

Existing definitions:

Little Rock Master Street Plan: Section 1. ~~Definitions~~ Definitions (an excerpt)

Class I Bicycle Route (Bike Paths): A route designated for the sole use of bicycles that is physically separated from vehicular lanes.

Class I (with road) Physically separated but within the road ROW (example: Rahling Road)

Class I (without road) Physically separated but within the its own easement or not associated with a road.

Class II Bicycle Route (Bike Lanes): ~~A route designated for the sole use by bicycles but physically connected to a street.~~ A route designated by a painted stripe separating the bikeway from motor vehicle traffic and intended for the sole use by bicycles. Additional pavement markings and signage are required.

Class III Bicycle Route: ~~A route designated with signs for bicycle use, but shared with motorized vehicles.~~ A route designated with only special signs for bicycle use. These routes use the existing vehicular area, with no physical separation.

Shared facilities: All streets, unless otherwise stated (interstates, for example) should be considered “shared facilities” because bicycles are classified as vehicles which may be ridden on public roadways. Shared facilities have no pavement markings or signs.

SECTION 4: BICYCLE PLAN

INTRODUCTION

It is the City's intention to provide bicycle accessibility throughout Little Rock. This can be accomplished with the use of the existing street network, with additional bicycle paths and lanes where necessary for safety and continuity. In addition to the existing street network, the City of Little Rock has adopted a network of routes to be specially designated for bicycle use. This Plan provides a system of ~~Class III and Class II (shared) routes and Class I (physically separated) routes.~~ Classes, (see table below) ~~It~~ It is the purpose of the City of Little Rock to review these routes on a regular basis to determine the need of upgrading the routes ~~to Class II (shared) Routes or Class I Routes,~~ and to review the need for additional routes. The decision to upgrade the routes will be based on usage, safety and speed and volume of motorized vehicular traffic.

All bicyclists wish to have safe, direct routes for non-recreational trips. The most advanced riders can generally operate under most traffic conditions. However the more casual user often will feel intimidated by the vehicular traffic. This combined with high volume and high speed vehicular traffic and few direct routes available creates t he need for a bicycle route system desirable for all users.

The City of Little Rock also intends to implement Class I ~~(not associated with a road without road) Routes- Bike Paths~~ in phases. A Class I ~~non-road Route-(without road) (Bike Ppath)~~ may be opened and built to a reduced standard (paving surface). If a Class I ~~rRoute~~ is built to less than the standard, the actual standards of these "Development Paths" will be designated on the plan map. Any Class I ~~(without road)-non-road Bike Path-route~~ must be reviewed and approved by the City of Little Rock Parks Department. The City is using the phasing process in an attempt to speed the process of implementation. Over time the ~~Class I Development Paths~~ may be upgraded to full bike path standards. Class I (road) Bike Path must be included in the review of new streets by the Public Works Department.

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BICYCLE FACILITIES

SHARED FACILITIES

Bicycles are legally classified as vehicles which may be ridden on public roadways. Therefore, any facilities designed for the sole use of bicycles must allow the bicyclists to emulate vehicle drivers. Bicycles have the right to share all city streets. Thus, all streets, unless otherwise stated, should be considered "~~shared-Shared facilities-Facilities~~". On ~~shared-Shared facilities-Facilities~~, the bicyclist shares the normal vehicle travel lanes with motorized vehicles. Where bicycle travel is significant or high volume and high speed vehicular traffic is present, additional bicycle facilities are recommended.

CLASS I AND CLASS II DIFFERENTIATED:

Bicycle only facilities are of two types: Bike Paths and Bike Lanes. A bicycle path is a physically separate, bicycle-only facility. A bicycle lane is a specifically designated area on a street for the sole use of bicycles.

CLASS I (WITH ROAD OR WITHOUT ROAD) BIKE PATHS

Class I bikeways or "Bike Paths" are constructed and designed for the exclusive use of bicyclists. These paths are completely separated ~~from motor~~ from motor vehicle traffic. Bike Paths are the safest for prevention of accidents with motorized vehicles.

The main advantage of a Class I ~~bikeway~~ Bike Path is the total separation between automobile traffic and bicyclists. It is, in essence, a road for bicyclists designed to accommodate speeds of up to 35 MPH with sharp turns and meandering pathways avoided whenever possible. Class I ~~bikeways~~ Bike Path should be used when motor vehicle traffic volumes or speeds are too high for Class II ~~bikeways~~ Bike Lanes. ~~They~~ Class I (without road) Bike Paths are also necessary when connections need to be made where no roadways exist. (such as following a creek bed)

While Class I ~~bikeways~~ Bike Paths are the safest and provide enjoyable rides, they are the most costly to construct and maintain. A reliable and continuing maintenance program is essential to the continued use and safety of the Bike element of the Master Street Plan. Design of Class I (non-road or road) ~~bikeways~~ Bike Paths must be done with care to insure safe intersections avoiding bicycle - motor vehicle accidents.

CLASS II BIKE LANES

Class II ~~bikeways~~ or "Bike Lanes" consist of a paved area both sides of a roadway with a painted stripe separating the bikeway from motor vehicle traffic. A Class II ~~bicycle route~~ Bike Lane is used for safety reasons where mixing of bicycle and motorized vehicles is unsafe for both. These routes may either be a smooth paved shoulder or a section of the paved roadway. Class II ~~bikeways~~ Bike Lanes require minimal construction and are likely to be located on higher volume and vehicular traffic major roadways. Class II ~~Routes~~ Lanes on collector roads should use the existing paved area. This would mean that in commercial areas with a Class II Lane, only two traffic lanes would be allowed, except at intersections. Only a painted line on the street separates bicyclists from motorists, additional pavement markings and signage are required. Class II Bike Lanes ~~ways~~ are easier to maintain and allow for maximum design flexibility. Accommodations can be made for automobile parking between the bike lane and curb where street parking is required. In order to accommodate parking on new (improved) roads additional ROW and paving will be required if parking is included. When space is limited, parking may have to be restricted to one side of the street.

CLASS III BICYCLE ROUTES

Class III ~~bikeways~~ Bicycle Routes have only special signage. These routes use the existing vehicular area with no physical separation. Generally, Class III ~~bikeways~~ Bicycle Routes are local streets or higher class streets when speeds are less than 30 miles per hour and volumes less than half design volume. Since there is no additional area, Class III ~~routes~~ Bicycle Routes have no additional maintenance requirements (except for signage).

The main disadvantage of Class III ~~bikeways~~ Bicycle Routes is that they provide the bicyclists with minimal protection from vehicular traffic. Safety concerns make shared facilities insufficient for high speed streets with heavy traffic.

CONSTRUCTION STANDARDS:

Class I ~~bikeways~~ Bicycle Paths may have an initial construction phase with a lesser standard. These routes should be designated "Development Routes". Any Development Route must be constructed with ~~a industrial-industrial~~ sand or screening of 100% crushed material or compacted soil. Off-road (large wheel) or mountain bikes will be recommended for these paths. In all cases the path must be constructed so it will properly drain.

Class I ~~bikeways~~ Bicycle Paths should be constructed to be permanent. Proper drainage is important to prevent standing water on the route. Construction should be of 2" flexible paving on a compacted 4" gravel base or 4" flexible paving on compacted or undisturbed suitable soil. A sloped surface of 1/4" in 1 foot will allow for drainage.

Paths should be constructed at least 10 feet from large trees to minimize root damage to paths and decrease the possibility of a cyclist/tree collision. For safety, separate paths should not run immediately parallel and adjacent to streets.

A one way bike path, while not recommended should be minimum of 5 feet wide, and a two way path should be at least 10.0 feet wide with a stripe down the middle to separate the two lanes. For Class I Bicycle Routes, non-road, routes where pedestrian traffic is expected, separate lanes 4 feet wide should be constructed for their use.

Class I ~~bikeways~~ Bicycle Paths build as part of an arterial will require an additional 10 feet of right-of-way (5 foot each side for one-way path) or an easement in which the path is placed. The required sidewalk along these streets can be incorporated into the bike path. The result would be a 9 foot wide path on each side of the road. A four-foot section of the path should be marked for pedestrian use.

Class II ~~Bikeways~~ Bicycle Lanes should be of the same construction as the streets on which they are constructed. The minimum width is 6 feet from back of curb. If roadway shoulders are used for ~~bikeways~~ Bicycle Lanes, the shoulder should be 5 feet wide. This width should discourage vehicular traffic use and keep the path free of debris.

Class III ~~bikeways~~ Bicycle Routes are part of the street. No additional construction is required. The AASHTO "Guide for Development of Bicycle Facilities", (1991) is the recognized standard for bikeway design and should be utilized by bikeway designers.

	Class III	Class II (1)	Class I With (2) Road	Class I Without Road
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			<u>e.g. RAHLING ROAD</u>	
R-O-W	No additional	No additional	10 feet additional	No additional
Paving	No additional	No additional	9 feet (4 feet for pedestrians)	10 to 13 feet

1. If on-street parking is desired, additional ROW and paving will be required, subject to Traffic Engineering approval.
2. Two one-way 5 feet each side, one two-way 10 feet one side

DESIGN SPECIFICATIONS

	Class I	All Others (non-road)
Design speed	35 MPH	*
Maximum grade	10%'	*
Minimum clearance		
vertical	8 ft.	*
lateral	1 ft.	*
Sight distance		
street intersection	100 ft.	*
bike intersection	30 ft.	*
Horizontal curves		
(between reverse curves)	200 ft.	*
Horizontal radius	100 ft.	*
(at centerline)		

' For no more than 500 feet

*Use associated street standards

SIGNAGE AND MARKING:

Signage for ~~bikeways~~ **Bicycle Paths** consists of pole mounted signs and painted graphics on the roadways. Pole mounted signs include: usual traffic signs; bike route signs indicating the degree of difficulty of the ~~bikeway~~ **Bicycle Path**; signs giving ~~bikeway~~ **Bicycle Path** designations; bicycle bus stop and color coded signs to aid bicyclists in following routes. Bike crossing signs

should be used to alert motorists to the presence of bicyclists. All classes of ~~bikeways~~ Bicycle Routes should be signed. Signs and graphics painted on the pavement may vary depending upon the class of a particular ~~bikeway~~ Bicycle Route.

Class I ~~bikeways~~ Bicycle Paths utilized by bicycles and/or pedestrians should have a solid or dashed 4" wide yellow or white line separating the various use lanes. Intersections should be appropriately striped to warn motorists to be aware of bicyclists.

Class II ~~bikeways~~ Bicycle Lanes require 8" wide, solid or dashed, yellow or white striping to denote the bike lane. Additional striping may be needed at intersections.

Class I and II ~~bikeways~~ Bicycle Routes should be marked with on street bicycle graphics in white paint with directional arrows directing the flow of bicycle traffic. Class III ~~bikeways~~ Bicycle Routes may be marked with on street bicycle graphics as described above. For Class II ~~routes~~ Bicycle Routes at intersections where it is necessary for bikes to merge with automobile traffic due to right turn lanes, the bike lane should resume on the other side of the intersection. Rating ~~bikeways~~ Bicycle Routes as to degree of difficulty and using color coded signage to designate them is helpful for cyclists. The ~~bikeways~~ Bicycle Routes can be color coded as black for difficult, red for moderate, and blue for a minimal level of difficulty. Marking specific routes with street graphics is important to keep cyclists aware of what direction they are traveling. East-west routes are designated with even numbers, with north-south routes designated with odd numbers.

The most important aspect of signage is that it remain consistent from ~~bikeway~~ Bicycle Route to ~~bikeway~~ Bicycle Route. This will reduce confusion for and aid those using of ~~Bikeways~~ Bicycle Routes.