



UPDATED FUTURE BICYCLE NETWORK

This section of the report summarizes the Updated Future Bicycle Network for the City of North Miami. The Future Bicycle Network update was combined with the Bicycle Parking Study to take advantage of the synthesis between providing bicycle routes and bicycle parking at key destinations and transfer points. The Future Bicycle Network was outlined in the City's Transportation Master Plan prepared in 2005 based on the Community Redevelopment Agency (CRA) Redevelopment Plan. The network has been updated as part of the City's Bicycle Parking and Transit Feasibility Study based on discussions with city staff, field observations, and input from the Study Advisory Group (SAG) about usage of these facilities.

Currently, off-street bicycle paths exist in the northeastern portions of the City within the Oleta River State Recreation Area and the Florida International University campus. Bicyclists use the lower volume residential streets and sidewalks along major arterials for riding.

The goal of the Updated Future Bicycle Network is to establish a vision for bicycle facilities on roadways within the City. According to Section 335.065(1)(a) of the Florida Statutes bicyclists and pedestrians are legitimate users of every roadway and as such should be accommodated through bicycle and pedestrian facilities. The section from the referenced statute is provided below:

“Bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into state, regional, and local transportation plans and programs. Bicycle and pedestrian ways shall be established in conjunction with construction, reconstruction, or other change of any state transportation facility, and special emphasis shall be given to projects within 1 mile of an urban area.”



The emphasis in bicycle planning has changed from the attempts to provide completely separate facilities for bicyclists, to the growing recognition that bicyclists are legitimate users of the roadway. Appropriately designed and located bicycle facilities play an important role in encouraging safe bicycle travel. Bicycle facility needs include bicycle lanes, route systems, and separate paths with the appropriate signs, control devices, parking facilities, etc.

The City's goal through the Updated Future Bicycle Network is to accommodate current bicycle use and to encourage increased use of bicycling in the future. Hence bicycle planning should be oriented toward meeting the needs of current and potential bicyclists using the roadway system. Additionally it needs to consider bicyclists of all skill levels. Roadway treatments intended to accommodate bicycle use must address the needs of both experienced and less experienced riders.

According to the U.S. Department of Transportation's Policy Guide titled "*Selecting Roadway Design Treatments to Accommodate Bicycles*", there are three levels of bicyclists:

1. Group A – Advanced Bicyclists
2. Group B – Basic Bicyclists
3. Group C – Children

Group A – Advanced Bicyclists include the experienced drivers 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:

- Direct access to destinations usually via the existing street and highway system.
- The opportunity to operate at maximum speed with minimum delays.



- 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.

Group B—Basic Bicyclists include the casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. Some will develop greater skills and progress to the advanced level, but there will always be many millions of basic bicyclists. This group is best served by the following:

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

Group C—Children include pre-teen riders whose roadway use is initially monitored by parents. Eventually they are accorded independent access to the system. They and their parents prefer the following:

- Access to key destinations surrounding residential areas, including schools, recreation facilities, shopping, or other residential areas.
- Residential streets with low motor vehicle speed limits and volumes.
- Well-defined separation of bicycles and motor vehicles on arterial and collector streets or separate bike paths.

The entire roadway network within the City was considered while developing recommendations for the Updated Future Bicycle Network. The Updated Future Bicycle Network classifies the City's bicycle network into three classifications:



1. Primary Routes
2. Secondary Routes
3. Local Routes

Primary Routes: These routes are intended to be dedicated bicycle facilities such as designated bicycle lanes or paved shoulders with bike route signage. For corridors in which more detailed engineering analyses determines that dedicated bicycle lanes are not feasible, primary routes should be designated with signage and/or pavement markings including “Bike Route”, “Sharrow” markings (contingent upon approval and inclusion in the 2009 Manual on Uniform Traffic Control Devices [MUTCD]) and “Share the Road” signs. Primary routes are generally intended for advanced bicyclists, although many basic bicyclists may feel comfortable using primary routes if designated bicycle lanes are provided.



D11-1

“Bike Route” Sign



Designated Bicycle Lane



A designated bicycle lane is a portion of the roadway designated by striping, signing and/or special pavement markings for the exclusive use of bicyclists. The Florida Department of Transportation’s (FDOT) *2008 Plans Preparation Manual* specifies the minimum standards for designated bicycle facilities. On roadways with flush shoulders, a minimum of 5’ paved shoulder should be provided for a designated bicycle lane. On curb and gutter roadways, a 4’ width measured from the lip of the gutter is required. Where parking is present, the bike lane should be placed between the parking lane and the travel lane and have a minimum width of 5’.

An undesignated bicycle lane or a paved shoulder is separated from traffic lanes by an edge stripe and should follow the same requirements for width and location as a designated bicycle lane, except it does not include bicycle lane signs and/or special pavement markings.

Secondary Routes: These routes are intended to be lower volume collector streets that may be more appropriate for a wider group of bicyclists and still provide a moderate degree of connectivity and mobility. These routes should be marked by “Share the Road” signs or “Sharrow” marking (contingent upon approval and inclusion in the 2009 MUTCD). However, designated bicycle lanes are appropriate for Secondary Routes to improve bicycle mobility where right-of-way and funding are available. The lower volumes along



Proposed “Sharrow” Sign



“Share the Road” Sign



these corridors can provide a comfortable bicycling environment for most basic bicyclists.

The word “Sharrow” is a combination of two words – share” and “arrow”. Sharrows are identified by a stencil of a bike under what looks like two inverted “V”s, or chevrons. The chevrons indicate the direction of travel (always with traffic). A minimum of 14 feet wide continuous pavement is required to install as Sharrow marking. The “Sharrow” markings are painted far enough out in the lane so as to move cyclists out of the “door zone”, thus reducing the chance that cyclists will be “doored” by motorists who do not check for cyclists before opening their doors in to traffic. Additionally, studies have shown that sharrows act as a form of traffic calming by subtly encouraging motorists to reduce their speed on roads with the markings.

Another type of treatment for the secondary routes can be to designate them as Bicycle Boulevards. The purpose of a Bicycle Boulevard is to increase the visibility of bike routes, expand the network of efficient bicycle routes, and to create a place where bicyclists of all skill levels will feel safer riding a bicycle without having to designate a bicycle lane. Bicycle Boulevards are typically established on low- to mid-volume collector roadways where there is not proper right-of-way or pavement width to create bicycle lanes. Bicycle Boulevards



are typically installed on collector roadways where the roadway is not wide enough for bicycle lanes, yet the roadway has enough traffic volume and high enough speeds to necessitate some sort of facility to encourage bicyclists and automobiles to share the road. Bicycle Boulevards send a clear signal to motorists that bicyclists are not only going to be on the road, but that they are part of the mix of vehicles. Bicycle Boulevards are often combined with traffic calming improvements. Wayfinding signs and guide signs are also included on Bicycle Boulevards to clearly indicate destinations and attractions that can be reached by bicycle.



Examples of Bicycle Boulevard Facilities

Local Routes: All local streets are local bicycle routes. These routes are intended to be lower volume lower speed streets where bicyclists of all skill levels can comfortably use the facility with little or no improvements or signage. In accordance with Section 335.065(1)(a) F.S., bicyclists are legitimate users of a roadway and hence should be accommodated on all roads.

The Updated Future Bicycle Network is attached as Figure 6. It is anticipated that as future reconstruction and resurfacing projects are implemented the recommendations from the Updated Future Bicycle Network will be used to allocate resources to accommodate bicycle improvements within the City.