

Creating New Opportunities for Port Canaveral

Freight Rail Extension To Breathe Life Into Underutilized Cargo Hub



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Port Canaveral may be the single most underutilized East Coast port.

Port Canaveral serves as a well-known departure point for cruise ships serving the Caribbean and the Gulf Coast. But it is the only major East Coast port that does not have a direct freight rail connection. Cargo moves between the port and regional rail facilities by truck, thus requiring multiple handlings and added expense.

Located in Central Florida roughly 40 miles east of Orlando, the port is ideally situated, with direct access to the Atlantic Ocean, close proximity to major markets and a large number of distribution and manufacturing shippers along the nearby I-4 corridor.

The absence of a rail connection severely limits the port's potential for growth.

Providing Transportation Solutions

In 2012, Port Canaveral selected TranSystems to find a solution. TranSystems was asked to help develop a direct freight rail connection between the port's north cargo terminals and the Florida East Coast Railway's main line, west of the Indian River and Intracoastal Waterway. The immediate assignment was to:

- ▶ Identify and assess potential routes between Port Canaveral and Florida East Coast Railway
- ▶ Recommend a preferred route, based on ecological and economic feasibility
- ▶ Initiate preliminary plans and designs for the recommended alignment
- ▶ Identify all related permitting and mitigation requirements for the recommended alignment

Navigating Multiple Stakeholder Interests

The port sits adjacent to the Cape Canaveral Air Force Station (CCAFS) – near the Kennedy Space Center, NASA's primary launch site with three launch pads currently active. The United States Air Force, Department of Defense and the National Aeronautics and Space Administration were thus among a long list of stakeholders that also included:

- ▶ The United States Fish & Wildlife Service
- ▶ The Department of the Interior
- ▶ State and Federal resource and regulatory agencies
- ▶ Environmental groups and activists
- ▶ Local communities, townships, citizens and homeowners

Any recommended alignment was expected to pose challenges, and Port Canaveral was depending on TranSystems to find a solution that would be economically feasible, ecologically friendly and politically acceptable.

Managing the Project's Lifecycle

Known for its strong reputation in rail, TranSystems has been in on this project from the beginning. For phase one, TranSystems identified and analyzed exactly how much cargo and what types of cargo the freight rail extension would need to handle and evaluated five potential rail alignments from the port to Florida East Coast Railway.

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Extensive interviews were conducted with current and potential cargo terminal operators at the port. The team found port tenants would use the freight rail extension if it were available. It was estimated that the initial cargo volume would be approximately 865,000 tons annually. Approximately 170 railcars would be needed per week, fairly evenly split between box cars and hopper cars.

At the same time, three potential rail alignments were evaluated.

- 1) The first alternative traverses the Banana River up through Merritt Island and adjoins at the Kennedy Space Center where 17 miles of rail is currently unused, which joins up with the FEC mainline
- 2) The second alternative heads west to SR 528, a four-lane state road, from Orlando to Cocoa Beach that goes along the shoulder or median
- 3) The third alternative goes through Cape Canaveral Air Force Station and links up with the unused rail line at the Kennedy Space Center

Adapting, Making Recommendations and Finding a Solution

For phase two, work was completed on the planning and preliminary design of the recommended freight rail alignment (alignment I above) and the determination of probable permitting and mitigation requirements.

Considerable community opposition to the Banana River-Merritt Island alignment extended the EIS process and expanded TranSystems' role to further explore other alternatives. The alignment along SR 528 also hit snags. The Florida DOT has plans for adding more lanes and capacity thus taking any potential right-of-way for a freight line. In addition, up to 10 private residences could be affected.

After these alignments received push back, the Port revisited the third alignment option and asked TranSystems to develop feasibility studies for an alignment that passed from the port into the CCAFS. In Dec. 2016, the feasibility was completed and there was a case to be made for feasibility, constructibility and lower cost to go through the Air Force Station then link with the rail at the Kennedy Space Center.

Preparing for the Design Phase

As the project evolves, TranSystems continues to work as the port's proponent and liaison to the Surface Transportation Board. After a feasibility study showed the alignment through the CCAFS was a viable and cost-effective option, TranSystems will work with the port to convince the Surface Transportation Board to only consider this alternative.

About the Author

Rick Ferrin, PE, is a vice president with TranSystems with more than 44 years of experience in a broad range of engineering, including port development (facility planning, design, construction management and project management), marine terminal operations, federal navigation project planning and development, business development and financial management. He has spent a significant portion of his career in the maritime business as an engineering project manager with the Panama Canal Commission, as the director of engineering at the Port of Oakland and as a port executive director.

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