Executive Summary

Buenaventura Boulevard

Complete Streets Feasibility Study

From Simpson Road to Osceola Parkway May 25, 2021

<u>Osceola County</u> Department of Transportation and Transit

<u>Author</u> HDR The Buenaventura Boulevard Complete Streets Feasibility Study has evaluated the feasibility of incorporating Complete Streets improvements along Buenaventura Boulevard from Simpson Road to Osceola Parkway, as shown in the Study Area map in **Figure 1**.



This memo provides a summary of the project findings and recommendations.

Figure 1| Study Area

The existing speed limit varies between 35 MPH and 40 MPH. Speed data from a 24-hour spot speed study shows that 77% of daily traffic travels above the posted speed limit.

Based on existing characteristics, the corridor can be split into three distinct segments:

- 1. From Simpson Road to Royal Palm Drive, approximately 0.7 miles of the 2.4-mile-long corridor, the right-of-way width varies. There is no curbing along this portion of the corridor, and driveways and cross-streets are infrequent. Sidewalk gaps exist on the east side.
- 2. From Royal Palm Drive to Bridle Court, approximately 0.4 miles, the right-of-way narrows to 105 ft. No curbing exists along this portion of the corridor. Many driveways exist on both the east and west sides of the street in this segment. Sidewalk gaps exist along the east side of the street. Single-family homes, neighborhood parks, and the library are adjacent land uses.
- 3. From Bridle Court to Osceola Parkway, approximately 1.3 miles, the right-of-way is widest, varying between 150 ft. to 200 ft. Sidewalk exists along the entire western side,

and contains some gaps on the east side. There is no curbing along this northern portion of the corridor. Driveways and cross-streets are less frequent, as adjacent land-use consists of commercial property and apartment complexes, plus the Archie Gordon Memorial Park and Buenaventura Lakes Community Park.

The study evaluated crashes and crash patterns along the corridor from the past five years (2014-2019) of crash data obtained from the Signal Four Analytics database. Based on the findings of the safety assessment, potential opportunities were identified to improve safety for bicyclists and pedestrians, as well as reduce the overall frequency and severity of crashes along the corridor. Crash density is highest at the major intersections of Simpson Road and Osceola Parkway. Additional hot spots are at the intersections of Royal Palm Drive, Buttonwood Drive, and Florida Parkway.

Within the 5-year period of crash records four (4) crashes occurred that involved one (1) or more fatalities. These fatalities occurred at or near the intersections of Royal Palm Drive, Wagon Circle, Buttonwood Drive, and Lakepointe Circle. There were ten (10) bicycle crashes and nine (9) pedestrian crashes. One of the pedestrian crashes resulted in a fatality. This pedestrian fatality occurred near the intersection of Lakepointe Circle during dark-lighting conditions.

As part of this study's initial data gathering and project kick-off efforts, the Study Team reviewed the findings of several previous studies relevant to the Buenaventura Boulevard Complete Streets study area:

- The Parkway Middle School Safe Routes to School Study proposed a 5-foot wide sidewalk on the north side of Buenaventura Boulevard from the east side of Florida Parkway to 500-ft west of Simpson Road. This project is federally funded as part of the Safe Routes to School Program.
- In the Osceola County Trail Prioritization and Feasibility Report, Buenaventura Boulevard was recognized as a "high priority" trail connection as it is the primary roadway through the Buenaventura Lakes community. A trail on the south side of Buenaventura Boulevard. ranked 8th of 74 trail projects throughout the County.
- 3. FDOT also prepared a study recently that provided recommendations for safety improvements along Buenaventura Boulevard from Florida Parkway to Osceola Parkway. Access management recommendations in the study change access at Trotters Circle/Florida Parkway, Briarwood Drive, Competition Drive/Pine Island Circle, and the Buenaventura Center entrance at Ventura Downs. The study also recommended segments of new sidewalk on the northern side where sidewalk gaps exist and minor roadway modifications through horizontal curves to improve safety.

At the start of this current study, the County and study team sent postcards to residents along the corridor and encouraged them to take the study kick-off survey. Key takeaways from this initial survey are:

1. There were over 60 participants for the survey. About 2/3rds of the respondents live along or near the corridor.

- 2. About 70% of the respondents felt speeding is a problem on Buenaventura Boulevard. and nearly 80% have difficulty turning on and/or off Buenaventura Boulevard.
- 3. When asked about specific design strategies being considered, 89% are neutral or are in favor of enhancements at intersections and texture pavement treatments that have been shown to calm vehicular speeds.
- 4. 53% of respondents were neutral to or in favor of the study evaluating roundabout opportunities along the corridor. It is important to note however that the benefits of roundabouts are often misunderstood, so there is an opportunity indicated in the survey results to provide the public with information to better understand the many benefits that roundabouts provide including traffic calming and improved access.
- 5. The survey also revealed that most respondents travel the corridor by car today, but after improvements, the percentage of respondents indicating that they would like to walk or bike along Buenaventura Boulevard increased. Respondents believe there are issues with the current sidewalk and bicycling infrastructure along Buenaventura Boulevard. 92% of respondents were neutral to or in support of shared use paths and 86% were neutral to or support more opportunities to cross Buenaventura Boulevard as a pedestrian or cyclist.

Based on the community outreach and the latest engineering approaches to traffic calming and safety, this project recommends the following additional improvements along the corridor in addition to those provided in previous studies:

- Add textured pavement within major intersections and textured mid-block pavement details evenly spaced between intersections to calm traffic and create placemaking opportunities that reflect the local culture and character of the Buenaventura Lakes community. A sequence of enhanced intersections and mid-block details reinforces the concept of short blocks.
- 2. Construct two proposed roundabouts with one at Trotters Circle south of Archie Gordon Memorial Park and one at Trotters Circle / Florida Parkway north of the park.
- 3. Reduce corner radii to slow right turning vehicles at Oakwood Drive, Royal Palm Drive, and Florida Parkway.
- 4. Add a pedestrian signal, such as a rectangular rapid flashing beacon, across Buenaventura Boulevard at Archie Gordon Memorial Park and provide a wider sidewalk on the northern side of Buenaventura Boulevard where feasible.
- 5. Add a northbound right turn lane to Archie Gordon Memorial Park.
- 6. Convert the median at Rider Circle to SB directional left only.

In addition, the recommendations include lowering the speed limit to 35 MPH from Bridle Court to Osceola Parkway.

This study's recommendations have been combined with previous study recommendations to become the recommended improvements to be implemented along the corridor. Improvements may be phased, as funding becomes available.