Temple Terrace Low-Speed Electric Vehicle Study - Executive Summary

Temple Terrace’s existing network of local roadways already allow golf carts to operate according to the City’s guidelines. However, the City is divided by two major state roads, 56th St. and Fowler Ave. Therefore, the study focused on crossing these two major thoroughfares to allow all residents to have access to the golf course Temple Terrace was designed around as well as parks, schools, and other destinations such as grocery stores.

To start, the project team analyzed seven crossing locations, four on 56th and three on Fowler. These were evaluated for their conformance with the warrants required under the State’s Transportation Engineering Manual (TEM), which sets standards that must be met to allow a crossing. These include the approach speed, intersection geometry, crossing distance and vehicle volume.

For Fowler, the main issue is crossing six through lanes of traffic. Based on variations granted by FDOT in the past that were provided by FDOT staff, a 6-lane golf cart crossing has not yet been allowed in the state. The crossing of US 301 in Sun City Center however, which is currently being widened, is likely to be the first 6-lane crossing in the state (although it is not yet approved). If granted, Temple Terrace staff could request similar variations for a Fowler crossing. Another possibility for crossing Fowler is to create an underpass for golf carts at the Hillsborough River Bridge. There are several associated impediments to this concept that would need further exploration including environmental permitting and impact, agreements with both FDOT and Hillsborough County to allow golf carts on the right of way, and pathways to and from the underpass both north and south of Fowler.

For 56th St., multiple intersections (Mission Hills, Serena Dr., Whiteway) come very close to meeting the warrants required by FDOT. One of these could be acted upon quickly, but will require some intersection improvements related to signage, striping and possibly other modifications to the intersection. Of these intersections, the crash numbers are lowest at Mission Hills and highest for Whiteway. For both Mission Hills and Serena, updated traffic counts are recommended prior to making application with FDOT for a variation to the golf cart crossing criteria. The main criterion for both Mission Hills and Serena that is missing is the presence of an exclusive left turn lane.

At the request of Temple Terrace, the intersections of 122nd St. and 127th St. on 56th St. were also analyzed. Neither of these is currently signalized, meaning that they are subject to a different set of approval criteria than signalized intersections. Currently traffic counts are not available for side street volumes at either intersection, but based on the lack of signalization, are likely low-volume. Signalization of one of these streets and intersection modifications could help either location achieve the warrants required by FDOT.

In conclusion, none of the intersections studied currently meets all FDOT warrants, however, variations for similar crossings have been approved in the state and could also be requested here. The MPO is available to assist with preparation of an application to FDOT at the City’s convenience.