CHAPTER 14

PEDESTRIAN AND BICYCLE FACILITIES

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14-1 OVERVIEW

This chapter is included in both Draft and Final environmental documents and Type 2 Categorical Exclusions (CEs), State Environmental Impact Report (SEIR), and the Preliminary Engineering Report (PER). Much of the discussion found in this section of a document is related to the needs outlined in the Purpose of and Need for Action section or Needs section of the Environmental Impact Statement (EIS) or Environmental Assessment (EA) respectively. This section discusses the accommodation of non-motorized modes of transportation that are planned by the community as a part of the overall transportation network and which are documented in the local transportation plan and Comprehensive Plan (Bicycle / Pedestrian Element). It also includes consideration of the accommodation of non-motorized modes of transportation when that section of the highway network which is under study has not considered such a mode in the overall (comprehensive) planning effort or when no such organized planning effort exists, but the need for a non-motorized facility can be documented through a study of user needs and demands. The Pedestrian and Bicycle Facilities section of the CE, EA, EIS, SEIR, and the PER must demonstrate that the Department has fully considered each of these modes of transportation and has actively coordinated with local government bicycle / pedestrian agencies and public interest groups to understand and meet, where feasible, identified community needs.

When the needs identified by local government propose a solution which is at variance with the solution proposed by the Department, the Department must resolve with the local government the difference in meeting user needs and document that resolution in this section of the CE, EA, EIS, SEIR, and the PER. The bicycle and pedestrian facilities proposed by the Department must be consistent with local planning to the maximum extent when feasible.

14-1.1 FHWA Bicycle Policy

"Under 23 USC Section 109(n), the U.S. Secretary of Transportation shall not approve any project under this title that will result in the severance or destruction of an existing major route for non-motorized transportation traffic and light motorcycles, unless such project provides a reasonable alternate route or such a route exists."

"Where appropriate, the EA and EIS should consider pedestrian and bicycle use as an integral feature of the project and include a discussion of the relationship of the proposed project to local plans for bicycles and pedestrian facilities and evidence that the project is consistent with 23 USC 109(n)." Implementation of this policy is found in FHWA's Technical Advisory T6640.8A.

14-1.2 Florida Statute 335.065

"Bicycle and pedestrian ways along state roads and transportation facilities.-(1) (a) 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 the construction reconstruction, or other change of any state transportation facility, and special emphasis shall be

given to projects in or within 1 mile (1.6 kilometers) of an urban area (b) Notwithstanding the provisions of paragraph (a), bicycle and pedestrian ways are not required to be established:

(1) Where their establishment would be contrary to public safety;
(2) When the cost would be excessively disproportionate to the need or probable use;
(3) Where other available means or factors indicate an absence of need."

14-1.3 Definitions

The following definitions are taken from the Florida Department of Transportation "Bicycle Facilities Planning and Design Handbook".

1. Bicycle Facilities

"A general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling, including bicycle paths, bike lanes, parking and storage facilities, lockers and showers, maps of all bikeways, marked routes, and shared roadways not specifically designated for bicycle use."

2. Bikeway

“Any road, path, or way which in some manner is specifically designated as open to bicycle travel, regardless of whether such facility is designated for exclusive use of bicycles or is to be shared with other transportation modes.

3. Bicycle Lanes

"A portion of a roadway which had been designated by signing, and pavement markings for the preferential or exclusive use of bicyclists."

4. Bicycle Routes

"A system of roads and ways that are linked by signs to aid bicyclists. Bike routes are ineffective unless signs are highly specific giving a clear indication of destination."

5. Sidewalk

"The portion of a highway designed for preferential or exclusive use by a pedestrian."

14-2 DESIGN CRITERIA

The following section discusses the criteria used by the Department in planning and designing non-motorized facilities. The topics discussed below include :

1. Wide-Curb Lanes

2. Bicycle Lanes

3. Paved Shoulders

4. Pedestrian Facilities

14-2.1 Wide-Curb Lanes

The Department no longer promotes the use of wide curb lanes to accommodate bicyclists. It is current practice to convert existing and proposed wide curb lanes to designated or undesignated bicycle lanes.

14-2.2 Bicycle Lanes

Bicycle lanes (designated or undesignated) are to be provided as the minimum treatment in connection with other roadway improvements (curb and gutter construction) unless right of way is inadequate and the cost associated with acquisition for this purpose is not feasible.

Criteria for bicycle lane width is contained in the Plans Preparation Manual. For projects that require additional right of way for the construction of the road, the additional width to provide bicycle lanes will be acquired unless the additional cost is extreme. With severe right of way limitations, 3.3 meter (11 foot) interior lanes may be used to provide the additional width for bike lanes.

If the facility is identified in the local government comprehensive plan as a bicycle route the bicycle lane will be signed and marked as a designated bicycle lane. If the facility is not designated as a bicycle route, the bicycle lane will still be provided but signing and markings will be determined on a case by case basis depending on route continuity, traffic operations, or other pertinent criteria.

14-2.3 Paved Shoulders

Shoulder pavement is to be constructed as the minimum treatment in conjunction with all new construction, reconstruction, lane addition, resurfacing, and widen-resurface projects with open type (no curb) drainage. Shoulder pavement widths are dependent on whether the facility has been designated as part of a bicycle route, or has significant truck traffic (>10%). The design criteria is stated in Volume 1, Chapter 2 of the Plans Preparation Manual.

14-2.4 Pedestrian Facilities

Sidewalks will be constructed in conjunction with all new construction, major reconstruction, and lane addition in urbanized areas and curb and gutter projects. As a general practice, sidewalks should be constructed along both sides of arterial streets that are not provided with shoulders even though pedestrian traffic may be light. Sidewalks should be provided along both sides of collector streets that are used for pedestrian access to schools, parks, shopping areas, and transit shops and along all collectors in commercial areas. In residential areas, sidewalks are desirable on both sides, but should be provided on at least one side of collector streets. Exceptions may be made to the

construction of sidewalks on both sides of the street when the roadway parallels a railroad or drainage canal, and pedestrians would not be expected to utilize the facility. Exceptions may also be made to the construction of sidewalks on both sides of a bridge if pedestrian usage is not anticipated. If sidewalks are constructed on the approaches to bridges, they should be continued across the structure.

Considerable savings can be obtained on some urban (curb and gutter) projects when the existing right-of-way is sufficient to move the sidewalk inside the right-of-way line and avoid the need for obtaining construction easements. For all projects, the policy of always placing the back of the sidewalk at the right-of-way line is to be discontinued. The space at the back of the sidewalk cannot only be used to avoid the need for some construction easements but, in some cases, it can be used as a more desirable location for utilities, landscaping, signs, newspaper racks, etc.. The benefits of placing the back edge of sidewalk at the right-of-way line to define and protect the right-of-way are, in most cases, more than offset by the cost-savings and administrative time / effort required to obtain construction easements. Right-of-way markers can be used to define the right-of-way.

All future urban projects with sufficient rights-of-way to provide adequate lane, median, sidewalk, and border widths are to be thoroughly evaluated to provide a reasonably safe and cost effective design. The comfort of pedestrians and the aesthetics of the walking environment should also be considered in establishing the border width. A wider area between the sidewalk and the right-of-way increases the opportunities to install trees for shade and improve aesthetics. An increased distance between the back of sidewalk and right-of-way can also be effective in minimizing construction easements due to grade differences. Caution must be exercised at connections to driveways to assure adequate vehicular connections (Index 515, sheet 2). This procedure to reduce the need for construction easements may also be applicable on projects where right-of-way is being obtained and connections can be made within the border. The border widths given in the Plans Preparation Manual must be acquired as right-of-way in order to prevent sight distance obstructions.

Criteria for sidewalk widths are given in the Plans Preparation Manual. Additional width may be justified in highly-developed urban areas and in the vicinity of schools. The additional width should be based on anticipated pedestrian volumes, not bicyclists. The Department's "Bicycle Facilities Planning and Design Handbook" states that it is important to recognize that the development of wide sidewalks does not necessarily add to the safety of sidewalk bicycle travel. Wide sidewalks encourage higher-speed bicycle use and can increase the potential for conflicts with motor vehicles at intersections, as well as with pedestrian and fixed objects. Both the AASHTO "Guide for Bicycle Facilities" and the Department’s Handbook state that bicycle riding on sidewalks can be expected in residential areas with young children and others who are too inexperienced to ride in the street. This type of bicycle use is generally accepted, but it is inappropriate to sign a sidewalk as a bicycle path. It is not appropriate to provide both bicycle lanes for the benefit of the experienced bicyclist and wide sidewalks that may encourage higher speed bicycle use.

When designing pedestrian facilities, the safe crossing needs of the pedestrian must be considered, such as median refuge, crosswalks being placed perpendicular to the roadway or to match the intersection lines at skewed intersections, and minimizing pedestrian crossing length. Suggested pedestrian facility designs are discussed in the "Florida Pedestrian Safety Plan."

A method for determining pedestrian facility needs is given in the "Highway Capacity Manual". Likewise, additional design criteria for bicycles is given in the Department's current "Bicycle Facilities Planning and Design Handbook".

14-3 PROCEDURE

14-3.1 Discussion of Pedestrian and Bicyclist Facilities in CE, EA, EIS, SEIR, and PER.

14-3.1.1 Need or Purpose of and Need for Action Section of EA , EIS, SEIR, or PER.

The needs discussion in the EA, EIS, SEIR, and PER must provide the following information:

1. Identify and discuss the need for bicycle and pedestrian facilities along the project corridor. This information needs to be coordinated with the District Bicycle / Pedestrian coordinator.

2. If the local community has planned for a bicycle and pedestrian facility along this project corridor then identify the transportation plans which contain the proposed facilities and identify the types of facilities planned by the community.

3. If a bicycle plan does not exist (or Bicycle Element in the case of a Comprehensive Plan) then the section must discuss the need for the facility based on the types of bicycle traffic generators in the project area and the types of user demands expected.

4. Identify any local governmental agencies or community interest groups supporting the development of bicycle and pedestrian facilities on the project.

5. If the project area contains an existing bicycle facility then the type of existing facility must be described and the impacts to that facility addressed. If this facility is a part of an existing bicycle system then the impact on the system must also be addressed.

14-3.1.2 Alternatives Considered Section of EA , EIS, SEIR, and PER.

This section must provide the following information :

1. Discuss the types of facilities proposed to address the needs identified in the Need section (EA) or Purpose of and Need for Action section (EIS).

2. Provide a typical section.

3. Any special needs (e.g., pedestrian flyovers, handicapped ramp access, etc.) must be identified and addressed.

4. Any deviation from standards for bicycle facilities or sidewalks must be justified in this section.

5. In urban areas, if bicycle and pedestrian facilities cannot be provided due to insufficient right-of-way and acquisition cost then this must be justified in this section.

14-3.1.3 Impacts or Environmental Consequences Section of CE, EA, EIS, or SEIR

In fulfilling the Department's and FHWA's policies on meeting the needs of bicyclists and pedestrians, this section of the CE, EA, EIS, and SEIR must be developed to address the following information :

1. The section must cite 23 USC 109(n) documenting the Department's full consideration of bicycle alternatives and the aspect of providing reasonable alternatives for the bicycling public.

2. In addressing the proposed bicycle facility, this section must state what type of facility is to be provided, its logical termini, and its interfacing with other bicycle routes. The discussion should also specify that the facility will be designed in accordance with the Florida "Bicycle Facilities Planning and Design Handbook" and the AASHTO Standards.

3. Coordination with local government and public interest groups concerning the bicycle facility must be demonstrated. The facility must be consistent with local bicycle planning as shown in local transportation plans or elements of local comprehensive plans and found acceptable by the local governing body. The Comments and Coordination section of the CE, EA or EIS must also document this coordination effort.

The information contained in this section should provide the reader with a firm understanding of how the local needs and movements of community bicyclists and pedestrians will be met by the facility.

14-3.2 Example Pedestrian and Bicyclist Section

Provided below is an example section normally found in CEs, EAs, EISs, and SEIRs concerning the impacts of a proposed project on pedestrians and bicyclists.

"The Metropolitan Planning Organization Urbanized Area Bikeways Plan identifies the SR XX corridor as an integral part of its bicycle transportation network.

The existing bicycle facility in the study is a discontinuous path varying in width from approximately 0.6 meter (2') to 2.4 meters (8'). In those areas where it is not continuous, bicyclists must use the existing traffic lanes or sidewalks to continue their journey.

The proposed project will impact the existing bicycle facility and render parts of it unusable. In compliance with Section 109(n) of 23 USC, the proposed project will provide bicyclists a reasonable alternative to the existing facility. This alternative is a shared facility from SR X to SR XXX, consisting of a combination of bicycle lanes and paved shoulders, which will meet the design standards of the current FDOT "Bicycle Facilities Planning and Design Handbook". The maintenance of bicycle traffic during construction is addressed in the Construction Impacts portion of this document (section X).

The existing roadway does not have continuous facilities for pedestrians, although it does receive moderate pedestrian traffic. The proposed project will provide sidewalks for pedestrian traffic along both sides of the proposed roadway project for the entire project corridor (Typical Section in Figure x)."

4-4 REFERENCES

1. U.S. Department of Transportation, Federal Highway Administration, October 30,1987. Guidance for Preparing and Processing Environmental and Section 4(f) Documents, FHWA Technical Advisory T6640.8A.

2. 23 USC 109, Standards.

3. Florida Department of Transportation, Bicycle Facilities Planning and Design Handbook.

4. Florida Department of Transportation Plans Preparation Manual.

5. Florida Department of Transportation, Florida Pedestrian Safety Plan.

6. Florida Highway Landscape Guide