

2.0 Current Freight Rail System and Services in Florida

■ 2.1 Overview

The Florida rail system is comprised of 2,786 miles of mainline track, which are owned by 15 operating line-haul railroads and terminal or switching companies, as well as 81 miles owned by the State of Florida. Florida's rail system includes 2 Class I Railroads (CSX Transportation and Norfolk Southern Corporation), 1 Class II (Florida East Coast Railway), 11 Class III (Alabama and Gulf Coast Railway AN Railway, Bay Line Railroad, First Coast Railroad, Florida West Coast Railroad, Florida Central Railroad, Florida Midland Railroad, Florida Northern Railroad, Georgia and Florida Railway, Seminole Gulf Railway, and South Central Florida Express) and 1 railroad specializing in switching and terminals (Talleyrand Terminal).⁹ The largest operator in the State is CSX Transportation, which owns more than 53 percent of the statewide track mileage.

In 2008, Florida's railroads carried nearly 1.6 million carloads – 19 percent less than in 2006 – and approximately 83 million tons of freight, representing a 25 million ton (23 percent) decrease from 2006.¹⁰

During that year, railroads handled freight equivalent to roughly 5.0 million heavy trucks.¹¹ Nonetheless, railroads continue to support thousands of jobs throughout the State and assist Florida's industries to remain competitive with international and domestic markets for fertilizer, construction rock, consumer goods, paper products, processed

⁹ U.S. Class I Railroads are line-haul freight railroads with 2007 operating revenue in excess of \$359.6 million (2006 operating revenues exceeding \$346.7 million). A Class II Railroad, also known as Regional Railroad, is a non-Class I line-haul railroad operating 350 or more miles of road and/or with revenues of at least \$40 million according to the Surface Transportation Board. A Class III Railroad, also known as a Local Railroad, is neither a Class I nor a Regional Railroad and is engaged in line-haul service according to the Surface Transportation Board. Finally, a Switching and Terminal Railroad is a non-Class I railroad engaged in switching and/or terminal services for other railroads. Source: American Association of Railroads, Railroad Service in Florida Fact Sheet, 2008.

¹⁰The 2008 Carload Waybill Sample is the latest annual dataset available from the STB.

¹¹Based on an average payload factor of 17 tons per truck.

foods, and agricultural products. In 2007, Florida’s freight railroads paid \$364 million¹² in wages – a 3.4 percent net increase from year 2006 receipts – to more than 5,600 workers.

This chapter describes the 15 Florida freight railroads, first by profiling each of the railroads and then by examining the traffic movements and trends across these railroads.

■ 2.2 Railroad Profiles

This section provides a one-page profile of each of the freight railroads operating in the State (Table 2.1). Each profile briefly describes the history, ownership, infrastructure, connections, and primary commodities for each railroad. A map is provided in each profile denoting line ownership (bold lines) and trackage rights (bold dashed lines) in relation to other railroads, urbanized areas, and principal highways.

Table 2.1 Freight Railroads Operating in Florida
2009

Railroad Name	Abbreviation	Class I	Class II	Class III	Terminal/ Switching
Alabama and Gulf Coast	AGR			●	
AN Railway	AN			●	
Bay Line	BAYL			●	
CSX Transportation	CSXT	●			
First Coast	FCRD			●	
Florida Central	FCEN			●	
Florida East Coast	FEC		●		
Florida Midland	FMID			●	
Florida Northern	FNOR			●	
Florida West Coast Railroad	FWCR			●	
Georgia and Florida Railway	GFRR			●	
Norfolk Southern	NS	●			
Seminole Gulf	SGLR			●	
South Central Florida Express	SCXF			●	
Talleyrand Terminal	TTR				●

¹²The total wage receipts do not include fringe benefits.

Two Class I railroads operate in Florida: CSX Transportation (CSXT) and the Norfolk Southern Railroad (NS). These two railroads serve the Eastern United States and connect Florida to the national rail network. CSXT is the single largest operating railroad in Florida, with an extensive network covering the Florida Panhandle, Northern and Central Florida, and the Greater Miami area in South Florida. NS lacks an extensive Florida network with only 96 miles of track in the State, however they have a haulage agreement with FEC for the 350 mile line between Jacksonville and Miami. Both the Class I carriers, CSXT and NS, interchange with the Florida East Coast Railway (FEC), a Class II regional railroad that provides service to the heavily populated Atlantic Coast Corridor from Jacksonville to Miami.

Class III short line railroads serve much of the rest of the State and provide local service to several important ports and manufacturing clusters. The Alabama and Gulf Coast (AGR) railway, owned by RailAmerica, is a Class III railroad that serves various key population centers in the panhandle and connects with CSXT at Cantonment. Finally, the Talleyrand Terminal Railroad (TTR) is a switching railroad providing service at the Jacksonville Port Authority (JaxPort). Table 2.2 shows the total miles operated and owned by railroad in Florida.

**Table 2.2 Summary of Railroad Miles in Florida
2009**

Railroad Name	Miles Operated in Florida	Miles Owned in Florida
Alabama and Gulf Coast	45	45
AN Railway	96	96
Bay Line	70	63
CSX Transportation ^a	1,651	1,508
First Coast ^b	32	22
Florida Central	94	66
Florida East Coast	386	371
Florida Midland	37	27
Florida Northern	114	103
Florida West Coast Railroad	3	3
Georgia and Florida Railway	45	50
Norfolk Southern	149	96
Seminole Gulf	103	115
South Central Florida Express	158	120
South Florida Rail Corridor	81	81
Talleyrand Terminal Railroad	2	10
Totals^c	3,066	2,786

Source: Association of American Railroads (AAR)

Notes: Miles are calculated as route miles and do not necessarily reflect total track mileage.

^a Includes 130 miles of trackage rights, 81 miles of which are on the South Florida Rail Corridor owned by FDOT.

^b Although the First Coast Railroad (FCRD) leases 32 miles from CSXT, the mileage is included with FCRD and subtracted from CSXT.

^c In 2004, the Florida West Coast Railroad applied to the Surface Transportation Board to abandon almost the whole line. FWC was allowed to abandon all but a short piece of track in Newberry (roughly three miles). The railroad consummated its abandonment in May 2010.

Alabama and Gulf Coast Railway

The Alabama and Gulf Coast Railway (AGR) is a Class III railroad operating between Pensacola, Florida, and Columbus, Mississippi. AGR also serves Mobile, Alabama.

Ownership and History

AGR is a wholly owned subsidiary of Jacksonville-based RailAmerica Corporation, a holding company with 40 short line railroads in the United States and Canada. AGR, based in Monroeville, Alabama,



Source: RailAmerica Corporation.

officially became part of RailAmerica in 2002. The railroad was formerly operated by States Rail, which acquired it from Burlington Northern Santa Fe (BNSF) in 1997.

Infrastructure and Connections

AGR operates 44.6 miles in Florida, representing approximately 13 percent of 348 total route miles. AGR's Florida route traverses Escambia County from the state border at Atmore, Alabama, to Pensacola. A small portion of the Atmore-Pensacola route passes back into Baldwin County, Alabama, between Barrineau Park and Muscogee, Florida.

In Florida, AGR connects with CSXT at Cantonment. The railroad's other primary interchanges include: Canadian National (CN) Railway at Mobile, Alabama; Burlington Northern Santa Fe (BNSF) Railroad at Amory, Mississippi; Columbus and Greenville Railway (CAGY), Golden Triangle Railroad (GTRA), and Kansas City Southern (KCS) Railroad at Columbus, Mississippi; CSXT at Linden, Hybart, and Mobile, Alabama; TASD at Mobile, Alabama; MNBR at Linden, Alabama; and NS at Boilgee, Kimbrough, Mobile, and Demopolis, Alabama.

Commodities and Markets

Annually, AGR handles approximately 16,000 carloads of freight in Florida. AGR handles over 61,000 carloads per year over its entire network. AGR primarily serves the paper production industry with service to four paper mills and a large paper consolidator, Oren International, in Pensacola. The principal commodities associated with the paper industry (both outbound and inbound) include woodchips, logs, chlorine, sodium chlorate, hydrogen peroxide, rolled and boxed paper, and kaolin clay. AGR also hauls aggregate rock for use by Escambia County for highway projects. AGR also serves the Pensacola Marine Shipyard Complex.

Seaports Served: Port of Pensacola.

AN Railway

The AN Railway (AN) is a Class III railroad operating between Port St. Joe and Chattahoochee, Florida.

Ownership and History

AN is operated by Genesee and Wyoming, Inc. (GWI), which owns and operates short line and regional freight railroads in the United States, Bolivia, Canada, Australia, and the Netherlands. GWI operates 62 railroads in nine regions with more than 6,000 miles of owned and leased track and approximately 3,000 additional miles under track access arrangements. GWI provides rail service at 16 ports in North America and Europe and performs contract coal loading and railcar switching for industrial customers. AN is one of three GWI short lines in Florida – the others being the First Coast Railroad and the Bay Line Railroad (BAYL). BAYL also was acquired from Rail Management Corporation in 2005.



Source: Rail Management Corporation.

AN was originally chartered by the State of Florida in 1903 and was known at that time as the Apalachicola Northern Railroad. The first 30 miles of railroad commenced operation in 1907 after two years of construction through swamp land between Apalachicola and Chattahoochee. Through a subsequent acquisition by DuPont in 1933, and the construction of a paper mill at Port St. Joe in 1937, the railroad's operations focused on paper shipment until the mill's closure in 1999. Rail Management Corporation acquired AN from the St. Joe Company in 2002.

Infrastructure and Connections

AN operates approximately 96 total route miles, all in Florida. Port St. Joe is the railroad's base of operations and location of its locomotive shop. GWI's Southern Region primary offices are located in Jacksonville, Florida. AN's only connection is with CSXT at Chattahoochee, Florida.

Commodities and Markets

AN serves various customers in the Florida Panhandle. AN's primary customers include three chemical companies, a scrap metal shipper, three forest products companies, and a barge-rail transload facility at Port St. Joe.

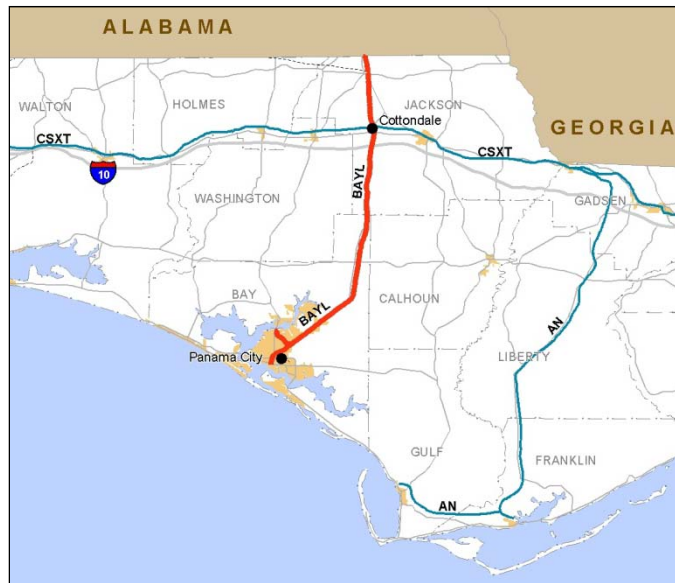
Seaports Served: Port St. Joe.

Bay Line Railroad, L.L.C.

The Bay Line Railroad, L.L.C. (BAYL) is a Class III railroad operating between Panama City and Dothan, Alabama.

Ownership and History

BAYL currently is operated by GWI, which purchased all of the assets of the Rail Management Corporation on June 1, 2005. BAYL was purchased by Rail Management Corporation from Stone Container Corporation in January 1994. The railroad was formerly the Atlanta and St. Andrew's Bay Railway.



Source: Rail Management Corporation.

Infrastructure and Connections

BAYL operates approximately 63 miles in Florida, representing 57 percent of the railroad's 110 route miles. Panama City is the primary base of operations for the railroad and the location of its principal offices, yard, and locomotive shop. BAYL also owns approximately 1,000 acres of land adjacent to the railroad. BAYL's other primary yard is at Dothan, Alabama.

BAYL's only Florida connection is with CSXT at Cottondale. The railroad's other primary connection is at Dothan, Alabama, where it interchanges with two Class I railroads (CSXT and NS) and two Class III railroads (CHAT and HS). BAYL also serves Port Panama City.

Commodities and Markets

Annually, BAYL handles approximately 28,000 carloads of freight. The principal commodities carried by the railroad include paper products, lumber, chemicals, coal, stone, steel, and fertilizer. BAYL's largest customer is Smurfit-Stone Container in Panama City. BAYL's other principal customers include: Port Panama City, Berg Steel Pipe, Cargill Steel, Arizona Chemical, Whitaker Oil, and Conrad Yelvington Distributors.

Seaports Served: Port of Panama City.

CSX Transportation

CSXT is a Class I railroad operating the most extensive rail network in Florida. CSXT provides the peninsula with its principal national rail connections and maintains its national headquarters at Jacksonville.

Ownership and History

CSXT is a division of CSX Corporation. CSXT acquired most of its current Florida assets through a merger of the Chessie System Railway and Seaboard Coast Line Industries in 1982. CSXT currently operates in 23 states, the District of Columbia, and two Canadian provinces.



Source: CSX Transportation, Wikipedia.org.

Infrastructure and Connections

CSXT owns 1,508 route miles in Florida and operates over an additional 81 miles owned by the FDOT (South Florida Rail Corridor) and 50 miles owned by the Georgia and Florida Railway (GFRR). CSXT's Florida route miles represent seven percent of the railroad's 21,000 national route miles. CSXT serves most of the State's major urban areas and provides national Class I network connections for many of Florida's short line railroads. CSXT's primary base of operations in Florida is Jacksonville with important yards throughout the State. Both of CSXT's major north-south lines, the "A Line" and the "S Line," terminate in central Florida. The names derive from former Atlantic Coast Line and Seaboard Air Line Railroad routes. CSXT provides vital connections to Florida's short line railroads, and in many cases are the only connection for the short line.

Commodities and Markets

CSXT's principal Florida commodities include nonmetallic minerals, chemicals and allied products, coal, and miscellaneous mixed shipments (intermodal). Nonmetallic minerals include phosphates from Central Florida's Bone Valley and crushed construction rock. CSXT moves hundreds of thousands of imported and domestic automobiles annually to and from Florida. Its largest automobile facilities are located at Jacksonville (three facilities), Tampa, and Palm Center (Miami). CSXT also operates an expedited service that delivers fresh Tropicana Orange Juice from Bradenton and Fort Pierce (received at Jacksonville from FEC) to distribution centers in New Jersey, Ohio, and California.

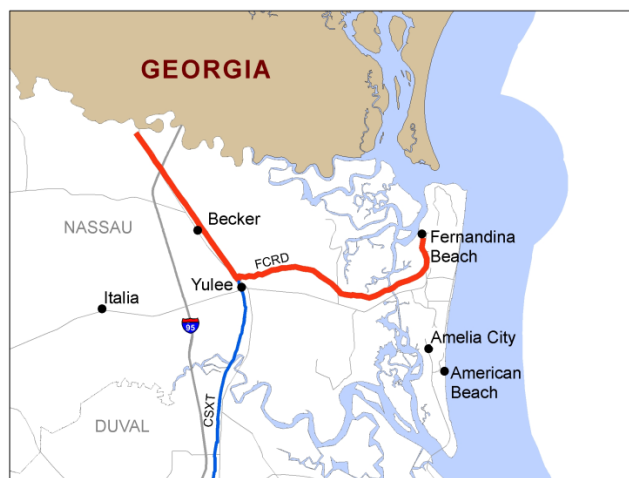
Seaports Served: Port of Tampa, Port of Jacksonville.

First Coast Railroad

The First Coast Railroad (FCRD) is a Class III railroad in Florida and Georgia, owned by Rail Link, a division of the GWI. GWI, based in Greenwich, CT operates over 63 short lines and terminal railroads.

Ownership and History

FCRD began operations in April 2005, when it leased 22 miles of railroad from CSXT. The north-south line was formerly Seaboard Air Line's main line.



Source: Federal Railroad Administration.

Infrastructure and Connections

FCRD's lines stretch east from Yulee to Fernandina Beach and north from Yulee to Seals, Georgia with a connection at Yulee to CSX to Jacksonville.

Commodities and Markets

FCRD serves 10 customers. Its rail lines handle approximately 15,000 carloads annually, including pulp and paper, chemicals, and agricultural products. Most of the traffic is generated by three paper product customers. The railroad also serves the Port at Fernandina Beach. Freight cars are interchanged with CSXT.

Seaports Served: Port of Fernandina.

Florida Central Railroad

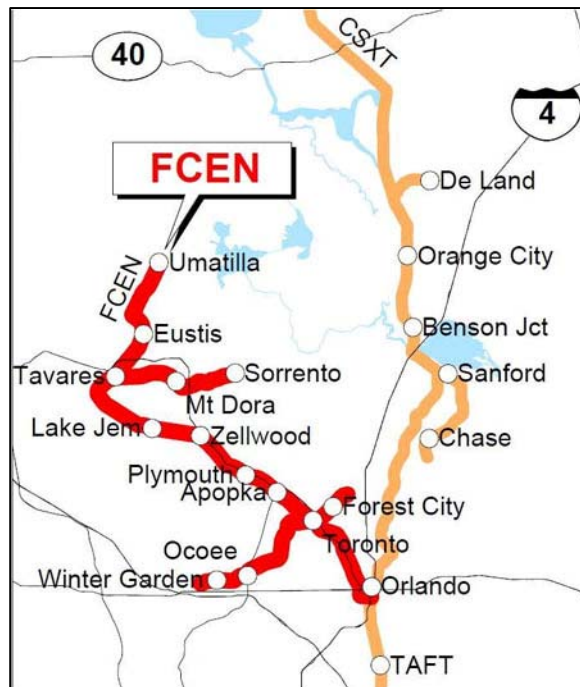
The Florida Central Railroad (FCEN) is a Class III railroad serving industries in Lake and Orange Counties northwest of Orlando.

Ownership and History

FCEN was formed in 1986 from several CSXT branch lines. It is one of three Florida short line railroads owned by Pinsly Railroad Company, a holding group with five short lines in Florida, Massachusetts, and Arkansas. The other Pinsly short lines in Florida are FMID and FNOR. All are based in Plymouth, Florida.

Infrastructure and Connections

FCEN operates 66 miles of track in Florida, including 41 miles of main track between Orlando and Umatilla; 11 miles of branch line from Tavares to Sorrento; and 14 miles of branch line from Forest City to Winter Garden. FCEN's principal Class I connection is at CSXT's Taft Yard. FCEN has trackage rights over 10 miles of CSXT through Orlando to access that connection at Taft Yard. In December 2004, the Surface Transportation Board (STB) granted permission for FCEN to abandon the Forest City Spur between Toronto and Forest City.



Source: Florida Central Railroad,
Pinsly Railroad Company.

Commodities and Markets

Annually, FCEN serves more than 65 customers in Orlando, Toronto, Plymouth, Zellwood, Tavares, Eustis, Umatilla, Mount Dora, Ocoee, and Winter Garden. The principal commodities carried by FCEN (and the other two Pinsly short lines in Florida) include food-related products, chemicals, lumber, stone, scrap metal, fly ash, fertilizer, citrus juices, pumice, and limestone. In 2003, Pinsly partnered with CSXT, with funding from FDOT, to construct a new rail spur to serve the Florida Auto Auction in Winter Garden. FCEN's rail service to the auction facility makes possible rail shipment of automobiles via CSXT's Taft Yard in Orlando to CSXT's national network.

Seaports Served: None.

Florida East Coast Railway

The FEC is a Class II regional railroad operating between Jacksonville and Miami. FEC maintains the second largest railroad network in the State after CSXT and provides the only north-south mainline along the Atlantic Coast between West Palm Beach and Jacksonville.

Ownership and History

FEC is headquartered at Jacksonville and is owned by RailAmerica. Founded in 1895 by Henry Flagler to serve rapid residential, agricultural, and tourism growth in South Florida, FEC's history is inextricably linked to the development of West Palm Beach, Miami, and Key West – the railroad's terminus from 1912 to 1935. FEC was acquired by Fortress Investment Group (parent corporation of RailAmerica) in 2008.

Infrastructure and Connections

FEC operates 371 route miles, including 351 miles of mainline track between Jacksonville and Miami; 276 miles of branch, switching, and other secondary track; and 159 miles of yard track. FEC provides exclusive rail service to the Ports of Palm Beach, Everglades (Fort Lauderdale), Miami, and the Kennedy Space Center. The FEC's principal carload transfer yards are located at Fort Pierce, Cocoa, Pompano, Fort Lauderdale, and Miami, and its intermodal facilities are located at Jacksonville, Fort Lauderdale, Ft. Pierce, and Miami. These intermodal terminals had volumes exceeding 300,000 20-foot equivalent units in 2007. FEC also provides a drayage leg in its portfolio of services to intermodal customers. FEC's chief connection with CSXT and NS occurs at Bowden Yard in Jacksonville. FEC also connects with CSXT at West Palm Beach and with SCXF at Fort Pierce.

Commodities and Markets

Annually, FEC moves approximately 30 million tons of freight, including 100,000 carloads of aggregate from its rock distribution centers in Miami, Fort Pierce, Cocoa, Daytona, St. Augustine, and Jacksonville, as well as 170,000 new automobiles from its Miami automobile facility. Other important commodities moved by the FEC include: lumber, cement, chemicals, paper products, food products (including orange juice and pulp), primary metal products, machinery, bulk freight, and farm products.



Source: Florida East Coast Railway.

Seaports Served: Port of Palm Beach, Port Everglades, and Port of Miami.

Florida Midland Railroad

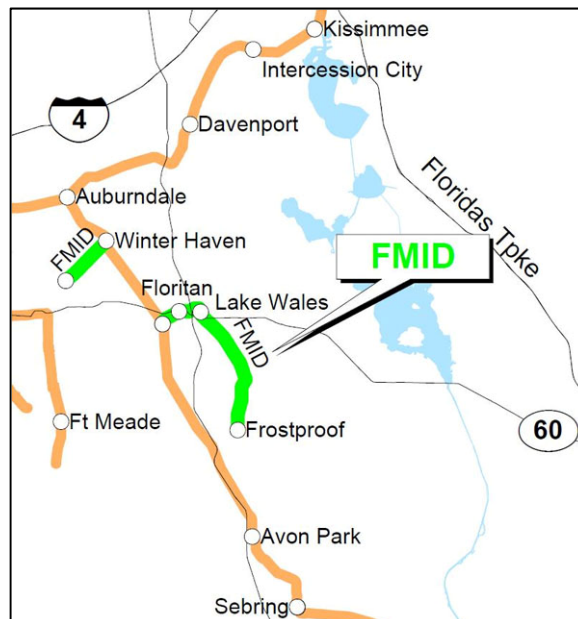
The Florida Midland Railroad (FMID) is a Class III railroad serving customers in Polk County in Central Florida.

Ownership and History

FMID was formed in 1987 from former CSXT branch lines. It is one of three Florida short line railroads owned by Pinsly Railroad Company, a holding company with five short lines in Florida, Massachusetts, and Arkansas. The other Pinsly short lines in Florida are FCEN and FNOR.

Infrastructure and Connections

FMID operates over 28 route miles consisting of two disconnected branch lines. The first line runs between Gordonville and Winter Haven and the second runs between Frostproof and Lake Wales, both in Polk County. FMID's principal Class I connections, both with CSXT, are at Winter Haven, and West Lake Wales. FMID has trackage rights over approximately 10 miles of CSXT that connect the two branch lines. FMID is based in Plymouth, Florida.



Source: Florida Midland Railroad,
Pinsly Railroad Company.

Commodities and Markets

FMID serves more than 25 customers in Winter Haven, Gordonville, Lake Wales, and Frostproof. The principal commodities carried by FMID (and the other two Pinsly short lines in Florida) include food-related products, chemicals, lumber, stone, building products, fertilizer, citrus juices, pumice, and limestone.

Seaports Served: None.

Florida Northern Railroad

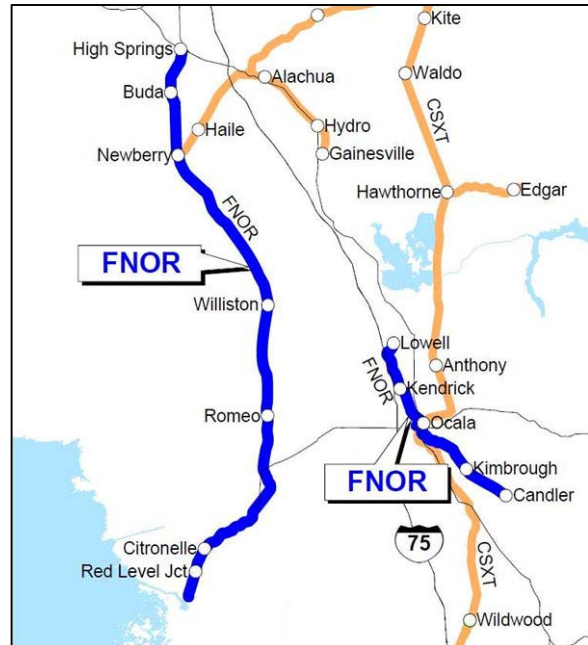
The Florida Northern Railroad (FNOR) is a Class III railroad serving customers in Alachua, Citrus, Levy, and Marion Counties of North Central Florida.

Ownership and History

FNOR was formed in 1988 from CSXT's Ocala Subdivision. It is one of three Florida short line railroads owned by Pinsly Railroad Company, a holding group with five short lines in Florida, Massachusetts, and Arkansas. The other Pinsly short lines in Florida are FMID and FCEN.

Infrastructure and Connections

Until 2005, FNOR operated 24.3 route miles between Lowell and Candler in Marion County. The railroad's only interchange was with CSXT at Ocala. In May of 2005, Pinsly acquired 76 miles of track from CSX between High Springs and Red Level, Florida. This acquisition included an interchange at Newberry, Florida. From Ocala, FNOR also operates a 2.7-mile industrial track. FNOR is based in Plymouth, Florida.



Source: Florida Northern Railroad, Pinsly Railroad Company.

Commodities and Markets

On the Ocala Branch, FNOR serves more than 20 customers in Ocala, Kendrick, Lowell, Maricamp, Kimbrough, and Candler. The principal commodities carried by FNOR on this corridor include food-related products, chemicals, lumber, stone, scrap metal, fertilizer, and limestone.

The railroad also operates the Newberry Branch which connects to CSX in Newberry running north to High Springs, where it serves plastic manufacturers, and south to the Crystal River Energy Complex in Red Level, just north of Crystal River. FNOR hauls coal for the Crystal River Power Plant, which serves as one of Pinsly's largest source of traffic in the State of Florida.

Seaports Served: None.

Florida West Coast Railroad

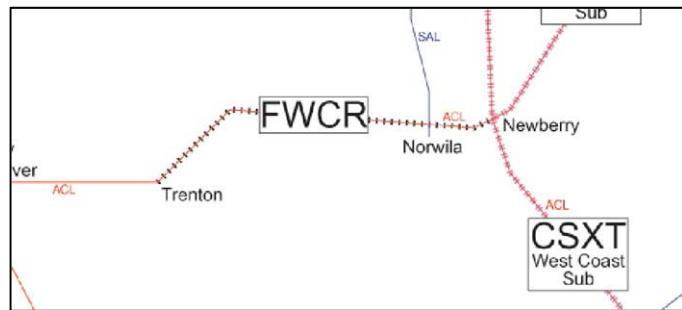
The Florida West Coast Railroad (FWCR) was a Class III railroad running west from a CSX line between Newberry and Trenton.

Ownership and History

FWCR was a 13-mile railroad owned by CSF Acquisition, Inc. which acquired it from CSX on December 13, 1987 as its first acquisition. The railroad used to extend west to Cross City, with a branch south to Chiefland. All the lines were originally owned by the Atlantic Coast Line Railroad. On February 25, 2004, the company applied to the Surface Transportation Board (STB) to abandon most of its line. The case was decided in March 2004. FWCR was allowed to abandon all but a short piece of track in Newberry. On May 2010, FWCR consummated its abandonment of 10.3 miles of the line extending from milepost 734.0 in Trenton, Florida to milepost 723.7 in Newberry, Florida. The only remaining portion of the line is a small 2.7-mile stretch mostly within Newberry, from milepost 720.0 to 723.7.

In 2010, Newberry county filed a Notice of Interim Trail Use (NITU) for this track with the STB. If this proceeds, it would give the County ownership of the track. Negotiations in this case currently are underway.

Seaports Served: None.



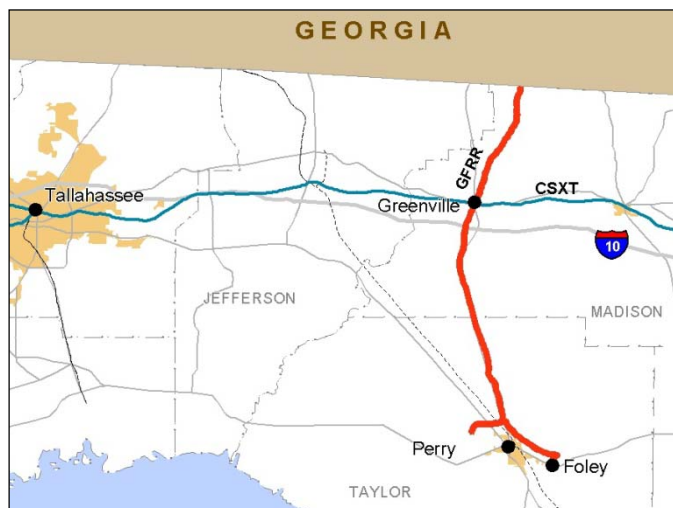
Source: Florida West Coast Railroad
(www.wikipedia.com).

Georgia and Florida Railway

The Georgia and Florida Railway (GFRR) is a Class III railroad operating between Adel, Georgia, and Perry and Foley, Florida.

Ownership and History

GFRR is one of several short line railroads owned by OmniTRAX, based in Denver, Colorado. GFRR was formerly owned by North American RailNet and operated as the Georgia and Florida RailNet. OmniTRAX purchased GFRR from North American RailNet on April 1, 2005. The railroad began operations in 1995 after acquiring the lines from NS in Georgia and Florida.



Source: Alberta Rail Net, Georgia Department of Transportation, Georgia Railroad Association, Georgia's Railroad History and Heritage (www.railga.com).

Infrastructure and Connections

GFRR operates 50 miles in Florida, representing approximately 20 percent of 297 total system miles. Albany, Georgia is the primary base of operations for the railroad. GFRR's only Florida connection is with CSXT at Greenville. The railroad also connects Norfolk Southern with two other short line railroads in Georgia (Georgia Southwestern Railroad and Valdosta Railway). CSXT has trackage rights over the railroad.

Commodities and Markets

Annually, GFRR handles approximately 31,000 carloads of freight in Georgia and Florida. The principal commodities carried by the railroad include wood pulp, beer, agricultural products, and limestone and aggregates. Customers of the railroad include Proctor and Gamble (P&G), Miller Brewing, and Buckeye Technologies.

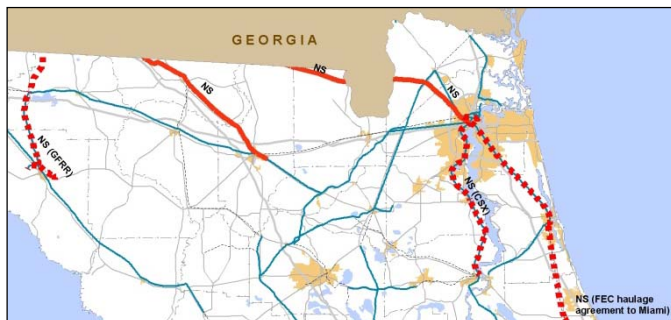
Seaports Served: None.

Norfolk Southern

NS is a Class I railroad providing service to the Eastern United States through its connections in Northeast Florida.

Ownership and History

NS is a publicly traded corporation based in Norfolk, Virginia. NS provides service to 22 eastern states, the District of Columbia, and the province of Ontario in Canada. The railroad was formed in 1982 through the union of the Norfolk and Western Railway and the Southern Railway Company. Through this merger, the new corporation acquired Southern Railway's Florida assets.



Source: Norfolk Southern Corporation.

Infrastructure and Connections

NS operates over 149 route miles in Florida, representing less than one percent of the railroads' 21,500 total U.S. and Canadian route miles. NS owns two main lines in Florida, terminating at Jacksonville and Navair (near Lake City), respectively. The two lines join at Valdosta, Georgia and interchange with the NS' Interstate network at Macon, Georgia. Trackage rights agreements allow NS to operate over the approximately 53 miles of CSXT's "A Line" between Jacksonville and Palatka (where NS serves Georgia Pacific paper mill) and NS maintains a haulage agreement with FEC from Jacksonville to Miami. NS connects with the following railroads in Florida: CSXT near Lake City and at Jacksonville; FEC at Jacksonville; SCXF at Fort Pierce; TTR at Jacksonville; and GFRR near Adel, Georgia.

Commodities and Markets

Nationally, NS's top commodity by tonnage is coal. In Florida, NS moves bulk commodities, food products, lumber, paper products, steel, and other products. Most of NS's major customers are located in the Jacksonville area and along the Atlantic Coast to Miami. NS also serves major customers in the vicinity of Lake City. NS operates three automobile distribution centers located at Jacksonville, Titusville, and Miami, and an intermodal container/trailer transload facility in Jacksonville and Titusville that receives port traffic via the Tallyrand Terminal Railroad (TTR).

Seaports Served: Port of Jacksonville.

Seminole Gulf Railway

The Seminole Gulf Railway (SGLR) is a Class III railroad with two lines in Southwestern Florida: The Fort Myers Line between Arcadia and Vanderbilt Beach and the Sarasota Line between Oneco and Venice.

Ownership and History

SGLR was formed in 1987 on two former CSXT branch lines. Before CSXT ownership, the Sarasota Line (Oneco-Venice) was operated by the Seaboard Air Line Railroad and the Fort Myers Line (Arcadia to North Naples, now terminating at Vanderbilt Beach) was operated by the Atlantic Coast Line Railroad. The first section of the railroad was constructed by the Florida Southern Railroad in 1886 between Arcadia and Punta Gorda. SGLR's headquarters are at Fort Myers and has a sister company, the Bay Colony Railroad based in Massachusetts.



Source: Seminole Gulf Railway, Wikipedia.org.

Infrastructure and Connections

SGLR operates on 115 route miles in Southwest Florida. The Fort Myers Line serves customers in De Soto, Charlotte, and Lee Counties and interchanges with CSXT at Arcadia. The Sarasota Line runs between Oneco and Venice and interchanges with CSXT at Oneco. The Sarasota Line serves customers in Manatee and Sarasota Counties. SGLR's primary yard and shop is located at Colonial Station in Fort Myers.

Commodities and Markets

The railroad's primary commodities include building materials, newsprint, beer, LP gas, pulpwood, logs, and stone. In addition to its freight services, SGLR has operated excursion trains from Fort Myers since 1991.

Seaports Served: None.

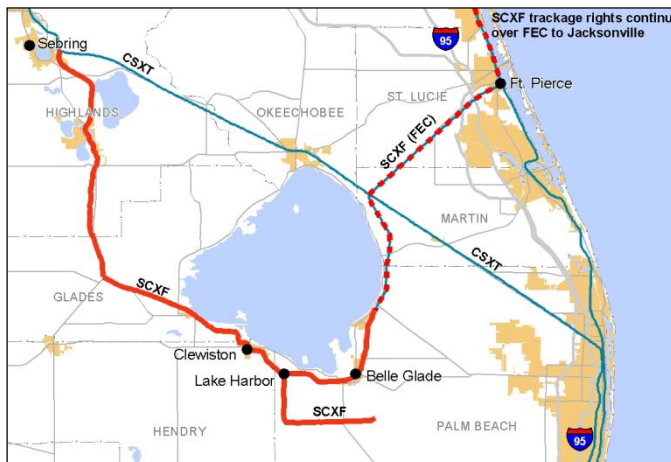
South Central Florida Express

SCXF is a Class III railroad serving the agricultural industries of South Central Florida. It is the largest private agricultural railroad in the United States.

Ownership and History

SCXF is a “company railroad” owned and operated by the U.S. Sugar Corporation since 1994. Between 1990 and 1994, the railroad was operated by the Brandywine Valley Railroad, a subsidiary of Lukens Steel. The railroad currently owns a 98-mile section between Sebring and Pahokee.

Much of that section was owned previously by CSXT (before Brandywine) and was originally part of the Atlantic Coast Line Railroad. The railroad also owns a branch line running south of Lake Harbor and then turning east into the cane fields south of Belle Glade. The railroad’s headquarters are at Clewiston, Florida.



Source: www.railwayage.com/aug99/shortline_awards.html, U.S. Sugar Corporation.

Infrastructure and Connections

SCXF operates on 171 route miles on both sides of Lake Okeechobee in South Florida. The line on the west side of Lake Okeechobee interchanges with CSXT at Sebring and, through a lease agreement, operates over 51 miles of FEC to the Atlantic Coast where it connects to the FEC main line at Fort Pierce. SCXF has haulage rights on the FEC to its Jacksonville interchanges with CSXT and NS. The railroad owns 14 locomotives and approximately 1,000 special purpose cane cars.

Commodities and Markets

As its ownership implies, SCXF’s principal purpose is to transport sugarcane. Since its purchase by its largest customer (U.S. Sugar) in 1994, traffic on the railroad has increased from 41,000 to more than 73,000 annual carloads between 1994 and 2003.¹³ The railroad serves 26 customers and hauls cut cane, bulk raw sugar, packages and bulk-refined sugar, fertilizer, molasses, pulpwood logs, rolled paper, and farm equipment.

Seaports Served: None.

¹³This is the latest data available on U.S. Sugar’s web site http://www.ussugar.com/sugar/sugar_railroad.html.

Talleyrand Terminal Railroad

TTR is a short line railroad run by Rail Link, Inc., a subsidiary of GWI. It serves the Jacksonville Port Authority and tenants with over 10 miles of track. It has only one main line, running west from the port to an interchange with CSXT and NS northeast of downtown Jacksonville, Florida. Operations began on July 28, 1996. Rail Link service expanded to include operation of the rubber tire gantry cranes, transferring more than 23,000 ocean-going containers between truck and rail.

Seaports Served: Port of Jacksonville.

■ 2.3 Traffic Description¹⁴

Historic Trends

In 2008, Florida's freight railroads moved more than 83 million tons of freight. This figure represents a significant decrease from the 119 million tons transported in 2004, a fact that is in large part attributed to the economic recession affecting the nation towards the end of the decade. The total value of this cargo was approximately \$2.15 billion. As shown in Figure 2.1, the 2008 freight rail tonnage by direction includes nearly 36.0 million inbound tons, 12.8 million outbound tons, 33.6 million local tons, and 1.4 million through tons.¹⁵ In percentage terms, inbound traffic accounted for a 43.0 percent share (up from 38.9 percent in 2004) of the total rail tonnage, outbound traffic comprised 15.2 percent (up from 11.8 percent in 2004), local traffic contributed 40.1 percent (down from 47.7 percent in 2004), and through traffic accounted for 1.6 percent (down slightly from 1.7 percent in 2004).

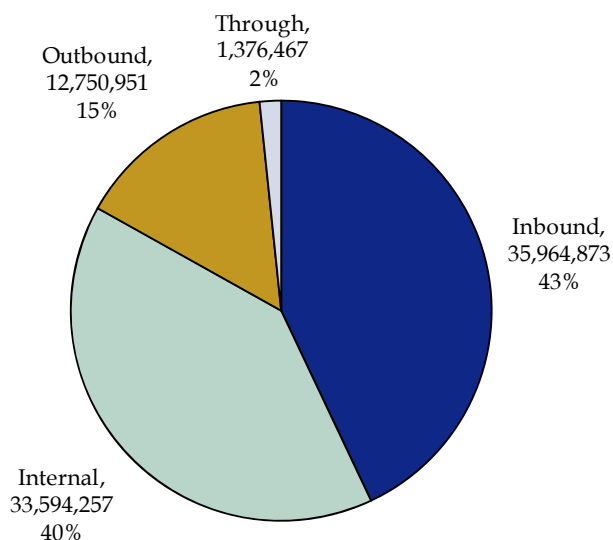
Florida's 2008 rail freight traffic was carried by approximately 835,000 carloads and 761,000 intermodal units (trailers and containers).¹⁶ Figure 2.2 illustrates the share of carload versus intermodal freight rail movements by direction, including outbound, inbound, internal, and through movements.

¹⁴Summaries by weight, unit type, and direction that are found in this section are based upon the 2008 Surface Transportation Board Carload Waybill Sample. This is the most recent data available, published in March 2010.

¹⁵The terminology used in this report refers to "inbound" as Interstate traffic terminating in Florida; "outbound" as Interstate traffic originating in Florida; "local" as Florida Intrastate traffic; and "through" as traffic neither originating nor terminating in Florida, but passing through the State. "Origins" include both *outbound and local* flows, while "terminations" include both *inbound and local* flows.

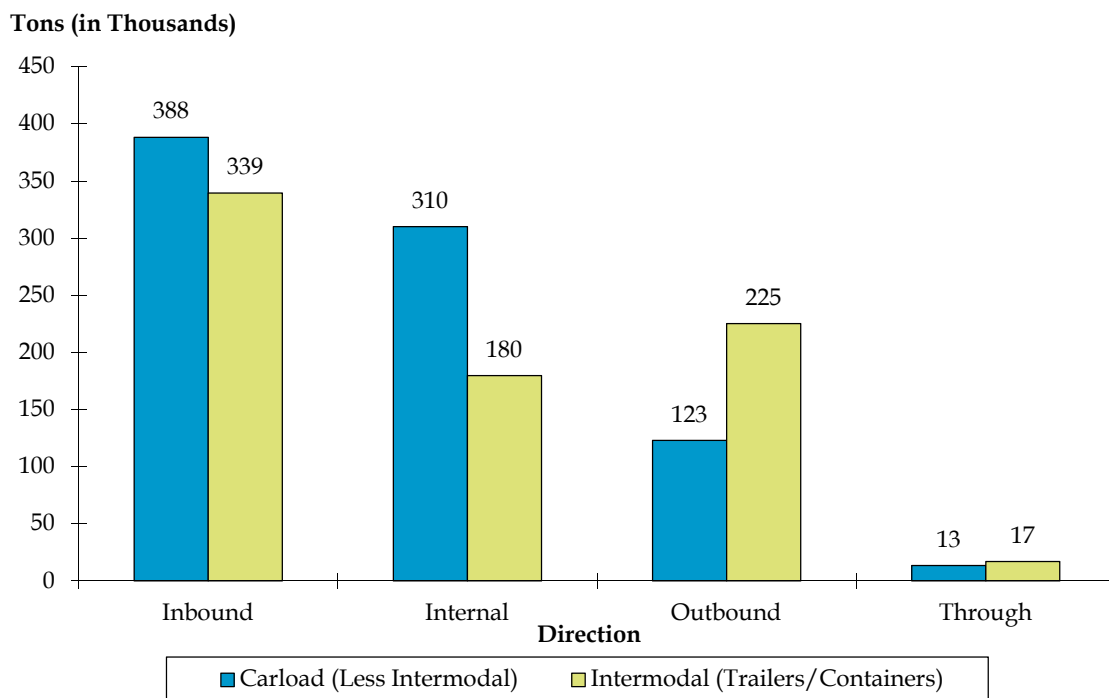
¹⁶The carload total figures exclude cars that haul intermodal units.

Figure 2.1 Florida Freight Rail Tonnage by Direction 2008



Source: 2008 Surface Transportation Board Carload Waybill Sample.

Figure 2.2 Florida Rail Carload and Intermodal Movements by Direction 2008



Source: 2008 Surface Transportation Board Carload Waybill Sample.

In 2008, the greatest share of carload movements were inbound movements, accounting for 47 percent of all carloads. Internal carload moves comprised 37 percent of traffic, while outbound and through moves accounted for 15 percent and less than 2 percent of total carload movements, respectively.

Inbound movements also were the greatest share of intermodal movements in 2008, representing about 45 percent of the total. Outbound movements comprised another 30 percent; internal movements comprised 24 percent; and through movements comprised the remaining 2 percent.

Rail Traffic by Florida District

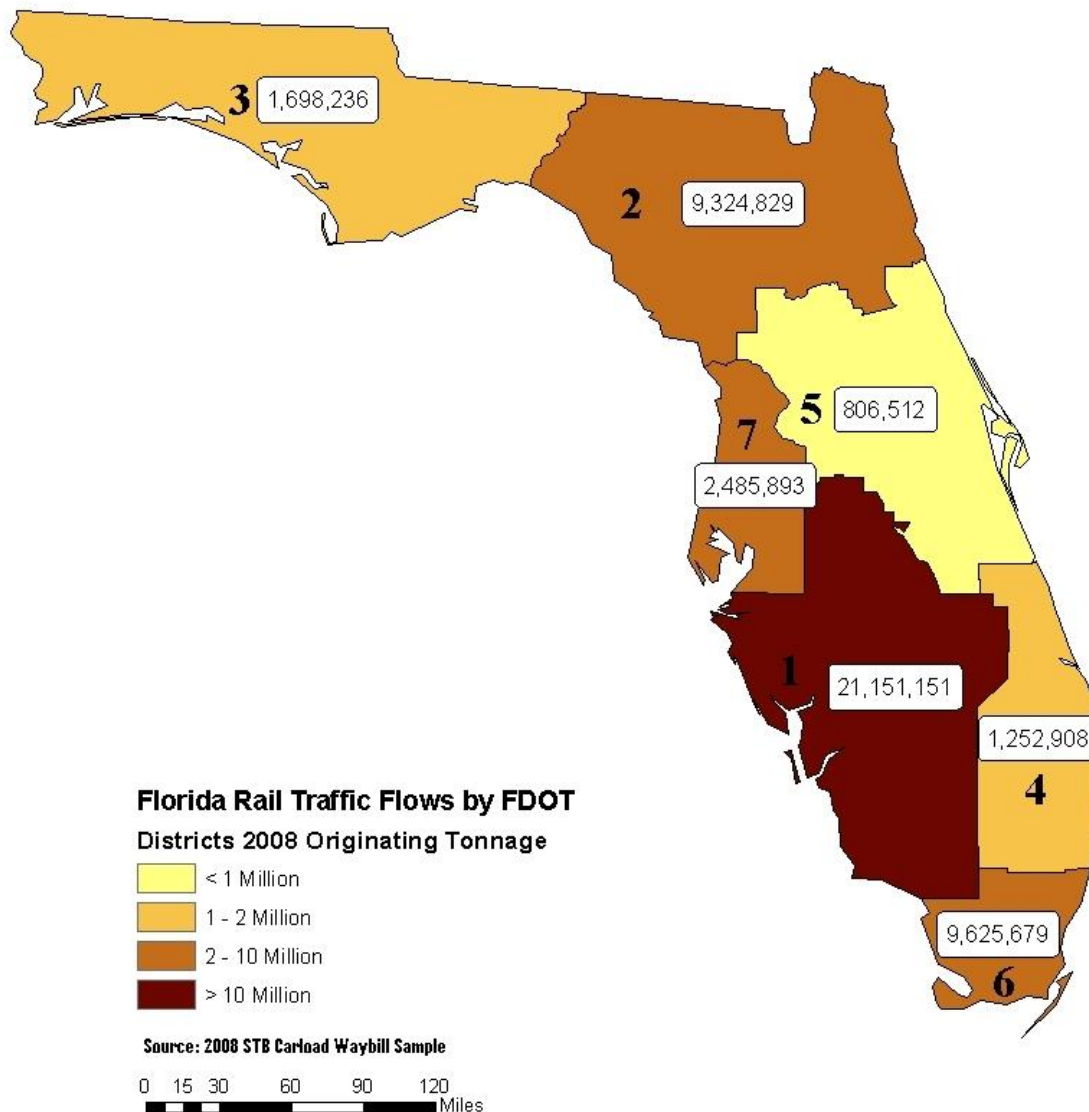
Traffic Originations

Figure 2.3 depicts the 2008 geographic distribution of originating tonnage by each Florida District, while Figure 2.4 presents historical trends for these moves for the previous 18 years (between 1991 and 2008). Consistent with each year of reported data, Southwest Florida (District 1), which along with Lakeland includes Sarasota and Fort Myers, had the highest originating tonnage of all districts in 2008, with more than 21 million tons. Much of District 1's originating tonnage was attributable to the phosphate mining industry in Central Florida's Bone Valley. Meanwhile, the second-highest originating district was South Florida (District 6), which carried 9.6 million tons. District 6 rail traffic includes large quantities of rock used in construction. The third-ranked originating district was Northeast Florida (District 2), which carried 9.3 million tons, including traffic originating at JaxPort. The remaining originating districts were West Central Florida (District 7) with 2.5 million tons; Northwest Florida (District 3) with 1.7 million tons; Southeast Florida (District 4) with 1.3 million tons; and, finally, Central Florida (District 5) with 0.8 million tons.

The economic recession has played a role in the level of traffic originating and terminating in the State which is evidenced in data from the most recent period (2006-2008). Over these two years, the sum of originating traffic for all districts decreased by 25 percent, from 62 to 46 million tons. The impact, was felt primarily in Districts 6 and 1, which decreased by 9.8 and 4.4 million tons, respectively; these figures represent a drop of 50 percent for District 6 and 17 percent for District 1¹⁷. Three other districts (2, 5, and 7) also experienced decreases in traffic, albeit in much smaller scales, with a combined drop of 1.73 million tons, mostly accumulated in District 2. On the other hand, Districts 3 and 4 went through minor upswings, increasing by 130 and 20 thousand tons respectively, representing a 9 percent and 2 percent increase. However, it should be noted that a significant portion of the growth in traffic for District 3 is due to post-Hurricane Katrina goods being re-routed to the Port of Panama City.

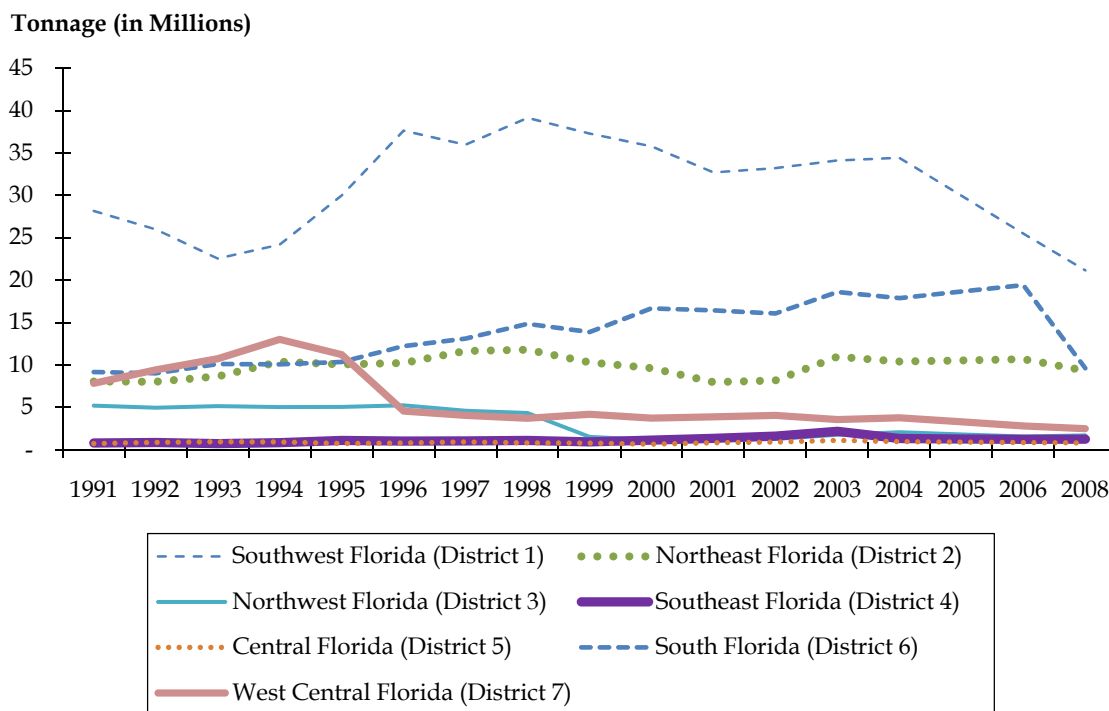
¹⁷ The drop in District 1 is primarily caused by reduction of rock trains in response to the slowdown in construction.

**Figure 2.3 Florida Rail Traffic Origins by District
2008**



The historical trends in Figure 2.4 show that originating traffic in 2008 was lower than at any point over the previous 18 years. Traffic had been dropping slowly since 2003 until 2007/2008 at which point the decrease was more pronounced. It should be noted, however, that early indications from 2010 suggest that traffic is picking back up throughout the State, but it will take a couple of years to fully see and understand the impact that the recession has played in overall traffic.

Figure 2.4 Florida Rail Traffic Origins by District
1991-2008

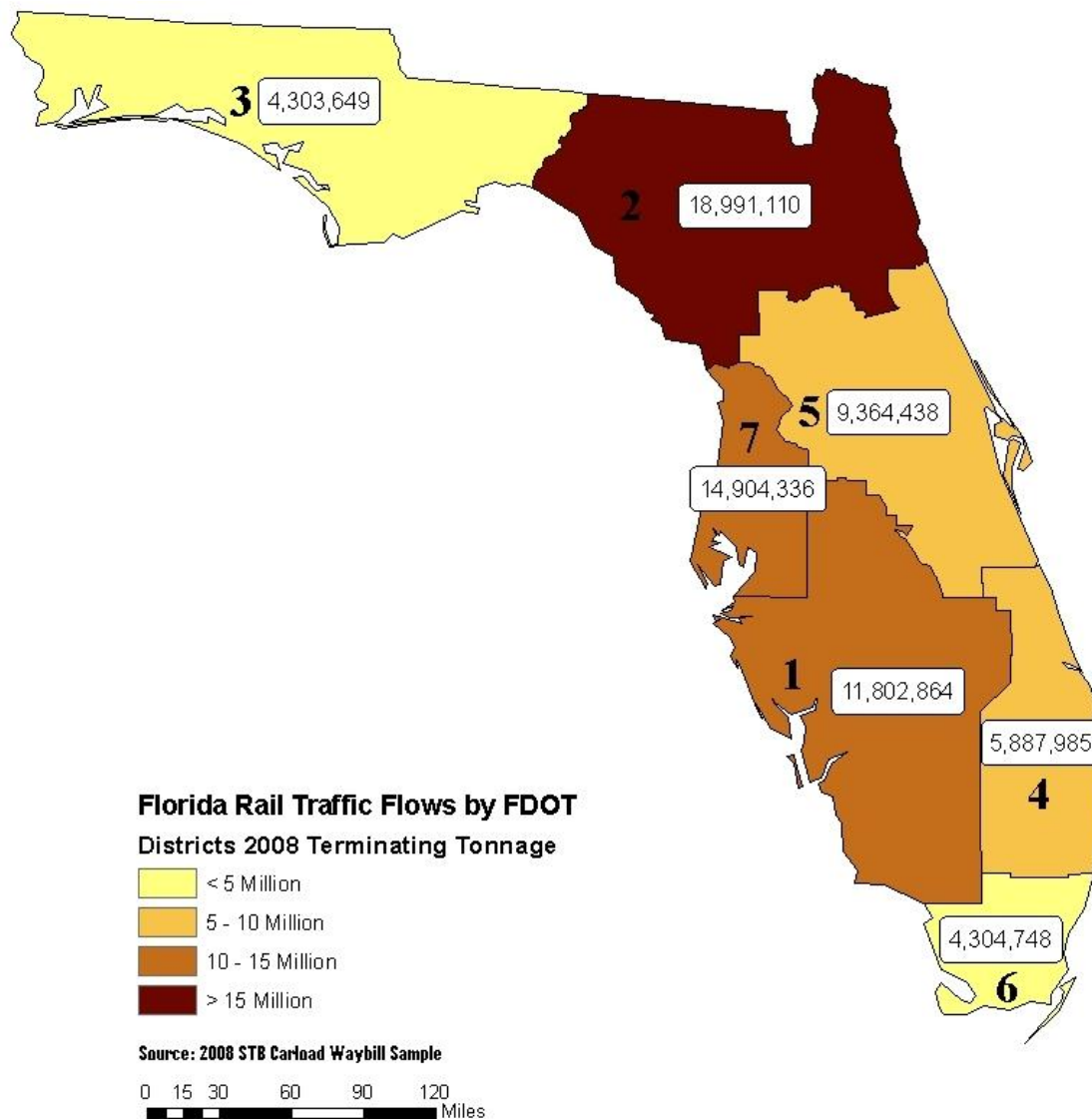


Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

Traffic Terminations

Figure 2.5 depicts the 2008 geographic distribution of terminating tonnage by each Florida District. Northeast Florida (District 2) was the highest receiving District, with 19 million terminating tons in 2008. This is largely attributable to Jacksonville’s extensive rail yards where many national rail trips terminate, and where cargo is transferred to trucks for local consumption, drayed to Florida peninsula destinations, or exported through JaxPort. West Central Florida (District 7), which includes Tampa and St. Petersburg, had the second highest terminating tonnage, with nearly 15 million tons in 2008, mostly attributable to the phosphate industry.

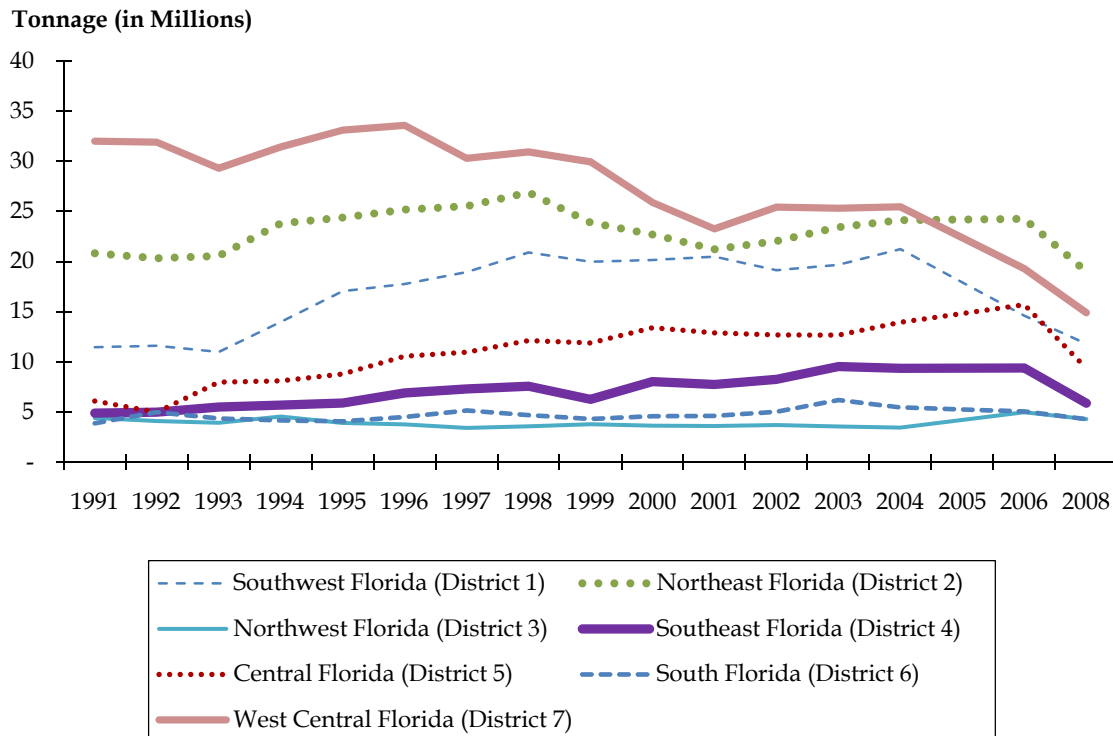
**Figure 2.5 Florida Rail Traffic Terminations by District
2008**



As was the case with originating tonnage, terminating tonnage statewide decreased by approximately 25 percent or 23.8 million tons over the most recent period (2006-2008). The most pronounced decreases were in District 5 (6.3 million tons representing a 40 percent decrease¹⁸), District 2 (5.3 million, -22 percent), and District 7 (4.4 million, -23 percent). All districts reported decreases in terminating traffic over this two-year period.

¹⁸ This drop is primarily caused by reduction of rock trains in response to the slowdown in construction.

Figure 2.6 Florida Rail Terminations by District
1991-2008



Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

Internal Traffic

Internal traffic (entirely within Florida) accounted for over 33 million tons of freight being transported by 180 thousand intermodal units and 310 thousand bulk carloads. CSX is the primary driver of this traffic with over 21 million tons, followed by FEC with 10.5 million tons, and NS with 1.8 million. CSX moves mostly bulk traffic between Central Florida and the Tampa Bay area, while FEC's intermodal operations take place between Miami-Dade/Broward counties and Jacksonville (this accounts for over 80% of intermodal traffic).

Rail Traffic by Commodity

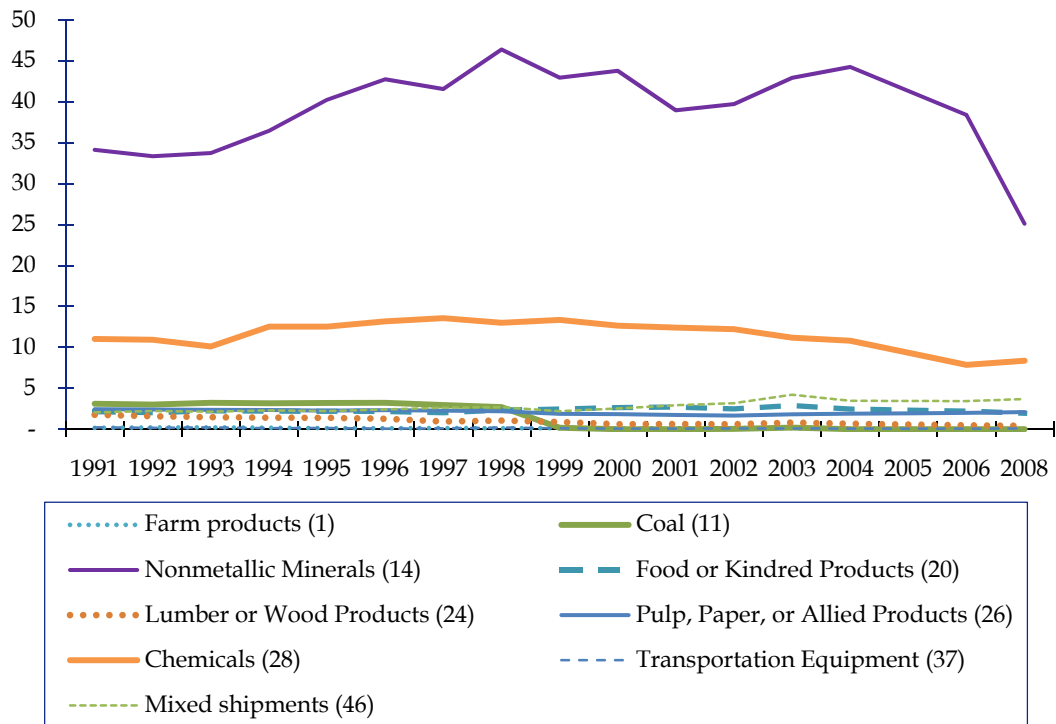
Traffic Originations

Figures 2.7 and 2.8 illustrate historical trends for Florida rail originations and terminations by commodity from 1991 to 2008. In the latest reporting period (2006-2008), four of the nine most important Florida industry groups presented decreases in originating

(outbound and local) tonnage. Measured by absolute tonnage, the largest decreases correspond to nonmetallic minerals (decrease of 13.3 million tons) which represents roughly 85 percent of the overall statewide decrease in originating traffic. Food products (-270,000 tons), lumber/wood products (-60,000 tons), and farm products (-5,000 tons) also saw decreases in outgoing moves. On the other hand, chemicals, mixed shipments, pulp/paper products, and transportation equipment increased slightly by a combined 880,000 tons, representing a 6.5 percent increase. The amount of coal originating from Florida remained at zero tons.

Nonmetallic minerals are the highest tonnage commodity originating from Florida, but have experienced multiple periods of growth and decline since 1996, and as indicated above, have dropped off significantly over the last couple of years (down to its lowest volume in more than 18 years). The next highest tonnage group has historically been chemicals, which have reported a gradual decrease since 1997 with a small uptick in 2008. Coal reported a stable trend until 1998, with significant decreases following that period. The tonnage of remaining commodities were relatively stable throughout the 1996 to 2008 period.

Figure 2.7 Florida Rail Originations by Commodity
1991-2008

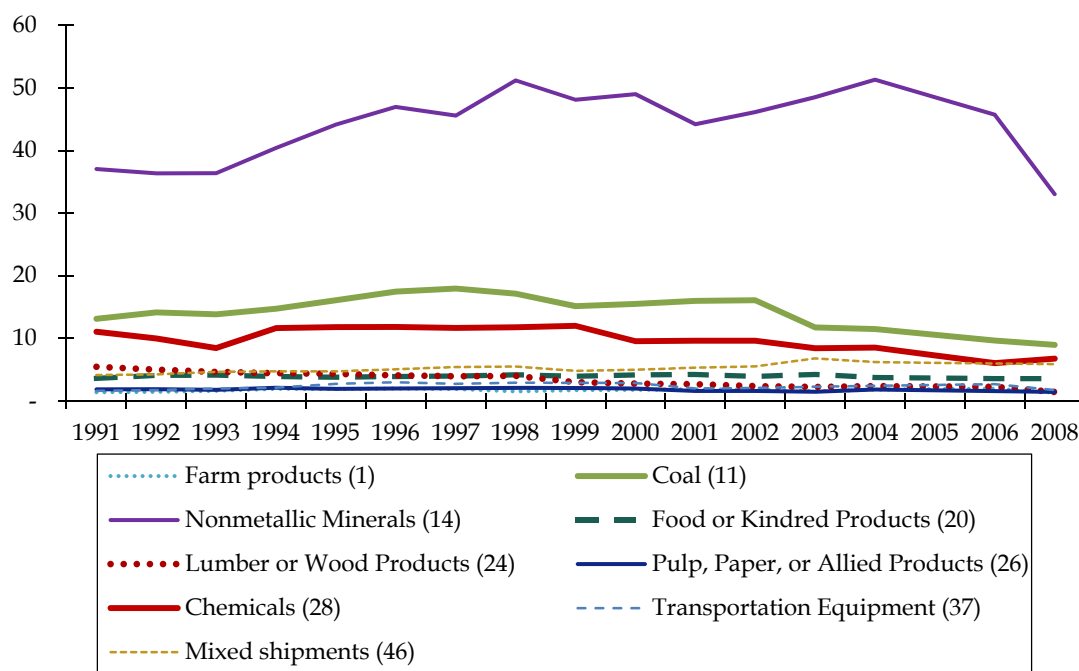


Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

Terminating (outbound and local) rail traffic in Florida also is declining. In the latest reporting period (2006-2008), eight of the nine most important Florida industry groups presented decreases in terminating tonnage. As was the case with originating shipments, nonmetallic minerals accounted for most of the decline, with 12.7 million fewer tons representing just over half of all decline in terminating traffic. Other commodities experiencing large downward trends were transportation equipment (940,000 tons), lumber/wood products (820,000 tons), coal (690,000 tons), and farm products (620,000 tons). Only chemicals experienced an increase in traffic, growing from 6.0 to 6.8 million tons over the two-year span, representing a 11 percent growth.

From a historical perspective (Figure 2.8), the highest tonnage commodity group is non-metallic minerals, which includes phosphates and construction aggregate. The nonmetallic minerals tonnage has dropped steadily since its last peak in 2004 and currently is at its lowest level in over 18 years, this is due in large part to a reduction in phosphate-related traffic in the State. The next highest tonnage group corresponds to coal shipments, which has declined since 2002 after a stable trend. Chemical products' tonnage, the third in the ranking, had declined since steadily since 1999 but experienced an uptick in 2008. Mixed shipments remained steady throughout the 1990s, increased between 1999 and 2003, and then stabilized again until 2008.

Figure 2.8 Florida Rail Terminations by Commodity
1991-2008



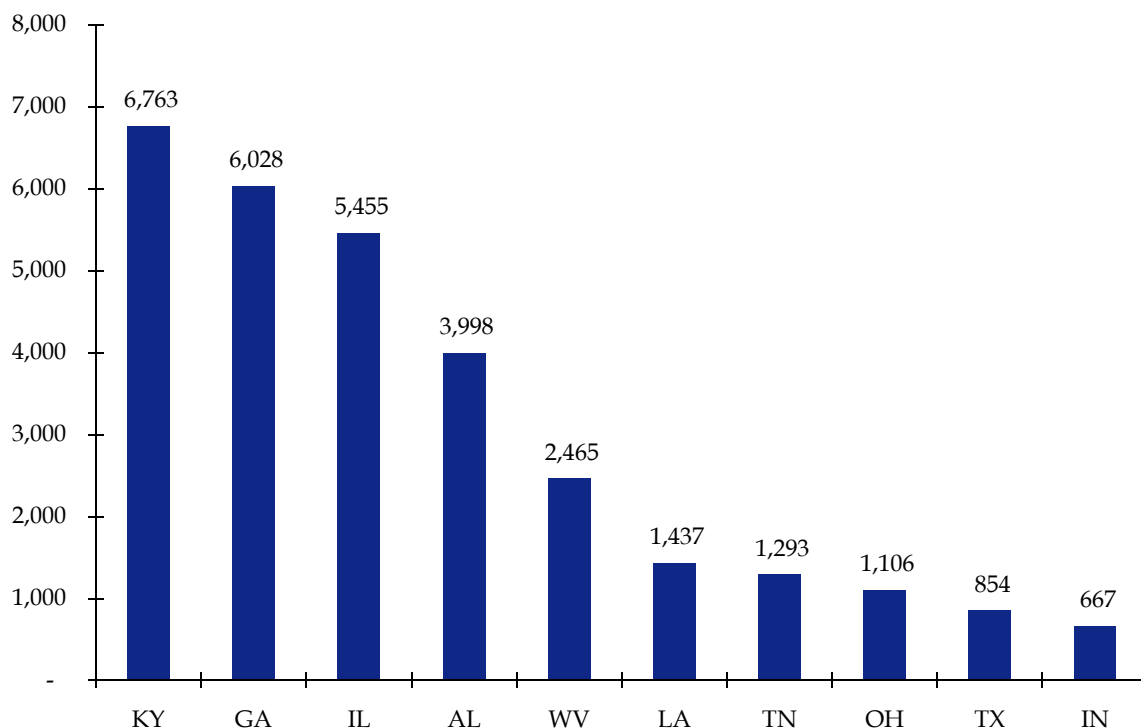
Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

Rail Traffic by Trading Partner

Inbound Traffic

Figure 2.9 shows the top 10 states shipping freight to Florida in 2008 ranked by tonnage. These states accounted for 84 percent of the total inbound tonnage that Florida received in that year. Kentucky ranked first with 6.8 million tons destined for Florida, with coal (6.1 million tons), transportation equipment/finished motor vehicles (398,000 tons), and petroleum/coal products (41,000 tons) as the top three commodities transported. Georgia ranked second with a total of 6.0 million tons shipped to Florida. The top three commodities from Georgia were nonmetallic minerals (3.9 million tons), pulp/paper products (477,000 tons), and lumber or wood products (405,000 tons). Next was Illinois with 5.5 million tons, comprised largely of nonmetallic minerals (1.4 million tons), food products (920,000 tons), and chemicals (720,000 tons). The remaining seven states - Alabama, West Virginia, Louisiana, Tennessee, Ohio, Texas, and Indiana - shipped between 667,000 and 4.0 million tons to Florida.

Figure 2.9 Inbound Florida Rail Tonnage by Origin State
2008, Tons in Thousands

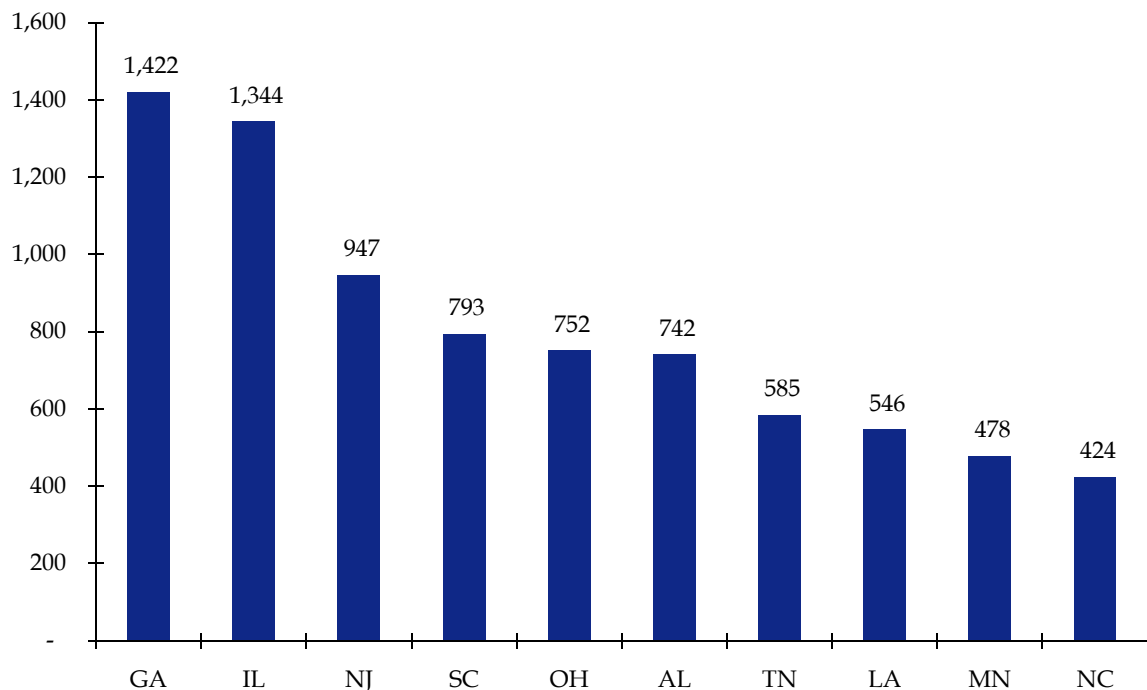


Source: 2008 Surface Transportation Board Carload Waybill Sample.

Outbound Traffic

Figure 2.10 shows the top 10 states receiving freight from Florida in 2008 ranked by tonnage. As the top trading partner, Georgia received 1.4 million tons of good from Florida, with the top three moves involving pulp/paper products (388,000 tons), shipping containers (267,000 tons), and chemical products (242,000 tons). Illinois was the second highest recipient of Florida goods, with 1.3 million tons of freight consisting primarily of chemical products (618,000 tons), pulp/paper products (214,000 tons), and shipping containers (137,000 tons). The remaining eight states – New Jersey, South Carolina, Ohio, Alabama, Tennessee, Louisiana, Minnesota, and North Carolina – each received between 424,000 and 947,000 tons from Florida.

Figure 2.10 Outbound Florida Rail Tonnage by Termination State
2008, Tons in Thousands



Source: 2008 Surface Transportation Board Carload Waybill Sample.

Current and Near Future Trends

As the current economy continues to hinder global trade activity, most transportation modes – including rail – will face challenges ranging from reduced demand for freight and import/export activities and rising costs. Nonetheless, the most recent statistics are showing that traffic is beginning to pick up from the bottom levels reached over the past

couple of years, but are still far from the peak reached between 2004-2007. The United States Department of Transportation's (U.S. DOT) Freight Transportation Services Index (TSI) for April 2010 increased to 98.1, representing a 4.8 percent increase year-over-year, but still over 11 percent lower than at the same time in 2006.

The Association of American Railroads (AAR) reported in June that monthly rail carloads for May 2010 were up 15.8 percent compared with last year, but still down 11.8 percent compared with May 2008. According to AAR's June Rail Time Indicators Report, intermodal traffic was up 18.9 percent last month compared with May 2009, and down 3.8 percent compared with May 2008. Seasonally adjusted data, which helps to measure month-to-month progress, showed carloads in May were down 1.1 percent from April 2010, while intermodal traffic was up 2.8 percent from April 2010.¹⁹

The national economic downturn has certainly impacted economic life and freight rail activity in Florida. Railroads operating in the State also have experienced a noticeable drop in volumes over the past few years. In 2008, Florida's railroads carried nearly 1.6 million carloads - 19 percent less carloads handled than in 2006 - and approximately 83 million tons of freight, representing a 25 million ton (23 percent) drop from 2006. Estimates for freight rail activities in Florida for years 2009 and 2010 currently are unavailable but are expected to illustrate further decline in freight demand largely due to the global and national recession.

However, the impacts of the global and national recessions on freight railroads are anticipated to be short-lived according to AAR, with demand for freight rail business in the United States growing by over 88 percent through 2035.

■ 2.4 Safety Record

The Federal Railroad Administration (FRA) collects data on three major types of safety incidents: train incidents, highway-rail grade crossing incidents, and other incidents.²⁰ Between 2004 and 2009, these three types of safety incidents accounted for 1,945 total railroad safety incidents in Florida, resulting in 263 fatalities and 1,233 nonfatal conditions. The following discussion and tables summarize the safety record of Florida's railroads (freight and passenger) for this period. The section is broken down into five subsections covering train incidents, highway-rail incidents, trespassers, other incidents, and Operation Lifesaver (an international nonprofit, continuing public education program

¹⁹<http://www.aar.org/NewsAndEvents/PressReleases/2010/06/060710-RailTimeIndicators.aspx>.

²⁰Incident is a generic term referring to an entire list of reportable events including: fatalities, injuries, and illnesses; collisions, derailments, and similar incidents involving the operation of on-track equipment causing reportable damage above an established threshold; and impacts between railroad on-track equipment and highway users at crossings.

first established in 1972 to end collisions, deaths, and injuries at places where roadways cross train tracks, and along railroad rights-of-way).

Table 2.3 Florida Railroad Safety Incidents
2004-2009

Year	Incidents			Total	Casualties	
	Train Incidents	Highway-Rail Incidents	Other Incidents		Fatalities	Nonfatal Injuries
2004	56	108	225	389	40	244
2005	62	103	227	392	51	227
2006	46	118	188	352	38	197
2007	46	90	205	341	54	243
2008	22	75	158	255	51	164
2009	14	50	152	216	29	158
Total	246	544	1,155	1,945	263	1,233

Source: Federal Railroad Administration Office of Safety Analysis.

Discussion on Train Incidents

Between 2004 and 2009, the FRA reported 246 train incidents in Florida, as shown in Table 2.3. The FRA defines a “train incident” as a safety-related event involving on-track rail equipment (both standing and moving), causing monetary damage to the rail equipment and track above \$6,700 in calendar years 2002 through 2005, above \$7,700 in calendar year 2006, or above \$8,200 in calendar year 2007-2009.²¹ Train incidents typically include derailments and major rail collisions, but do not account for all highway-rail grade crossing incidents. However, some highway-rail crossing incidents may be classified under the “train incident” category when they inflict damages to train equipment and track in excess of the annual reporting threshold. Table 2.4 summarizes train incidents by major cause, type of incident, by cost of damages to rail equipment and track, and by the resulting casualties. In addition, Table 2.4 reports 36 highway-rail incidents exceeding the damage cost threshold for train incidents. In total, 282 train incidents (246 typical train incidents in addition to 36 highway-rail crossing incidents exceeding the cost threshold) were reported for the period 2004 to 2009.

²¹Federal Railroad Administration Office of Safety Analysis.

Table 2.4 Florida Train Incidents by Cause
2004-2009^a

Major Cause	Type of Incident					Percent Share	Damage to Rail Equipment and Track		Casualties	
	Collision	Derailment	Highway-Rail Crossing	Other	Total		2008 Dollars (Thousands)	Percent of Total Damage	Killed	Nonfatal
Equipment	1	15	0	1	17	6%	\$1,066	5%	-	2
Highway-Rail	0	0	36	0	36	13%	\$3,582	16%	17	69
Human Error	23	52	0	20	95	34%	\$4,255	19%	2	11
Miscellaneous	2	21	0	12	35	12%	\$1,927	8%	-	1
Track	1	98	0	0	99	35%	\$11,872	52%	-	1
Total	27	186	36	33	282	100%	\$22,702	100%	19	84

Source: Federal Railroad Administration Office of Safety Analysis.

^a Period covers January 2004 to December 2009 and includes passenger and freight train incidents exceeding the \$6,700 reporting threshold for damages in calendar year 2004 to 2005, \$7,700 in 2006, or \$8,200 in 2007 to 2009.

^b Highway-Rail incidents matching the operational definition of “train incident” are reported in this table.

The leading cause of train incidents between 2004 and 2009 was defective track, accounting for 99 incidents (35 percent). The second leading factor was human error, accounting for 95 incidents (34 percent) and two fatalities. Other less prominent causation factors were highway-rail crossings, miscellaneous causes,²² and equipment (mobile component); each causation factor accounted for 13 percent or less of total train incidents.

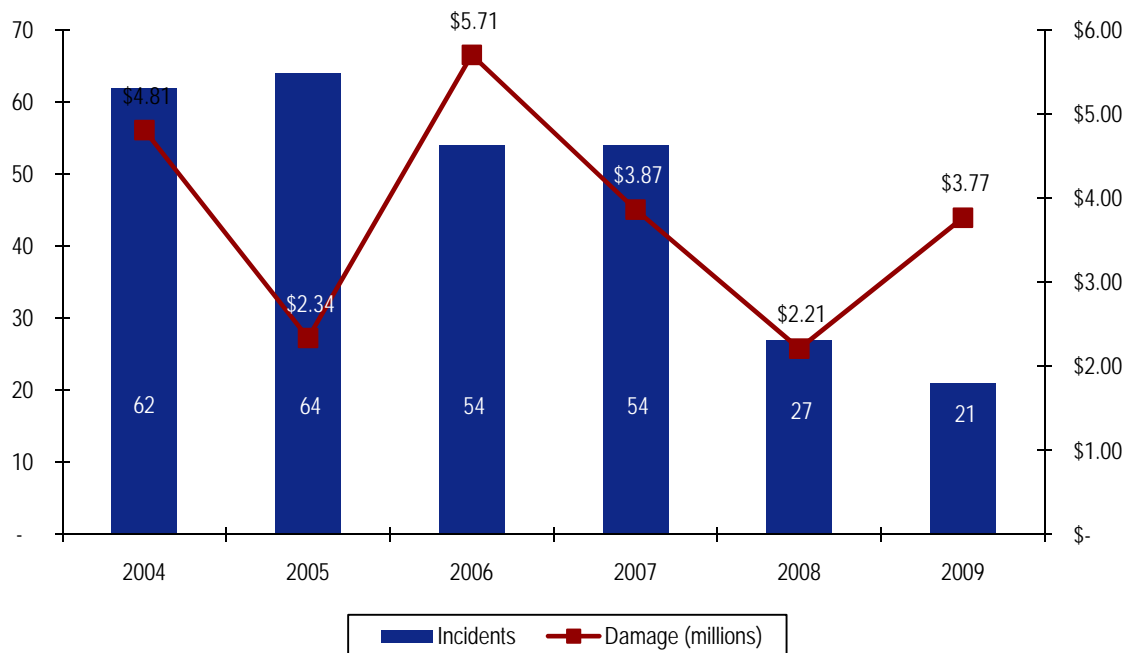
In terms of casualties, highway-rail incidents were associated with the largest number of fatalities and injuries during the 2004 to 2009 period, accounting for 17 fatalities and 69 injuries. The next significant cause of fatalities and injuries was human error, with 2 fatalities and 11 injuries. Equipment, track damage, and miscellaneous causes were only associated with 4 injuries over the six-year period.

Derailments accounted for 66 percent of incidents, followed by highway-rail crossings (13 percent), other types of incidents (12 percent), and collisions (10 percent). The data suggest that efforts to address human error, jointly with track improvements, could have a positive effect in increasing overall safety. Moreover, track improvements could significantly offset damage costs in high-cost incidents.

²² According to FRA’s Accident Reporting Guide, “miscellaneous causes” refer to causation factors that do not fit in the pre-established cause categories.

In 2008 dollars, damage to train equipment and tracks totaled \$22.7 million between 2004 and 2009. Track-related incidents were the most costly, estimated at nearly \$12 million (or 52 percent of the damage costs to train equipment and tracks). Figure 2.11 presents the number of train incidents and their damage costs for each year between 2004 and 2009. As illustrated, the number of train incidents taking place has reduced for three consecutive years, however, the cost of repair has not followed the same pattern. While costs decreased in 2008 from \$3.9 to \$2.2 million, they have jumped back to \$3.8 million in 2009. This may be a result of either more expensive crashes (in terms of the equipment being damaged) or an increase in repair costs.

Figure 2.11 Train Incidents and Damage Costs in Florida
2004-2009



Source: Federal Railroad Administration Office of Safety Analysis.

Discussion on Highway-Rail Incidents

The second category of incidents covered by the FRA is highway-rail incidents, these are defined as “any impact between a rail and highway user (both motor vehicles and other users) of the crossing as a designated crossing site, including walkways, sidewalks, etc., associated with the crossing.” As Table 2.5 shows, there were 544 of these incidents in Florida between 2004 and 2009. Out of these, 476 (or 88 percent) took place in public crossings, while the remaining 68 took place at private crossings.

In most of the incidents reported, a train struck a highway user – either a motor vehicle or a pedestrian, these accounted for 450 incidents representing 82 percent. The majority of these, 387, involved a collision with a motor vehicle. In addition, there were 94 incidents in which a train was struck by a motor vehicle. According to a U.S. Department of Transportation’s report, 94 percent of all grade crossing incidents (involving motor vehicles) are caused by risky driver behavior. The remaining 6 percent resulted from vehicles stuck, stalled, or abandoned at crossings.²³

During the six-year period from 2004 to 2009, there were 63 instances in which a train struck a pedestrian. These incidents were typically very severe when compared to train-motor vehicle incidents, with 65 percent of them resulting in a fatality, while an additional 16 percent resulted in an injury. In fact, while incidents with pedestrian accounted for only 11.6 percent of all incidents, they generated approximately 40 percent of the fatalities. In total, highway-rail incidents resulted in 101 fatalities and 208 injuries.

Table 2.5 Florida Highway-Rail Incidents by Highway User Type
2004-2009^a

Type and Highway User	Total Incidents	Casualties	
		Killed	Nonfatal
Train Struck Highway User	450	92	174
<i>Motor Vehicle</i>	387	51	164
<i>Pedestrian or Other</i>	63	41	10
Train Struck by Highway User (Consists Totally of Motor Vehicles)	94	9	34
Total Figures	544	101	208

Source: Federal Railroad Administration Office of Safety Analysis.

^a Period covers January 2004 through December 2009.

Trespassing Incidents

Between 2004 and 2009, the primary source of rail-related fatalities was trespassers, which accounted for 61 percent of all fatalities, representing 159 deaths or roughly 27 per year (see Table 2.6 and Figure 2.12). In fact, this was the leading cause of fatalities for each of the six years. In addition to these fatalities, 94 other injury incidents occurred to trespassers over this time period, for total of 253 trespasser-related incidents. Most often trespassers nationally are pedestrians who walk across or along railroad tracks as a shortcut from

²³U.S. DOT Audit of the Highway-Rail Crossing Program. <http://www.oig.dot.gov/sites/dot/files/pdfdocs/mh2004065.pdf>.

one place to another, or they are engaged in loitering, hunting, dog walking, bicycling, or riding on all terrain vehicles, snowmobiles, or even horseback.

This issue is not unique to Florida, according to the FRA, over 450 trespassing deaths have taken place each year over the last decade, the vast majority of which are preventable. Furthermore, since 1997, at the national level more people have been killed while trespassing than as a result of motor vehicle collisions with trains at highway-rail grade crossings. In Florida, the FRA works in partnership with the railroad industry, the state and local governments, and other organizations to sponsor, plan, and conduct educational outreach efforts at schools, workplaces, civic and community centers, and other venues to raise awareness about the inherent dangers and consequences of trespassing.²⁴ Addressing these issues is complicated by the fact that trespassers are not a single, consistent group.

Other Incidents

The fourth category of incidents reported by the FRA is “Other Incidents,” which are defined as “any death, injury, or occupational illness of a railroad employee that is not the result of a ‘train incident’ or ‘highway-rail incident.’” This last category covers mostly incidents within a rail yard to employees and contractors. As Table 2.6 illustrates, this category accounts for most of the railroad-related injuries that have taken place in Florida over the last six years. From 2004 to 2009, these incidents accounted for 921 injuries out of the 1,221 total reported in the State, approximately 75 percent. These injuries included a wide range of issues such as tripping/falling in the yard, hearing loss (from noise exposure), and being struck by equipment or debris. Only two incidents under this category resulted in fatalities over the six-year period.

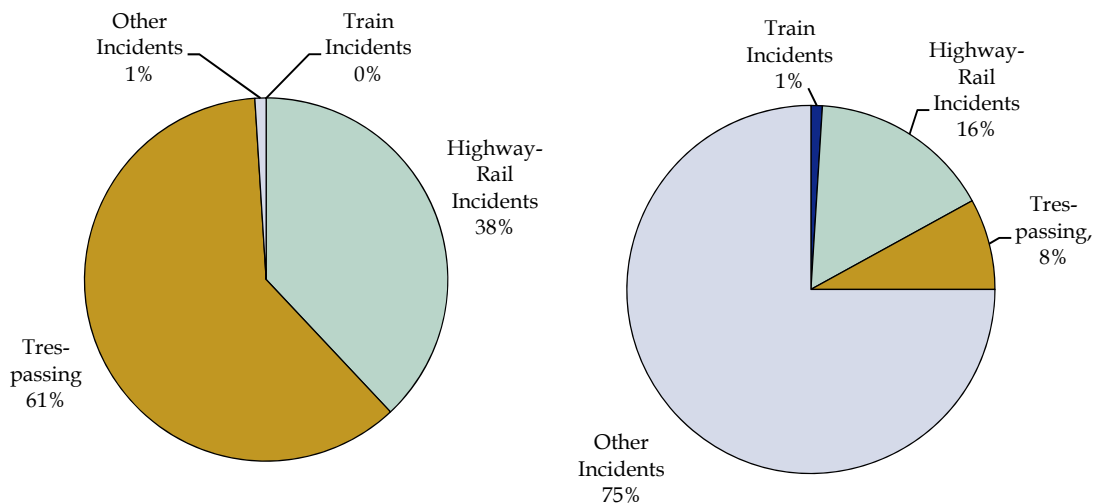
²⁴FRA Railroad Trespassing Fact Sheet – <http://www.fra.dot.gov/Downloads/pubaffairs/FRA%20Railroad%20Trespassing%20Fact%20Sheet%20December%202008.pdf>.

**Table 2.6 Florida Injuries and Fatalities by Incident Type
2004-2009**

	Year	Train Incidents	Highway-Rail Incidents	Trespassing	Other Incidents	Total
Fatalities	2004	1	19	20	0	40
	2005	0	17	33	1	51
	2006	0	10	28	0	38
	2007	0	20	33	1	54
	2008	0	25	26	0	51
	2009	0	10	19	0	29
	<i>Subtotal</i>	<i>1</i>	<i>101</i>	<i>159</i>	<i>2</i>	<i>263</i>
Injuries	2004	2	35	14	193	244
	2005	6	21	22	178	227
	2006	0	35	20	143	198
	2007	2	66	16	160	244
	2008	0	30	14	120	164
	2009	1	8	8	127	144
	<i>Subtotal</i>	<i>11</i>	<i>195</i>	<i>94</i>	<i>921</i>	<i>1,221</i>
Total		12	296	253	923	1,484

Source: Federal Railroad Administration Office of Safety Analysis.

Figure 2.12 Florida Fatalities and Injuries by Incident Type
2004-2009



Source: Federal Railroad Administration Office of Safety Analysis.

Operation Lifesaver, Inc.

*Background*²⁵

Operation Lifesaver started in Idaho in 1972 when the national average of collisions at highway-rail grade crossings exceeded 12,000 annually. A six-week public awareness campaign called “Operation Lifesaver” was sponsored by the office of Governor Cecil Andrus, the Idaho Peace Officers and Union Pacific railroad as a one-time, one-state initiative.

During the campaign’s first year, Idaho’s crossing-related fatalities dropped by 43 percent. The next year, the Operation Lifesaver campaign spread to Nebraska, where their collision rate was reduced by 26 percent. Kansas and Georgia experienced similar success the following year.

Between 1978 and 1986, while Operation Lifesaver operated under the auspices of the National Safety Council (NSC), all 49 continental states started independent Operation Lifesaver programs. In 1986, the national program was released from NSC and incorporated as a national, nonprofit, 501(c)(3) educational organization. The founding sponsors of Operation Lifesaver, Inc. (OLI) – the Railway Supply Institute, Amtrak and the

²⁵Operation Lifesaver, Inc – <http://www.oli.org/about/History.htm>.

Association of American Railroads – continue to serve on OLI’s 11 member Board of Directors.

Today, Operation Lifesaver programs are active in 49 states and the District of Columbia nationwide. These programs are sponsored cooperatively by Federal, state, and local government agencies; highway safety organizations, and the nation’s railroads.

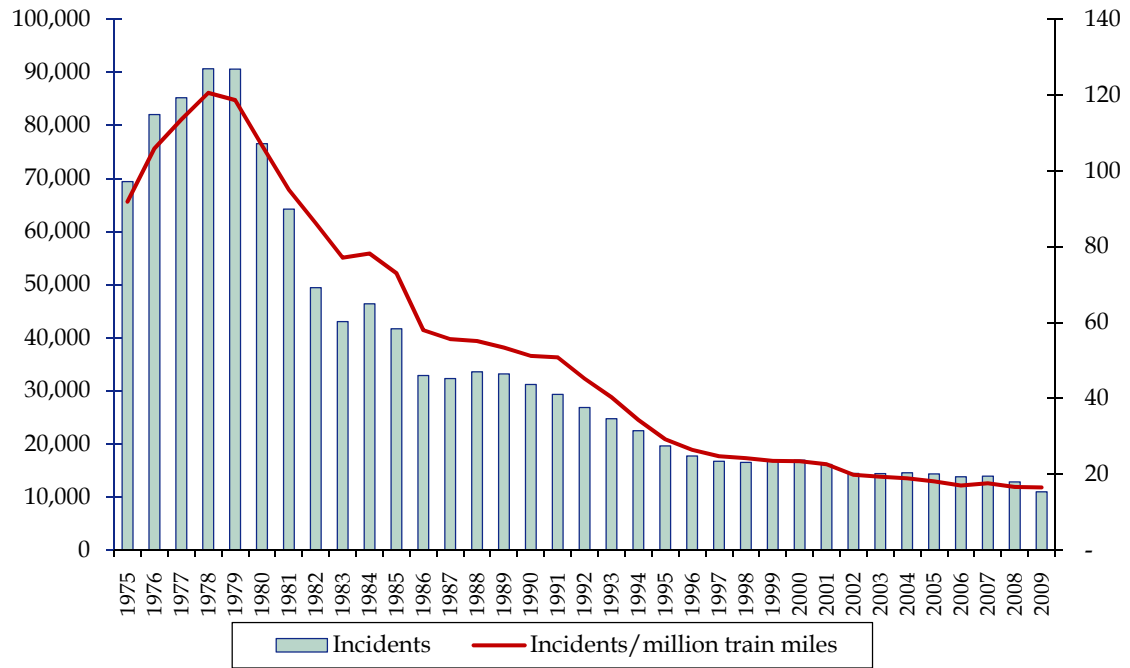
Impact

In 1975, around the time that OLI began, there were 69.4 thousand rail-related incidents in the United States which represented roughly 91.9 incidents per million train miles traveled. As Figure 2.13 illustrates, by 2009, these numbers had dropped to 10.9 thousand rail-related incidents, representing only 16.5 incidents per million miles traveled.

While it would not be reasonable to attribute OLI as the sole source for these improvements, they need to be recognized as one of the primary drivers for advancements in railroad safety. They have been able to achieve this through education at the local level, and by raising awareness of safety issues affecting railroads throughout the country.

The improvements have been felt in all three areas of incident reporting, with train incidents dropping from 7.7 to 1.9 thousand, highway-rail crossing incidents decreasing from 12.1 to 1.9 thousand, and other incidents falling from 49.5 thousand to 7.2 thousand over the 34-year period.

Figure 2.13 National Incidents and Rate per Mile by Year
1975-2009



■ 2.5 Positive Train Control Legislation

On October 16, 2008 Congress signed into law the Rail Safety Improvement Act (RSIA), which requires that Class I railroads carrying regular passenger service or certain hazardous materials implement a Positive Train Control (PTC) system. This section presents an overview of PTC technology, describes some of the key benefits and challenges, the existing federal requirements, schedule for implementation, and the current status of PTC deployment by Florida's railroads.

Overview

Positive Train Control (PTC) is a collision avoidance system designed to automatically stop or slow a train before an accident occurs. Specifically, PTC technologies are intended to prevent train-to-train collisions, derailments caused by excessive speed, unauthorized incursions by trains onto sections of track where repairs are being made, and movement of

a train through a track switch left in the wrong position.²⁶ For the Federal Railroad Administration (FRA), PTC systems are described as “integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency”. These systems vary widely in complexity and sophistication based on the level of automation and functionality implemented, the system architecture utilized, the wayside system upon which they are based, and the degree of train control they are capable of assuming. If the PTC system is fully functional, the system must be able to precisely determine the location and speed of trains; warn train operators of potential problems; and take action if the operator does not respond to a warning. Consequently, the principal objective of deploying PTC technology is to enhance system safety by preventing collisions between trains.

Benefits

PTC technology is capable of evaluating real time train data for location and speed, monitoring and controlling system information, and exchanging instructions and messages with locomotives. As a result, in addition to the safety objectives mentioned above, other benefits are obtained with the implementation of fully functional, 100 percent reliable PTC systems:

- Improved service reliability. With effective meet/pass planning achievable due to accurate position information and possibly supplemented with sophisticated computer analysis, system velocity and reliability can increase using PTC.
- Increased running times. Through improved train control information and signaling, performance is improved and the spacing between trains is reduced, which ultimately reduces total running times.
- Fuel savings. An effective PTC system could reduce overall fuel consumption for a system by selecting optimal train velocity based on expected intersection times with other trains. In essence, it would reduce the amount of stop and go that locomotives would have to do.
- Increased line capacity.²⁷ PTC systems have the potential to increase railroad capacity (reduce excess headway as compared with fixed block signaling) by means of its

²⁶ Association of American Railroads, *Positive Train Control*, Policy and Economics Department, June 2010.

²⁷ Zeta-Tech Associates, *Quantifications of the Business Benefits of Positive Train Control*, March 15, 2004.

moving block architecture, thus reducing train delays, increasing service reliability and allowing more trains to move over each rail line.²⁸

- System life cycle cost reduction. PTC technology could also decrease train control system life cycle cost by reducing the amount of wayside vital equipment required (signals and track circuits).
- Improved efficiency. In addition, a PTC system in its most sophisticated form could enable many levels of automation like paperless track warrants and work orders for example, improving efficiency.²⁹

It should be noted that the PTC systems currently being developed are an additional set of systems overlaid on current analogue train control systems, meaning they supplement rather than replace existing train control and dispatching systems. Railroads would need to invest beyond these basic PTC overlay systems into more robust fully-functional PTC systems to achieve the commercial and operational or non-safety benefits mentioned above, but these more advanced PTC systems are more expensive to implement and present much higher implementation risks.³⁰

Challenges

The two primary challenges to an effective/efficient PTC implementation by the railroads are the up-front costs required for equipment and training, and the development of a system that communicates perfectly across all major railroads in the country. These are discussed below.

Costs

The single largest challenge associated with PTC technology is the cost required to deploy such a system, even at its most basic level. The railroads have to invest in new equipment for the tracks, trains, and central control station. In fact, according to the FRA, railroads will have to spend up to \$13.2 billion (in 2010 dollars) to install and maintain PTC over the next 20 years.³¹ As railroads are mandated to install PTC technology by December 31, 2015 (this is discussed in the next section), it will likely mean less available capital funds to invest in other infrastructure improvements and safety initiatives. This level of

²⁸ The moving block concept allows a train to receive movement authority between any two locations, rather than being constrained to the fixed block boundaries of conventional signaling. (FRA, *The North American Joint Positive Train Control Project*, Research Results, April 2009.)

²⁹ Railway Age, *PTC, is everyone on board?*, May 2010. www.railwayage.com

³⁰ To ensure PTC technology is fully functional and completely safe, much more development and testing of PTC technology is needed.

³¹ Association of American Railroads, *Positive Train Control*, Policy and Economics Department, June 2010.

investment is extraordinary when compared to the benefits, especially considering that only three percent of all train accidents in the country are related to train-controlled related issues.³² Furthermore, the FRA's own economic analysis suggests that the costs of PTC implementation outweigh its benefits by a ratio of 15 to 1.³³

FRA has established several programs for funding and financing the PTC systems implementation. The Railroad Rehabilitation and Improvement Financing (RRIF) Program is one of them but no railroads have approached FRA for funding of PTC projects using this program. Monies up to \$50 million annually from 2009 to 2013 from the Railroad Safety Technology grants to support PTC projects have been authorized, though money has not yet been appropriated. Tax incentives for rail revitalization that could be applied to the cost of installing PTC have been proposed by the AAR to help offset the huge costs associated with PTC implementation.³⁴ Funding will remain a key challenge as the 2015 deadline approaches.

Development of Universal and/or Compatible Systems

The PTC systems being developed must account for complex railroad operational factors; they need to be proven to be safe and reliable; and most importantly, they need to be interoperable so that passenger and commuter trains can utilize it in coordination with freight railroads. The system must work perfectly across the network of rail lines owned and operated by many different companies with their own equipment, procedures, and operation characteristics.³⁵

Initially, each railroad has been developing their own system to meet their needs, however moving forward, commonality and uniformity among all rail carriers will be key to achieve interoperability. The challenge for the FRA and the railroads is to generate enough consensus and cooperation among private and public rail carriers in order to meet the December 31st, 2015 deadline (explained next).

³² Railway Age, From the Editor, *The business of PTC is safety, Period*, May 2010. www.railwayage.com. PTC will not prevent accidents caused by broken rails or broken axles.

³³ Federal Railroad Administration (FRA), Final Ruling, Positive Control Systems, January 12, 2010 [http://www.fra.dot.gov/downloads/safety/PTC_Final_Rule_20100112_\(FedReg\)_\(final\).pdf](http://www.fra.dot.gov/downloads/safety/PTC_Final_Rule_20100112_(FedReg)_(final).pdf)

³⁴ Association of American Railroads, *Positive Train Control*, Policy and Economics Department, June 2010.

³⁵ Association of American Railroads, *Implementing Positive Train Control*, http://www.aar.com/news/pdfs/Implementing_%20PTC.pdf

Federal PTC Mandate

PTC systems were being voluntarily installed by various rail carriers prior to October 2008. However, the passage of the Rail Safety Improvement Act (RSIA) signed into law on October 16, 2008 requires the implementation of PTC systems by the end of 2015. FRA's final ruling on PTC implementation issued on January 12, 2010 requires PTC installation on:³⁶

- All main rail lines over which passenger (regularly scheduled intercity or commuter rail) trains operate,
- All main rail lines of Class I freight carriers carrying any amount of poison-or toxic-by-inhalation (PIH or TIH) hazardous materials,³⁷ and
- Any other lines as designated by the US Secretary of Transportation.

All regional (Class II) and short line (Class III) railroads are exempt from the PTC mandate regardless of tonnage or number of PIH/TIC cars handled unless they host regularly scheduled passenger trains. They are also exempt if Class II and Class III rail lines cross Class I PTC-equipped lines without exceeding 40 mph in any direction. However, if regional and short line railroads have rights over Class I lines that are required to have PTC installed, Class I railroads will most likely require their tenants to also install PTC systems.³⁸

Currently, all affected railroads are committed to complying with the PTC mandate. Before April 16, 2010, all affected railroads submitted to FRA their PTC Implementation Plans (PTCIP) required by the RSIA since PTC systems need to be ready for testing and certification by late 2012. At the same time, they have been adapting their individual PTC systems to maximize interoperability among all freight railroads and passenger trains.³⁹

³⁶ One of FRA's function is to promulgate and enforce rail safety regulations including the PTC Final Rule:
[http://www.fra.dot.gov/downloads/safety/PTC_Final_Rule_20100112_\(FedReg\)_\(final\).pdf](http://www.fra.dot.gov/downloads/safety/PTC_Final_Rule_20100112_(FedReg)_(final).pdf)

³⁷ FRA classifies, as a general rule, freight "main lines" as those track or route segments carrying five million or more gross tons of annual freight.

³⁸ Railway Age, *PTC, is everyone on board? What impact on Class II and III?*, May 2010. www.railwayage.com

³⁹ The Interoperable Train Control Working Committee under the auspices of the Association of American Railroads (AAR) have prompted the industry to coordinate PTC efforts and support interoperability.

Implications for Florida's Railroads

Based on the FRA requirements described above for PTC installation, only CSX and NS will be required to implement PTC technology in their line given that they are both Class I and either carry regular passenger service (such as Tri-Rail traffic or Amtrak traffic on CSX's lines) or handle certain hazardous materials (both railroads). Depending on future passenger service plans, other railroads may be required to implement similar systems, these include the First Coast Railroad and the Florida East Coast Railroad. For future passenger services, it should be noted that the regulation allows for a waiver to the PTC requirement based on the number of passenger trains operated, allowing for each case to be decided on its own merit.

Class I and Passenger Railroads

CSX Transportation (CSXT), the largest Class I railroad operating in the state with over 1,600 route miles, carries both intercity and commuter rail passengers in its Florida system in addition to hazardous materials. Therefore, it must comply with the RSIA and implement PTC systems before the end of 2015. Amtrak, which provides regularly scheduled intercity rail traffic on a large percentage of CSXT's track segments, will also be required to equip its locomotives with a PTC system that is interoperable with CSXT's system, a vital overlay system called Vital Electronic Train Management System (V-ETMS).⁴⁰ Amtrak's PTC Implementation Plan submitted to FRA in April 2010 confirms the passenger railroad intends to install V-ETMS on all of its mainline tracks in Florida and equip its diesel locomotive fleet with V-ETMS on-board PTC equipment to achieve interoperability with its host railroad in Florida, CSXT.⁴¹

Florida's only operating commuter rail service, South Florida Regional Transportation Authority (SFRTA)'s Tri-Rail, operates between West Palm Beach and Miami on 71.2 miles of track owned by the Florida Department of Transportation and referred to as the South Florida Rail Corridor (SFRC). Currently this line is operated and maintained by CSXT, and as a result the SFRTA will also need to equip its locomotives with a PTC system that is interoperable with CSXT's PTC system (V-ETMS).⁴² SFRTA's PTC implementation sequence for track and signal work for the SFRC (which is to be performed by CSXT) states that work will start in 2013 and be completed in 2014 with PTC rolling stock implementation expected to start with ten locomotives in 2013, 15 in 2014 and 14 in 2015 to

⁴⁰ CSX Transportation, Positive Train Control Implementation Plan Version 1.0, submitted to FRA on April 2010.

⁴¹ Amtrak, PTC Implementation Plan, submitted to FRA on April 2010.

⁴² FDOT acquired the SFRC from CSXT in 1988, with CSXT providing dispatching for the SFRC and maintenance of its tracks and signals under the Operating and Maintenance Agreement Phase A (OMAPA) with FDOT. CSXT also manages the Corridor and controls train movement through its Operating Rules.

achieve complete rolling stock implementation by December 31, 2015.⁴³ New intercity and commuter services planned to come on-line in the coming years will need to implement PTC systems that are interoperable with their host railroad (CSXT). These include: SunRail or the Central Florida Commuter Rail in Orlando, Tampa Bay Area's long distance (commuter) rail plans and the Northeast Florida proposed commuter rail corridors plan to use CSX's main lines to provide passenger service in the future. In some locations, this also will require coordination with Class II and III carriers.

Norfolk Southern (NS) is the other Class I railroad operating close to 150 route miles in Florida. It carries hazardous materials in its Florida operation; therefore, it must also install PTC systems to comply with FRA's PTC mandate. NS' PTC Implementation Plan indicates it will install also a V-ETMS PTC system.⁴⁴

High Speed Rail Corridors

Florida's high speed rail (HSR) plans to provide faster rail passenger service between Tampa, Orlando and Miami will require a new alignment for high speed passenger rail, thus not requiring the use of freight railroad main lines. The HSR corridor between Tampa and Orlando will run along the I-4 median and the HSR corridors being evaluated for service between Orlando and Miami include I-95 and Florida's Turnpike rights-of-way. Therefore, PTC implementation is not required when high speed passenger rail service operates in the state since freight lines will not be carrying high speed passenger trains.

■ 2.6 Abandonment History

Since 2004, six railroads - CSXT, Florida Central, Florida East Coast, Florida Midland, Florida West Coast, and Seminole Gulf - have petitioned the STB for permission to abandon portions or all of their railroad track in Florida. Since then, the STB has granted abandonment exemptions for a total of 42.78 miles, which includes two sections of CSX lines, one section of the Florida Central Railway, two sections of the Florida East Coast Railway, one section of the Florida West Coast Railroad, and one section of the Seminole Gulf Rail line.

One section of CSXT rail line and one section of Florida Midland rail line - a total of 4.66 miles - have been granted abandonment exemptions pending the railroads' compliance with conditions and completion of tasks identified by an Environmental Analysis. Roughly 15 of the miles that railroads have petitioned to abandon since 2004 are involved in negotiations for interim trail use/rail banking agreements or were granted an aban-

⁴³ South Florida Regional Transportation Authority, PTC Implementation Plan, submitted to FRA on April 2010.

⁴⁴ Norfolk Southern, PTC Implementation Plan v.1 (Redacted), submitted to FRA on April 2010.

donment exemption subject to the right-of-way being converted to trails or public use. Table 2.7 summarizes the status of rail abandonments in Florida.

Table 2.7 Railroad Abandonments since 2004

Railroad Name	Section	Status
CSX Transportation	Branch line in Pinellas County (1.85 miles)	Abandonment exemption granted by the STB in December 2005, subject to public/trail use (STB Docket AB_55_646x)
	West end of the Parrish Spur (0.66 miles) in Manatee County)	Pending salvage activities identified in Environmental Assessment (STB Docket AB_55_672_X)
	Mills and Nebraska Lead (0.69 miles) in Orange County)	Abandonment exemption granted by the STB in August 2007, subject to public/trail use. Permission to extend the time to exercise the abandonment authority through April 2010 granted (STB Docket AB_55_681X)
Florida Central	Forest City Spur (3.4 miles) between Toronto and Forest City in Seminole and Orange Counties)	Abandonment exemption granted by the STB in December 2004 (STB Docket AB_319_3_X)
Florida East Coast	Portion of South Little River Branch Line (5.0 miles) to the Miami-Dade County line)	Abandonment exemption granted by the STB in August 2005 (STB Docket AB_70_4_X)
	Titusville Branch (9.8 miles) from Titusville to Aurantia, in Brevard County)	Abandonment exemption granted by the STB in August 2005 (STB Docket AB_70_5_X)
Florida Midland	Wildwood Branch (4.0 miles) from Wildwood to Orange Home in Sumter County)	Pending conditions identified in Environmental Assessment (STB Docket AB_325_4_X)
Florida West Coast	Trenton to Newberry Line (13 miles) in Alachua and Gilchrist Counties)	Abandonment exemption granted by the STB on May 2010 for a 10.3-mile portion of track between Newberry and Trenton. (STB Docket AB_347_3X)
Seminole Gulf	Portion of the Venice Branch (12.43 miles) between Sarasota and Venice	Abandonment exemption granted by the STB in April 2004, subject to public/trail use and environmental conditions (STB Docket AB_400_3X)
<i>Abandonments</i>	<i>42.78 miles</i>	
<i>Abandonments not Consummated</i>	<i>3.39 miles</i>	
<i>Abandonments in Process</i>	<i>4.66 miles</i>	
Total Potential Abandonments	50.83 miles	