

Exploring I-75's Transit Needs



Transit Study Objective and Purpose

A transit component has been included in this Project Development and Environment (PD&E) Study. FDOT will identify a transit alignment within the I-75 right-of-way in Broward County and evaluate various locations for a transit corridor in Miami-Dade County. The transit analysis limits are from the Miami-Dade Metrorail in Miami-Dade County to the proposed Central Broward East-West Transit system in Broward County (currently under the Project Development phase), a distance of approximately 22 miles.

Multiple transit corridors have been evaluated in Miami-Dade County between I-75 at the Florida Turnpike interchange to existing or future Miami-Dade Metrorail system.

Potential Transit Technologies

This I-75 PD&E Study will evaluate different technologies for the transit corridor along I-75. Three different technologies are currently under consideration. An overview of these technologies is presented below. A technology will not be selected as part of the PD&E Study; rather a design "envelope" wide enough for any technology will be preserved.

Bus Rapid Transit (Bottom Left)

Bus Rapid Transit (BRT) consists of buses operating on exclusive lanes that can be within the I-75 right-of-way. These lanes can either be located in the median of the freeway or to either side of the existing highway lanes (within the right-of-way). The potential BRT system would be similar to the South Dade Busway except that buses would be grade-separated from cross-street traffic at the interchanges.

Bus Rapid Transit Characteristics

Vehicle length – 40 to 60-feet
 Running way width – 30 to 45-feet
 Operating speed – similar to adjacent highway,
 55 to 70 mph



Light Rail Transit Characteristics

Vehicle length – 50 to 80-feet with 2-4 cars per trainset
 Running way width – 25 to 35-feet
 Operating speed – up to 60 mph



Heavy Rail Transit Characteristics

Vehicle length – 40 to 70-feet with 2-10 cars per trainset
 Running way width – 25 to 35-feet
 Operating speed – 50-80 mph



Light Rail Transit (Bottom Center)

Light Rail Transit (LRT) consists of trainsets operating on tracks and with an overhead electrical power system. Light rail is a flexible technology that can be located in city streets as well as exclusive rights-of-way such as what is being considered for I-75. LRT is the technology being considered for the Central Broward East-West Transit System.

Heavy Rail Transit (Bottom Right)

Heavy Rail Transit (HRT) consists of electrically powered vehicles operating on rails. Unlike light rail, heavy rail receives its electrical power from a "third rail" alongside the tracks, at ground level. HRT is the technology used by the existing Miami-Dade Metrorail System.

Transit Station Areas

Transit station areas and Park and Ride lots will be evaluated during the first phase of this study. Stations will be located adjacent to the transit guideway. Stations will include parking, shelters, seating, wind protection, and other amenities.

Phased Transit Implementation

The transit improvements will be phased into the I-75 corridor as ridership demand warrants. Phase I would include express buses sharing the median special use lanes (managed lanes), as well as Park and Ride facilities within the existing interchange areas in Broward County. Two Park and Ride lots are envisioned in Broward County for Phase I, one at the Griffin Road interchange and one at Pines Boulevard interchange.

Phase II for the transit improvements could include the actual transit guideway for the ultimate corridor technology within the I-75 right-of-way. Highway improvements will be designed to not preclude the provision of the future Phase II improvements.