

LESTER HIGHTOWER

Vice President and Chief Information Officer
Florida East Coast Railway and Its Sister Companies

PROFESSIONAL PORTFOLIO



PROFESSIONAL SUMMARY

Vice President and Chief Information Officer, Florida East Coast Railway 2012-present

CIO of FECR and its two trucking subsidiaries, FEC Highway Services and Raven Transport. Created value through digital transformation of numerous internal and customer-facing business processes and systems.

Director, Software Solutions, Invensys Rail (now Siemens Mobility) 2010-2012

Unified several software-as-a-service systems into a P&L apart from the electronics products business.

Vice President, Chief Technology Officer, and Founder, 10East Corp 1995-2010

In the mid-1990s, created what became 10East Corp's flagship product, RailDOCS. Saw RailDOCS through an acquisition, a parent company bankruptcy followed by restructuring through private equity, significant growth, and then divestiture to The Carlyle Group's RMI, Inc. GE Transportation Digital Solutions now owns and operates RailDOCS.

Various Roles, Supercomputer Computations Research Institute 1990-1995

Federally funded supercomputer research center that was started during the Ronald Reagan presidency and housed on the campus of the Florida State University (<https://rcc.fsu.edu/history>).

ABOUT FLORIDA EAST COAST RAILWAY

Florida East Coast Railway (FECR) is a storied and highly strategic Class II railway with an intermodal focus. FECR interchanges with CSX and Norfolk Southern in Jacksonville, and provides full-service drayage at five intermodal terminals on its network and two off-network. FECR provides door-to-door and ramp/door intermodal transportation, with drayage provided by FEC Highway Services, truck/rail moves done in conjunction with its over-the-road trucking subsidiary Raven Transport, and international intermodal in conjunction with the seaports of South Florida. In short, FECR provides intermodal transportation services that feel like door-to-door truck service, and markets and sells that “integrated product” directly to retail customers.

FECR is the exclusive rail provider to Port Miami, Port Everglades in Ft. Lauderdale, and the Port of Palm Beach. FECR's railcar traffic includes crushed rock, automobiles, and other food and industrial products. FECR also operates an automotive trans-loading facility in Miami.

In the past six years, many technology innovations were brought to bear over FECR's operations, for both internal and external customers. FECR achieved efficiency gains and cost reductions as well as captured additional revenue and improved profit margins. In July of 2017, Fortress Investment Group sold FECR to Grupo Mexico for US \$2.1B.

FECR – HIGH-LEVEL, CORE IT LANDSCAPE

IBM iSeries (AS/400) Midrange Computing

- JDE EnterpriseOne ERP from Oracle.
- RailConnect TMS, RMS, and ISS from GE.
- TL2000 trucking TMS from TMW Systems.
- Cleo EEI EDI processor from Extol International.

Intel x86 and VMWare

- OASIS terminal operating system from GE.
- LoadMaster and DocumentMaster from McLeod Software.
- Transflo document management system from Pegasus TransTech.

High-Performant and/or Non-Virtualized x86 for Specialized Applications

- Enterprise Business Intelligence Server and related products from SAS Institute.
- Image processing and optical character recognition servers for PEV automated gate system from ABB.
- In-memory MySQL databases for FECR Connect.

FECR – RE-ESTABLISHED THE IT DEPT.

Background

- Fortress Investment Group (Fortress) purchased Florida East Coast Industries in July of 2007.
- Fortress focused on Flagler Development real estate and gave control of FECR to RailAmerica.
- Fortress later chose to sell RailAmerica but keep FECR, and hired Jim Hertwig as FECR CEO.
- Fortress Investment Group sold RailAmerica to Genesee & Wyoming on July 23, 2012.

Circumstances and First-Year Undertakings

- RailAmerica had completely eliminated FECR's IT Department.
- Ran RFQ processes for several managed service providers and staffed the department.
- Worked with G&W executives to execute a smooth IT transition. That resulted in G&W moving RailAmerica IT out of its Jacksonville datacenter and FECR IT building up in its place.
- Corrected copious deferred maintenance and investment problems; added disaster recovery.

FECR – EXECUTIVE INFORMATION SYSTEM

Supported the CFO and VP of FP&A in creating a business intelligence dash boarding system. FECR's Executive Information System (EIS) resides at <https://eis.fecrwy.com/>

EIS mission - “To provide information to executives, managers, and analysts that will enable them to better understand the business, measure performance, and take action to improve.”

EIS first went live in early 2013 and is built atop SAS and Logi Analytics.

- SAS does all of the ETL and data normalizations, and then publishes datasets for analysts to use, plus a data mart for EIS to utilize.
- EIS requirements included properly functioning on iPads, which it does. In the late 2012 timeframe, iPad support was a major reason that Logi Analytics was chosen.

EIS continues to expand. Recent examples include “Gate Availability for Intermodal Customers” and “Train Velocity” - both added to the EIS Ops Dashboard during the last week of September.

FECR – ICTF AT PORT EVERGLADES

In July of 2014, FECR opened a new intermodal container transfer facility in Ft. Lauderdale, adjacent to Port Everglades (PEV).

FECR's PEV ICTF was a \$73 million investment, \$5.8M of which was for technology.

- PEV has an automated gate system (AGS) that was supplied by ABB.
- The AGS uses line scan cameras and optical character recognition to identify interchanging equipment.
- Drivers use bank ATM-style kiosks in the gate complexes. There are no clerks in the lanes.
- Separate domestic and international gates, with higher levels of automation at the international gates.
- Mi-Jack cranes in PEV use Accusteer - <https://mi-jacktech.com/accusteer/>
- Outdoor security cameras blanket the 42.5 acre facility and integrate to Tyco's exacqVision.

Year one growth of rail traffic to/from PEV was 26%.

- <http://www.sun-sentinel.com/business/fl-port-everglades-railway-20150716-story.html>

FECR – CUSTOMER WEB PORTAL

FECR Connect was launched in late 2014, offering comprehensive views of all shipments in the railroad's system at any time, plus detailed histories, and including times when shipments are being pulled over-the-road by FEC Highway Services or Raven Transport.

- Customer docks' location fidelity is provided via integration to SkyBitz and others.
- Over-the-road location fidelity is provided via integration to Omnitrac's brand, in-cab computers that are installed in all of the trucks of FECR's trucking subsidiaries.
- Railroad location fidelity is from integrations to TMDS from Wabtec; and TMS, Oasis, and mCrew from GE.

FECR Connect employs a rapid innovation architecture built predominantly on open source software.

Over time, many other features were added. A few examples include Order Entry, Statements and Invoices including back-up paperwork, and ICTF Gate Activity. FECR Customer Service staffing was significantly reduced while customer satisfaction rose.

In early 2016, FECR launched EZ Buy to allow customers to buy non-contract freight services.

- The launch of EZ Buy initiated FECR's entrance into the spot freight market.
- That launch was followed closely by API integrations to LoadDex and Softmodal.
- EZ Buy exceeded its multi-million dollar revenue goals within the first 18 months.

FECR – PRICE OPTIMIZATION

Assisted Pricing Department leader with an extensive price optimization software RFQ process.

Awarded contract to Revenue Analytics (RA) of Atlanta, Georgia. RA began in airline ticket price optimization with Delta, and today also prices rooms for many large hotel chains.

FECR was RA's first rail/intermodal customer, but had glowing recommendations from Maersk.

Supported the development, implementation, and systems integrations of FECR's "Deal Desk" and it went into service on time and on budget, in June of 2017.

Early indications of yield uplift seemed positive, but Grupo Mexico did not perceive value in this type of system and so it was retired, and FECR's relationship with RA is being severed.

FECR – FECHS OWNER/OPERATOR MOBILE APP

The FEC Highway Services Owner/Operator Mobile App was launched in June of 2018.

- FECHS O/OMA is designed to work on iOS or Android-powered mobile phones.
- Apple App Store: <https://itunes.apple.com/us/app/fechs-o-oma/id1403886158>
- Google Play Store: <https://play.google.com/store/apps/details?id=com.fecrwy.Ooma>

FECHS O/OMA is an extension of FECR Connect with direct integrations to TMW's TL2000.

Currently, the app allows owner/operators to review, and to accept or dispute their settlements.

Additional functionality is in the works. Next to be released is load event management, and that will eliminate many owner/operator interactions with dispatchers, reduce audible- and keypunch-errors, and improve efficiency at the origin and destination points of drayage.

FECR – RAVEN CONNECT

Raven Connect launched in August of 2018 and resides at <https://connect.raventrans.com>.

Was built by adapting a few FECR Connect modules for over-the-road trucking and integrating them to LoadMaster and DocumentPower from McLeod Software.

Currently, Load Track & Trace capability, that includes load back-up paperwork, Order Entry, and Missing Paperwork are in production.

EDI integration with FECR provides “end-to-end” visibility for Raven’s truck/rail customers.

Customer acceptance is good and user satisfaction is high. Over time, customer requests will guide new feature additions.

INVENSYS RAIL – EOT PHONE HOME

Responsible for EOT Phone Home (www.eotph.com) at Invensys Rail.

EOTPH manages telemetry and configuration management for many thousands of end of train devices across North America (Canada, USA and Mexico), owned by dozens of railroads.

Rebuilt EOTPH to dramatically enhance customer value, and then raised prices and margins.

- Was heavily involved in the development of Invensys's 2011 EOT product refresh that added many noteworthy features. Examples include configuration management, over-the-air software updates, and over-the-air device disabling to provoke their return to the owning railroad – all industry firsts.
- Employed k-means clustering to automatically identify and alert of owned EOTs leaving a RR's property.

Designed the new EOTPH to support multiple EOT manufacturers.

- Negotiated commercial and patent-licensing agreements with DPS Electronics, and mutual customers, to support DPS's line of EOT devices. <http://dev.rtands.com/index.php/cs/invensys-rail-and-dps-electronics-sign-agreement.html>
- At Invensys, the revamped EOTPH SaaS business was more profitable than the EOT product line itself.

10EAST CORP – RAILDOCS

In the mid-1990s and at United Railway Signal Group, created what became 10East Corp's flagship product, RailDOCS. Saw RailDOCS through an acquisition, a parent company bankruptcy (ABC-NACO) followed by restructuring through private equity, significant growth, and then divestiture to The Carlyle Group's RMI, Inc. GE Transportation Digital Solutions now owns and operates RailDOCS.

RailDOCS is a cloud-based mobile software platform for project management, configuration management, testing, inspecting, reporting and maintaining track, signal, bridge and communications equipment. RailDOCS stores many millions of test forms for 100,000+ railroad wayside locations and aids in compliance with railroad, state and federal regulations.

RailDOCS also provides the means to track and manage signal, train crew, and dispatcher employee time worked and hours-of-service availability.

RailDOCS results in improved preventative maintenance, greater compliance with regulations, and greater employee productivity. RailDOCS is hosted at www.raildocs.net.

PROFESSIONAL VOLUNTEERING EXPERIENCE

- Customer Advisory Board Member, GE Transportation Digital Solutions

The GE Transportation Digital Solutions Customer Advisory Board (CAB) is an invitation-only board comprised of executives from railroads that use products from GE Transportation Digital Solutions. CAB members meet with GE leadership quarterly, for strategic discussions on GE products and commercial activities, and on industry and technology topics that are pertinent to short line and regional railroads.

- Council Member, Northeast Florida CIO Council

The Northeast Florida CIO Council is comprised of the senior level technology representative of any business, government, non-profit or educational institution with a substantial investment in information technology. Membership is by invitation only to top level IT executives of a JAXUSA Partnership investor company/CIO or equivalent.

- Board of Directors Member, The Rivere Foundation

The Rivere Foundation is a registered public charity in the USA (EIN 82-0728601) that promotes a diabetes management regimen, anchored in nutrition and the proper use of insulins, that allows people with diabetes to achieve very near-normal blood glucose levels. The foundation's primary advocacy work is done via the Let Me Be 83 trademark. Learn more at <http://www.letmebe83.org/>.