obey traffic laws when riding on public roadways.
- Treat cyclist as you would any other vehicle on the road – it's the law!
- Never pass a cyclist riding in a traffic lane in which they are traveling.
- Never pass a cyclist and immediately turn right.
- Scan traffic intersections for cyclists.
- Never honk, yell, or otherwise harass a cyclist.

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