# Chapter 5 SPECIALIZED OPERATIONAL TOPICS

#### Section 5.1

# GOLF CART CROSSING AND OPERATION ON THE STATE HIGHWAY SYSTEM

#### 5.1.1 PURPOSE

The purpose of this section is to establish criteria and guidelines for safe operation of golf carts on authorized portions of the State Highway System.

#### 5.1.2 GENERAL

- (1) The Department has developed this section in response to a growing public interest in using golf carts. Golf carts are increasingly used to make short trips for shopping, social and recreational purposes from nearby residential neighborhoods such as planned unit communities with golf courses. These passenger-carrying vehicles, although low-speed, offer a variety of advantages, including comparatively low-cost and energy-efficient mobility.
- (2) Golf cart use and operation on public roads is authorized only under certain circumstances as provided in <u>Section 316.212</u>, <u>F.S.</u> The intent of this section is to provide criteria and guidelines for authorizing golf cart crossings at designated locations along State Highway System and promote uniformity within the State. This section also provides safety recommendations to counties and municipalities wishing to enact ordinances authorizing the use of golf carts on sidewalks adjacent to or on the State Highway System within their corresponding jurisdictions.

#### 5.1.3 **DEFINITIONS**

- (1) Golf Cart: A motor vehicle designed and manufactured for operation on a golf course for sporting or recreational purposes and that attain speeds of less than 20 miles per hour.
- (2) Grade Separated Crossing: A tunnel or overpass designed and constructed for the purpose of crossing a street or highway.
- (3) Local Government: A City or County as defined in <u>Section 11.45 (e), F.S.</u>
- (4) State Roadway: Any roadway of the State Highway System under jurisdiction of the State except limited access facilities.

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#### 5.1.4 PROCEDURE

- Any golf cart crossing proposed for a location on the State Highway System shall be reviewed and approved by the appropriate District Traffic Operations Engineer prior to installation. The Department's preferred design for golf cart crossing of any state road shall be via grade separated facility.
- (2) A request from a local government shall be submitted to the appropriate District Traffic Operations Engineer. Non governmental entities wishing to obtain authorization for a golf cart crossings shall do so through the local government with jurisdictional authority.
- (3) If the District Traffic Operations Engineer's review of available information supports the installation of a golf cart crossing based upon the criteria outlined in Section 5.1.5, then a full engineering study prepared by a State of Florida licensed engineer representing the requester may be conducted.
- (4) The criteria referenced in **Section 5.1.5**, as documented in an engineering study, shall be met as a condition for approval of a golf cart crossing. The engineering study shall also contain the following information:
  - (a) Document the need for a golf cart crossing based on conditions set forth in **Section 316.212, F.S.**, i.e., verify the following:
    - The intersecting county or municipal road has been designated for use by golf carts.
    - A golf course or single mobile home park is constructed on both sides of a state road.
      - (b) Document all safety considerations with respect to intersecting sight distances, proximity to intersection and driveway conflict areas, number and configuration of approach lanes to signalized intersections and roadway speed and volume thresholds as described in **Section 5.1.5** that can be satisfied at the proposed location.
      - (c) Document the proposed golf cart crossing and/or roadway segment location (Roadway ID and Mile Post) and corresponding signing, marking, and signal treatments (if applicable). A schematic layout should be provided over aerial photography or survey to show locations of signs, markings, and other treatments in proximity to existing traffic control devices.
      - (d) Document all crash history within the vicinity of the proposed golf cart crossing based upon a minimum three years of data.

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  (5) If the evaluation results in a decision not to authorize the installation of a golf cart
- (5) If the evaluation results in a decision not to authorize the installation of a golf cart crossing, the District Traffic Operations Engineer shall document the reasons and advise the local government of the findings. Meeting the minimum criteria outlined in this section does not guarantee approval of a request for a golf cart crossing.
- (6) Prior to the approval of a golf cart crossing, coordination is necessary between the appropriate District Traffic Operations Office, District Maintenance Office and local governments to determine any permitting requirements or responsibilities for maintenance.

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DTOE reviews **DTOE** Receives available information written request from for the requested local government crossing location DTOE denies Golf Is the available NO Cart crossing request information in Stop and documents the support of a reason in writing to the Golf Cart crossing? local government YES **Engineering Study** PE prepares/revises Engineering Study per prepared by a P.E. representing the local direction/comments government may be conducted from DTOE DTOE reviews Engineering Study for the requested crossing location NO NO YES Is the Engineering Study in support of Golf Cart ? Is the Engineering Study complete? YES DTOE approves Golf Cart crossing and issues Traffic Regulation Letter Stop

Figure 5.1-1. Procedure Flowchart

### 5.1.5 CRITERIA FOR APPROVAL OF CROSSING

- (1) Mid-Block Crossing: To be considered for a golf cart crossing at a mid-block location along any state road where a golf course or a single mobile home park is constructed or located on both sides of the roadway, the proposed location and roadway characteristics shall meet the following criteria:
  - (a) Maximum vehicular volume of 15,000 Average Daily Traffic (ADT) or less along the roadway segment.
  - **(b)** Maximum Posted Speed Limit of 40 miles per hour or less.
  - (c) Maximum number of lanes is three (3) with or without bike lanes.
  - (d) Maximum allowable median width is 15 feet or less.
  - **(e)** Minimum distance to the nearest driveway, access point or pedestrian crosswalk is 350 feet in each direction.
  - (f) Crossing along roadway tangents only with the nearest point of curvature at least 350 feet in each direction.
  - **(g)** A clear and unobstructed view of the roadside on the approach to the crossing.
  - (h) Mid-block crossing signing and pavement markings should be installed as shown in *Figure 5.1-2*.
  - (i) Golf carts are the only vehicle permitted to use the designated crossing or to traverse State right-of-way. Other vehicles such as Low Speed Vehicles are strictly prohibited. See 320.01(42) F.S.

Note: Pavement markings shall be in accordance with W11-11 W11-11 Index 17346. R1-1 ST0 W16-9P W11-7P Α APPROACH SPEED A - DISTANCE MPH (ft) ST0P W11-11 W11-11 25 or Less 26 to 35 250

R1-1

36 - 40

300

Figure 5.1-2. Mid-Block Crossing

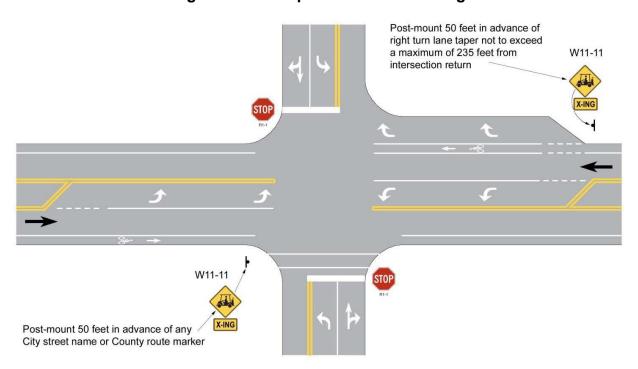
W11-7P

W16-9P AHEAD

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- (2) Side Street Stop Controlled Intersections: To be considered for a golf cart crossing at a roadway intersection with side street stop control, the location along any state road shall meet the following criteria:
  - (a) Side street maximum vehicular volume 1,200 ADT and AM/PM Peak Hour not to exceed 110 vehicles per hour single direction.
    - **(b)** Main street posted speed limit or 85th percentile intersection approach speed is 35 miles per hour or less.
    - (c) Maximum crossing distance for undivided roadways shall be equal to three (3) lanes or less not including any right turn lanes, bike lanes and crosswalks. For divided roadways of four (4) lanes or less, a minimum of twenty two (22) feet median width is required. See *Figure 5.1-4*.
    - (d) Side street approaches should have an exclusive left turn lane and a shared through-right turn lane. Other lane approach configurations will be considered on case-by-case basis.
    - (e) Side street intersection alignment shall be a 90 degrees (not more than 105 degrees) angle to the mainline tangent. Skewed or offset intersections are not recommended for golf cart crossings.
    - (f) Approach stop signs and pavement markings shall be in accordance with <u>MUTCD</u> and <u>Department's Standard</u> Plans, Index No.711-001.
    - (g) Golf Cart signs (W11-11) should be placed on the mainline approach as shown in *Figure 5.1-3* and *Figure 5.1-4*.

Figure 5.1-3. Stop-Controlled Crossing



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Post-mount 100 feet in advance of intersecting edge of pavement or radius return.

Post-mount 100 feet in advance of intersecting edge of pavement or radius return.

Figure 5.1-4. Four-Lane Stop-Controlled Crossing

- (3) Full Signalized Intersections: To be considered for a golf cart crossing at a roadway intersection with full signal control, the location along any state road shall meet the following criteria:
  - (a) Side street maximum vehicular volume 1,500 ADT and AM/PM Peak Hour not to exceed 200 vehicles per hour single direction.
    - **(b)** Side street posted speed limit or 85th percentile intersection approach speed is 35 miles per hour or less.
    - (c) Maximum crossing distance equal to five (5) lanes or less not including any right turn lanes, bike lanes and crosswalks.
    - (d) Side street approaches should have at least one (1) exclusive left turn lane and at least one (1) exclusive through or shared through-right turn lane. Other lane approach configurations will be considered on case-by-case basis.
    - **(e)** Side street intersection alignment shall be a 90 degrees (not more than 105 degrees) angle to the mainline tangent.

Skewed or offset intersections are not recommended for golf cart crossings.

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- **(f)** Golf carts shall not use pedestrian crosswalks or sidewalk ramps for the purpose of crossing the mainline state road.
- (g) Golf cart crossings are not permitted at "T" intersections.
- (h) For existing signalized "T" intersections, a proposed forth leg approach and receiving lane for the exclusive use of golf cart crossing shall not be permitted.
- (i) Approach traffic control signs and pavement markings shall be in accordance to <u>MUTCD</u> and <u>Department's Standard Plans, Index No. 711-001</u>.
- (j) Golf Cart signs (W11-11) should be placed on the side street approach as shown in *Figure 5.1-5*.

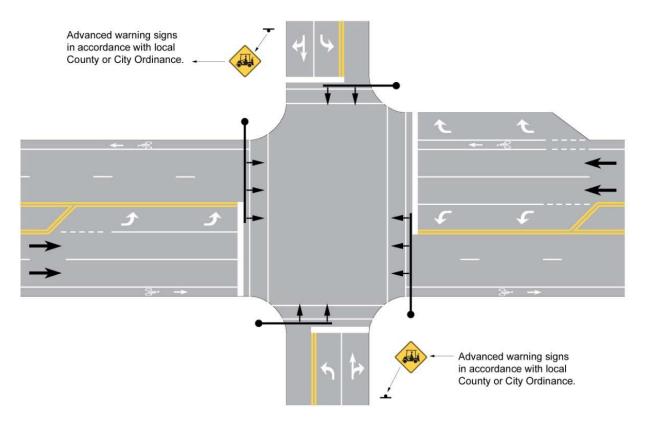


Figure 5.1-5. Traffic Signal Controlled Crossing

## 5.1.6 OPERATION OF GOLF CARTS ON SIDEWALKS

(1) Under <u>Title 23 of United States Code, Section 217</u>, existing and proposed non-motorized trails and pedestrian walkways using Federal transportation funds do not permit motorized use including golf cars or golf carts. However, the legislation

- authorizes exceptions and the Federal Highway Administration (FHWA) has developed framework for an exception process.
- (2) Safety and Operational Recommendations: The following recommendations for the operation of golf carts on pedestrian sidewalks adjacent to a state road should be considered when authorizing such use by local government ordinance:
  - (a) Access to State maintained sidewalks should be from county or city maintained sidewalks adjacent to side streets intersecting with a state road. In-street golf cart operation onto State operated sidewalks via ADA curb ramps is not permitted.
    - (b) Crossing a state road from county or city maintained streets or sidewalks to access State operated adjacent sidewalks is not recommended. If a local government submits a request for golf cart crossing and seeks consultation for golf cart operation on a State operated sidewalk at the same location, the golf cart crossing will not be allowed.
    - **(c)** A minimum un-obstructed sidewalk width of 8 feet is required and separated from back of curb or edge of shoulder by at least 5 feet is recommended.
    - (d) A minimum width of 4 foot grassed or stabilized, relatively flat area should be provided beyond the outside edge of sidewalks for recovery or stalled golf carts. Sidewalks with existing adjacent drainage features or fencing should not be considered.
    - (e) Golf cart operation on State operated sidewalks should terminate at a connecting county or city maintained sidewalk.
    - (f) State approved, Golf Cart On Sidewalk signs should be installed along State operated sidewalks as shown in Figure 5.1-6.

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Double Post-mount (one for each direction) @ 200 foot intervals. "T" Intersections and driveways shall use the same configuration.

Figure 5.1-6. Golf Cart Operation on Sidewalks