

WALK BIKE SAFETY AUDIT

Glades Road DDI

Date Conducted: June 30, 2023

Location: Boca Raton, FL

The Palm Beach TPA conducted a Walk Bike Safety Audit to evaluate the walking and biking conditions of the newly constructed Diverging Diamond Interchange (DDI) on Glades Road. The audit was conducted in collaboration with the City of Boca Raton and the Florida Department of Transportation (FDOT) to evaluate the effectiveness of the interchange with a pedestrian and bicycle perspective and improve the design of future DDIs programmed in FDOT's Five-Year Work Program.











MILLIAN







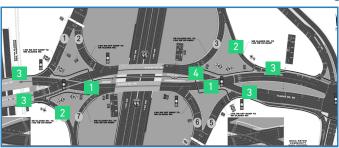
SUMMARY REPORT



Diverging Diamond Interchanges (DDIs) are timely, innovative, and cost-effective solutions to improve traffic flow and safety within a road. Unlike conventional interchanges, DDIs allow the two directions of traffic on the roadway to cross to the opposite side of the road. This limits the number of traffic signal phases and allows drivers to make a left turn without crossing in front of oncoming traffic. The Florida Department of Transportation (FDOT) recently integrated multimodal accommodations on diamond interchanges to provide pedestrian, bicycle, and transit users access to these roads.

The Glades Road DDI is the first diamond interchange in Palm Beach County. This Walk Bike Safety Audit provided participants the opportunity to evaluate walking and biking conditions of the interchange and ways to improve multimodal safety, connectivity, and accessibility on future planned DDIs.

A brief summary of four key observations made by audit participants are listed below. To view the full list of observations, visit: PalmBeachTPA.org/Audit.







- Bicyclists were not given enough time to cross each conflict point. Additional signal heads should be provided for on-street facility users and shielded from view of motorists.
- Limited crosswalk visibility at I-95 northbound and southbound on ramps. Advanced warning signage should be provided for motorists.
- Sidewalks did not provide physical barriers at the crossover going westbound and eastbound of the I-95 off ramp and were exposed to traffic. Sidewalks were also not wide enough to accommodate wheelchair users, a bicyclist, or a person pushing a double stroller to travel through the sidewalk while pedestrians are walking.
- On-road bicycle lanes do not accomodate people of all ages and abilities. The lack of physical separation between drivers and bicyclists will not feel safe to the average bicycle user.

Future interchange projects should prioritize pedestrian and bicycle safety, and comfort by providing physical barriers to minimize their interactions with vehicles and improved signal timing at entry/ exit ramps.

For more information and resources on designing DDIs with multimodal accommodations, visit FDOT's DDI Design Webinar Series at FDOT.gov/Roadway/Training/DDI and FHWA's Crossover Intersection at Safety.FHWA.DOT.gov/Intersection/Crossover.













