

EXECUTIVE SUMMARY

The purpose of this report is to document the results of the Traffic Impact Analysis for the DOWNTOWN REDEVELOPMENT of the “Village of Palmetto Bay”, located between SW 174th Street and SW 184th Street along US-1 and SW 97th Avenue in Palmetto Bay, Florida. The proposed project consists of residential and retail/office land uses, to be built in three development phases occurring in 2025, 2035 and 2045. This traffic impact study analyzed the transportation corridor segments and intersections in accordance with the Village of Palmetto Bay requirements and approved methodology, which specified an analysis of existing conditions, future conditions without the downtown project (background traffic) and future conditions with the downtown project (total traffic).

Results of the existing intersection and segment analysis demonstrate that the intersections and segments operate above the adopted levels of service during the peak hours, with exception to:

- SW 97th Avenue at US-1/Evergreen Street (A.M. peak hour)
- US-1 at Wayne (A.M. and P.M. peak hours)
- US-1 at E Indigo Street (A.M., midday and P.M. peak hours)

The Village of Palmetto Bay staff recognizes the projected capacity challenges represented along 97th Avenue and has proposed construction of a parallel facility along SW 95th Avenue to alleviate congestion. Therefore, future analyses were performed both with the proposed SW 95th Avenue segment.

Results of the future background intersection and segment analysis “**without**” the proposed SW 95th Avenue demonstrate that the intersections and segments operate above the adopted levels of service during the peak hours, with exception to:

- SW 97th Avenue (2025, 2035 and 2045 - A.M. peak period)
- US-1 (2045 - A.M. peak period)
- SW 97th Avenue at US-1/Evergreen Street (2025, 2035 and 2045 - A.M. peak period)
- US-1 at Wayne Avenue (2025, 2035 and 2045 - A.M. and P.M. peak periods)
- US-1 at E Indigo Street (2025, 2035 and 2045 - A.M., midday and P.M. peak periods)

Results of the future background intersection and segment analysis “**with**” the proposed SW 95th Avenue demonstrates that the intersections and segments operate above the adopted levels of service during the peak hours, with exception to:

- US-1 (2025, 2035 and 2045 - A.M. period)
- SW 97th Avenue at US-1/Evergreen Street (2045 - A.M. peak period)
- US-1 at Wayne Avenue (2025 - A.M. and P.M. peak periods) (2035, 2045 - A.M., midday and P.M. peak periods)
- US-1 at E Indigo Street (2025, 2035 and 2045 - A.M., midday and P.M. peak periods)
- SW 184th Street at SW 95th (2025, 2035 and 2045 - A.M. and P.M. peak periods)

As expected, in general delay times are reduced and level of service is improved along SW 97th Avenue and at each of the study intersections with the proposed SW 95th Avenue segment in the network.

Results of the future total traffic intersection and segment analysis with the proposed SW 95th Avenue demonstrates that the intersections and segments operate above the adopted levels of service during the peak hours, with exception to:

- US-1 (2045 - A.M peak period)
- SW 97th Avenue at US-1/ Evergreen Street (2025 and 2035 - A.M. peak period) (2045 - A.M. and P.M. peak periods).
- US-1 at Wayne (2025 - A.M. and P.M. peak periods) (2035 and 2045 – A.M., midday and P.M. peak periods)
- US-1 at E Indigo Street (2025, 2035 and 2045 - A.M., midday and P.M. peak periods)
- US-1 at SW 184 (2035 - A.M. and P.M. peak periods) (2045 - A.M., midday and P.M. peak periods)
- SW 184th Street at SW 95th Avenue (2025 -A.M. and P.M. peak periods) (2035 and 2045 - A.M., midday and P.M. peak periods)
- SW 184th Street at SW 97th Avenue (2045 - P.M. peak period)

To mitigate the impacts created by the additional project traffic, both network and intersection cycle lengths were optimized for future total traffic conditions along with geometric improvements, as follows:

1. US-1 at SW 184th Street
 - a. Add EB thru, left-turn and right-turn lane
 - b. Add WB thru and right-turn lane
 - c. Add NB right-turn lane
 - d. Add SB dual right-turn lane
2. US-1 at Evergreen/97th Avenue
 - a. Add EB dual right-turn lanes
 - b. Add NB left-turn, thru lane and free-flow right-turn lane
 - c. Add SB thru lane
3. US-1 at Indigo Street
 - a. Install signal
4. US-1 at Wayne Street
 - a. Install signal
5. SW 184th Street at SW 95th Avenue
 - a. Install signal
6. SW 184th Street at SW 97th Avenue
 - a. Add EB and WB thru lane

After implementation of the improvements, the intersection level of service analysis for future total traffic conditions with intersection improvements showed that each of the intersections performed above the

adopted level of service standards, as compared to the future conditions without project traffic during the AM, midday and PM peak hour, with exception to:

- US-1 2045 – A.M. peak period)
- US-1 at SW 184th Street (2045 – A.M. peak period)

In conclusion, the results of this study demonstrate that in general the traffic generated by the proposed development project can be accommodated on the existing roadway network and levels of service expected without the project can be maintained upon the addition of project-generated traffic with negligible intersection improvements. However, it is recommended that the Village of Palmetto Bay coordinate with FDOT District Six and Miami Dade Public Works Division to further evaluate a long term improvement concepts at the US-1 at SW 184th intersection.

In addition, this study also suggest a series of improvements encouraging people travel to and from the project to use public transportation as well as promoting bicycling and walking, including:

- Installation of on-site bicycle racks or parking stations
- Provide transit information stations within the site including route schedules and maps
- Provide other transit-oriented amenities
- Design/construct the site in a bicycle/pedestrian - and transit-friendly fashion