FLORIDA INTERCITY PASSENGER RAIL

"VISION PLAN"

EXECUTIVE REPORT

AUGUST 2006

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OVERVIEW

The purpose of the Florida Intercity Passenger Rail study is to develop a "Vision Plan" for a statewide passenger rail system, to be incrementally implemented, and to serve the major travel markets within the State. Florida continues to have one of the highest population and economic growth rates in the United States. This extraordinary growth places pressure on the State's major transportation network to provide mobility for resident and visitor populations. In order to meet it's mobility needs, the State has a well developed network of limited access highway facilities, as well as a highly developed airport system that serves intercity and interstate travel markets. Unfortunately, the ability to significantly expand those components of the network to meet existing and projected growth is becoming limited, due to environmental, social, economic and financial impacts. Under the direction of the Florida Department of Transportation (FDOT), the State has, for several years, explored the potential of higher speed intercity rail service to assist in meeting the State's mobility needs in a multi-modal manner. This "Vision Plan" has evolved from a series of past corridor and system proposals, to a well defined, integrated vision creating a 21st Century statewide system, to be developed on an incremental, cost effective basis.

The Florida "Vision Plan" benefits from the worldwide transformation of intercity passenger rail over the past twenty years into a modern dynamic business that provides competitive travel services in intercity corridors 100 to 300 miles in length. This transformation reflects the evolution in intercity rail technology, equipment and marketing approaches. However, the transformation also reflects the escalating costs of providing capacity for alternative modes, as experienced throughout the world as well as in Florida. When implemented, the Florida Intercity Passenger Rail System will offer higher train speeds, competitive train frequencies, intermodal connectivity, service reliability, on-board comfort and services equal to or better than traveling by auto or air. As presented in this report, the proposed system will connect the major cities of Florida, as well as numerous other communities not typically served by air or rail.

This "Vision Plan" addresses the travel and economic benefits derived through a series of incremental capital investments in existing rail and limited access highway corridors. The market, operating and infrastructure requirements for implementing the Florida Intercity Passenger Rail System have been assessed at a detailed feasibility level and in terms of the financial and economic objectives of the USDOT Federal Railroad Administration (FRA) for intercity passenger rail. The key results of this assessment are —

- An affordable statewide intercity passenger rail system can be developed incrementally that eventually will link all of the major urban areas in the state.
- The system can be developed using a combination of FEC and CSX rights-of-way, along with segments of highway corridors already owned by the FDOT and other public entities.
- The system will meet the FRA's public-private partnership, financial and benefit cost requirements, making the system eligible for Federal funding once the environmental assessment process has been completed.

The Florida “Vision Plan” offers new travel options to the citizens and visitors of the State of Florida that has many advantages:

- It is environmentally friendly, and offers one of the few opportunities the State has to achieve significant congestion, emission and energy savings in an intercity travel context.
- It provides increased intercity and interstate mobility at an affordable price as rail fares are 60-70 percent of comparable airfares and service will be provided between many city pairs not effectively served by air.
- It creates new business opportunities, promotes economic growth in smaller communities and helps reduce sprawl.
- It promotes joint development opportunities at station locations, and creates conditions for redevelopment of city centers and new economic development in urban areas.
- It provides increased rail capacity and efficiency, introduces a new technology, and expands existing rail infrastructure, thereby increasing passenger/freight throughput and allowing higher overall train speeds.
- It improves safety at rail crossings by increasing the separation of rail and vehicular traffic.

THE MARKET

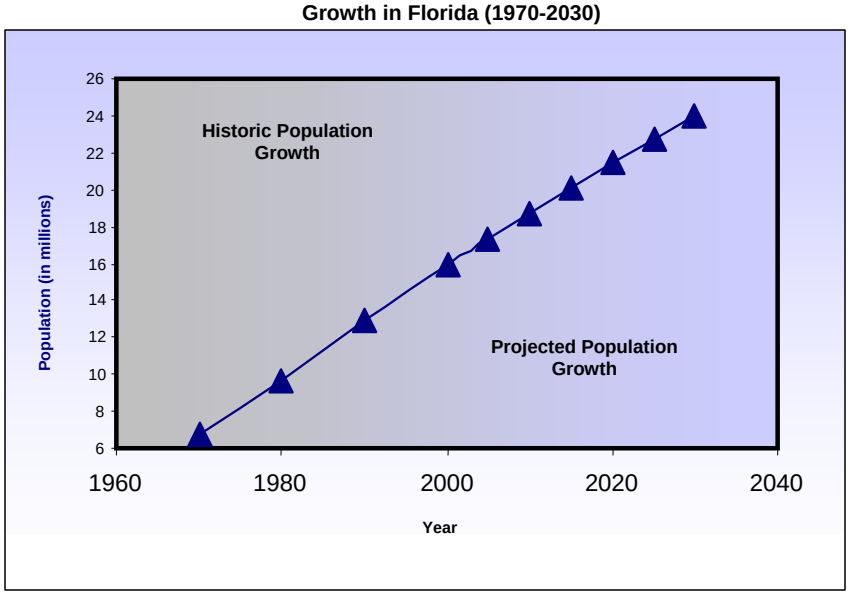
Florida is one of the most dynamic intercity travel markets in the U.S. with both a rapidly growing population and visitor market. Over the next thirty-five years (i.e., by 2040) the population will grow by nearly 70 percent and the intercity travel market by over 200 percent. The intercity travel market is projected to expand from just over 100 million trips to nearly 200 million trips by 2020 and 320 million trips by 2040. The size of these increases will put pressure on existing transportation facilities and require the development of substantial new infrastructure to meet the demand.

The largest numbers of intercity trips are between —

- Central Florida and Tampa Bay (Orlando-Tampa).
- Southeast Florida and Central Florida (Miami-Orlando).
- Southeast Florida and Tampa Bay (Miami-Tampa).

There is also significant travel between Northeast Florida and Central Florida (Jacksonville-Orlando).

Historic and Projected Population Growth in Florida (1970-2030)

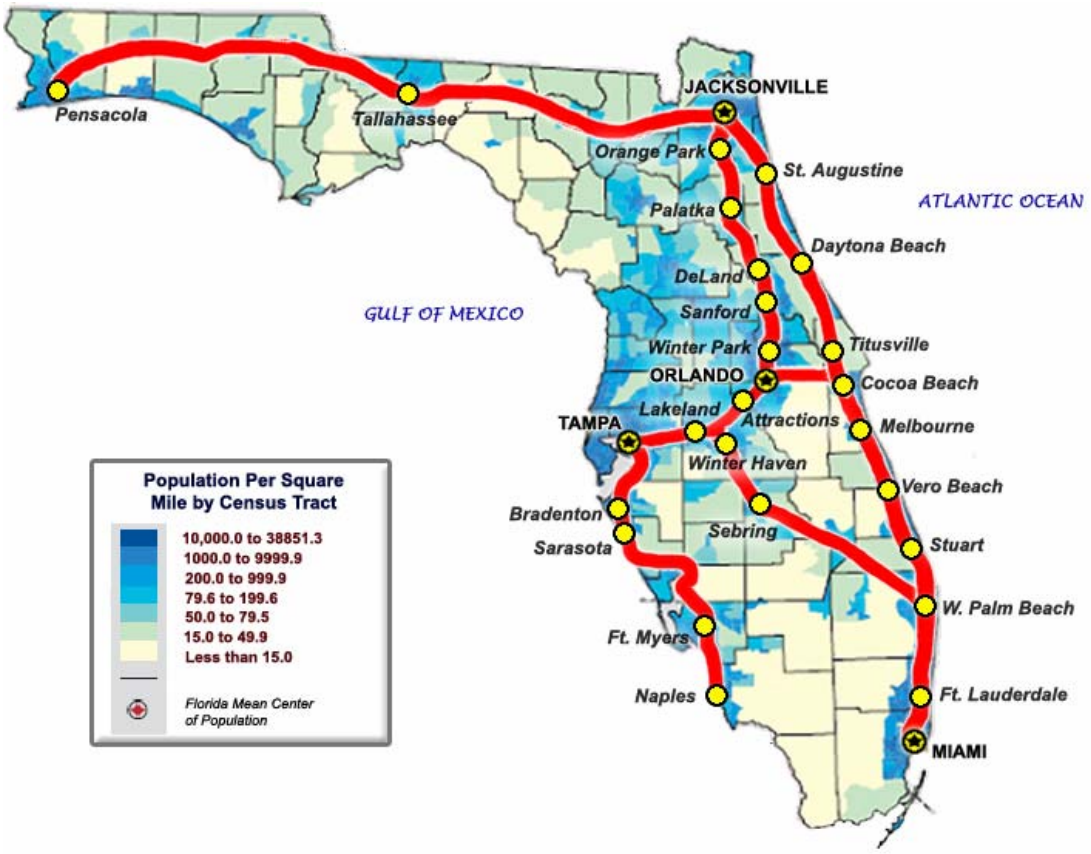


Florida Intercity Travel in Selected Markets

Market	Total Person Trips (2000)	Total Person Trips (2020)	Total Person Trips (2040)
S.E. Florida - Central Florida	9,446,524	18,420,722	30,394,191
S.E. Florida - Tampa Bay	4,850,862	8,537,517	14,086,903
S.E. Florida-N.E. Florida	1,304,613	2,283,073	3,767,070
Central Florida-Tampa Bay	14,156,497	29,162,384	48,117,933
Central Florida-N.E. Florida	3,537,194	7,321,992	12,081,286
Tampa Bay-N.E. Florida	1,545,914	2,906,318	4,795,425

Given the demand for intercity trips, Miami-Orlando, Miami-Tampa and Tampa-Orlando are the key markets that should be connected in the initial phase of the Florida Intercity Passenger Rail System. As the system is expanded to Jacksonville, the opportunity to serve intermediate markets such as, but not limited to Daytona Beach, St. Augustine and Cocoa Beach expands exponentially.

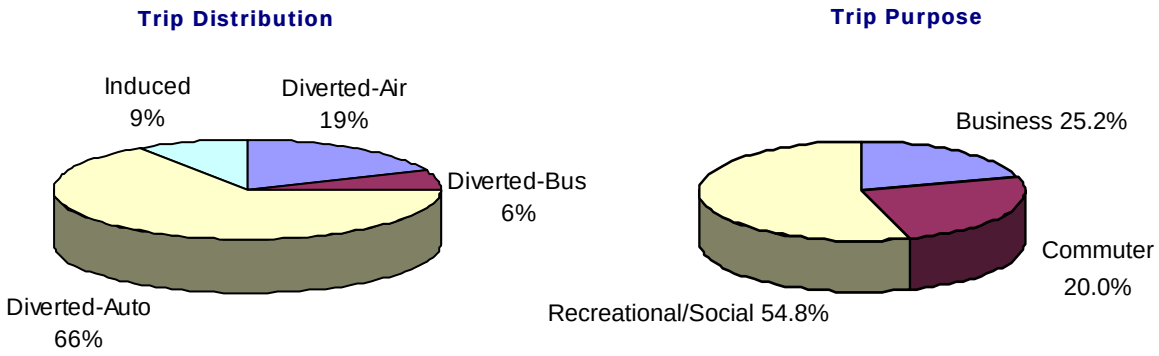
The Florida "Vision Plan" provides a flexible framework that can gear the implementation program needs of the Florida Intercity Passenger Rail System incrementally to the State's policy and funding capabilities. At build-out, the Florida Intercity Passenger Rail System will be a 1,200-mile network that links all the major communities of Florida. Due to the linear distribution of much of the state's population, the proposed system provides a competitive travel option to over 90 percent of the state's population.



The Florida Intercity Passenger Rail System will provide a modern, fast and comfortable rail service with top speeds of 110-125 mph that will make intercity travel by rail more effective than by auto or air. For example, the travel time between Miami and Orlando, or Tampa and Miami, both 240 mile trips, is approximately 3 hours by express train. This competes favorably with automotive travel. The new rail system will provide a reliable service with a high level of on-time performance. The stations will be modern and provide a wide range of ancillary services, much like airport terminals. Once the system is fully built out, there will be between 8 and 12 trains per day in each direction in all major corridors, providing travelers with the ability to make a trip "out and back" within the same day. Fares will be about 60-70 percent of comparable airfares.

At build out, the proposed system can handle up to 10 million trips annually. Approximately 25 percent of the trips are anticipated to be for business, 20 percent for commuters, and 55 percent for social/recreational travel. As for the source of rail passengers, approximately 66 percent of the trips are diverted from auto, 25 percent are diverted

from air and bus, and 9 percent are new passengers attracted to (or induced to use) the system because of the level of service offered.



In addition, the proposed intercity rail system will connect with an intercity feeder bus system that will provide additional connections to communities not served directly by the rail system. The feeder bus systems will be integrated with the rail service and have joint ticketing. The location of feeder bus routes/locations will depend on which rail routes are selected for implementation.

SYSTEM FRAMEWORK

The Florida "Vision Plan" was developed utilizing several system assumptions. First, any initial system is required to serve three of the State's large markets, and ultimately serve the majority of the State's urban areas. Second, USDOT FRA guidelines were utilized which suggest that new passenger rail systems be built in existing rail and highway rights-of-way to the maximum extent feasible. Third, it was assumed that rail rights-of-way selected must support a modern and competitive intercity passenger rail service without impacting freight service. FDOT must develop appropriate mutually beneficial partnerships with the freight railroads to obtain access to their rights-of-way and track. In areas where that cannot occur, the plan utilizes existing State rights-of-way reserved for intercity rail as well as other limited access highway rights-of-way controlled by other entities.

Initially, two independent route options were evaluated for potential intercity rail service —

- The Inland Route, which uses CSX rights-of-way and the South Florida Rail Corridor (SFRC).
- The Coastal Route, which uses the Florida East Coast (FEC) right-of-way to south Florida, the SFRC, the Beachline Expressway between the Cocoa Beach and Orlando, and the I-4 right-of-way between Orlando and Tampa.

As part of the initial study activities, meetings were held with major stakeholders, including the freight railroads. While the conversations were generally positive with both railroads, there was reluctance on the part of CSX to allow the possibility for any passenger service on the CSX line between Auburndale and Tampa. This reluctance was based on their ongoing plan for a new logistics/intermodal freight village near Lakeland, the amount of existing and future freight traffic and actual rail configuration limitations between Lakeland and Tampa.

Therefore, it became necessary to investigate other alternatives to the pure "Coastal" or "Inland " options, including route and speed "hybrids" which contained, for example, the use of the I-4 right-of-way in both alternatives, and potentially a dedicated passenger track in the CSX Lakeland to Tampa segment.

GENERAL SERVICE ASSUMPTIONS

In the evaluation of the initial Coastal and Inland Routes, two train speed options were considered — 79 mph and 110/125 mph. The 79 mph speed reflects existing allowable freight train speeds and the use of existing infrastructure, while 110 mph is the maximum speed that FRA allows for mixed freight and passenger operations with improved signals and grade crossings. A speed of 125 mph is allowed where new passenger rail lines are proposed, e.g., along the Beachline and I-4 highway corridors. On these sections, 125 mph is possible as the rail system is fully separated from the highway system and all crossings are grade separated.

For both the 79 mph and 110/125 mph options, the travel times reflected the capabilities of both the trains and the track. For the longest corridors — Orlando-Miami and Miami-Tampa — the running time for the 79-mph technology was estimated to be around 4 hours, while the 110/125-mph technology was just over 3 hours. For shorter corridors, the time differences between the 79 mph and the 110/125 mph were smaller. For example, on the Orlando-Jacksonville Inland Route, the difference is only 18 minutes for the 157-mile route. Because of its faster running times, the 110/125-mph option generates higher ridership and can therefore support increased frequencies. The following table outlines the train running time and frequencies for the Inland and Coastal Routes, for purposes of comparison.

Train Running Times and Frequencies (2020)

Route Segment	Inland Route 79 mph	Inland Route 110/125 mph	Coastal Route 79 mph	Coastal Route 110/125 mph
Jacksonville-Orlando	2:27 4	2.20 5	3:12 4	2:25 5
Orlando-Tampa	1:28 4	1:05 8	1:28 6	0:55 8
Miami-Orlando	4:05 6	3:20 8	3:53 6	3:00 8
Miami-Tampa	3:51 4	3:15 8	5:21 4	3:55 8

IMPLEMENTATION AND PHASING

The following section outlines the potential phasing for both the Inland Route and the Coastal Route. The analysis indicates that certain options investigated for both routes are financially and economically viable. At the end of this discussion, the proposed Florida Intercity Passenger Rail System is presented, which combines physically and economically feasible components of both routes.

INLAND ROUTE

This study placed a special emphasis on developing a strategy for quickly implementing rail service to the major markets by upgrading existing rail lines. The Inland Route offers a generally lower cost opportunity to incrementally build-up the intercity rail system. However, as previously indicated, this route depends on a partnership with CSX. Potential phasing of the Inland Route is presented below.

Phase 1 (2010): The CSX "S" line is used to connect the largest markets in Florida — Orlando, Tampa and Miami. Phase 1 provides for upgrading West Palm Beach to Auburndale to 110 mph and mixing freight and passenger operations between Tampa and Orlando. A 79-mph operation is proposed because of the heavy volume of freight traffic that is expected in the future. To ensure that CSX is not impacted by the passenger rail system, a fully separated passenger infrastructure is provided between Auburndale and Tampa. This includes dedicated track, a major grade separation crossing for passenger and freight in Lakeland, and a dedicated rail bridge over Six Mile Creek in Tampa. Between Auburndale and West Palm Beach, safety at rail crossings will be improved by implementing the FRA "sealed" corridor concept. These improvements include grade separation or quad gates at all crossings, along with fencing throughout the entire corridor.

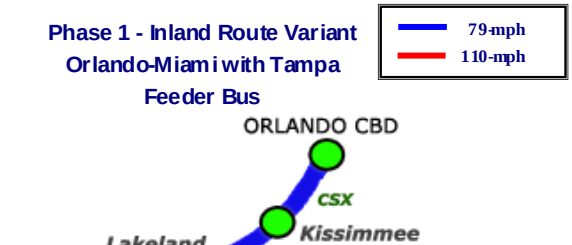
The service for Phase 1 is 4 trains per day in each direction between Tampa/Orlando and Miami with travel times of about 3½ hours, and 3 trains per day in each direction between Tampa and Orlando, with a travel time of 1½ hours. The system carries nearly 1.8 million passengers after the two-year ramp up period. Phase 1 results indicate a positive Operating Ratio.

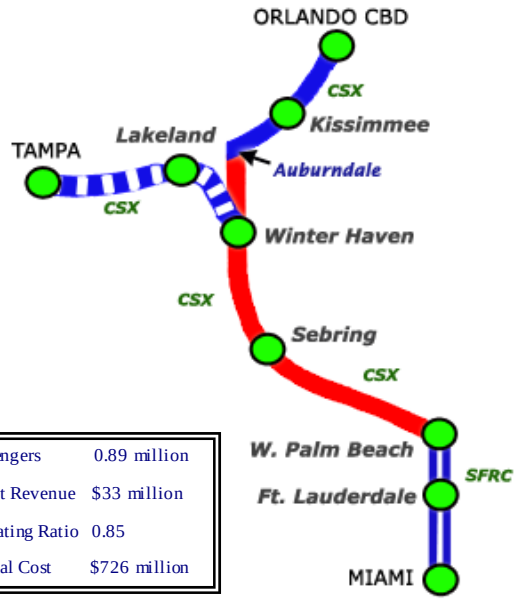
Given potential CSX related issues, replacing the rail service between Auburndale and Tampa with a connecting feeder bus between Winter Haven and Tampa was tested. While this would lower the capital costs by over $300 million, it reduces ridership by 50 percent and

Phase 1 - Inland Route
Dedicated Passenger Track in CSX Right-of-Way
Auburndale-Tampa

Passengers	1.79 million
Ticket Revenue	$65 million
Operating Ratio	1.0
Capital Cost	$1.1 billion

Phase 1 - Inland Route Variant
Orlando-Miami with Tampa
Feeder Bus





Passengers	0.89 million
Ticket Revenue	$33 million
Operating Ratio	0.85
Capital Cost	$726 million

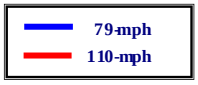
provides a negative Operating Ratio from 2010 to as far out as 2020. The loss of $60 to $100 million in revenue makes this a very weak option.

At a cost of just over $3 million per track mile, the Inland Route provides a very low cost option, with a Phase 1 capital cost of $1.1 billion. The main drawbacks of the Inland Route are CSX's stated need for "unfettered" expansion in the future and the costs associated with moving the intercity passenger rail service from the CSX to the I-4 right-of-way (as is proposed in Phase 3 of the Inland Route). Implementation of this phase relies on the FDOT to develop a partnership with CSX or become an operating partner with Amtrak, who can exercise its Federal mandate to operate passenger rail service in any freight rail corridor.

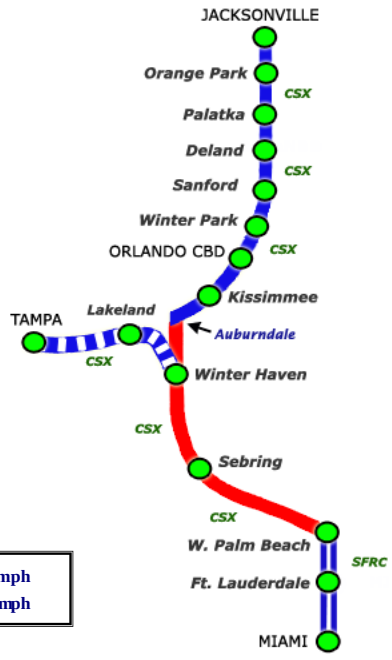
Phase 2 (2015): The flexibility of the Inland Route is demonstrated by the low cost of Phase 2, which adds a 79-mph service to Jacksonville. Phase 2 connects the four major market centers of Florida — Miami, Tampa, Orlando and Jacksonville for an additional $150 million, and within the first ten years of the program. There are 3 trains in each direction between Orlando and Jacksonville with a travel time of about 2½ hours. Because the extension to Jacksonville is expected to generate 600,000 additional passengers, a fifth train is needed in the Orlando-Miami route so Jacksonville travelers can take advantage of the connections to Miami and Tampa. A total of 15 train sets are required in Phase 2 to carry approximately 2.4 million passengers.

Phase 2 - Inland Route
Dedicated Passenger Track in CSX Right-of-Way
Auburndale-Tampa

Passengers	2.4 million
Ticket Revenue	$101 million
Operating Ratio	1.30
Capital Cost	$1.2 billion



Phase 2 - Inland Route with Phase 1 Variant
Jacksonville-Miami Inland with
Tampa Feeder Bus



Passengers	1.33 million
Ticket Revenue	$57 million
Operating Ratio	0.99
Capital Cost	$900 million

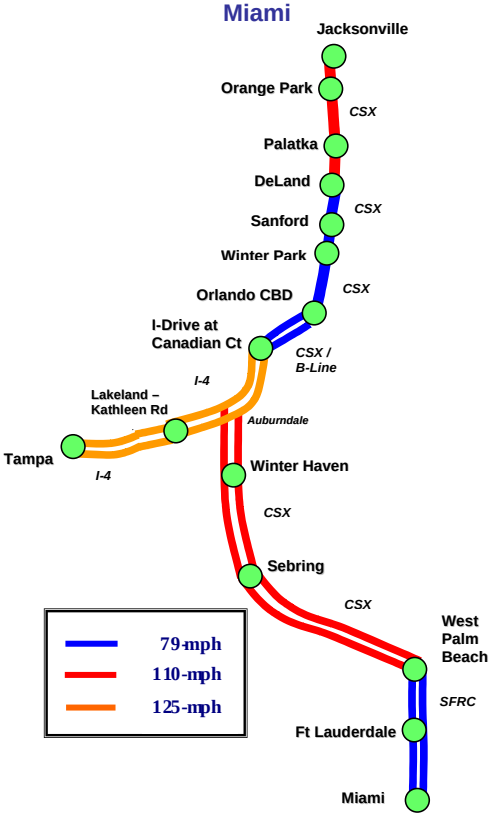
Phase 3 (2020): Given the issue of increasing freight traffic on the Auburndale-Tampa route, the approach in Phase 3 is to abandon this route segment and move the passenger rail service between Orlando and Tampa to the I-4 corridor by 2020. In Phase 3, there will be 8 trains per day in each direction between Tampa and the Orlando, and 8 trains per day in each direction between Miami and Tampa and Miami and Orlando. The Jacksonville route will be upgraded to 110 mph with five trains per day in each direction.

To meet the growth in projected passenger rail demand, the I-4 corridor which will be designed and built to accommodate train speeds of 125 mph, as well as Auburndale to West Palm Beach corridor, will be double tracked. The number of train sets required will increase from 15 to 21. The capital costs for Phase 3 for the Inland Route are estimated at $3.5 billion.

Phase 4: Phase 4 for the Inland Route includes connections to Southwest and Northwest Florida. The connection to Northwest Florida can be added relatively inexpensively, utilizing the existing rail rights-of-way. The alignment would have approximately five stations between Jacksonville and Pensacola. No detailed study has been conducted on this alignment at this time.

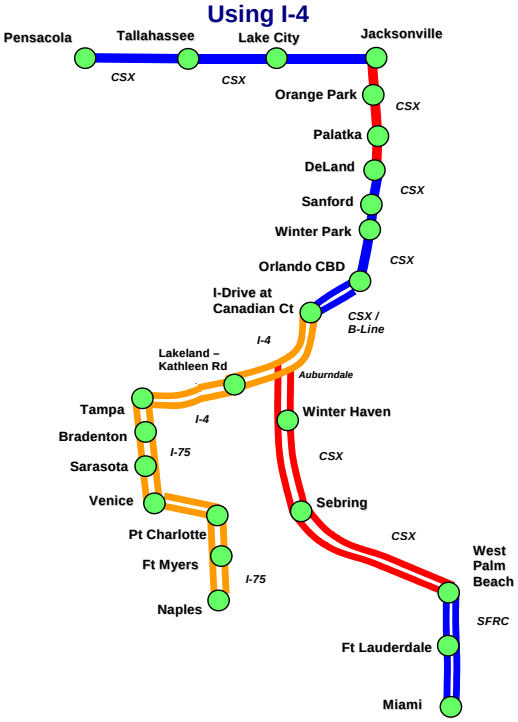
The connection to Southwest Florida between Tampa and Naples was studied by FDOT in 2002. The alignment would utilize the I-75 right-of-way, and would have approximately five stations. At the time of the study, the alignment was estimated to cost approximately $1.5 billion. However, the extension was found to generate significant increases in ridership, revenues and economic benefits.

Phase 3 – Inland Route
Jacksonville-Orlando-Tampa-Miami



Passengers	4.4 million
Ticket Revenue	$175 million
Operating Ratio	1.34
Capital Cost	$3.5 billion

Phase 4 – Inland Route
Jacksonville-Orlando-Tampa-Miami
Using I-4



COASTAL ROUTE

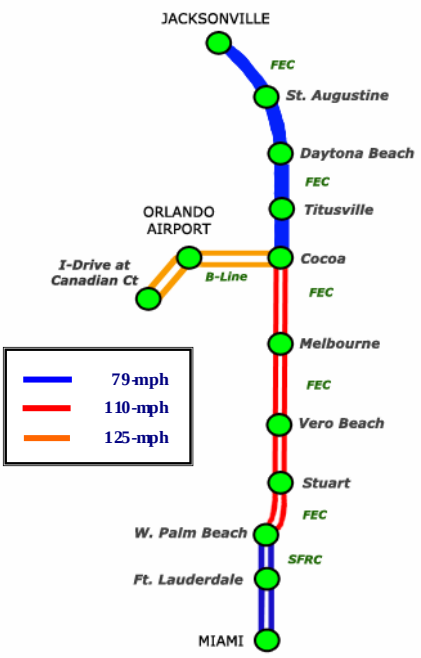
This route option utilizes the FEC railroad instead of the CSX. The Coastal Route is a slightly more expensive option but potentially could provide higher ridership and better financial performance. This route provides service to the coastal communities between Jacksonville and West Palm Beach, and as previously indicated, depends on a partnership with the FEC railroad. Potential phasing of the Coastal Route is presented below.

Phase 1 (2012): This phase of the Coastal Route would provide service between Miami and Jacksonville using the FEC right-of-way. In addition, a new rail line would be built using the Beachline right-of-way between Cocoa Beach, Orlando International Airport and International Drive tourist attractions area at Canadian Court. This phase requires 13 trains.

As part of this Phase, the FEC line between West Palm Beach and Cocoa Beach would be double tracked and upgraded to 110 mph. The new line built along the Beachline would be double tracked and would provide for 125 mph service. The Jacksonville to Cocoa Beach connection would be operated at 79 mph. In 2012, the system would provide 5 trains per day in each direction between Orlando International Airport and Miami, and 3 trains per day in each direction between Jacksonville and Miami with connections between Orlando International Airport and Cocoa Beach. Express trains from Orlando International Airport would provide a 3-hour service to Miami, while the travel time between Jacksonville and Miami would be just over 5 hours. The system is projected to carry approximately 2 million passengers after the two-year ramp up period.

Phase 1 is projected to achieve a positive Operating Ratio after the two-year ramp-up period. Phase 1 is projected to cost $2.1 billion or just over $5 million per track mile. Phase 1 would provide a "sealed" corridor between West Palm Beach and Cocoa Beach and between Cocoa Beach and Canadian Court, which would dramatically lower the risk of accidents in one of the most densely populated corridors in Florida.

Phase 1 - Coastal Route
Jacksonville Miami



Passengers	1.95 million
Ticket Revenue	$73 million
Operating Ratio	1.07
Capital Cost	$2.1 billion

Potential variations for Phase 1 include —

- Not double tracking the FEC route until 2015 when the capacity is really needed, which reduces costs by about $400 million.
- Not building the route beyond the Orlando International Airport until 2015, which reduces the cost by another $400 million. While delaying this investment reduces ridership, the Operating Ratio remains positive.

Phase 2 (2015): By 2015, the market for intercity rail is projected to expand significantly, thus the development of the connection to Tampa will be essential. This connection will use the I-4 right-of-way between Canadian Court and Tampa. Because of the increased demand for rail travel, 8 trains per day in each direction will be needed for the Tampa-Orlando service. The travel time for the 125-mph high-speed service between Orlando International Airport and Tampa will be less than 1 hour. The service from Miami to Orlando will increase to 8 trains per day in each direction with a projected travel time of less than 3 hours. Extra trains will be added between Jacksonville and Orlando International Airport (express train will take 2½ hours) and between Jacksonville and Miami (express train will take 4½ hours).

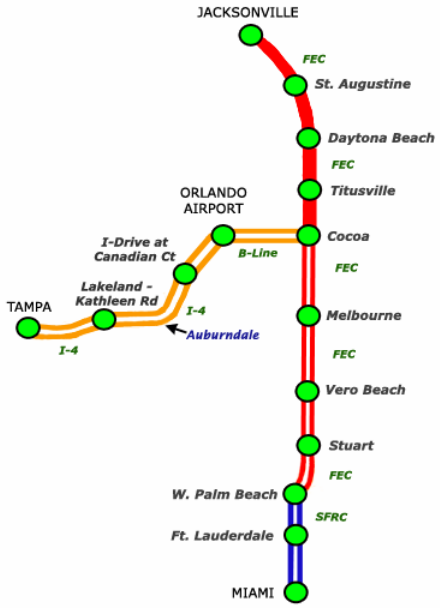
Passenger volumes are anticipated to more than double to over 5 million trips per year and the fleet will be increased to 25 train sets. The Operating Ratio will increase to 1.43.

The total cost for this option is $4 billion. Options for lowering capital costs include running at 79 mph rather than 110 mph to Jacksonville, which would reduce the cost by $400 million.

Phase 3 (2020): This phase will provide additional capacity and better connection between Miami, Orlando and Tampa. The addition of the Auburndale-West Palm Beach cut-off will cost an additional $700 million. As a result, express service between Tampa and Miami would take 3 hours, 30 minutes less than Phase 2. The total capital cost is estimated at $4.7 billion or $6.5 million per track mile. Phase 3, like Phase 2, will require a total of 25 train sets.

Phase 4: As indicated in the Inland Route, connections can be made to Southwest Florida and to Northwest Florida in Phase 4. The connection to Northwest Florida can be added relatively inexpensively, utilizing the existing rail rights-of-way. The connection to Southwest Florida between Tampa and Naples would utilize the I-75 right-of-way.

Phase 2 - Coastal Route
Jacksonville-Orlando-Miami-Tampa Coastal



Passengers	5.5 million
Ticket Revenue	$205 million
Operating Ratio	1.43
Capital Cost	$4 billion

Phase 3 - Coastal Route
Jacksonville-Orlando-Tampa-Miami w/CSX from Auburndale to West Palm Beach

Passengers	5.7 million
Ticket Revenue	$211 million
Operating Ratio	1.38
Capital Cost	$4.7 billion

Phase 4 – Coastal Route
Jacksonville-Orlando-Tampa-Miami w/CSX from Auburndale to West Palm Beach

PROPOSED SYSTEM

This study developed and presented the results for the Inland and Coastal Routes separately, as it is easier to understand the strengths and weaknesses of each option. However, the two options are not mutually exclusive. It was determined during the study process that the best parts of each network could be blended into a single system. Furthermore, even the most conservative ridership and cost projections indicated a need for most, if not all of the feasible segments of the combined Inland and Coastal Routes.

Based on a detailed analysis of the route and technology options, the Florida "Vision Plan" allows for the incremental implementation of a modern intercity passenger train operation that will provide a 21st Century rail service across the state, operating at top speeds of 79, 110 and 125 mph. The proposed system will require the purchase of a modern train fleet, the upgrade of existing track to handle 110-mph operations and the development of a new right-of-way to handle 125-mph operations.

By 2020, the rail system could consist of 650 miles of track connecting Miami and Jacksonville and Cocoa Beach with Orlando International Airport, Orlando attractions and Tampa. The proposed rail system includes a "direct" route between Tampa and West Palm Beach-Miami to provide effective service for these communities. The rail system will have at least 17 stations, providing rail service to the rest of Florida by direct or connecting trains. It is estimated that the system can support either or both of the routes between Orlando and Jacksonville. Detailed phasing and implementation will be determined based on continued discussions with various stakeholders, including the FDOT Districts, freight railroads, aviation, transit and expressway authorities, and affected local governmental entities.

PROPOSED TECHNOLOGY

The Florida "Vision Plan" calls for a fleet of advanced passenger trains, that will provide the following:

- A fast and frequent rail service, with speeds up to 125 mph on new grade separated tracks and up to 110 mph when there is mixed passenger and freight traffic.

- A very high level of performance with both rapid acceleration and deceleration.

Laptop connections

- The latest in vehicle design that is built to meet a high standard of reliability and safety. Advanced signaling and IT technology will be used to provide train control and ensure train safety. Automatic safety devices will be used to prevent grade crossing conflicts and issues.

- A high level of passenger comfort and convenience, including on-board amenities for business and leisure travelers. Interiors will offer the comfort of modern high-speed trains and incorporate ergonomically designed seating and lighting, air conditioning, music and video facilities, food service and facilities for laptop computers.

PROPOSED INFRASTRUCTURE

A key feature of the Florida "Vision Plan" is the incremental use of existing freight railroad and highway rights-of-way to develop a statewide intercity rail network. Depending on the alignment and segment, the proposed maximum speed is 110 mph in accordance with the USDOT FRA policy for mixed passenger and freight traffic on railroad rights-of-way. On dedicated passenger rail rights-of-way, speeds can be increased to 125 mph as the new track is separated from other rail operations as well as adjacent highways. Within the potential limited access highway corridors, the maximum speed is 125 mph, again, depending on alignment and segment.

Major capital improvements for the Florida Intercity Passenger Rail System include, but are not limited to —

- Track replacement and upgrades in several locations to ensure the track performs effectively at its designated FRA class:

- Class IV for 79-mph track
- Class VI for 110-mph track
- Class VII for 125-mph track

- Additional passenger and freight sidings to ensure effective train passing.
- Significant double tracking of existing single track to ensure the freight railroads are not impacted by the proposed passenger rail service.
- Upgraded signaling and communications systems to provide improved dispatching and increased safety.
- Fencing along the entire length of the corridor in areas of high speeds to maximize the safety and security of the system.
- On 110-mph sections, "quad gates" at grade crossings to "seal" the corridor and prevent auto, pedestrian and truck traffic from entering the rail right-of-way when trains are approaching.
- On 125-mph sections, grade separated track so that passenger rail operations are separated from freight rail operations as well as highways.

The estimated capital costs for the initial system (Phase I) ranges from $726 million to $2.1 billion, depending on the alignment. At buildout, the system cost is approximately $6-7 million per track mile. Because of the projected rapid growth of both freight and passenger rail traffic over the next 20 years, large sections of the system are double tracked to provide the additional capacity that will be needed to provide cost effective service, while minimizing the impact to the movement of freight traffic. Over 60 percent of the system operates on track that is dedicated to passenger trains, which has the effect of doubling the capital costs per mile.

Implementation of the Florida "Vision Plan" will improve freight as well as passenger operations by increasing capacity, intermodal train speeds, and grade crossing safety.

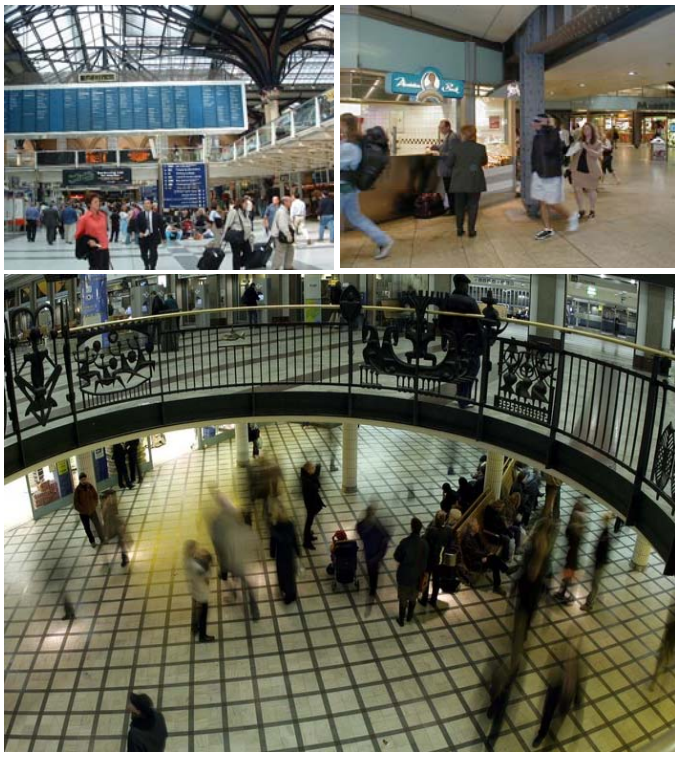
PROPOSED STATIONS

In addition to new trains and infrastructure improvements, the Florida "Vision Plan" anticipates new, modern passenger rail stations. One critical element in the success of modern passenger rail systems is the quality of services offered by the stations and the overall station environment, as those stations serve as the gateway to the overall system. Major stations should offer all the facilities of a modern airport. There is the potential for several stations to be located at or adjacent to major airports, such as the Orlando International Airport and the Miami Intermodal Center, or major downtown terminals such as the existing LYNX Central Station and proposed Jacksonville Intermodal Station. All stations will offer significant opportunities for joint development projects by the local and private development communities. The FDOT will work with local communities to both develop and help integrate these expanded existing or new facilities within each community.

The new stations can be integrated with a full range of multimodal connections, including rental cars, taxis, transit, intercity bus, local urban rail and bus transit service. It is anticipated that approximately 17 stations will needed to support the system at buildout.

Proposed Inland Stations

Jacksonville
Orange Park
Palatka
DeLand
Sanford
Winter Park
Orlando CBD
Kissimmee
Lakeland
Tampa
Winter Haven
Sebring
West Palm Beach
Ft. Lauderdale
Miami



Proposed Coastal Stations

Jacksonville
St. Augustine
Daytona Beach
Titusville
Cocoa Beach
Melbourne
Vero Beach
Stuart
West Palm Beach
Ft. Lauderdale
Miami
Orlando Airport
Canadian Court
Lakeland
Tampa

FINANCIAL RESULTS

The goal of the Florida "Vision Plan" is to use public investment and public private partnerships to provide a modern intercity passenger rail service. As an added benefit, where rail rights-of-way are used, the infrastructure will support and improve the performance, safety and reliability of the freight rail partners. The Florida Intercity Passenger Rail System was designed to ensure the project is a worthwhile investment for the State, local governments and private partners. In addition, the system was designed to ensure the project is eligible for matching Federal funds.

The USDOT policies for public-private partnership investments are —

- A fully developed intercity passenger rail system must have a **positive Operating Ratio**, which ensures the intercity passenger rail system **does not need any ongoing operating subsidy** after the ramp-up period. The revenues from fares and ancillary services must exceed operating costs to provide a positive Operating Ratio (i.e., revenues divided by costs must be greater than one).
- A fully developed intercity passenger rail system must have a **positive Benefit Cost Ratio**, which ensures that the revenues and benefits of the intercity passenger rail system exceed its capital and operating costs for the life of the project (i.e., revenues and benefits divided by capital and operating costs must be greater than one). Benefits the system must generate include savings in travel time for all modes, reduced emissions, resource savings (i.e., fuel and infrastructure) resulting from diverted auto, air and bus trips, and reduced congestion.

The Operating Ratios for the proposed Florida Intercity Rail System were assessed, by phase, to ensure the system does not require any ongoing operating subsidy. As can be seen below, none of the implementation phases for the Inland or Coastal Route require an operating subsidy. Each phase has a positive operating ratio, ranging from 1.0 for the Phase 1 Inland Route to 1.43 for the Phase 2 Coastal Route. The Operating Ratios for all phases meet the USDOT policies regarding public private partnership investments.

Summary of Financial Results

	Inland			Coastal		
	Phase 1	Phase 2	Phase 3	Phase 1	Phase 2	Phase 3
Passengers (millions)	1.79	2.4	4.4	1.95	5.5	5.7
Revenues ($millions)	65	101	175	73	205	211
Operating Costs ($millions)	65	77	131	68	143	153
Operating Ratio	1.0	1.3	1.34	1.07	1.43	1.38

Likewise, the Benefit Cost Ratio, as defined by USDOT, was calculated by assessing the Net Present Value (NPV) of revenues, consumer surplus, resource benefits, operating costs and capital costs. The NPV is calculated over the life of the project (30 years) with values being discounted to the base year. The discount rate is defined by the GAO. The NPV of revenues, consumer surplus, and resource benefits are divided by the NPV of the capital and operating costs. The Benefit Cost Ratio was calculated for the Phase 3 (Year 2020) system for both the Inland and Coastal Routes. The Inland and Coastal Routes have a positive Benefit Cost Ratio in the Year 2020. The Inland Route has a Benefit Cost Ratio of 1.5 in Phase 3, while the Coastal Route has a Benefit Cost Ratio of 1.8. These ratios meet and exceed the USDOT requirements for Federal funding eligibility.

As with most forms of major infrastructure development, a mixture of Federal, State and private funding will be required to fund the Florida Intercity Passenger Rail System. Historically, highway, transit and rail projects of the magnitude of the proposed Florida Intercity Rail System sought Federal funds for 80 percent of capital costs. While most Federal funding for major highway projects remains at 80 percent, only 50 to 60 percent Federal funding is provided for major transit programs. For study purposes, a conservative 50 percent Federal match was assumed for the Florida Intercity Rail System capital program. The remaining 50 percent share of capital costs will be derived from State funds, local partners (including but not limited to station areas, right-of-way, expressway and aviation authorities) and private partners (including but not limited to freight railroads, development community, and vendors).

SYSTEM BENEFITS

The Florida "Vision Plan" offers an affordable and effective new transportation system that will assist in implementing Florida's future. It provides a cost-effective alternative to auto and air travel between the cities and communities of Florida. Given the high rate of travel and projected trip demand between major city pairs, this is an important advantage in an era of escalating oil prices. Intercity passenger rail provides a powerful and effective option for access to the state's city centers as well as hub airports. Since air deregulation, many communities in Florida lack air service and intercity passenger rail system will fill the void that local air service has vacated. The following paragraphs outline some of the benefits of the intercity rail system are summarized below.

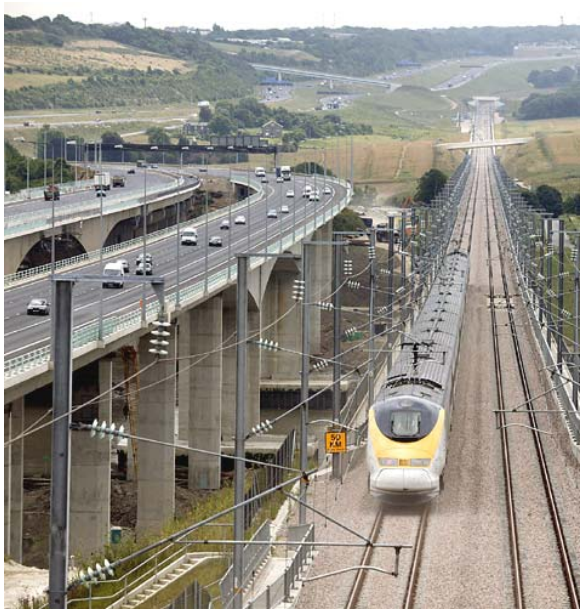
User Benefits: In terms of user benefits, the Florida "Vision Plan" shows very significant results. In Phase 3 of the system, the Benefit Cost Ratio ranges from 1.5 to 1.8, which is very competitive with other existing and planned systems. For the overall system, estimated user benefits are over $15 billion for a total $2.25 billion State investment. In addition, each phase has a positive operating ratio. In Phase 3, the Operating Ratio is 1.34 for the Inland Route and 1.38 for the Coastal Route.

Potential Economic Impact: While a detailed Economic Impact Study has not been completed, a preliminary analysis of previous studies, both locally and nationwide, suggests that the Florida Intercity Passenger Rail System will have very significant productivity impacts on the Florida economy. It is estimated that it could —

- Generate at least 2,000 permanent passenger rail related jobs in rail operations, track maintenance, management and administration, police and security, retail and catering to name a few.
- Generate an additional 30-40,000 long-term jobs or as many as 1 million person years of work.
- Increase personal income in Florida by $800 million per year.
- Create over $3.5 billion of joint development potential at station sites.

The potential impact of $2.25 billion from the Federal government and a similar total investment by the State, local and private funding partners to build the entire system is substantial. Additional potential benefits during the construction period could include —

- At least 35,000 person years of work or the equivalent of 7,000 full-time jobs.
- Increase in personal incomes of $1.5 billion or $120 million per year over 25 years.
- Increased state Gross Domestic Product of $5 billion.



Statewide Mobility: The Florida transportation plans call for significant improvements to the state's existing transportation systems. The Florida DOT recognizes that real constraints on mobility will exist in the future because of the rapid growth of auto use. Given the shortage of space for developing new infrastructure, environmental concerns about building new highways, and the linear character of urban development in the state, implementation of the Florida Intercity Passenger Rail System offers a distinct alternative to auto travel within the state. The Florida Intercity Passenger Rail System offers a viable option for business and leisure travelers between city centers, airports and tourist attractions, which is safe and reliable, cost effective, energy efficient, and environmentally friendly.

Urban Transit: Implementation of the system supports the development of urban rail and bus transit by sharing infrastructure costs and generating increased demand for transit services. For example, increased transit services in Orlando and Miami will be needed when the system provides service to intermodal stations such as Orlando International Airport and the Miami Intermodal Center. In addition, these stations serve to create a focal point in each city where bus transit and urban rail can share facilities with intercity rail.

Freight Railroads: The infusion of a major investment in Florida's rail systems generates major benefits for the freight railroads —

- Freight operators are able to consider running faster intermodal traffic.
- Capacity improvements provide freight railroads more flexibility and efficiency to handle future traffic than their existing network does.
- The introduction of Positive Train Control (PTC) signaling allows the freight railroads to improve throughput and in some cases avoid expensive upgrades to their track signaling systems.
- The introduction of "sealed" corridors to separate auto and rail traffic increases safety for both freight and passenger trains.

Airports: The system links the State's major international and domestic airports and provides new world class travel opportunities such as air and rail partnerships that provide through ticketing and seamless connections with the major hub airports (i.e., Orlando, Miami, Ft. Lauderdale, Tampa and Jacksonville).

Energy Savings: The system provides an effective way to increase energy efficiency and reduce the state's energy needs.

Joint Development: Based on comparable studies and implementation experience elsewhere, the system could generate at least $3.5 billion in joint development potential for the communities where stations are located.

Summary: As outlined in this study, the proposed Florida Intercity Passenger Rail System will provide —

- Travel times equal to or better than auto travel, with average speeds of 65-75-mph for local trains that stop at all stations and 80 mph for express trains.
- Intercity rail fares that are very affordable, with optimized fares set at 60-70 percent of comparable airfares.
- A high level of reliability and performance that ensures on-time departures and arrivals.
- Comfortable trains with a full range of on-board services that provide an enjoyable travel environment.
- Service to both large and small communities that provides a new option for intercity travel.
- Downtown-to-downtown connections that encourage business travelers to use the rail system.
- Connections to major airports that allow travelers to use rail to access the airport for long-distance air trips.

FUTURE STEPS

The focus of this study has been to establish the potential for a statewide intercity passenger rail service. Both the Coastal Route and the Inland Route, as well as a strategic combination of both, can meet the public-private partnership, financial and benefit cost objectives of the USDOT FRA. The next step is for the FDOT to take the plan to the various stakeholders, including the freight railroads, for further discussions. At the end of those discussions, FDOT should make a policy decision about the implementation option to pursue. Whichever implementation option is selected, the capacity of both the Inland and Coastal Routes that serve the Miami market need to be developed in the 2020 timeframe to meet the demand for passenger rail travel, and to provide a mobility option for intercity travel demand. This infrastructure will also provide the additional capacity needed by the freight railroads during the same time period.

To move towards implementing the system, the FDOT needs to take the evaluation process to the next level of detail and specifically —

- Carry out a detailed environmental evaluation for the project. This might consist initially of a Programmatic Environmental Impact Statement (PEIS) to develop a management framework for the overall project and an EIS for specific segments of Phase 1.
- As part of the EIS process, carry out preliminary engineering to a level of detail that allows the development of unit costs without the large contingency factor included in the capital costs for this study.
- Develop a public-private partnership with the freight railroads and undertake a joint evaluation of track capacity needed for freight and intercity passenger rail operations and negotiate agreements for the shared use of rights-of-way.
- Develop partnerships with the local communities regarding station areas, with local transit agencies regarding service and with local authorities regarding utilization of right-of-way.

Upon completion of these steps, the Florida Intercity Passenger Rail System will be “funding ready” and the FDOT will have —

- Environmental documentation that satisfies the requirements of the National Environmental Policy Act (NEPA).
- Negotiated agreements with the freight railroads.
- Negotiated agreements with the local authorities for right-of-way utilization.
- Community support for the project and local community programs in place to support station development.
- Identification of local matching funds (public and private) that will enable the FDOT to proceed forward with the intercity rail project.

FOR ADDITIONAL INFORMATION

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