

The purpose of the interchange access request (IAR) is to document the potential safety and operational impacts of the proposed interchange and arterial modifications being proposed as part of Phase I of the I-4 and SR 535 interchange modification project. It is expected that a separate IAR will be prepared to document the potential safety and operational impacts of the Phase II interchange improvements when funding is identified.

2.2. Purpose and Need Statement

The purpose of this project is to improve safety and improve traffic operations at the I-4 and SR 535 interchange. Improvements to the operation and safety of the SR 535 interchange area will better accommodate future population increases, improve mobility, and support economic growth.

The need for the project is shown by the projections of future population and employment in the region indicating that travel demand will continue to increase well into the future. The ability to accommodate the new travel patterns resulting from growth must be provided to sustain the region's economy. Without the improvements, extremely congested conditions are expected to occur for extended periods of time in both the morning and evening peak periods. This congestion is expected to occur along SR 535 and impact the operations at the ramp terminal intersections with I-4. Queue spillback onto the mainline I-4 is expected to occur in the future without improvements at the interchange and the arterial.

Due to these congested conditions, user travel times will continue to increase, the movement of goods through the urban area will be slower, and the deliveries of goods within the urban area will be forced to other times throughout the day. The need for improvements is illustrated by the important transportation role I-4 serves to the Central Florida region and the State of Florida.

2.3. Analysis Years

Traffic operations were analyzed for the existing year (2019) and the following future years:

- Opening Year – 2025
- Interim Year – 2035 (analyzed to understand when Phase II improvements may be needed)
- Design Year – 2045