

# Tampa Hillsborough Expressway Authority

Building innovative and iconic concrete bridges to serve the community

by Brian Pickard, Tampa Hillsborough Expressway Authority, and James E. Drapp, HNTB Corporation



View of the underside of the Lee Roy Selmon Expressway Reversible Express Lanes (REL) elevated structure, which was the world's first fully operational all-electronic tolling facility when the REL opened. The REL provides an additional three lanes, westbound during the morning commute from Brandon to Tampa and eastbound during the evening commute and on weekends. All Photos: Tampa Hillsborough Expressway Authority.

Since its establishment in 1963, the Tampa Hillsborough Expressway Authority (THEA) in Florida has led the charge in state-of-the-art transportation options at the local, national, and international levels. As an independent agency of the state, THEA owns, maintains, and operates four facilities within Hillsborough County: the Selmon Expressway, the Brandon Parkway, Meridian Avenue, and the Selmon Greenway. The agency is focused on driving innovation and improving mobility and safety throughout the Tampa Bay region, and it is committed to the progress and future of the region.

THEA partners with community organizations on everything from beautification to economic development to education; among its priorities are enhancing the community and activating urban spaces. THEA constructed the Selmon Greenway, a 1.7-mile-long multiuse trail that runs east-west

under the Selmon Expressway through downtown Tampa and connects with Tampa's Riverwalk and the Meridian Trail. Along the Selmon Greenway, THEA has built a series of pocket parks with landscaping, benches, and artwork that enhance downtown Tampa's aesthetics. One of these parks is the award-winning Deputy Kotfila Memorial Dog Park.

THEA owns and maintains 15 miles of concrete bridges totaling more than 4 million ft<sup>2</sup> of bridge deck area. The estimated value of all THEA concrete structures is \$775 million. The vast majority of the 71 THEA-owned bridges are conventional prestressed concrete, multigirder superstructures, but four concrete segmental box-girder superstructures comprise more than half of the bridge inventory by deck area. These four bridges—State Route (SR) 618A from 12th Street to 26th Street, SR 618A from 39th Street to 78th Street, SR

618A over Interstate 75, and the recently completed Selmon West Extension (SR 618B over U.S. 92)—form the most recognizable aspect of THEA's system and are icons in the Greater Tampa community. The first three bridges, collectively known as the Selmon Expressway Reversible Express Lane bridges, were built as separate projects beginning in 2004 (see the article on the project in the Fall 2007 issue of *ASPIRE*<sup>®</sup>). Unique features of these bridges include:

- They were constructed almost entirely in the limited median of an existing four-lane limited-access expressway.
- All existing travel lanes remained open during daily peak hours.
- The slender precast concrete superstructures were built on piers that are only 6 ft wide.

The aesthetics inherent in the concrete segmental box-girder superstructure and the concrete piers and columns provide an



View of the Selmon Expressway crossing the Hillsborough River as it passes south of downtown Tampa.

opportunity to enhance the experience for the driver and community. THEA has built on these features by installing aesthetic lighting with unique color schemes for both the piers and bridge spans. These amenities have enabled THEA to celebrate community events such as holidays, sporting events, and the local Gasparilla Pirate Fest.

These robust concrete bridges have handled the demands of high traffic counts and Florida's coastal environment while delivering the ride experience THEA's customers expect. The long-term performance of these structures

has helped THEA achieve consistently high bond ratings, thereby reducing long-term financing costs. To better capture the value of the long-term performance of concrete bridges and all bridges across its system, THEA will take over bridge inspection responsibilities from the Florida Department of Transportation in July 2022.

As Tampa's facilities and community evolve, THEA's state-of-the-art system will continue to be resilient, efficient, and responsive to changing demands, thanks to the versatility and economy of concrete bridges. [A](#)

*Brian Pickard is the Tampa Hillsborough Expressway Authority's director of Operations and Engineering and James E. Drapp is a senior vice president for HNTB Corporation in Tampa, Fla.*

### EDITOR'S NOTE

*The most recent addition to THEA facilities is the Selmon West Extension, described in the Project article on page 12 and the Concrete Bridge Technology article on page 44.*

View of the Selmon Expressway superstructure from the Hillsborough River in Tampa's Channel District.

