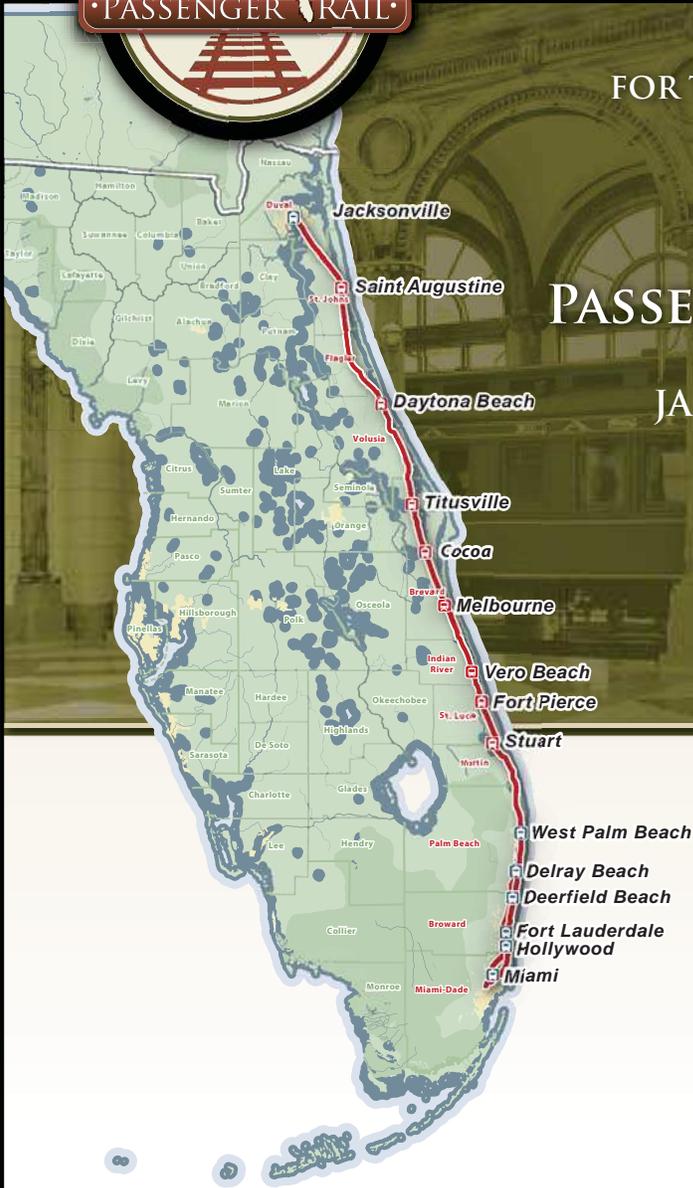


# FINANCIAL PLAN



## FOR THE FLORIDA EAST COAST (FEC) CORRIDOR AMTRAK SERVICE HIGH SPEED INTERCITY PASSENGER RAIL (HSIPR) PROGRAM

JACKSONVILLE (DUVAL COUNTY) TO MIAMI  
(MIAMI-DADE COUNTY), FLORIDA



AUGUST 2010



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# *Acronyms*

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FEC	Florida East Coast Railway
TPC	Train Performance Calculator
FDOT	Florida Department of Transportation
MAS	maximum authorized speeds
CWR	continuously-welded rails
SFRTA	South Florida Regional Transit Authority
HSIPR	High Speed Intercity Passenger Rail Program
PRIIA	Passenger Rail Investment and Improvement Act of 2008
ARRA	American Recovery and Reinvestment Act of 2009
SIS	Strategic Intermodal System
SFRC	South Florida Rail Corridor
FS	Florida Statutes
REC	Revenue Estimating Conference
T&E	Train and Engine Service
OBS	On-Board Services

# ***Chapter 1***

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## Purpose and Need

The primary purpose of the project is to provide intercity passenger rail service on Florida's east coast, from Jacksonville to Miami as part of the 2009 Florida Rail System Plan to improve connectivity for intercity and intermodal travel, enhance mobility of the transportation network, and stimulate economic development. Project goals and objectives include:

- Restoring intercity passenger rail service along nearly 350 miles of Florida's east coast to improve intercity mobility and access by filling a critical gap in the transportation network on Florida's east coast; connecting major tourist destinations along Florida's east coast; providing reliable, high-quality rail service connecting to the Northeast, Mid-Atlantic, Southeast and Midwest; and providing efficient, comfortable, safe and reliable intercity rail service;
- Augmenting ongoing redevelopment by promoting compact development patterns in historic downtowns; enhancing development opportunities to strengthen existing communities; increasing visitation for tourism, sporting events, business activities, and personal visits; preserving environmental quality; protecting Florida's sensitive human and natural environmental resources
- Interfacing with airports, seaports, mass transit and Florida's highway by linking all major forms of transportation; providing better access to seaports and airports; interconnecting with local and mass transit services
- Lightening capacity constraints on existing transportation systems by enhancing rail mobility and connectivity to Florida's east coast, expanding choices of transportation modes; providing predictable, consistent travel times; enhancing efficient operation of transportation facilities and service; and providing travel times that are comparable with air and automobile
- Stimulating the economy with new construction and transit-oriented development opportunities, including the creation of new employment opportunities

The need for the project stems from continued growth in long-distance travel to Florida's east coast cities; an incomplete, inconvenient, and overburdened transportation network; and depressed economic conditions.

# Chapter 2

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## Program Rationale

The Florida East Coast Railway (FEC) is the transportation system that was primarily responsible for the development of Florida, south of Jacksonville, in the late Nineteenth and early Twentieth Centuries. Early development along the east coast of the state was concentrated around the FEC, and development continues to the present day in proximity to the railroad.

Transportation infrastructure in the corridor is dominated by highways, especially US1 and I95, which parallel the FEC over most of its length. In terms of public transportation alternatives, the endpoint cities of Miami and Jacksonville have large airports with frequent scheduled air service. Among the eight corridor cities in which a rail station is proposed to be located - St. Augustine, Daytona Beach, Cocoa, Titusville, Melbourne, Vero Beach, Fort Pierce, and Stuart, scheduled air service is available at only three - St. Augustine, Daytona Beach, and Melbourne. Among these eight cities, scheduled intercity bus service is available at five - St. Augustine, Daytona Beach, Titusville, Melbourne, and Fort Pierce. Local transit buses operate in numerous municipalities along the corridor.

Population in Florida and in the corridor is forecasted to increase by some 70% between the years 2005 and 2040, as referenced in the *2006 Florida Intercity Passenger Rail Vision Plan, Executive Summary, Pg.3* (FDOT, August 2006). The future will bring transportation challenges to the corridor, including highway and airport congestion caused by continued growth, increasing transportation costs as the cost of oil increases over the long-term, and the aging of the population which in-turn increases a preference for and dependence upon public transportation modes. Annual intercity travel throughout the state is anticipated to double from 100 million to 200 million between 2005 and 2020, and increase further to 230 million trips by 2040; intercity trips between selected major markets statewide are forecasted to roughly triple from 35 million in 2000 to 113 million by 2040; the northeast Florida - Southeast corridor portion of those major market intercity trips is forecasted to increase from 1.30 million in 2000 to 2.28 million in 2020 and 3.76 million in 2040 as referenced in the *Florida Intercity Passenger Rail Vision Plan, Executive Summary, Pg.3* (FDOT, August 2006). The proposed Florida East Coast (FEC) Amtrak service will provide a means for accommodating a portion of the anticipated growth, more cost effective than relying entirely upon the existing modes of highway and air. Reviving passenger rail in the corridor also affords an opportunity to incrementally develop rail service in the corridor, carrying an ever greater number of travelers more efficiently than by auto or air in much the same way as the Pacific Coast Corridor in California has grown from a single daily Amtrak train in each direction to a dozen each way plus even more commuter rail service provided by Metrolink and Coaster. Development of the proposed FEC Amtrak service, as well as facilitation of future additional service development, is consistent with adopted plans on both the state and local levels in the corridor, including the 2006 Florida Intercity Passenger Rail Vision Plan, and the 2009 Florida State Rail Plan. The proposed FEC Amtrak service is not only consistent with providing a transportation alternative that is more cost effective and environmentally friendly than automobiles or airplanes, but that promotes more geographically concentrated real estate development or re-development, which is more environmentally sustainable in the long term.

# Chapter 3

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The preliminary timetables provided by Amtrak are based on a computer-based Train Performance Calculator (TPC) analysis. Three phases of the proposed FEC Amtrak service were developed for consideration for Options D and E. Phase 1 consists of splitting the Silver Star daily at Jacksonville (14 trips per week) and providing one additional daily corridor service roundtrip between Miami and Jacksonville over the FEC corridor (14 trips per week). As stated previously, Phase 1 is the same for both Options D and E and is the subject of this application.

Phase 2 includes, in addition to Phase 1 service: The addition of three daily corridor service roundtrips (42 trips per week) between Miami and Cocoa (Option D); or the addition of one additional roundtrip and two additional weekday roundtrips between Miami and Vero Beach (Option E) over the FEC corridor (34 trips per week).

Phase 3 would include one roundtrip weekday train from Jacksonville to Cocoa for Option D and one roundtrip weekday train from Jacksonville to Vero Beach for Option E.

It should be noted that no decisions have been made by Florida Department of Transportation (FDOT) on whether to implement Option D or Option E for Phases 2 and 3. However, for the purposes of this Service Development Plan, Option D modeling results will be shown.

## 3.1. Revenue Forecasts

Revenue forecasts for Options D and E Phases 1 and 2 were developed by Amtrak and are provided in Attachment A. Forecasted ticket revenues, ridership and passenger miles were provided by the Amtrak Market Research Department. Amtrak forecasts food and beverage revenue based on the per rider average for a comparable route. Food and beverage revenues for first class riders, where applicable (including sleepers) are adjusted for the food and beverage revenue transfer, which accounts for the food and beverage revenue being included in the ticket revenue forecast. As shown in Attachment B, ticket revenue (which includes food and beverage) is forecast for the Phase 1 (Options D and E) corridor train to be approximately \$1.6 million per year. The total train revenues for Phase 1 services are expected to be approximately \$10.1 million. For Phase 2, Option D ticket revenue for the FEC corridor trains is estimated at \$3 million per year and Option E is estimated at approximately \$2.4 million per year. As indicated previously, Phase 3 revenue forecasts for Option D and E were not estimated.

## 3.2. Operating Timetables

Operating timetables as provided by Amtrak are provided in Attachment B for Option D Phases 1, 2, and 3. As shown in Attachment B, the end-to-end travel times are estimated to be 6:34 for long distance trains and 6:08 for corridor trains assuming an increase in the highest maximum authorized speeds (MAS) on the FEC to 90 MPH and one minute dwell times at each of thirteen intermediate stations.

### **3.3. Equipment Consists**

Equipment consists for Option D Phases 1, 2, 3 were provided by Amtrak in Attachment B. As shown, the train consists include one locomotive and six cars. Annual total train miles for Phase 1 is estimated at 256,230, 644,310 for Phase 2 and 729,810 for Phase 3.

### **3.4. Rail Infrastructure Characteristics**

Rail infrastructure characteristics are described in the Draft Environmental Assessment and the Preliminary Engineering Report submitted as part of this application.

In summary, the existing Florida East Coast Railway along this 350 mile corridor consists mostly of a single track line within the 100-ft right of way. This track, which is maintained to Class IV standards (per CFR 49.213), runs on 132 lb. continuously-welded rails (CWR) on concrete ties. Along this corridor, the tracks traverse over 400 roadway crossings and four major water crossings (bridges), including St. Johns River, Sebastian River, St. Lucie River, and Jupiter River. In addition to this single track, there are 26 passing sidings, areas with double tracks for industrial commercial use, and several maintenance yards at strategic locations along the corridor (Bowden, Wilson, Fort Pierce, and West Palm Beach Yards). The FEC Railway currently services freight traffic only with a maximum operating speed of 60 mph. Phase 1 of this Corridor Service Development Program includes several mainline track improvements to allow for Amtrak passenger trains to operate along the corridor with continued FEC freight service. The existing Class IV track will be upgraded to Class V and includes over 29 miles of track work at the existing horizontal curves to lengthen the spiral in the curve and increase superelevation to allow for trains to operate at the higher speeds; 90 mph for passenger trains. However, it should be noted that there are several areas along the corridor, including other track curves that do not allow the higher speeds of operation without rebuilding bridges and incurring much higher costs. The FEC Track Charts included herein provide locations of the mainline track improvements proposed, existing FEC operating speed, and proposed Amtrak operating speed. Final Design Plans for construction of these improvements will be subsequently developed.

As previously noted, the crossover between FEC Railway and the CSX line, and South Florida Rail Corridor (SFRC) corridor is proposed at West Palm Beach (Northwood). The Preferred Alternative for the Northwood Connection has been developed and are included in this document. The proposed track work at Northwood includes constructing double tracks adjacent to the existing single track in an east-west direction. Wyes are proposed at the tie-in points with FEC Railway and SFRC line for full movement and connectivity between both mainlines. However, double tracks are proposed for the north to west and west to south track connections to provide for higher rail traffic for exiting FEC freight service, proposed Amtrak service, and new extension of Tri-Rail service to Jupiter. Some right-of-way acquisition will be required for this connection.

### **3.5. Outputs**

Operational modeling outputs as provided by Amtrak for Option D Phases 1, 2, and 3 are provided in Attachment B.

### **3.6. Equipment and Train Crew Scheduling**

Attachment B contains information on potential crew couplets for Option D Phases 1, and 2. This information was developed by Amtrak.

### **3.7. Terminal, Yard and Support Operations**

For Phase 1, the crew base will be developed at Jacksonville. In addition, as indicated in the modeling methodology, Amtrak's current station at Hialeah is closed but it continues to operate as a crew base and train layover/service facility. Hialeah will be used to operate a crew base and train layover/service facility once the FEC Amtrak Passenger Service system is implemented for Phase 2.

# Chapter 4

## Capital Needs

Capital cost estimates have been prepared to reflect the cost of implementation of Phase 1 of the proposed FEC Amtrak service. The estimated cost of infrastructure improvements for Phases 1 through 3 is \$109 million. Rolling stock capital costs for Phase 1 are estimated at \$110.250 million. Soft costs are estimated at \$30.6 million, making the estimated overall cost \$250 million, and leaving the capital costs to implement subsequent options to consist of essentially only additional rolling stock. Capital costs are shown in the summary table below and detailed cost estimates are included in Attachment C.

<b>CAPITAL COST ESTIMATE</b>		
<b>STANDARD COST CATEGORIES</b>	<b>DESCRIPTION</b>	<b>UNIT COST</b>
<b>10 TRACK STRUCTURES AND TRACK</b>		
	<b>Total for Category 10</b>	<b>\$17,839,000</b>
<b>20 STATIONS, TERMINALS, INTERMODAL</b>		
	<b>Total for Category 20</b>	<b>\$28,688,000</b>
<b>40 SITEWORK, RIGHT OF WAY, LAND, EXISTING IMPROVEMENTS</b>		
	<b>Total for Category 40</b>	<b>\$33,451,955</b>
<b>50 COMMUNICATIONS &amp; SIGNALING</b>		
	<b>Total for Category 50</b>	<b>\$29,111,000</b>
	<b>TOTAL CONSTRUCTION COSTS W/ PURCHASE OF REAL ESTATE</b>	<b>\$109,089,955</b>
	<b>TOTAL CONSTRUCTION COSTS W/O PURCHASE OF REAL ESTATE</b>	<b>\$79,651,955</b>
	<b>TOTAL GENERAL CONTRACTOR CONSTRUCTION COSTS W/O PURCHASE OF REAL ESTATE</b>	<b>\$32,701,955</b>
	<b>TOTAL RR FORCE ACCOUNT CONSTRUCTION COSTS</b>	<b>\$46,950,000</b>
<b>70 VEHICLES</b>		
	<b>Total for Category 70</b>	<b>\$110,250,000</b>
<b>80 PROFESSIONAL SERVICES (applies to Cats. 10-60)</b>		
	<b>Total for Category 80</b>	<b>\$21,027,165</b>
<b>90 UNALLOCATED CONTINGENCY</b>		
	<b>Total for Category 90</b>	<b>\$7,965,196</b>
<b>100 FINANCE CHARGES</b>		
	<b>Total for Category 100</b>	<b>\$1,593,039</b>
	<b>TOTAL</b>	<b>\$249,925,354</b>

This infrastructure cost estimate includes construction costs organized by standard cost categories, real estate acquisition for ancillary property such as station sites, railroad force account work, rolling stock, professional services including survey, design and construction support, construction contingency of five percent, and interest charges during construction. The estimates include the investments necessary to accommodate all phases of any of the proposed Versions; they do not include provision for future replacement of original system components, which will be addressed separately based on an assumed average service life of all infrastructure improvements and rolling stock.

The infrastructure estimate was developed using the bottom-up method, by which site-specific quantities were estimated and unit costs applied. Unit costs were taken from recent, relevant in various parts of the U.S., including Florida. Adjustments to unit costs were made, where necessary, to reflect regional differences in costs.

Rolling stock requirements were analyzed by Amtrak, based on the preliminary timetables, including anticipated reliable equipment rotations and the need for spare vehicles. The equipment utilization analysis is provided as Attachment C. Rolling stock requirements, as shown in Attachment E for Phase 1 consist of 2 locomotives, 2 cab cars, 11 coaches, 1 food car, 4 sleeping cars, and 4 baggage cars for long distance and corridor service in Phase 1. For Phase 2, an additional 3 locomotives, 3 cab cars, 6 coaches and 3 food cars would be needed.

Estimated rolling stock costs assumed all new equipment, but the fleet ultimately deployed on the FEC will likely include both new and rehabilitated existing equipment. Specifically, at least three potential sources of equipment have been identified for the FEC Amtrak Service: a planned procurement of new single-level, long distance cars; an anticipated, Amtrak-led procurement of a fleet of next-generation corridor cars and associated locomotives; and, refurbishment of existing Amtrak cars stored unserviceable. The new single-level equipment procurement is anticipated to include some 200 cars in a variety of configurations including baggage, coach, sleeper and diner; this procurement is the subject of a funding request separate from this application. The new corridor cars and associated locomotives are anticipated to be procured through the efforts of the Section 303 Equipment Committee, which was formed in response to Section 303 of the Passenger Rail Investment and Improvement Act of 2008 and which requires Amtrak to “establish a Next Generation Corridor Equipment Pool Committee to design, develop specifications for, and procure standardized next-generation corridor equipment.” FDOT is subject to Florida statutes that may limit its ability to effectively participate in any joint procurement that may come out of the Section 303 Committee’s efforts; however participation is being explored by FDOT to maximize the possibility of conforming the joint procurement process and the relevant Florida statutory requirements. Lastly, Amtrak’s existing fleet includes approximately 70 cars previously stored unserviceable and now planned to be repaired for operation using funds to be obtained under a separate ARRA grant; some of these cars may be available to partially fulfill the FEC Amtrak Service equipment requirements.

### **4.1. Capital Funding**

The majority of the capital funding for the project will come from under the High Speed Intercity Passenger Rail Program (HSIPR) and the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), which complement the American Recovery and Reinvestment Act of 2009 (ARRA). The total amount of federal funding that is being requested within this application is \$250 million. However, it is anticipated that any station sites located on municipal right-of-way will be donated to the project. It is unknown at this stage of project development the amount of

in kind match associated with the right-of-way donation due the fact that detailed right of way cost estimates will be initiated as part of final design of the project. As the project moves forward through the project development process, the in-kind match will be identified and quantified.

However, FDOT, through its Strategic Intermodal System (SIS) program, has invested over \$38.3 million in rail capacity enhancements on the FEC Railway. These capacity improvements to FEC rail infrastructure have enhanced the movement of freight throughout the east coast of Florida and facilitates the restoration of Intercity Passenger Rail Service along the FEC and should be included as part of the in kind match.

In addition, to the SIS monies FDOT has invested on the FEC corridor to facility the FEC Amtrak Passenger Corridor project, FDOT has invested state money on the South Florida Rail Corridor (SFRC) to ensure that Tri-Rail, Amtrak Intercity Rail, and FEC Passenger Rail is able to utilize the rail corridor. The spreadsheet contained in Attachment D is a summary of state and federal monies invested on the SFRC. A portion of the capital projects listed in Attachment D is 100% state monies with no federal match. This equates to nearly \$70 million in state money investiture to ensure the that future passenger projects such as the FEC Amtrak Corridor project will be able to utilize the SFRC. These monies may also account for in kind match. Specific projects in Attachment accounted in the nearly \$70 million match are as follows:

- 406912-1 - New River Bridge
- 406919-1 - Rehab New River Bridge
- 418305-1 - Deerfield Station
- 419484-1 - SFRC Noise Wall
- 420344-1 - Station Improvements
- 420546-1 - Intermodal Access Improvements
- 408427-2 - SFRC Extension
- 420580-1 - Intermodal Passenger Amenities
- 421870-1 - Station Development
- 421871-1 - Rolling Stock
- 424860-1 - New River Bridge Security Cameras

Finally, local jurisdictions along the corridor have made several improvements near station areas to facilitate the implementation of the FEC Amtrak Passenger Corridor service. These locally funded projects are described in Attachment D and account for an approximate in kind match of over \$15 million.

In summary, as shown in the table below, the state and local governments have invested over \$123 million in projects along the proposed project corridor to facilitate the implementation of the FEC Amtrak Passenger Rail Service. These dollars have not been matched with any federal dollars and can be used as an in kind match for the project.

# Florida East Coast Corridor Amtrak Service

IDENTIFICATION OF LOCAL ASSETS & IMPROVEMENTS FOR GRANT MATCH					
Agency	Local Asset/Improvement	Owner/ Sponsor	Year of Expenditure	Estimated Value	Source of Funds
FDOT	Strategic Intermodal System	FDOT	To Present	\$38,300,000	State
	New River Bridge (408912-1) - SFRC	FDOT	2008 - 2009	\$11,344,857	State
	New River Bridge Rehab (408919-1) - SFRC	FDOT	2009 thru 2014	\$30,385,713	State
	Deerfield Station (418305-1) - SFRC	FDOT	2009 thru 2011	\$1,837,723	State
	SFRC - Noise Wall (419484-1)	FDOT	2007 - 2008	\$100,781	State
	Station Improvements (420344-1)	FDOT	2007 thru 2014	\$11,498,000	State
	Intermodal Access Improvements (420548-1)	FDOT	2007 - 2008	\$99,710	State
	Intermodal Passenger Amenities (420580-1)	FDOT	2007 - 2008	\$111,300	State
	Station Development (421870-1)	FDOT	2007	\$500,000	State
	Rolling Stock (421871-1)	FDOT	2008	\$8,000,000	State
	SFRC - Extension (408427-1)	FDOT	2012 through 2013	\$6,000,000	MPO
	New River Bridge Security Cameras (424860-1)	FDOT	2009	\$65,000	State
<b>SUB-TOTAL</b>				<b>\$108,233,084</b>	
Stuart	Station Area Land & Parking	Martin County, leased to City for 40 yrs @ \$8K/year	2010/11	\$320,000	Martin County
	Station Building Maintenance	City of Stuart (\$15K/yr x 40 yrs)	2010/11	\$600,000	City of Stuart
	Downtown Cross Walk Program	City of Stuart/Martin County	2010/11	\$300,000	Martin County MPO (enhancement funds)
	Woodlawn Park Improvements (sidewalks, parking adjacent to station)	City of Stuart	2008/09 thru 2010/11	\$706,000	City of Stuart & CDBG
	Downtown Wayfinding Signage Program (annual)	City of Stuart	2010/11	\$10,000	City of Stuart
	Martin Luther King Jr. Boulevard & Dixie Highway Intersection Improvements	City of Stuart & Martin County	2008	\$1,800,000	City of Stuart & Martin County
	Waste Water Plant Beautification & Aromatic Improvements (adjacent to station)	City of Stuart	2009	\$1,500,000	City of Stuart
<b>SUB-TOTAL</b>				<b>\$5,038,000</b>	
	US1 Improvements by Station <sup>1</sup>	FDOT	2009	\$2,137,622	FDOT
	City Roadway Improvements by Station <sup>2</sup>	City of Vero Beach	2010	\$228,028	City of Vero Beach
	Roadway Improvements by Station <sup>3</sup>	City of Vero Beach	2011	\$58,500	City of Vero Beach
	Model Block (infrastructure) by Station <sup>4</sup>	City of Vero Beach	2010/11 thru 2014/15	\$850,000	City of Vero Beach
<b>SUB-TOTAL</b>				<b>\$3,274,150</b>	
	Strawbridge Ave Medians Project (pedestrian safety & beautification adjacent to station)	City of Melbourne	2010/11	\$600,000	City of Melbourne/CRA
	Downtown Wayfinding Signage Program (Phase 1)	City of Melbourne	2010/11	\$30,000	City of Melbourne/CRA
	Property Acquisition (.17 ac lot adjacent to station)	City of Melbourne	2010/11	\$136,000	City of Melbourne/CRA
	Downtown Municipal Parking Structure	City of Melbourne	2007/08 thru 2009/10	\$5,000,000	City of Melbourne/CRA
<b>SUB-TOTAL</b>				<b>\$5,766,000</b>	
St Augustine	City Entryway/Directional Signage Program	City of St Augustine	2009/10 thru 2010/11	\$475,000	FDOT & City of St Aug
	Sidewalk Connection from Station to Downtown	City of St Augustine	2010	\$20,000	City of St Aug
	Downtown Sidewalk (ADA) Improvement Pgm	City of St Augustine	2008/09 thru 2011/12	\$600,000	City of St Aug
	North City Entrance Park (adjacent to station)	City of St Augustine	2010/11	\$10,000	City of St Aug
<b>SUB-TOTAL</b>				<b>\$1,105,000</b>	
<b>GRAND TOTAL</b>				<b>\$123,411,234</b>	

SOURCE: All data was provided by staff of the eight station cities and FDOT.

**FOOTNOTES:**

<sup>1</sup> Project description: The project scope consists of milling and resurfacing, rehabilitation and restoration (RRR), sidewalk improvements, signalization and landscaping from 20th Place to a point south of 33rd Street on SR 5/US1 (FDOT Project # 415291 1 52 01).

<sup>2</sup> Project description: FY 2009/10 City-funded sidewalk and roadway improvements within 1/2-mile of station location

<sup>3</sup> Project description: FY 2010-11 proposed City-funded (in CIP) sidewalk and roadway improvements within 1/2-mile of station location

<sup>4</sup> Project description: FY 2009-2014 City-funded infrastructure "Model Block" program within 1/2-mile of station location (parking, sidewalk, drainage, paving)

# Chapter 5

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## Operating and Financial Results

Amtrak provided the operating costing methodology and assumptions for Option D Phases 1 and 2.

### 5.1. Summary

This section summarizes the process that the Amtrak Financial Analysis Department follows in calculating the expected financial impact from proposed service changes to passenger rail service provided by Amtrak.

All estimates are based on specific information describing the proposed changes. This usually includes:

- The proposed schedule,
- The required additional equipment,
- The proposed changes to service, and
- Any proposed changes to operations.

Each proposal is reviewed by Finance employees familiar with Amtrak operations, data bases and financial systems. Each analysis is adapted to the specific intricacies of the request. Unit costs and averages used to calculate and allocate costs are specifically selected to fit the proposed service, schedule and operation.

Along with the forecasted change to riders, passenger miles, revenue, costs, net impact, and train miles, on most analyses, Amtrak also provides the cost recovery statistic and the cost per train mile to help facilitate the validation and understanding of the financial analysis.

### 5.2. Costs

Amtrak's process utilizes information provided by other Amtrak departments as well as average unit costs provided by APT, Amtrak's cost allocation system. Costs are calculated and allocated at a detailed level. We use unit costs that are selected specifically for the targeted cost area. Costs are inflated to the targeted reporting year, using specific inflation rates at the account level (e.g., wages, salaries, fuel, etc.). The unit cost that is listed below for each cost area.

**Host Railroad costs:** Host railroad costs are based on a per train mile rate, provided by the Amtrak Host Railroad Department. The rate includes the access charge and the incentive charge.

**Fuel Cost:** Amtrak uses a fuel consumption model to estimate the required gallons. The model takes into account the weight of each car, the proposed schedule and the specific grade changes of the track. The estimated required gallons are used to determine the percent change from the current gallons (of the targeted route). That percentage is used to calculate the change in current fuel costs.

**T&E Labor Costs:** T&E labor costs are provided by the Amtrak Crew Management Department. The estimate of these costs are based on the specific schedule and the current or proposed crew bases.

**OBS Costs:** OBS labor costs are provided by the Amtrak Crew Management Department. The estimate of these costs are based on the specific schedule and the current or proposed crew bases.

**Commissary Costs:** Two separate food and beverage commissary costs are forecasted: direct costs and allocated fixed costs. Direct commissary costs are based on the average direct cost per rider from a comparable route. Fixed costs are based on the proposed schedule and the endpoints juxtaposition to Amtrak's existing commissary facilities.

**Yard Costs:** If the proposed train operations require switching from diesel to electric, or include a large facility where yard expenses are incurred to transport equipment to a yard, yard costs are estimated using a cost per frequency average.

**Transportation Management and Training Costs:** Transportation management and training costs are based on unit trips.

**Operations Management Costs:** Operations management costs are based on unit trips.

**Bus Costs:** Bus cost estimates are provided by the Operations Support Department. The estimate of these costs are based on the proposed schedule and the appropriate bus rates.

**Mechanical Costs:**

- **Turnaround Costs:** Turnaround costs are based on the proposed change in turns and layovers.
- **Car and locomotive maintenance costs:** Maintenance costs are based on the proposed change in unit miles.
- **Back shop costs:** Back shop costs are based on the proposed change in unit miles.
- **MoE supervision and overhead:** MoE supervision and overhead costs are calculated based on the proposed change to mechanical direct costs.

**Station Costs:** Station costs are based on the forecasted change in riders.

**Amtrak Maintenance of Way Costs:** Amtrak maintenance of way costs are based on the proposed increase in train miles over Amtrak maintained track.

**Sales and Marketing Costs:** Sales and marketing costs are based on the forecasted change in passenger related revenues.

**Commission Costs:** Commission costs are based on the forecasted change in passenger related revenues.

**Insurance Costs:** Insurance costs are based on the forecasted change in passenger miles.

**Passenger Inconvenience Costs:** Passenger inconvenience costs are based on the forecasted change in passenger miles.

**Police & Security / Environmental Safety Costs:** Police & security / environmental safety costs are based on the forecasted change in unit trips.

### 5.3. Financial Results Summary

The financial impact from the proposed FEC Amtrak Passenger Service was developed by Amtrak and is provided in Appendix E. A summary of the financial analysis results as provided by Amtrak for Phase 1 and Phase 2 for Options D and E are provided below. The table includes the forecasted operating deficit for the Phase 1 corridor train.

Financial Analysis Results					
Allocated Financial Impact (1)	Phase 1, Option D/E			Phase 2 (2)	
	Star	Corridor	Total	Option D Corridor	Option E Corridor
Riders	135,800	86,800	222,600	190,300	150,100
Revenue (million)					
Ticket Revenue		\$1.5		\$3.0	\$2.3
Food and Beverage Revenue		0.0		0.1	0.1
Total Revenue		\$1.6		\$3.1	\$2.4
Expenses (million)					
Host Railroad		\$2.0		\$5.3	\$4.0
Fuel		0.8		2.2	1.8
Power - Electric Traction		0.0		0.0	0.0
T&E (Labor & Support)		1.8		5.2	3.4
OBS (Labor & Support)		0.3		1.1	0.9
Commissary (F&B)		0.1		0.2	0.2
Yard Ops		0.0		0.0	0.0
Operations Management		0.3		1.3	1.3
Motor Coach		0.0		0.0	0.0
Maintenance of Equipment		0.9		4.7	4.7
Stations		0.4		0.8	0.8
Amtrak Maintenance of Way		0.0		0.0	0.0
Sales and Marketing		0.2		0.37	0.29
Commissions		0.0		0.1	0.1
Insurance		0.1		0.14	0.10
Passenger Inconvenience		0.0		0.02	0.01
Police, Environmental, and Safety		0.1		0.3	0.4
Sub-total Direct Operating Costs		\$6.9		\$21.8	\$17.9
Net (Rev. – Dir. Op. Costs) (mil)		-\$5.3		-\$18.7	-\$15.5
Cost Recovery (Rev/Dir Costs)		23%		14%	14%
Cost per Train Mile		\$27		\$32	\$36

1) 2010 Dollars

2) Both Option D and Option E for Phase 2 are incremental to the Corridor portion of Phase 1

3) Amtrak absorbs operating costs for Star

## **5.4. Funding for Operating Deficits**

As indicated previously, the proposed service plan for Phase 1 consists of splitting Amtrak's current Silver Star Service in Jacksonville and adding a corridor service train between Jacksonville and Miami. The Silver Star is a part of the National System operating since the 1970's. The new service would entail restored intercity passenger train service via the FEC Railway. Since the Silver Star is a part of the National Intercity Rail System, Amtrak will pay for the operating deficit for this train. The state of Florida will pay for the operating deficit for the corridor train in Phase 1 which is estimated in the above table at \$5.3 million per year. FDOT will program the required amount for the operating deficit for Phase 1 through FDOT's 5-year Work Program. FDOT's Financial Structure is provided in Section 5.4.1. The state of Florida will be responsible for its fair share of the designated operating deficits for the future state corridor service (Phases 2 and 3). The final Operating Plan between FDOT and Amtrak will define the allocation methodology. FDOT will allocate the required amount for the operating deficit for Phase 1 through FDOT's 5-year Work Program.

Maintenance at each of the eight stations will be paid by the local municipalities. Resolutions of support and a commitment to funding maintenance are included in the resolutions provided in Attachment G of the application.

### ***5.4.1. FDOT Financial Structure***

FDOT has a sound financial structure that has been favorably rated by the market based upon: legislatively-established financial control processes; strong internal controls; dedicated long-term trust-funded revenue streams; and a multi-year work program process that includes annual legislative appropriations in support of the work program. These attributes support the long-term stability of the transportation program, including debt repayment.

The following processes assure the systems and controls of the Department:

- Legislatively Defined
  - Five-year Work Program (s. 339.135, FS)
  - Program and Resource Plan (s. 339.135, FS)
  - Five-year Finance Plan (s. 339.135, FS)
  - Three-year Cash Forecast (s. 216.134, FS)
  - Annual Review by the Florida Transportation Commission
- Chapter 339 of the Florida Statutes (FS) requires the Department's programs to be driven by "policies" and "program objectives". These are outlined in the Florida Transportation Plan. The program levels are balanced to revenue projections of available funding from the finance plan. The Five-Year Tentative Work Program and annual Budget Request are sent to the Legislature for appropriation as required by law (s. 339.135, FS). Appropriations are allocated according to broad categories by the Legislature.

### ***5.4.2. Five-Year Work Program Development Process***

As a result of input at the local level, s. 339.135 (4), FS states that "It is the intent of the Legislature that the first three years of the Adopted Work Program stand as the commitment of the state to undertake transportation projects that local governments may rely on for planning purposes and in the development and amendment of the capital improvement elements of their local government comprehensive plans."

The Secretary of Transportation “Adopts” the Five-Year Work Program with first year appropriation by the Legislature (with opportunity for subsequent events amendments) and funds are allocated to the Department’s districts. This process is referred to as “Policy to Projects.” The intent is to meet local needs and provide a stable multiple year program driven by overall policy. The first three years of the five year work program represents the state’s commitment to local governments and citizens of Florida. The process provides the long-term project funding while adapting to local needs as they evolve.

The Department’s Work Program contains multiple year commitments that extend outside of the five-year work program cycle. These types of projects are programmed for the full term of the agreement within the work program system. Each year as the department builds the next five-year work program, a new fifth year is added to the existing program which captures the next planned year of the multi-year commitments. In addition, the department builds ten-year specific plans for the Strategic Intermodal System and 20-year plans at a high level. Project commitments are included in these longer-term plans. Finance plans assure against any over-commitments. An example of this type of commitments that has been reviewed and rated by the market is the Miami Intermodal Center TIFIA Loan repayment. The project received investment grade ratings from the market.

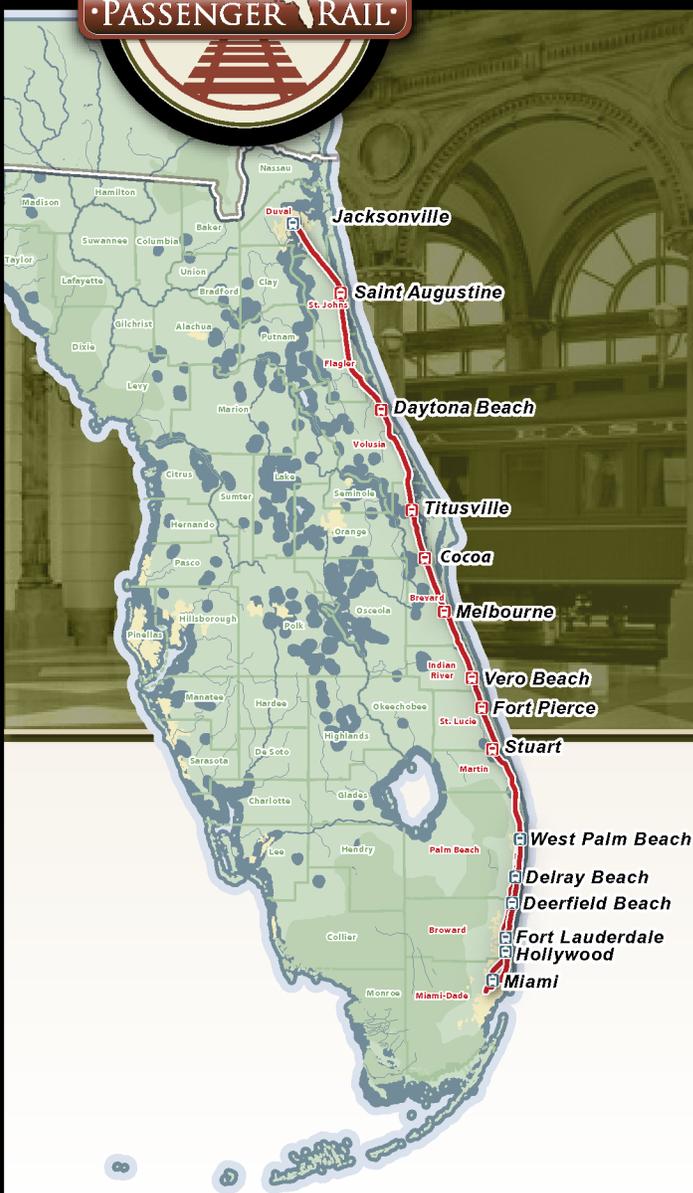
Revenue forecasting is accomplished through the Revenue Estimating Conference (REC). The Transportation REC is comprised of principle members of the Executive Office of the Governor, Division of Economic and Demographic Research of the Joint Legislative Management Committee, professional staff of the House and Senate committees, and participating members from the Departments of Transportation, Revenue, and Highway Safety. The REC provides projections, as approved by consensus of the principles, of revenues and other economic assumptions for use in all state planning and budgeting activities. The Transportation REC meets and updates its projections of transportation revenues at least twice annually (Section 216.134, Florida Statutes). FDOT also receives general revenue from documentary stamp proceeds which are estimated by the General Revenue REC.

The FDOT Comptroller prepares and publishes each month a multi-year monthly cash forecast for the trust funds. The results are provided to the Department's Executive Board to assure management that cash is available to meet obligations as they come due for the near and long term.

All of the long-term projects are part of the overall FDOT Work Program and are programmed, budgeted, managed, and paid the same as all other FDOT projects. Cash flow payouts are developed by the FDOT in the finance plan and cash is forecast based on project and phase types such as roadway design, roadway construction, major bridge construction, major buildings, etc. This process has been in place for many years and is routinely monitored, balanced, and reconciled to actual amounts in two independent systems (finance plan and cash forecast). This is a very sophisticated process and is well respected in Florida and across the country.

# ATTACHMENT A

## FORECAST RESULTS FOR PROPOSED NEW FEC SERVICE OPTIONS



**Forecast Results for Proposed new FEC Service Options**  
(prepared 06/14/10)

<u>Route</u>	<u>Annual Totals</u>			<u>Annual Increments for Schedule Option D**</u>					
	<u>FY10 Baseline*</u>			<u>Phase I</u>		<u>Phase II</u>			
	<u>Ridership</u>	<u>Ticket Revenue</u>	<u>Passenger Miles</u>	<u>Ridership</u>	<u>Ticket Revenue</u>	<u>Passenger Miles</u>	<u>Ridership</u>	<u>Ticket Revenue</u>	<u>Passenger Miles</u>
Silver Star									
Main Section									
Coach	367,100	\$22,431,000	184,150,000	(4,200)	(\$366,000)	(4,140,000)	(4,200)	(\$366,000)	(4,140,000)
Sleeper	<u>25,300</u>	<u>\$6,232,000</u>	<u>22,200,000</u>	<u>(3,900)</u>	<u>(\$1,168,000)</u>	<u>(4,820,000)</u>	<u>(3,900)</u>	<u>(\$1,168,000)</u>	<u>(4,820,000)</u>
SUBTOTAL	392,400	\$28,663,000	206,350,000	(8,100)	(\$1,534,000)	(8,960,000)	(8,100)	(\$1,534,000)	(8,960,000)
FEC Section									
Coach	0	\$0	0	132,700	\$6,954,000	66,440,000	119,300	\$6,767,000	65,140,000
Sleeper	<u>0</u>	<u>\$0</u>	<u>0</u>	<u>15,800</u>	<u>\$3,919,000</u>	<u>14,720,000</u>	<u>15,500</u>	<u>\$3,911,000</u>	<u>14,690,000</u>
SUBTOTAL	<u>0</u>	<u>\$0</u>	<u>0</u>	<u>148,500</u>	<u>\$10,873,000</u>	<u>81,160,000</u>	<u>134,800</u>	<u>\$10,678,000</u>	<u>79,830,000</u>
TOTAL	392,400	\$28,663,000	206,350,000	140,400	\$9,339,000	72,200,000	126,700	\$9,144,000	70,870,000
Silver Meteor									
Coach	310,600	\$23,917,000	177,440,000	(3,500)	(\$362,000)	(3,300,000)	(3,500)	(\$362,000)	(3,300,000)
Sleeper	<u>39,500</u>	<u>\$11,021,000</u>	<u>37,150,000</u>	<u>(1,100)</u>	<u>(\$370,000)</u>	<u>(1,390,000)</u>	<u>(1,100)</u>	<u>(\$370,000)</u>	<u>(1,390,000)</u>
TOTAL	350,100	\$34,938,000	214,590,000	(4,600)	(\$732,000)	(4,690,000)	(4,600)	(\$732,000)	(4,690,000)
New FEC Corridor Service	NO SERVICE			86,800	\$1,514,000	10,840,000	190,300	\$2,969,000	20,970,000
<b>GRAND TOTAL</b>	<b>742,500</b>	<b>\$63,601,000</b>	<b>420,940,000</b>	<b>222,600</b>	<b>\$10,121,000</b>	<b>78,350,000</b>	<b>312,400</b>	<b>\$11,381,000</b>	<b>87,150,000</b>

<u>Route</u>	<u>Annual Totals</u>			<u>Annual Increments for Schedule Option E**</u>					
	<u>FY10 Baseline*</u>			<u>Phase I</u>		<u>Phase II</u>			
	<u>Ridership</u>	<u>Ticket Revenue</u>	<u>Passenger Miles</u>	<u>Ridership</u>	<u>Ticket Revenue</u>	<u>Passenger Miles</u>	<u>Ridership</u>	<u>Ticket Revenue</u>	<u>Passenger Miles</u>
Silver Star									
Main Section									
Coach	367,100	\$22,431,000	184,150,000	(4,200)	(\$366,000)	(4,140,000)	(4,200)	(\$366,000)	(4,140,000)
Sleeper	<u>25,300</u>	<u>\$6,232,000</u>	<u>22,200,000</u>	<u>(3,900)</u>	<u>(\$1,168,000)</u>	<u>(4,820,000)</u>	<u>(3,900)</u>	<u>(\$1,168,000)</u>	<u>(4,820,000)</u>
SUBTOTAL	392,400	\$28,663,000	206,350,000	(8,100)	(\$1,534,000)	(8,960,000)	(8,100)	(\$1,534,000)	(8,960,000)
FEC Section									
Coach	0	\$0	0	132,700	\$6,954,000	66,440,000	123,800	\$6,835,000	65,710,000
Sleeper	<u>0</u>	<u>\$0</u>	<u>0</u>	<u>15,800</u>	<u>\$3,919,000</u>	<u>14,720,000</u>	<u>15,600</u>	<u>\$3,915,000</u>	<u>14,710,000</u>
SUBTOTAL	<u>0</u>	<u>\$0</u>	<u>0</u>	<u>148,500</u>	<u>\$10,873,000</u>	<u>81,160,000</u>	<u>139,400</u>	<u>\$10,750,000</u>	<u>80,420,000</u>
TOTAL	392,400	\$28,663,000	206,350,000	140,400	\$9,339,000	72,200,000	131,300	\$9,216,000	71,460,000
Silver Meteor									
Coach	310,600	\$23,917,000	177,440,000	(3,500)	(\$362,000)	(3,300,000)	(3,500)	(\$362,000)	(3,300,000)
Sleeper	<u>39,500</u>	<u>\$11,021,000</u>	<u>37,150,000</u>	<u>(1,100)</u>	<u>(\$370,000)</u>	<u>(1,390,000)</u>	<u>(1,100)</u>	<u>(\$370,000)</u>	<u>(1,390,000)</u>
TOTAL	350,100	\$34,938,000	214,590,000	(4,600)	(\$732,000)	(4,690,000)	(4,600)	(\$732,000)	(4,690,000)
New FEC Corridor Service	NO SERVICE			86,800	\$1,514,000	10,840,000	150,100	\$2,365,000	16,030,000
<b>GRAND TOTAL</b>	<b>742,500</b>	<b>\$63,601,000</b>	<b>420,940,000</b>	<b>222,600</b>	<b>\$10,121,000</b>	<b>78,350,000</b>	<b>276,800</b>	<b>\$10,849,000</b>	<b>82,800,000</b>

These forecasts are based solely upon information available to AECOM Consult as of 6/14/10.

These forecasts are provided for the sole use of Amtrak. They are not intended for disclosure in a financial offering statement.

Notes: \* FY10 Budget Estimate (prepared April 2010)

\*\* Proposed FEC Schedule Options D & E (provided by Amtrak 6/01/10)

**Forecast Results for Proposed new FEC Service Options**  
(forecasts prepared 6/14/10)

	<b>Incremental ONs &amp; OFFs by Option &amp; Phase*</b>			
	<b>Option D</b>		<b>Option E</b>	
	<b>Phase I</b>	<b>Phase II</b>	<b>Phase I</b>	<b>Phase II</b>
New York, NY	18,169	18,169	18,169	18,169
Newark , NJ	3,123	3,123	3,123	3,123
Philadelphia, PA	3,997	3,997	3,997	3,997
Washington, DC	7,742	7,742	7,742	7,742
Richmond , VA	2,121	2,121	2,121	2,121
Raleigh, NC	10,434	10,434	10,434	10,434
Columbia , SC	5,982	5,982	5,982	5,982
Fayetteville, NC	(19)	(19)	(19)	(19)
Charleston , SC	(141)	(141)	(141)	(141)
Savannah, GA	3,490	3,490	3,490	3,490
Jacksonville, FL (Clifford Lane)	11,990	11,990	11,990	11,990
Palatka, FL	(2,688)	(2,688)	(2,688)	(2,688)
Deland, FL	(930)	(930)	(930)	(930)
Winter Park , FL	(62)	(62)	(62)	(62)
Orlando, FL	126	126	126	126
Kissimmee, FL	247	247	247	247
Lakeland, FL	205	205	205	205
Tampa, FL	336	336	336	336
Winter Haven, FL	361	361	361	361
Sebring, FL	241	241	241	241
Okeechobee, FL	(33)	(33)	(33)	(33)
St. Augustine, FL	11,531	11,531	11,531	11,531
Daytona Beach, FL	18,788	18,788	18,788	18,788
Titusville, FL	11,936	11,936	11,936	11,936
Cocoa Beach, FL	26,962	36,538	26,962	26,962
Melbourne, FL	33,785	46,189	33,785	33,785
Vero Beach, FL	30,103	47,404	30,103	43,609
Ft. Pierce, FL	36,520	58,642	36,520	53,799
Stuart, FL	45,821	79,820	45,821	70,995
Palm Bch Gardens, FL	4,340	6,766	4,340	6,060
West Palm Beach, FL	26,788	40,258	26,788	36,041
Delray Beach, FL	8,003	12,642	8,003	11,111
Deerfield Beach, FL	26,157	42,283	26,157	37,599
Fort Lauderdale, FL	26,217	39,812	26,217	34,658
Fort Lauderdale Airport, FL	1,625	2,600	1,625	2,275
Hollywood, FL	23,893	37,342	23,893	31,542
Miami, FL -- NO FUTURE SERVICE	(85,250)	(85,250)	(85,250)	(85,250)
Miami MetroRail, FL	3,027	10,581	3,027	6,182
Miami, FL (MIC)	120,659	132,623	120,659	127,682
Other Affected Stations**	<u>9,604</u>	<u>9,604</u>	<u>9,604</u>	<u>9,604</u>
<b>TOTAL</b>	<b>445,200</b>	<b>624,800</b>	<b>445,200</b>	<b>553,600</b>

**These forecasts are based solely upon information available to AECOM Consult as of 6/14/10. These forecasts are provided for the sole use of Amtrak. They are not intended for disclosure in a financial offering statement.**

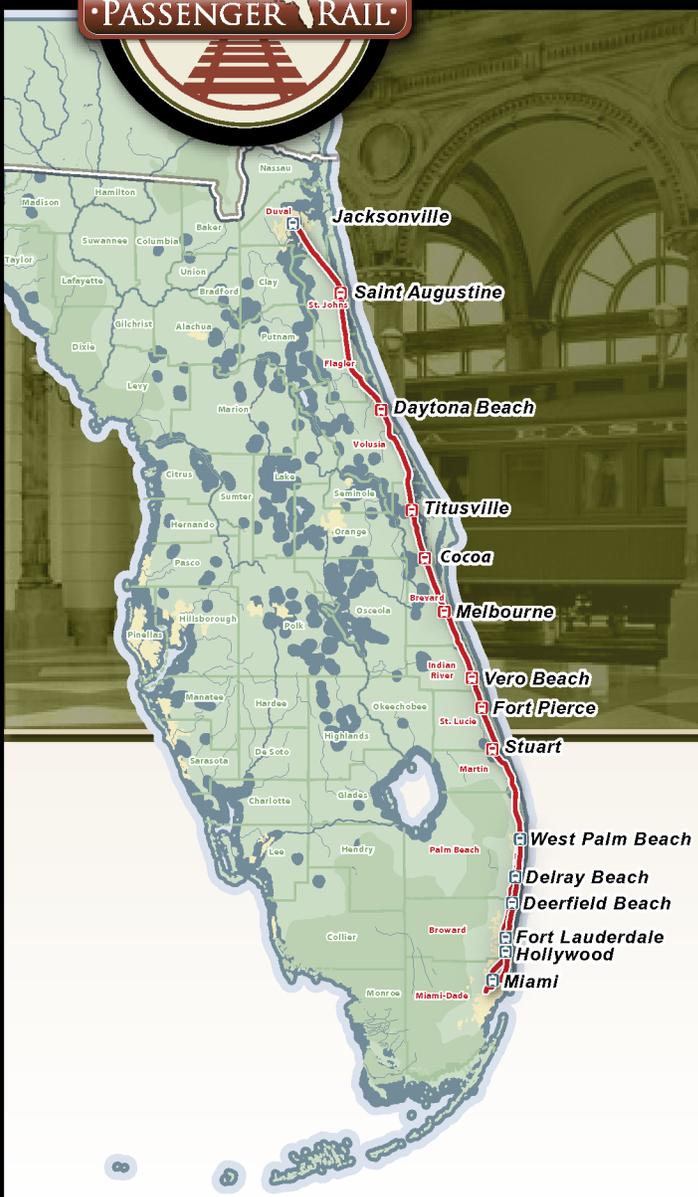
**Notes:**

\* Proposed Schedule Options D & E by Phase (provided by Amtrak 6/01/10)

\*\* Other markets served by the Silver Star and the Silver Meteor between New York and Jacksonville

# ATTACHMENT B

## OPERATING TIMETABLES



**PROPOSED FEC CORRIDOR SERVICE DEVELOPMENT PLAN BETWEEN MIAMI, COCOA AND JACKSONVILLE**

**OPTION 'D'** - Includes split of *Silver Star* and *Silver Meteor* at Jacksonville and intra-Florida corridor services over the FEC Corridor

SOUTHBOUND - Read Down								Station Information				NORTHBOUND - Read Up										
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Mon-Fri	READ DOWN	Miles Fr New York * = via Orlando	Direction	READ UP	Mon-Fri	Daily	Daily	Daily	Daily	Daily	Daily	Daily			
881	883	91	991	885	97	877	869			Train Number		860	870	98	880	992	92	884	886			
FEC Corridor	FEC Corridor	Silver Star	Silver Star	FEC Corridor	Silver Meteor	FEC Corridor	FEC Corridor			Route		FEC Corridor	FEC Corridor	Silver Meteor	FEC Corridor	Silver Star	Silver Star	FEC Corridor	FEC Corridor			
Phase II	Phase II	Existing	Phase I	Phase II	Existing	Phase I	Phase III			Phase		Phase III	Phase I	Existing	Phase II	Phase I	Existing	Phase II	Phase II			
		6:55 A	↔		9:23 A			Ar 977	JACKSONVILLE	Lv			5:33 P	↔								
		7:15 A	↔		9:48 A	4:00 P		Lv 977	Clifford Lane	Ar		12:28 P	5:10 P	↔	9:49 P	10:09 P						
JTC Phase III		7:00 A	↔		9:28 A			Ar 983	JACKSONVILLE	Lv			5:25 P	↔								
		7:25 A	↔		9:53 A	4:10 P	5:30 P	Lv 983	Transp. Center	Ar	8:53 A	12:18 P	5:00 P	↔	9:39 P	9:59 P			JTC Phase III			
			8:04 A	Potential use of Tri-Rail equip.		4:37 P	5:57 P	Lv 1012	St. Augustine, FL	Lv	8:21 A	11:46 A		Potential use of Tri-Rail equip.	9:05 P							
			8:58 A				5:28 P	6:48 P	Lv 1070	Daytona Beach, FL	Lv	7:30 A	10:55 A				8:12 P					
			9:43 A				6:10 P	7:30 P	Lv 1115	Titusville, FL	Lv	6:47 A	10:12 A				7:26 P					
5:30 A	8:45 A	Runs via Tampa	10:02 A	2:20 P	Runs via Orlando	6:28 P	7:48 P	Lv 1131	Cocoa, FL	Lv	6:30 A	9:55 A		Runs via Orlando	12:35 P	7:07 P			7:35 P	8:50 P		
5:52 A	9:07 A		10:25 A	2:42 P		6:50 P		Lv 1153	Melbourne, FL	Lv		9:28 A			12:08 P	6:38 P				7:08 P	8:23 P	
6:24 A	9:39 A		11:00 A	3:14 P		7:22 P		Lv 1188	Vero Beach, FL	Lv		8:59 A			11:39 A	6:07 P				6:39 P	7:54 P	
6:39 A	9:54 A		11:16 A	3:29 P		7:37 P		Lv 1202	Ft. Pierce, FL	Lv		8:44 A			11:24 A	5:50 P				6:24 P	7:39 P	
6:59 A	10:14 A		11:38 A	3:49 P		7:57 P		Lv 1222	Stuart, FL	Lv		8:24 A			11:04 A	5:27 P				6:04 P	7:19 P	
7:24 A	10:39 A		----	4:14 P		8:22 P		Lv 1248	Palm Bch. Gardens, FL	Lv		7:59 A			10:39 A	----				5:39 P	6:54 P	
7:44 A	10:59 A		4:13 P	12:26 P		4:34 P	4:54 P	8:42 P		Lv 1324*	West Palm Bch, FL	Lv	7:41 A		10:17 A	10:21 A	4:44 P	12:59 P	5:21 P	6:36 P		
8:02 A	11:17 A		4:32 P	12:45 P		4:52 P	5:13 P	9:00 P		Lv 1342*	Delray Beach, FL	Lv	7:23 A		9:52 A	10:03 A	4:22 P	12:37 P	5:03 P	6:18 P		
8:15 A	11:30 A	4:46 P	12:59 P	5:05 P	5:27 P	9:13 P		Lv 1353*	Deerfield, Beach, FL	Lv	7:10 A	9:38 A	9:50 A	4:08 P	12:23 P	4:50 P	6:05 P					
8:29 A	11:44 A	5:03 P	1:16 P	5:19 P	5:44 P	9:27 P		Lv 1367*	Ft. Lauderdale, FL	Lv	6:57 A	9:24 A	9:37 A	3:54 P	12:09 P	4:37 P	5:52 P					
8:35 A	11:50 A	----	----	5:25 P	----	9:33 P		Lv 1371*	Ft. Laud. Airport, FL	Lv	6:50 A	----	9:30 A	----	----	4:30 P	5:45 P					
8:44 A	11:59 A	5:18 P	1:31 P	5:34 P	5:59 P	9:42 P		Lv 1375*	Hollywood, FL	Lv	6:42 A	9:07 A	9:22 A	3:37 P	11:52 A	4:22 P	5:37 P					
9:02 A	12:17 P	----	----	5:52 P	----	10:00 P		Lv 1389*	Miami MetroRail, FL	Lv	6:25 A	----	9:05 A	----	----	4:05 P	5:20 P					
9:10 A	12:25 P	5:47 P	2:00 P	6:00 P	6:28 P	10:08 P		Ar 1393*	MIAMI, FL (MIC)	Lv	6:20 A	8:45 A	9:00 A	3:15 P	11:30 A	4:00 P	5:15 P					
Trains 91, 991, 97 Discharge Passengers Only between West Palm Beach and Miami												Trains 98, 992, 92 Receive Passengers Only between West Palm Beach and Miami										
ALL RUNNING TIMES AND SCHEDULES ARE CONCEPTUAL - SUBJECT TO FURTHER ADJUSTMENT AND CARRIER AGREEMENTS																						

NOTES /  
ASSUMPTIONS

- 1) Trains 91/92, 97/98, 991/992 operate from Clifford Lane station in Phases I, II
- 2) All trains operate from Jacksonville Transportation Center in Phase III
- 3) All trains operate from Miami Intermodal Center in Phases I, II & III
- 4) Assumes 3 tracks at Jacksonville and Miami stations capable of holding 12 car trains

- 5) FEC Corridor Trains between Miami and Jupiter crosshonor Tri-Rail tickets
- 6) FEC running times based on Sept 2009 FEC "Track Chart" provided by FEC
- 7) Assumes Cocoa Beach opened as Crew Base with "Respite" assignments
- 8) Assumes Cocoa Beach station co-located with Tampa - Orlando HSR station

Train	Initial Terminal	FEC CORRIDOR PROGRAM - OPTION 'D' - EQUIPMENT MANIPULATIONS																								Final Terminal																	
Consist (Sets)	ORL JAX CCB MIA	5:00 AM :30	6:00 AM :30	7:00 AM :30	8:00 AM :30	9:00 AM :30	10:00 AM :30	11:00 AM :30	12:00 PM :30	1:00 PM :30	2:00 PM :30	3:00 PM :30	4:00 PM :30	5:00 PM :30	6:00 PM :30	7:00 PM :30	8:00 PM :30	9:00 PM :30	10:00 PM :30	11:00 PM :30	12:00 AM :30	1:00 AM :30	2:00 AM	ORL	JAX	CCB	MIA																
<b>Option 'D' - Phase I - Silver Meteor and Jacksonville to Miami Intermodal Center corridor service</b>																																											
Silver Star -		991													Silver Star -																												
Amtrak responsibility															992													Amtrak responsibility															
FEC Cor	1	870												----- JAX -----	877													(Reimbursable to Amtrak)															1
Starts	0 0 0 1	Total Sets = 1    Total Locomotives (Sets + 1 spare) = 2    Total Cars (Sets @ 4 cars each + Spare Cab Car, Coach) = 6																								0	0	0	1														
FDOT responsibility		Annual Total Train Miles = 256,230    Annual Total Locomotive Miles = 256,230    Annual Total Car Miles = 1,024,920																																									
<b>Option 'D' - Phase II - Add Cocoa to Miami Intermodal Center corridor services</b>																																											
Silver Star -		991													Silver Star -																												
Amtrak responsibility															992													Amtrak responsibility															
FEC Cor	1	870												----- JAX -----	877																												1
FEC Cor	1	881						----- MIA -----	884																							1											
FEC Cor	1	883						----- MIA -----	886																							1											
FEC Cor	1	Option 'A' 880						CCB	885						Potential use of Tri-Rail equipment																1												
Starts	0 0 2 2	Total Sets = 4    Total Locomotives (Sets + 1 spare) = 5    Total Cars (Sets @ 4 cars each + Spare Cab Car, Coach) = 18																								0	0	2	2														
FDOT responsibility		Annual Total Train Miles = 644,310    Annual Total Locomotive Miles = 644,310    Annual Total Car Miles = 2,577,240																																									
<b>Option 'D' - Phase III - Add Cocoa to Jacksonville Transportation Center service (requires construction of JTC)</b>																																											
Silver Star -		991													Silver Star -																												
Amtrak responsibility															992													Amtrak responsibility															
FEC Cor	1	870												----- JAX -----	877																												1
FEC Cor	1	881						----- MIA -----	884																							1											
FEC Cor	1	883						----- MIA -----	886																							1											
FEC Cor	1	Option 'A' 880						CCB	885						Potential use of Tri-Rail equipment																1												
FEC Cor	1	860						----- JAX - SEE NOTE -----	869																							1											
Starts	0 0 3 2	Total Sets = 5    Total Locomotives (Sets + 1 spare) = 6    Total Cars (Sets @ 4 cars each + Spare Cab Car, Coach) = 22																								0	0	3	2														
FDOT responsibility		Annual Total Train Miles = 729,810    Annual Total Locomotive Miles = 729,810    Annual Total Car Miles = 2,919,240																																									
<b>NOTE:</b> Identification of Tr 860 - 869 for establishing layover facility requirements only. Jacksonville service is anticipated to be developed separately in conjunction with potential commuter services. Not accounted for in FEC costing work sheets.																																											
Mileage Assumptions		All Trains run Daily    SFD - ORL = 17 mi.    JAX - ORL = 141 mi.    JAX - CCB = 171 mi.    CCB - MIA = 198 mi.    JAX - MIA = 351 mi.    HIA - MIA = 4 mi.																																									

Initial Terminal		FEC CORRIDOR PROGRAM - OPTION 'D' - POTENTIAL CREW COUPLETS												
Crew	Base	ORL	JAX	CCB	MIA	SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
						M   6a   N   6p	M   6a   N   6p	M   6a   N   6p	M   6a   N   6p	M   6a   N   6p	M   6a   N   6p	M   6a   N   6p	M   6a   N   6p	M   6a   N   6p
<b>Option 'D' - Phase I - Initial FEC Service - Silver Star / corridor trains 870/877</b>														
Assumes Amtrak / FDOT share equally in base crew requirements and costs (LD OBS excluded)														
Miami					1		870 JAX	991	RD	RD	870 JAX	991	Opt	
Miami					1	RD	870 JAX	991	870 JAX	991	Opt	RD		
Miami					1		Opt	870 JAX	991	RD	RD	870 JAX	991	
MIA ExBd											870 JAX	991		
Jacksonville					1	877 MIA	992	877 MIA	992					
Jacksonville					1		877 MIA	992	877 MIA	992				
Jacksonville					1					877 MIA	992	877 MIA	992	
JAX ExBd					0						877 MIA	992		
Starts		0	3	0	3	Total Crew Starts		6	Number of train crews required to meet service demand					
Extra Board		0.0	0.8	0.0	0.8	Extra Board Staff		6	Based on 25%. Extra Board personnel split between crew bases					
Total		0	4	0	4	Total Crew Staff		30	Based on 4 person standard crew (Engr., Cond., Asst Condr., FSA)					
<b>Option 'D' - Phase II - Initial FEC Service plus Cocoa-Miami trains</b>														
Assumes Amtrak / FDOT share equally in base crew requirements and costs (LD OBS excluded)														
Miami					1	870 JAX	991	RD	RD	870 JAX	991	Opt		
Miami					1	RD	870 JAX	991	870 JAX	991	Opt	RD		
Miami					1		Opt	870 JAX	991	RD	RD	870 JAX	991	
Miami					1	880 CCB	881	RD	RD		880 CCB	881		
Miami					1		RD	RD	880 CCB	881		886 CCB	885	
Miami					1	RD	RD	880 CCB	881	880 CCB	881			
Miami					1		RD	RD	884 C	883	870 JAX	991		
Miami					1	884 C	883	884 C	883	RD	RD			
Miami					1		884 C	883	RD	RD	884 C	883		
Miami					1		RD	RD		884 C	883	884 C	883	
Miami					1	886 CCB	885	886 CCB	885	RD	RD			
Miami					1		886 CCB	885	886 CCB	885	RD	RD		
Miami					1		RD	RD		886 CCB	885	886 CCB	885	
Miami					1		880 CCB	881	RD	RD	886 CCB	885		
Jacksonville					1	877 MIA	992	877 MIA	992	RD	RD			
Jacksonville					1		877 MIA	992	877 MIA	992	RD	RD		
Jacksonville					1		RD	RD		877 MIA	992	877 MIA	992	
JAX ExBd					0						877 MIA	992		
Starts		0	3	0	14	Total Crew Starts		17	Number of train crews required to meet service demand					
Extra Board		0.0	0.8	0.0	3.5	Extra Board Staff		17	Based on 25%. Extra Board personnel split between crew bases					
Total		0	4	0	18	Total Crew Staff		85	Based on 4 person standard crew (Engr., Cond., Asst Condr., FSA)					

## FEC CORRIDOR SOUTHBOUND RUN TIME ASSUMPTIONS FOR SCHEDULE DEVELOPMENT

Based on FEC Rwy provided Speed Chart of 9/11/09 and Amtrak 'TPC' analysis of 10/15/09

FEC CORRIDOR STATIONS		SILVER STAR SOUTHBOUND	
		ELAPSED TIME	AVERAGE SPEED
JAX-Clifford Lane	Dp	0	-
ST. AUGUSTINE	Dp	0:39 hr:min	55.2 mph
DAYTONA	Dp	1:33 hr:min	65.2 mph
TITUSVILLE	Dp	2:18 hr:min	59.6 mph
COCOA	Dp	2:37 hr:min	54.9 mph
MELBOURNE	Dp	3:00 hr:min	56.9 mph
VERO BEACH	Dp	3:35 hr:min	57.7 mph
FT. PIERCE	Dp	3:51 hr:min	55.0 mph
STUART	Dp	4:13 hr:min	53.9 mph
PALM BCH GARDEN	PASS	4:38 hr:min	62.6 mph
CSXT Connection	PASS	4:52 hr:min	41.1 mph
WEST PALM BEACH	Dp	5:01 hr:min	16.4 mph
DELRAY BEACH	Dp	5:20 hr:min	54.2 mph
DEERFIELD BEACH	Dp	5:34 hr:min	46.3 mph
FT. LAUDERDALE	Dp	5:51 hr:min	48.7 mph
FT. LAUD. AIRPORT	PASS	5:57 hr:min	40.0 mph
HOLLYWOOD	Dp	6:06 hr:min	37.6 mph
MIAMI METRO	PASS	6:23 hr:min	42.9 mph
MIAMI (MIC)	Ar	6:34 hr:min	15.3 mph
<b>SUMMARY</b>		<b>6:34</b>	<b>53.5 mph</b>
90 mph MAS, 4" Eu - 7 Amfleet, 1 P42			

FEC CORRIDOR STATIONS		CORRIDOR TRAINS SOUTHBOUND	
		ELAPSED TIME	AVERAGE SPEED
JAX-Clifford Lane	Dp	0	-
ST. AUGUSTINE	Dp	0:37 hr:min	58.2 mph
DAYTONA	Dp	1:28 hr:min	69.0 mph
TITUSVILLE	Dp	2:10 hr:min	63.9 mph
COCOA	Dp	2:28 hr:min	57.9 mph
MELBOURNE	Dp	2:50 hr:min	59.5 mph
VERO BEACH	Dp	3:22 hr:min	63.1 mph
FT. PIERCE	Dp	3:37 hr:min	58.6 mph
STUART	Dp	3:57 hr:min	59.2 mph
PALM BCH GARDEN	Dp	4:22 hr:min	62.6 mph
CSXT Connection	PASS	4:35 hr:min	44.3 mph
WEST PALM BEACH	Dp	4:42 hr:min	21.0 mph
DELRAY BEACH	Dp	5:00 hr:min	57.3 mph
DEERFIELD BEACH	Dp	5:13 hr:min	49.8 mph
FT. LAUDERDALE	Dp	5:27 hr:min	59.2 mph
FT. LAUD. AIRPORT	Dp	5:33 hr:min	40.0 mph
HOLLYWOOD	Dp	5:42 hr:min	37.6 mph
MIAMI METRO	Dp	6:00 hr:min	40.5 mph
MIAMI (MIC)	Ar	6:08 hr:min	21.0 mph
<b>SUMMARY</b>		<b>6:08</b>	<b>57.2 mph</b>
90 mph MAS, 4" Eu - 7 Amfleet, 1 P42			

## FEC CORRIDOR NORTHBOUND RUN TIME ASSUMPTIONS FOR SCHEDULE DEVELOPMENT

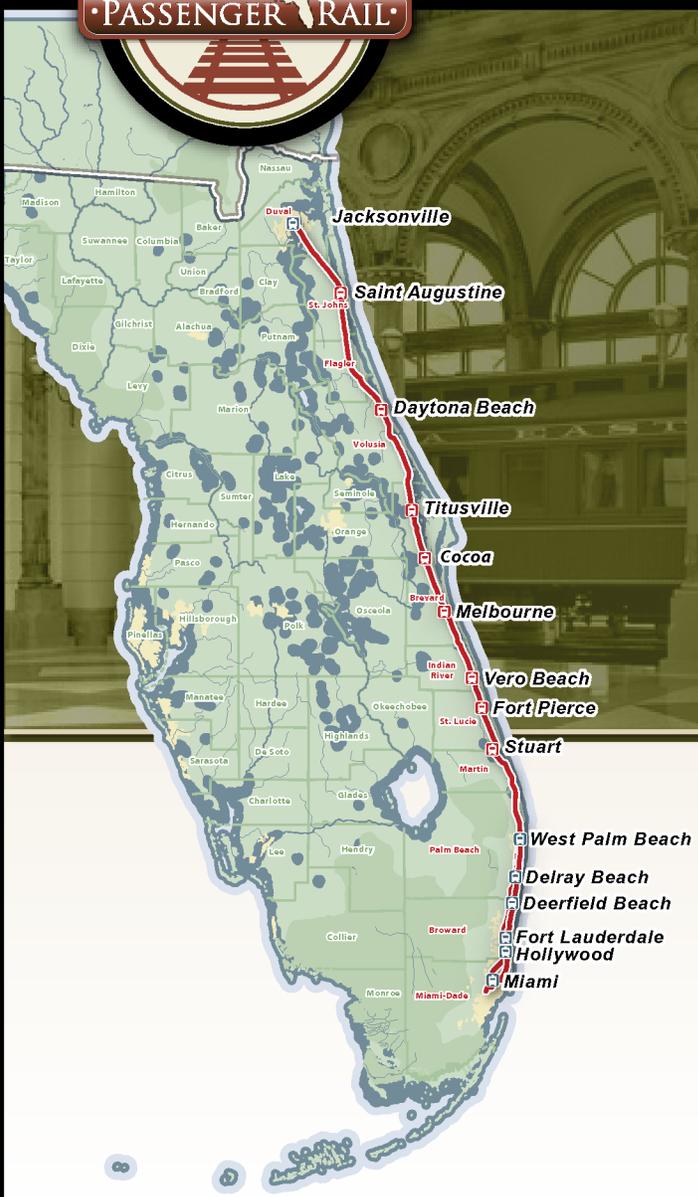
Based on FEC Rwy provided Speed Chart of 9/11/09 and Amtrak 'TPC' analysis of 10/15/09

FEC CORRIDOR STATIONS		SILVER STAR NORTHBOUND	
		ELAPSED TIME	AVERAGE SPEED
MIAMI (MIC)	Dp	0	-
MIAMI METRO	PASS	0:04 hr:min	42.1 mph
HOLLYWOOD	Dp	0:22 hr:min	40.5 mph
FT. LAUD. AIRPORT	PASS	0:29 hr:min	48.3 mph
FT. LAUDERDALE	Dp	0:39 hr:min	24.0 mph
DEERFIELD BEACH	Dp	0:53 hr:min	59.2 mph
DELRAY BEACH	Dp	1:07 hr:min	46.3 mph
WEST PALM BEACH	Dp	1:29 hr:min	46.8 mph
CSXT Connection	PASS	1:36 hr:min	21.0 mph
PALM BCH GARDEN	PASS	1:46 hr:min	57.6 mph
STUART	Dp	2:12 hr:min	60.2 mph
FT. PIERCE	Dp	2:35 hr:min	51.5 mph
VERO BEACH	Dp	2:52 hr:min	51.7 mph
MELBOURNE	Dp	3:23 hr:min	65.1 mph
COCOA	Dp	3:52 hr:min	45.1 mph
TITUSVILLE	Dp	4:11 hr:min	54.9 mph
DAYTONA	Dp	4:57 hr:min	58.3 mph
ST. AUGUSTINE	Dp	5:50 hr:min	66.4 mph
JAX-Clifford Lane	Ar	6:34 hr:min	48.9 mph
<b>SUMMARY</b>		<b>6:34</b>	<b>53.5 mph</b>
90 mph MAS, 4" Eu - 7 Amfleet, 1 P42			

FEC CORRIDOR STATIONS		CORRIDOR TRAINS NORTHBOUND	
		ELAPSED TIME	AVERAGE SPEED
MIAMI (MIC)	Dp	0	-
MIAMI METRO	Dp	0:05 hr:min	33.6 mph
HOLLYWOOD	Dp	0:22 hr:min	42.9 mph
FT. LAUD. AIRPORT	Dp	0:30 hr:min	42.3 mph
FT. LAUDERDALE	Dp	0:37 hr:min	34.3 mph
DEERFIELD BEACH	Dp	0:50 hr:min	63.7 mph
DELRAY BEACH	Dp	1:03 hr:min	49.8 mph
WEST PALM BEACH	Dp	1:21 hr:min	57.3 mph
CSXT Connection	PASS	1:28 hr:min	21.0 mph
PALM BCH GARDEN	Dp	1:39 hr:min	52.3 mph
STUART	Dp	2:04 hr:min	62.6 mph
FT. PIERCE	Dp	2:24 hr:min	59.2 mph
VERO BEACH	Dp	2:39 hr:min	58.6 mph
MELBOURNE	Dp	3:08 hr:min	69.6 mph
COCOA	Dp	3:35 hr:min	48.5 mph
TITUSVILLE	Dp	3:52 hr:min	61.3 mph
DAYTONA	Dp	4:35 hr:min	62.4 mph
ST. AUGUSTINE	Dp	5:26 hr:min	69.0 mph
JAX-Clifford Lane	Ar	6:08 hr:min	51.2 mph
<b>SUMMARY</b>		<b>6:08</b>	<b>57.2 mph</b>
90 mph MAS, 4" Eu - 4 Amfleet, 1 P42			

# ATTACHMENT C

## CAPITAL COST ESTIMATE



HIGH-SPEED INTERCITY PASSENGER RAIL (HSIPR) PROGRAM			DATE:	15-Jul-10
TRACK 2 CORRIDOR PROGRAM			EST. BY:	C. Deeb
ENGINEERS OPINION OF CAPITAL COST			Check	H. Gutierrez
STANDARD COST CATEGORIES	DESCRIPTION	QTY	UNIT	UNIT COST
<b>10 TRACK STRUCTURES AND TRACK</b>				
10.03	Track structure: Undergrade Bridges	1	LS	\$0
10.06	Track structure: At-grade (grading and subgrade stabilization)	1	LS	\$28,000
10.09	Track new construction: Conventional ballasted	1	LS	\$7,627,000
10.11	Track rehabilitation: Ballast and surfacing	1	LS	\$6,113,000
10.14	Track: Special track work (switches, turnouts, insulated joints)	1	LS	\$4,071,000
<b>Total for Category 10</b>				<b>\$17,839,000</b>
<b>20 STATIONS, TERMINALS, INTERMODAL</b>				
20.01	Station buildings: Intercity passenger rail only	1	LS	\$4,516,000
20.03	Platforms	1	LS	\$18,924,000
20.04	Elevators, Escalators			\$3,000,000
20.06	Pedestrian / bike access and accommodation, landscaping, parking lots	1	LS	\$2,248,000
<b>Total for Category 20</b>				<b>\$28,688,000</b>
<b>40 SITEWORK, RIGHT OF WAY, LAND, EXISTING IMPROVEMENTS</b>				
40.01	Demolition, clearing, site preparation	1	LS	\$1,083,000
40.02	Site utilities, utility relocation	1	LS	\$540,000
40.06	Temporary facilities and other indirect costs during construction	1	LS	2,390,955
40.07	Purchase or lease of real estate	1	LS	29,438,000
<b>Total for Category 40</b>				<b>\$33,451,955</b>
<b>50 COMMUNICATIONS &amp; SIGNALING</b>				
50.01	Wayside signaling equipment	1	LS	\$9,621,000
50.06	Grade crossing protection	1	LS	\$19,490,000
<b>Total for Category 50</b>				<b>\$29,111,000</b>
<b>TOTAL CONSTRUCTION COSTS W/ PURCHASE OF REAL ESTATE</b>				<b>\$109,089,955</b>
<b>TOTAL CONSTRUCTION COSTS W/O PURCHASE OF REAL ESTATE</b>				<b>\$79,651,955</b>
<b>TOTAL GENERAL CONTRACTOR CONSTRUCTION COSTS W/O PURCHASE OF REAL ESTATE</b>				<b>\$32,701,955</b>
<b>TOTAL RR FORCE ACCOUNT CONSTRUCTION COSTS</b>				<b>\$46,950,000</b>
<b>70 VEHICLES</b>				
70.03	Vehicle Acquisition: Diesel Multiple Unit	1	LS	\$0
70.04	Vehicle Acquisition: Loco-hauled passenger cars and locomotives	1	LS	\$110,250,000
<b>Total for Category 70</b>				<b>\$110,250,000</b>
<b>80 PROFESSIONAL SERVICES (applies to Cats. 10-60)</b>				
<b>General Contractor Work (Stations)</b>				
80.01	Service Development Plan/Service Environmental	1	LS	
80.02	Preliminary Engineering/Project Environmental	1	LS	\$1,308,078
80.03	Final design	1	LS	\$3,270,196
80.04	Project management for design and construction	1	LS	\$654,039
80.05	Construction administration & management	1	LS	\$2,779,666
80.06	Professional liability and other non-construction insurance	1	LS	\$1,635,098
80.07	Legal; Permits; Review Fees by other agencies, cities, etc.	1	LS	\$654,039
80.08	Surveys, testing, investigation	1	LS	\$327,020
80.09	Engineering inspection	1	LS	\$490,529
80.10	Start up	1	LS	\$3,805,000
<b>Sub-Total</b>				<b>\$14,923,665</b>
<b>Railroad Force Account Work</b>				
80.01	Service Development Plan/Service Environmental	1	LS	
80.02	Preliminary Engineering/Project Environmental	1	LS	\$939,000
80.03	Final design	1	LS	\$2,817,000
80.04	Project management for design and construction	1	LS	\$939,000
80.05	Construction administration & management	1	LS	\$939,000
80.06	Professional liability and other non-construction insurance	1	LS	\$0
80.07	Legal; Permits; Review Fees by other agencies, cities, etc.	1	LS	\$0
80.08	Surveys, testing, investigation	1	LS	\$469,500
80.09	Engineering inspection	1	LS	\$0
80.10	Start up	1	LS	
<b>Sub-Total</b>				<b>\$6,103,500</b>
<b>Total for Category 80</b>				<b>\$21,027,165</b>
<b>90 UNALLOCATED CONTINGENCY</b>				
<b>Total for Category 90</b>				<b>7,965,196</b>
<b>100 FINANCE CHARGES</b>				
<b>Total for Category 100</b>				<b>\$1,593,039</b>
<b>TOTAL</b>				<b>\$249,925,354</b>





**10 TRACK STRUCTURES AND TRACK**

10.09 Track new construction: Conventional ballasted

Cost Reference	DESCRIPTION	COST ID	QTY	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
<b>RR Force Account</b>								
<b>Bowden Yard</b>								
	Lead Track to Reba St							
	New Track Construction (4000-ft)							
Unit Price - FEC	Track Material: 136# Rail w/ new crossies		4,000	TF	\$120.00	\$480,000	5.00%	\$504,000
Unit Price - FEC	Install Track - Labor & Equipment		4,000	TF	\$55.00	\$220,000	5.00%	\$231,000
	<b>Sub-Total</b>							<b>\$735,000</b>
<b>Station Tracks (8 locations @ 2,500 ft each)</b>								
Unit Price - FEC	Track Material: 136# Rail w/ new crossies		20,000	TF	\$120.00	\$2,400,000	5.00%	\$2,520,000
Unit Price - FEC	Install Track - Labor & Equipment		20,000	TF	\$55.00	\$1,100,000	5.00%	\$1,155,000
Unit Price - FEC	Surface Track No 24 Turnout		16	EA	\$1,000.00	\$16,000	5.00%	\$17,000
	<b>Sub-Total</b>							<b>\$3,692,000</b>
<b>Northwood Connection (Single Track w/wyes)</b>								
Unit Price - FEC	Track Material: 136# Rail w/ new crossies		4,900	TF	\$120.00	\$588,000	5.00%	\$617,000
Unit Price - FEC	Install Track - Labor & Equipment		4,900	TF	\$55.00	\$269,500	5.00%	\$283,000
	<b>Sub-Total</b>							<b>\$900,000</b>
<b>MIC</b>								
	Platform Tracks		1	LS	\$2,300,000.00	\$2,300,000		\$2,300,000
	<b>Total</b>		<b>28,900</b>	TF				<b>\$7,627,000</b>
<b>Rail (CWR)</b>								
	ft	yd	lb	lb	<b>TONS</b>			
	57,800	19,267	136	2,620,267	1,310			
<b>12" Ballast Section</b>								
	CY per mile	# of Miles	Total CY					
	7,200	5	39,409					
<b>12" Subballast Section</b>								
	CY per mile	# of Miles	Total CY					
	8,475	5	46,388					
<b>Concrete Crossies 24" Centers</b>								
	# of ties per 39' @ 24" C-C	TF	Total # of Ties					
	24	28,900	14,450					



**10 TRACK STRUCTURES AND TRACK**

10.14 Track: Special track work (switches, turnouts, insulated joints)

Cost Reference	DESCRIPTION	COST ID	QTY	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
	<b>RR Force Account</b>							
	<b>Bowden Yard</b>							
Unit Price-FEC	No 20 Universal Crossover - 136# (Material)		1	EA	\$199,500	\$199,500	5.00%	\$209,000
Unit Price-FEC	Labor to Install No 20 Universal Crossover		1	EA	\$65,000	\$65,000	5.00%	\$68,000
Unit Price-FEC	No 20 Turnout - 136# (Material)		1	EA	\$98,115	\$98,115	5.00%	\$103,000
Unit Price-FEC	Labor to Install No 20 Turnout		1	EA	\$30,000	\$30,000	5.00%	\$32,000
Unit Price-FEC	No 10 Turnout - 136# (Material)		2	EA	\$54,000	\$108,000	5.00%	\$113,000
Unit Price-FEC	Labor to Install No 10 Turnout		2	EA	\$18,000	\$36,000	5.00%	\$38,000
Unit Price-FEC	No 24 Turnout - 136# (Replace Existing Switch to increase speed)		1	EA	\$125,000	\$125,000	5.00%	\$131,000
	<b>Sub-Total</b>		4	EA				<b>\$694,000</b>
	<b>Station Tracks</b>							
Unit Price-FEC	No 24 Powered Turnout 136#		16	EA	\$125,000	\$2,000,000	5.00%	\$2,100,000
Unit Price-FEC	Labor to Install No 24 Turnout		16	EA	\$35,000	\$560,000	5.00%	\$588,000
	<b>Sub-Total</b>		16	EA				<b>\$2,688,000</b>
	<b>Northwood Connection Single Track w/wyes</b>							
Unit Price-FEC	No 10 Turnout - 136# (Material)		2	EA	\$54,000	\$108,000	5.00%	\$113,000
Unit Price-FEC	Labor to Install No 10 Turnout		2	EA	\$18,000	\$36,000	5.00%	\$38,000
Unit Price-FEC	No 20 Turnout - 136# (Material)		4	EA	\$98,115	\$392,460	5.00%	\$412,000
Unit Price-FEC	Labor to Install No 20 Turnout		4	EA	\$30,000	\$120,000	5.00%	\$126,000
	<b>Sub-Total</b>		6	EA				<b>\$689,000</b>
	<b>Total</b>		26	EA				<b>\$4,071,000</b>

<b>20 STATIONS, TERMINALS, INTERMODAL</b>								
20.01 Station buildings: Intercity passenger rail only								
Cost Reference	DESCRIPTION	COST ID	TOTAL QUANTITIES	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
<b>General Contractor Work</b>								
<b>DAYTONA BEACH AMTRAK STATIONS</b>								
Medium Size - Partially Staffed								
	Alt. #1 - South of International Speedway Blvd. (Magnolia Avenue Station)		1	EA	\$1,211,000	\$1,211,000	10.00%	\$1,332,000
<b>TITUSVILLE AMTRAK STATIONS</b>								
Sheltered, Unstaffed								
	Alt. #2 - North of Pine Street (Historic station)		1	EA	\$216,000	\$216,000	10.00%	\$238,000
<b>COCOA AMTRAK STATIONS</b>								
Medium Size - Staffed								
	Alt. #2 - South of Rosa L. Jones Boulevard		1	EA	\$1,211,000	\$1,211,000	10.00%	\$1,332,000
<b>MELBOURNE AMTRAK STATIONS</b>								
Sheltered, Unstaffed								
	Alternative 3 - North of E. Strawbridge Avenue (U.S. 192)		1	EA	\$216,000	\$216,000	10.00%	\$238,000
<b>ST. AUGUSTINE OPTION 1</b>								
Medium Size - Staffed								
	Alt. #1 - U.S. 1 at San Marco Avenue (Historic Rail Turnaround)		1	EA	\$1,211,000	\$1,211,000	10.00%	\$1,332,000
<b>VERO</b>								
Sheltered, Unstaffed								
	Alt. #3 - North of 23rd Street		1	EA	\$216,000	\$216,000	10.00%	\$238,000
<b>FORT PIERCE</b>								
Sheltered, Unstaffed								
	Alt. #1 - South of Orange Avenue		1	EA	\$216,000	\$216,000	10.00%	\$238,000
<b>STUART</b>								
Sheltered, Unstaffed								
	Alt. #3 - Stypmann Boulevard		1	EA	\$216,000	\$216,000	10.00%	\$238,000
<b>MIC</b>								
	Headhouse Building		1	LS	\$900,000	\$900,000		\$900,000
<b>Total</b>								<b>\$4,516,000</b>

<b>20 STATIONS, TERMINALS, INTERMODAL</b>								
20.03 Platforms (12' x 1,000')								
Platform Canopy included under station building Cost. For the platforms at the MIC, canopy is included								
Cost Reference	DESCRIPTION	COST ID	TOTAL QUANTITIES	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
	General Contractor Work							
<b>DAYTONA BEACH AMTRAK STATIONS</b>								
	Alt. #1 - South of International Speedway Blvd. (Magnolia Avenue Station)		12,000	SF	\$30	\$360,000	10.00%	\$396,000
<b>TITUSVILLE AMTRAK STATIONS</b>								
	Alt. #2 - North of Pine Street (Historic station)		12,000	SF	\$30	\$360,000	10.00%	\$396,000
<b>COCOA AMTRAK STATIONS</b>								
	Alt. #2 - South of Rosa L. Jones Boulevard		12,000	SF	\$30	\$360,000	10.00%	\$396,000
<b>MELBOURNE AMTRAK STATIONS</b>								
	Alternative 3 - North of E. Strawbridge Avenue (U.S. 192)		10,680	SF	\$30	\$320,400	10.00%	\$352,000
<b>ST. AUGUSTINE OPTION 1</b>								
	Alt. #1 - U.S. 1 at San Marco Avenue (Historic Rail Turnaround)		12,000	SF	\$30	\$360,000	10.00%	\$396,000
<b>VERO</b>								
	Alt. #3 - North of 23rd Street		12,000	SF	\$30	\$360,000	10.00%	\$396,000
<b>FORT PIERCE</b>								
	Alt. #1 - South of Orange Avenue		12,000	SF	\$30	\$360,000	10.00%	\$396,000
<b>STUART</b>								
	Alt. #3 - Stypmann Boulevard		12,000	SF	\$30	\$360,000	10.00%	\$396,000
<b>MIC</b>								
	Platform includes signage, seating, CCTV		1	LS	\$1,800,000	\$1,800,000		\$1,800,000
	Platform Canopy includes 2 escalator/stair chutes		1	LS	\$14,000,000	\$14,000,000		\$14,000,000
	<b>Total</b>							<b>\$18,924,000</b>









**40 SITEWORK, RIGHT OF WAY, LAND, EXISTING IMPROVEMENTS**

40.06 Temporary facilities and other indirect costs during construction

STATIONING		DESCRIPTION	COST ID	QTY	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
BEGIN	END								
		General Contractor Work Only							
		<b>General Requirements</b>							
		Mobilization		6%			\$1,902,420		\$1,902,420
		Contractor Temporary Facilities		1	LS	\$300,000	\$300,000	10.00%	\$330,000
		Remove Temporary Facilities and Site Clean-Up		0.50%			\$158,535		\$158,535
		<b>TOTAL</b>							<b>\$2,390,955</b>

**40 SITEWORK, RIGHT OF WAY, LAND, EXISTING IMPROVEMENTS**

40.07 Purchase or lease of real estate

Cost Reference	DESCRIPTION	COST ID	QTY	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
<b>STATIONS</b>								
DAYTONA BEACH AMTRAK STATION								
	Alt. #1 - South of International Speedway Blvd. (Magnolia Avenue Station)		63,984	SF	\$49.17	\$3,146,093	0.00%	\$3,146,000
TITUSVILLE AMTRAK STATIONS								
	Alt. #2 - North of Pine Street (Historic station)		10,178	SF	\$15.15	\$154,197	0.00%	\$154,000
COCOA AMTRAK STATIONS								
	Alt. #2 - South of Rosa L. Jones Boulevard		48,132	SF	\$39.23	\$1,888,218	0.00%	\$1,888,000
MELBOURNE AMTRAK STATIONS								
	Alternative 3 - North of E. Strawbridge Avenue (U.S. 192)		10,500	SF	\$25.17	\$264,285	0.00%	\$264,000
ST. AUGUSTINE								
	Alt. #1 - U.S. 1 at San Marco Avenue (Historic Rail Turnaround)		66,950	SF	\$30	\$2,008,500	10.00%	\$2,209,000
VERO								
	Alt. #3 - North of 23rd Street		100	SF	\$30	\$3,000	0.00%	\$3,000
FORT PIERCE								
	Alt. #1 - South of Orange Avenue		8,400	SF	\$30	\$252,000	0.00%	\$252,000
STUART								
	Alt. #3 - Stypmann Boulevard		3,944	SF	\$50	\$197,200	0.00%	\$197,000
	<b>Sub-Total</b>							<b>\$8,113,000</b>
<b>NORTHWOOD CONNECTION</b>								
	50-ft Right of way		1	LS	\$21,325,321	\$21,325,321	0.00%	\$21,325,000
	<b>Sub-Total</b>							<b>\$21,325,000</b>
	<b>Total</b>							<b>\$29,438,000</b>

**50 COMMUNICATIONS AND SIGNALING**

50.01 Wayside signaling equipment

Cost Reference	DESCRIPTION	COST ID	QTY	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
	<b>RR Force Account</b>							
	<b>Bowden Yard</b>							
Unit Price FEC	Universal Control Point		1	LS	\$512,520	\$512,520	10.00%	\$564,000
Unit Price FEC	Immediate Signal		4	EA	\$95,000	\$380,000	10.00%	\$418,000
Unit Price FEC	Control Point 5.4		1	LS	\$340,400	\$340,400	10.00%	\$374,000
Unit Price FEC	Control Point 9.7 (Replace Existing CP)		1	LS	\$362,650	\$362,650	10.00%	\$399,000
Unit Price FEC	Reba Street Control Point		1	LS	\$362,650	\$362,650	10.00%	\$399,000
Unit Price FEC	Electric Lock		2	EA	\$70,000	\$140,000	10.00%	\$154,000
Unit Price FEC	Adjust Grade Crossing Approaches		4	LS	\$30,000	\$120,000	10.00%	\$132,000
	<b>Sub-Total</b>							<b>\$2,440,000</b>
	<b>Station Tracks</b>							
Unit Price FEC	Control Point		16	EA	\$362,650	\$5,802,400	10.00%	\$6,383,000
	<b>Sub-Total</b>							<b>\$6,383,000</b>
	<b>Northwood Connection</b>							
Unit Price FEC	Control Point		2	EA	\$362,650	\$725,300	10.00%	\$798,000
	<b>Sub-Total</b>							<b>\$798,000</b>
	<b>Total</b>							<b>\$9,621,000</b>

**50 COMMUNICATIONS AND SIGNALING**

**50.06 Grade crossing protection**

Cost Reference	DESCRIPTION	COST ID	QTY	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
	<b>RR Force Account</b>							
	<b>Stations</b>							
	Modify Crossing Gate Locations for 2nd Track							
	<b>DAYTONA BEACH AMTRAK STATIONS</b>							
	Alt. #1 - South of International Speedway Blvd. (Magnolia Avenue Station)							
			2	EA	\$50,000	\$100,000	10.00%	\$110,000
			100	TF	\$600	\$60,000	5.00%	\$63,000
	<b>TITUSVILLE AMTRAK STATIONS</b>							
	Alt. #2 - North of Pine Street (Historic station)							
			2	EA	\$50,000	\$100,000	10.00%	\$110,000
			100	TF	\$600	\$60,000	5.00%	\$63,000
	<b>COCOA AMTRAK STATIONS</b>							
	Alt. #2 - South of Rosa L. Jones Boulevard							
			1	EA	\$50,000	\$50,000	10.00%	\$55,000
			50	TF	\$600	\$30,000	5.00%	\$32,000
	<b>MELBOURNE AMTRAK STATIONS</b>							
	Alternative 3 - North of E. Strawbridge Avenue (U.S. 192)							
			2	EA	\$50,000	\$100,000	10.00%	\$110,000
			100	TF	\$600	\$60,000	5.00%	\$63,000
	<b>ST. AUGUSTINE OPTION 1</b>							
	Alt. #1 - U.S. 1 at San Marco Avenue (Historic Rail Turnaround)							
			0	EA	\$50,000	\$0	10.00%	\$0
			0	TF	\$600	\$0	5.00%	\$0
	<b>VERO</b>							
	Alt. #3 - North of 23rd Street							
			3	EA	\$50,000	\$150,000	10.00%	\$165,000
			150	TF	\$600	\$90,000	5.00%	\$95,000
	<b>FORT PIERCE</b>							
	Alt. #1 - South of Orange Avenue							
			2	EA	\$50,000	\$100,000	10.00%	\$110,000
			100	TF	\$600	\$60,000	5.00%	\$63,000
	<b>STUART</b>							
	Alt. #3 - Stypmann Boulevard							
			2	EA	\$50,000	\$100,000	10.00%	\$110,000
			200	TF	\$600	\$120,000	5.00%	\$126,000
	<b>Sub-Total</b>							<b>\$1,275,000</b>
	<b>Mainline System Signals MP 9.7 to WPB</b>							
	Install Signal Cut Section & Adjust Grade Crossing Approaches		1	LS	\$16,000,000	\$16,000,000	5.00%	\$16,800,000
	<b>Sub-Total</b>							<b>\$16,800,000</b>
	<b>Northwood Connection</b>							
	Warning and Protection System		3	EA	\$400,000	\$1,200,000	10.00%	\$1,320,000
	Grade Crossing Panels		150	TF	\$600	\$90,000	5.00%	\$95,000
	<b>Sub-Total</b>							<b>\$1,415,000</b>
	<b>Total</b>							<b>\$19,490,000</b>



**70 VEHICLES**

70.04 Vehicle Acquisition: Loco-haul passenger cars

			DESCRIPTION	COST ID	QTY	UNIT	UNIT COST	BASE COST	ALLOCATED CONTINGENCY	TOTAL COST
			Passenger Cars and locos		24			\$105,000,000	5%	\$110,250,000
			Total		24					\$110,250,000















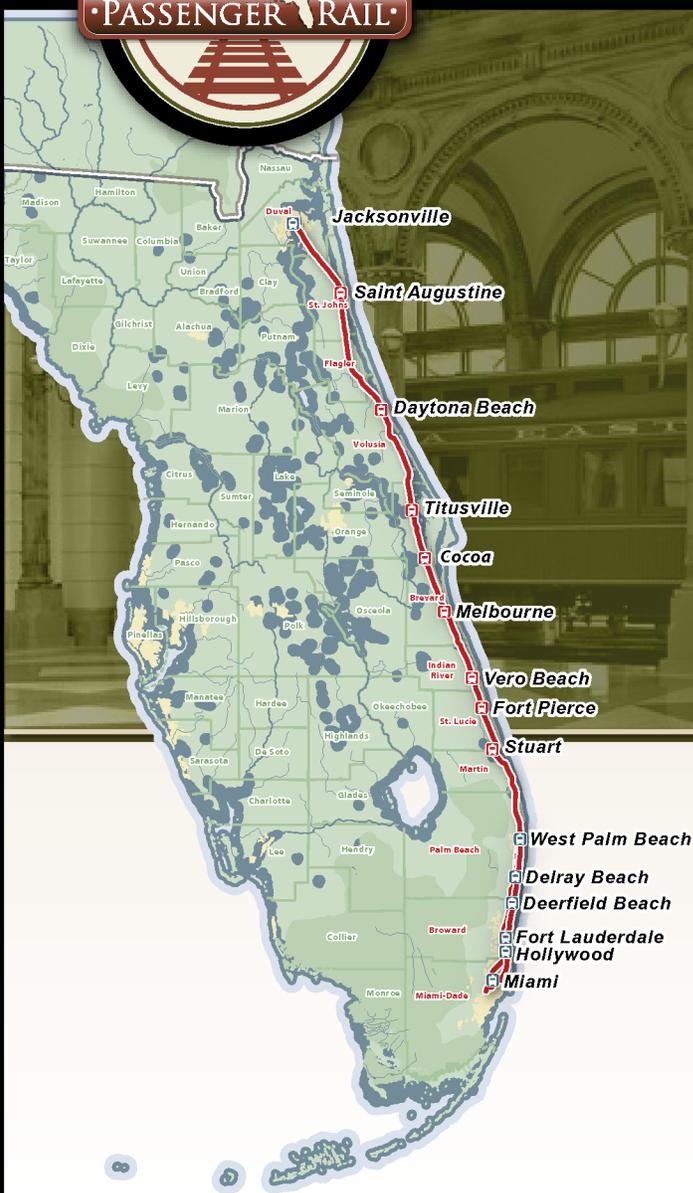






# ATTACHMENT D

## STATE AND LOCAL CONTRIBUTIONS



**South Florida Rail Corridor Maintenance and Capital Cost**

Description	Total 2007	Total 2008	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014
Boxes	\$0	\$0	\$65,013	\$0	\$6,518,911	\$5,921,690	\$2,161,968	\$1,433,578
Maintenance	\$6,890,182	\$8,144,994	\$5,920,651	\$10,509,617	\$4,196,662	\$14,744,000	\$11,043,000	\$11,443,000
Bus Funding	\$2,427,022	\$4,421,490	\$4,596,281	\$2,994,450	\$4,494,256	\$5,803,010	\$4,939,744	\$4,939,744
Train Operating	\$14,786,561	\$16,797,056	\$15,464,180	\$16,144,457	\$94,541,101	\$44,185,253	\$31,708,388	\$29,387,531
Capital	\$41,254,817	\$14,314,035	\$17,370,838	\$4,100,368	\$192,539	\$6,030,000	\$30,000,667	\$3,000,000
<b>Maintenance</b>	\$24,103,765	\$29,363,540	\$26,046,125	\$29,648,524	\$109,750,930	\$70,653,953	\$49,853,100	\$47,203,853
<b>Capital</b>	\$41,254,817	\$14,314,035	\$17,370,838	\$4,100,368	\$192,539	\$6,030,000	\$30,000,667	\$3,000,000
<b>Total</b>	<b>\$65,358,582</b>	<b>\$43,677,575</b>	<b>\$43,416,963</b>	<b>\$33,748,892</b>	<b>\$109,943,469</b>	<b>\$76,683,953</b>	<b>\$79,853,767</b>	<b>\$50,203,853</b>

ItemSeg	Ph	Sq	Sys	Pg	Description	BD	CC	Fund	Amt_2007	Total 2007	Amt_2008	Total 2008	Amt_2009	Total 2009	Amt_2010	Total 2010	Amt_2011	Total 2011	Amt_2012	Total 2012	Amt_2013	Total 2013	Amt_2014	Total 2014		
234021-1	72	01	05	00	SFRC/CORRIDOR MAINT CORRIDOR MAINTENANCE	04	4	D	0		0		943,000		943,000		0		0		0		0			
	72	01	05	00	SFRC/CORRIDOR MAINT CORRIDOR MAINTENANCE	04	4	D	0		0		0	943,000		943,000		0		0		0		0		
	72	01	05	00	SFRC/CORRIDOR MAINT CORRIDOR MAINTENANCE	04	4	D	943,000	943,000	0	943,000	0	943,000	0	943,000	0	943,000	0	943,000	0	943,000	0	943,000	0	
	72	01	05	00	SFRC/CORRIDOR MAINT CORRIDOR MAINTENANCE	04	4	D	0		943,000		0		0		0		0		0		0		0	
	72	01	05	00	SFRC/CORRIDOR MAINT CORRIDOR MAINTENANCE	31	4	D	0		0		0		943,000		943,000		0		943,000		943,000		943,000	
234681-1	84	01	08	13	TRANSIT CORRIDOR FOR OPERATIONS SFRTA FEEDER BUS	04	4	DPTO	0		0		0		1,666,667		0		0		0		0		0	
	84	01	08	13	TRANSIT CORRIDOR FOR OPERATIONS SFRTA FEEDER BUS	04	4	DPTO	0		0		918,600		0		0		0		0		0		0	
	84	01	08	13	TRANSIT CORRIDOR FOR OPERATIONS SFRTA FEEDER BUS	04	4	DS	574,999	574,999	3,258,333	3,258,333	0	1,666,666	0	1,666,667	0	1,442,711	0	1,666,667	0	1,666,667	0	1,666,667	0	1,666,667
	84	01	08	13	TRANSIT CORRIDOR FOR OPERATIONS SFRTA FEEDER BUS	04	4	DS	0		0		748,066		0		0		0		0		0		0	
	84	01	08	13	TRANSIT CORRIDOR FOR OPERATIONS SFRTA FEEDER BUS	31	4	DPTO	0		0		0		1,442,711		1,666,667		1,666,667		1,666,667		1,666,667		1,666,667	
236759-1	52	01	10	11	SFRC MANAGEMENT BOX RAIL FUNDS	31	8	DS	0		0		0		0		0		0		1,411,824		0		0	
	52	01	10	29	SFRC MANAGEMENT BOX RAIL FUNDS	31	8	DDR	0		0		0		0		0		2,181,690		0		0		0	
	52	01	10	29	SFRC MANAGEMENT BOX RAIL FUNDS	31	8	DPTO	0		0		0	100,000		100,000	106,057	106,057	2,181,690	3,697,690	0	1,411,824		0	0	
	52	01	10	29	SFRC MANAGEMENT BOX RAIL FUNDS	31	8	DS	0		0		0		0		0		1,516,000		0		0		0	
	52	01	10	29	SFRC MANAGEMENT BOX RAIL FUNDS	31	8	DS	0		0		0		6,057		6,057		0		0		0		0	
236759-2	94	01	15	11	SFRC MANAGEMENT BOX INTERMODAL FUNDS	31	8	DDR	0		0		0		0		0		0		0		0	520,921	683,578	
	94	01	15	11	SFRC MANAGEMENT BOX INTERMODAL FUNDS	31	8	DPTO	0		0		0		0		0		0		0		0	162,657	0	
236759-3	43	01	10	29	SFRC FOR REVENUES	04	8	DS	0		0		0		0		1		0		0		0		0	
	94	01	10	29	SFRC FOR REVENUES	04	8	DS	0		0		0		0		1	3	0		0		0		0	
236767-1	94	01	10	29	SFRC FOR REVENUES	04	8	DL	0		0		0		0		1		0		0		0		0	
	94	04	10	29	SFRC BROW/PALM BCH & DADE TRASH & DEBRIS REMOVAL ON SFRC	04	4	DL	0	0	250,000	250,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
236769-1	94	01	10	11	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DPTO	0		0		0		46,835		0		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DDR	0		0		229,201		0		0		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DDR	0		0		0	93,304		93,304		0		0		0		0	0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DPTO	0		0		68,731		0		68,731		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DPTO	0		0		0	1,060,617		1,060,617		0		0		0		0	0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DS	0		351,841		0		0		0		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DS	0		0		202,068		0		0		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DS	0		0		0	234,999		234,999		0		0		0		0	0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DS	190,000	190,000	0		0		0		0		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DL	0		648,158		0		0		0		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DL	0		0		0	432,373		432,373		0		0		0		0	0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DL	500,000	500,000	0		0		0		0		0		0		0		0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DDR	0	5,924,236	0	6,287,454	0	4,665,151	0	8,978,669	0	2,990,662	0	13,801,000	500,000	10,100,000	0	10,500,000	0	
	94	01	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DS	0		0		0		0		500,000		500,000		0		500,000		500,000	
	94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DDR	0		0		4,165,151		0		0		0		0		0		0	
	94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DPTO	0		0		0	274,813		274,813		0		0		0		0	0	
	94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DS	0		5,287,455		0		0		0		0		0		0		0	
	94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DS	0		0		0	6,835,728		6,835,728		0		0		0		0	0	
	94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	04	4	DS	5,234,236	5,234,236	0		0	0		0		0		0		0		0	0	
	94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DDR	0		0		0		0		0		0		0		0	10,000,000	0	
94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DPTO	0		0		0		0		0		7,823,320		7,823,320		0		0		
94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DPTO	0		0		0		0		2,165,713		2,165,713		0		0		0		
94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DS	0		0		0		0		0		0		0		9,600,000		0		
94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DS	0		0		0		324,949		324,949		0		0		0		0		
94	03	10	29	SFRC/ MAINTENANCE CORRIDOR MAINTENANCE & AMTRAK UTILITIES	31	4	DS	0		0		0		0		0		5,477,680		5,477,680		0		0		
236771-1	94	04	10	29	SFRC BROW/PALM BCH & DADE/FENCING AS REQUIRED	04	4	DL	0		250,000	250,000	0	0	0	0	0	0	0	0	0	0	0	0	0	
	94	04	10	29	SFRC BROW/PALM BCH & DADE/FENCING AS REQUIRED	31	4	DPTO	0		0		0		0		100,000		100,000		0		0		0	
236775-1	57	01	10	29	ENGINEERING SERVICES	04	4	DS	10,446	10,446	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
236786-1	52	01	10	29	SFRC MANAGEMENT BOX FOR CONTRACTS	31	8	DS	0		0		0		0		0		1,474,000		1,474,000		0		0	
	52	01	10	29	SFRC MANAGEMENT BOX FOR CONTRACTS	31	8	DL	0		0		0		0		0		0		1,474,000	144	144	0	0	









428344-2	84	01	10	29	SFRFC TRI-RAIL MAINTENANCE & DISPATCHING OPERATING ASSISTANCE	31	4	DDR	0	0	0	0	0	0	4,821,960	7,160,115	0	6,266,676	0	6,268,930	0	6,100,809
	84	01	10	29	SFRFC TRI-RAIL MAINTENANCE & DISPATCHING OPERATING ASSISTANCE	31	4	DPTO	0	0	0	0	0	0	0	0	2,773,549	0	3,013,354	0	3,987,350	0
	84	01	10	29	SFRFC TRI-RAIL MAINTENANCE & DISPATCHING OPERATING ASSISTANCE	31	4	DPTO	0	0	0	0	0	2,338,155	0	0	0	0	0	0	0	0

Boxes	\$0	\$0	\$65,013	\$0	\$6,518,911	\$5,921,690	\$2,161,968	\$1,433,578
Maintenance	\$6,890,182	\$8,144,994	\$5,920,551	\$10,509,617	\$4,196,662	\$14,744,000	\$11,043,000	\$11,443,000
Bus Funding	\$2,427,022	\$4,421,490	\$4,596,281	\$2,994,450	\$4,494,256	\$5,803,010	\$4,939,744	\$4,939,744
Train Operating	\$14,786,561	\$16,797,056	\$15,464,180	\$16,144,457	\$94,541,101	\$44,185,253	\$31,708,388	\$29,387,531
Capital	\$41,254,817	\$14,314,035	\$17,370,838	\$4,100,368	\$192,539	\$6,030,000	\$30,000,667	\$3,000,000
Maintenance	\$24,103,765	\$29,363,540	\$26,046,125	\$29,648,524	\$109,750,930	\$70,653,953	\$49,853,100	\$47,203,853
Capital	\$41,254,817	\$14,314,035	\$17,370,838	\$4,100,368	\$192,539	\$6,030,000	\$30,000,667	\$3,000,000
<b>Total</b>	<b>\$65,358,582</b>	<b>\$43,677,575</b>	<b>\$43,416,963</b>	<b>\$33,748,892</b>	<b>\$109,943,469</b>	<b>\$76,683,953</b>	<b>\$79,853,767</b>	<b>\$50,203,853</b>

\$63,933,084.00

## AMTRAK/FEC CORRIDOR PROJECT

### IDENTIFICATION OF LOCAL ASSETS & IMPROVEMENTS FOR GRANT MATCH

Station City	Local Asset/Improvement	Owner/ Sponsor	Year of Expenditure	Estimated Value	Source of Funds
Stuart	Station Area Land & Parking	Martin County; leased to City for 40 yrs @ \$8K/year	2010/11	\$320,000	Martin County
	Station Building Maintenance	City of Stuart (\$15K/yr x 40 yrs)	2010/11	\$600,000	City of Stuart
	Downtown Cross Walk Program	City of Stuart/Martin County	2010/11	\$300,000	Martin County MPO (enhancement funds)
	Woodlawn Park Improvements (sidewalks, parking adjacent to station)	City of Stuart	2008/09 thru 2010/11	\$706,000	City of Stuart & CDBG
	Downtown Wayfinding Signage Program (annual)	City of Stuart	2010/11	\$10,000	City of Stuart
	Martin Luther King Jr. Boulevard & Dixie Highway Intersection Improvements	City of Stuart & Martin County	2008	\$1,600,000	City of Stuart & Martin County
	Waste Water Plant Beautification & Aromatic Improvements (adjacent to station)	City of Stuart	2009	\$1,500,000	City of Stuart
	<b>SUB-TOTAL</b>				<b>\$5,036,000</b>
Fort Pierce	Municipal Parking Structure	City of Fort Pierce	2008/09	TBD	Fort Pierce RDA (TIF)
	<b>SUB-TOTAL</b>				<b>\$0</b>
Vero Beach	Land Area for Station and Parking	City of Vero Beach	pre-2000	TBD	n/a
	Public Parking	City of Vero Beach	pre-2000	TBD	n/a
	US1 Improvements by Station <sup>1</sup>	FDOT	2009	\$2,137,622	FDOT
	City Roadway Improvements by Station <sup>2</sup>	City of Vero Beach	2010	\$226,028	City of Vero Beach
	Roadway Improvements by Station <sup>3</sup>	City of Vero Beach	2011	\$58,500	City of Vero Beach
	Model Block (infrastructure) by Station <sup>4</sup>	City of Vero Beach	2010/11 thru 2014/15	\$850,000	City of Vero Beach
	<b>SUB-TOTAL</b>				<b>\$3,272,150</b>
	Land Area for Station and Parking	City of Vero Beach	pre-2000	TBD	n/a
	Public Parking	City of Vero Beach	pre-2000	TBD	n/a

Melbourne	Strawbridge Ave Medians Project (pedestrian safety & beautification adjacent to station)	City of Melbourne	2010/11	\$600,000	City of Melbourne/CRA
	Downtown Wayfinding Signage Program (Phase 1)	City of Melbourne	2010/11	\$30,000	City of Melbourne/CRA
	Property Acquisition (.17 ac lot adjacent to station)	City of Melbourne	2010/11	\$135,000	City of Melbourne/CRA
	Downtown Municipal Parking Structure	City of Melbourne	2007/08 thru 2009/10	\$5,000,000	City of Melbourne/CRA
<i>SUB-TOTAL</i>				\$5,765,000	
Cocoa					
	<i>SUB-TOTAL</i>				\$0
Titusville					
	<i>SUB-TOTAL</i>				\$0
Daytona Beach	Land Area for Parking (Magnolia Ave ROW)	City of Daytona Beach	pre-2000	TBD	n/a
	<i>SUB-TOTAL</i>				\$0
St Augustine	City Entryway/Directional Signage Program	City of St Augustine	2009/10 thru 2010/11	\$475,000	FDOT & City of St Aug
	Sidewalk Connection from Station to Downtown	City of St Augustine	2010	\$20,000	City of St Aug
	Downtown Sidewalk (ADA) Improvement Pgm	City of St Augustine	2008/09 thru 2011/12	\$600,000	City of St Aug
	North City Entrance Park (adjacent to station)	City of St Augustine	2010/11	\$10,000	City of St Aug
<i>SUB-TOTAL</i>				\$1,105,000	
<i>GRAND TOTAL</i>				\$15,178,150	

SOURCE: All data was provided by staff of the eight station cities.

**FOOTNOTES:**

<sup>1</sup> Project description: The project scope consists of milling and resurfacing, rehabilitation and restoration (RRR), sidewalk improvements, signalization and landscaping

from 20th Place to a point south of 33rd Street on SR 5/US1 (FDOT Project # 415291 1 52 01).

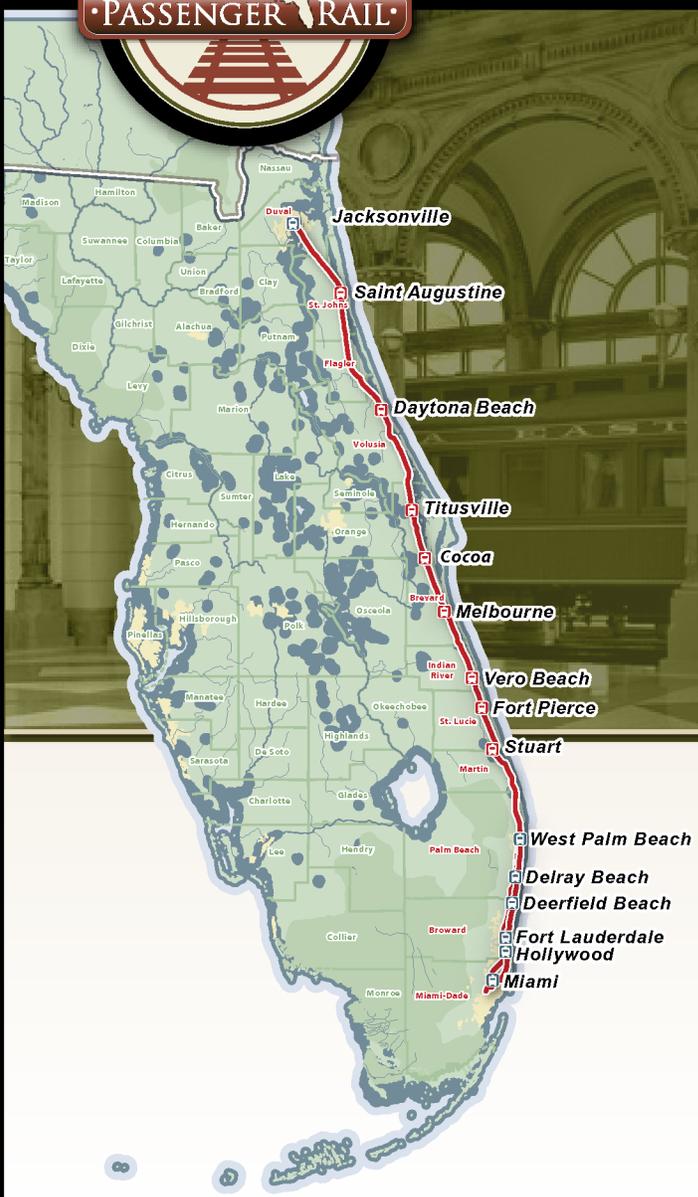
<sup>2</sup> Project description: FY 2009/10 City-funded sidewalk and roadway improvements within 1/2-mile of station location

<sup>3</sup> Project description: FY 2010-11 proposed City-funded (in CIP) sidewalk and roadway improvements within 1/2-mile of station location

<sup>4</sup> Project description: FY 2009-2014 City-funded infrastructure "Model Block" program within 1/2-mile of station location (parking, sidewalk, drainage, paving)

# ATTACHMENT E

## FINANCIAL ANALYSIS SUMMARY



TBGA/14.10/23/23/01R

Federal Funding Opportunity Number: FR-HSR-10-004



## FINANCIAL IMPACT FROM PROPOSED FEC SERVICE (REVISED)

1. This analysis assumes the *Silver Star* extension over the FEC is part of the LD network for operating cost purposes (and not a state-supported expense), but its required incremental equipment is included in the capital needs portion.

Allocated Financial Impact <sup>(1)</sup>	Phase 1, Option D/E			Phase 2 <sup>(2)</sup>	
	Star <sup>(3)</sup>	Corridor	Total	Option D Corridor	Option E Corridor
Total Riders	135,800	86,800	222,600	190,300	150,100
Total Revenue (millions)		\$1.6	\$10.8	\$3.1	\$2.4
Total Direct Costs (millions)		\$6.9	\$19.2	\$21.8	\$17.9
Net Impact (Rev. – Direct Costs) (millions)		-\$5.3	-\$8.4	-\$18.7	-\$15.5

1) 2010 Dollars

2) Both Option D and Option E for Phase 2 are incremental to the Corridor portion of Phase 1

3) Includes the impact of current riders transferring from the *Meteor* to the *Star*

4) Amtrak responsible for revenues / costs for *Silver Star*

## 2. Summary of Proposed Changes

We have updated the FEC analysis to include the financial impact from splitting the *Silver Star* at Jacksonville.

We were asked to determine the financial impact for two options for passenger train service along the FEC Corridor. There are two phases for each option. Both options include splitting the *Silver Star* at Jacksonville, operating one section over the FEC Corridor and the other via the current route through Tampa. This analysis is a continuation of a previous analysis.

- **Option D**
  - **Phase 1**
    - Split the *Silver Star* daily at Jacksonville (14 trips per week)
    - One additional daily roundtrip between Miami and Jacksonville over the FEC (14 trips per week)
  - **Phase 2**
    - Phase 1 service, plus
    - Three daily roundtrips between Miami and Cocoa over the FEC corridor (42 trips per week).
- **Option E**
  - **Phase 1**
    - Same as Option D
  - **Phase 2**
    - Phase 1 service, plus
    - One daily roundtrip and two additional weekday roundtrips between Miami and Vero Beach over the FEC corridor (34 trips per week).

## 3. Important Assumptions

- **T&E Crew Bases**
  - Option D
    - Phase 1: Jacksonville crew base
    - Phase 2: Miami crew base
  - Option E
    - Phase 2: Vero Beach crew base

- **Equipment**

Incremental Equipment	Phase 1		Phase 2
	Star	Corridor (protect) <sup>(1)</sup>	JAX-Cocoa
Train Sets Assigned	4	1	3
Locomotives		1 (1)	3
Baggage Car (1 per set)	4		
Viewliner Sleeper (1 per set)	4		
Amfleet II Coaches (2 per set)	8		
Bi-Level Cab Cars (1 per set)		1 (1)	3
Bi-Level Coaches (3 per set)		2 (1)	6
Bi-Level Food Cars (1 per set)		1	3

- 1) The proposed protect equipment is listed parenthetically
- 2) Amtrak absorbs incremental protect needs for Star

- **Locomotives/Cab Cars**

We are assuming a push-pull operation requiring a cab-car for each set.

- **Weekend Trains for Option E**

We assumed trains 883 and 886 would operate on the weekend for Option E

- **Mechanical**

- Hialeah costs were based on a T. Farr estimate (made for Option C), proportionately adjusted for changes in incremental equipment and for the daily turns and layovers at MIA.
- Turnaround costs:
  - Jacksonville: \$55,000 per month for 1 layover (contractor)
  - Cocoa/Vero Beach: \$55,000 per month for 1 layover plus \$15,000 per month for one turn (contractor)

- **Food Service**

- FEC: Food service similar to NE Regionals (1 LSA)

- **Stations**

- We have assumed none of the new FEC stations would be staffed and that Amtrak would not incur any operating expenses for these new stations.
- Estimated growth in ridership at Florida staffed stations is 40%. We assume that labor costs at these stations would increase by 20%.

- **Schedule**

None of the proposed schedules have been submitted to the host railroads for approval, so are subject to change.

#### 4. Incremental Headcount

Incremental Headcount	Phase 1, Option D/E			Phase 2	
	Star	Corridor	Total	Option D	Option E
Stations	tbd	tbd	tbd	tbd	tbd
T&E Crew <sup>(1)</sup>		15		35	16
OBS <sup>(2)</sup>		4		9	6
Mechanical		tbd	tbd	tbd	tbd

- 1) Includes one Road Foreman per 15 new T&E employees
- 2) Includes 1 OBS District Manager per 15 new OBS employees
- 3) Amtrak absorbs incremental crew costs for Star

## 5. Financial Analysis Results

Allocated Financial Impact <sup>(1)</sup>	Phase 1, Option D/E			Phase 2 <sup>(2)</sup>	
	Star	Corridor	Total	Option D Corridor	Option E Corridor
<b>Riders</b>	135,800	86,800	222,600	190,300	150,100
<b>Revenue (million)</b>					
Ticket Revenue		\$1.5		\$3.0	\$2.3
Food and Beverage Revenue		0.0		0.1	0.1
<b>Total Revenue</b>		\$1.6		\$3.1	\$2.4
<b>Expenses (million)</b>					
Host Railroad		\$2.0		\$5.3	\$4.0
Fuel		0.8		2.2	1.8
Power - Electric Traction		0.0		0.0	0.0
T&E (Labor & Support)		1.8		5.2	3.4
OBS (Labor & Support)		0.3		1.1	0.9
Commissary (F&B)		0.1		0.2	0.2
Yard Ops		0.0		0.0	0.0
Operations Management		0.3		1.3	1.3
Motor Coach		0.0		0.0	0.0
Maintenance of Equipment		0.9		4.7	4.7
Stations		0.4		0.8	0.8
Amtrak Maintenance of Way		0.0		0.0	0.0
Sales and Marketing		0.2		0.37	0.29
Commissions		0.0		0.1	0.1
Insurance		0.1		0.14	0.10
Passenger Inconvenience		0.0		0.02	0.01
Police, Environmental, and Safety		0.1		0.3	0.4
<b>Sub-total Direct Operating Costs</b>		\$6.9		\$21.8	\$17.9
<b>Net (Rev. – Dir. Op. Costs) (mil)</b>		-\$5.3		-\$18.7	-\$15.5
Cost Recovery (Rev/ Dir Costs)		23%		14%	14%
Cost per Train Mile		\$27		\$32	\$36

1) 2010 Dollars

2) Both Option D and Option E for Phase 2 are incremental to the Corridor portion of Phase 1

3) Amtrak absorbs operating costs for *Star*

## 6. One Time Charges

In addition to annual operating costs, implementation would also require one time training/qualification costs as well as capital costs.

Training and Qualifying Costs (millions) <sup>(1)</sup>	Phase 1, Option D/E			Phase 2 <sup>(3)</sup>	
	Star	Corridor	Total	Option D	Option E
<b>Amtrak</b>					
OBS		\$0.05	\$0.35	\$0.10	\$0.10
T&E		\$1.03	\$2.06	\$2.00	\$0.90
Host Railroad T&E <sup>(2)</sup>		\$0.57	\$1.14	\$1.80	\$0.80
<b>Total</b>		\$1.65	\$3.55	\$3.90	\$1.80

1) 2010 Dollars

2) Assume 30 trips for each new employee. Host railroad staff required includes 1 engineer and 1 conductor.

3) Phase 2 is incremental after Phase 1. Option D and Option E are exclusive; one or the other

4) Amtrak absorbs one time charges for Star

Equipment Capital Costs for both Options D and E <sup>(1)</sup>							
	Unit Costs (mil)	Phase 1 Star		Phase 1 Corridor		Phase 2	
		Number <sup>(2)</sup>	Total (mil)	Number <sup>(2)</sup>	Total (mil)	Number <sup>(2)</sup>	Total (mil)
Diesel Locomotives	\$7			2	\$14	3	\$21
Cab Cars <sup>(3)</sup>	\$5			2	\$10	3	\$15
Coaches	\$4	8	\$32	3	\$12	6	\$24
Food Cars	\$5			1	\$ 5	3	\$15
Baggage Car	\$3	4	\$12				
Sleeper (Viewliner)	\$5	4	\$20				
<b>Total</b>			\$64		\$41		\$75

1) 2010 Dollars **Total**

2) Includes shop count (see Equipment Assumption above)

3) Assume push-pull operation requiring cab-cars

4) Amtrak absorbs capital costs for Star shop count

Host Railroad Capital Costs: The Finance Department has not estimated nor reviewed any estimate of the capital cost required by the host railroads.

Station Capital Costs: The Finance Department has not estimated nor reviewed any estimate of the capital cost required for new stations.

## 7. Financial Analysis Methodology

- Ticket Revenues and Ridership: We used a Long Distance and Commuter Train Demand Forecasting Model to forecast ridership and ticket revenue. The model uses a direct demand approach to forecast Amtrak ridership by geographic market and class of service.
- Food and Beverage Revenues: Corridor train food and beverage revenues and cost estimates were based on average food and beverage costs for the *Surfliner* Service.
- Host Railroad Costs: We based Host Railroad costs on the current, route specific, cost per train mile.
- Fuel Costs: We estimated fuel costs based on the average fuel costs per train mile on the *Silver Star* Route for the last 12 months.
- Train Crew Costs: T&E labor cost estimates were provided by Crew Management.
- Route and Shared Station Costs – Estimated costs for route stations (both staffed and unstaffed) were based on average allocated costs for similar stations.

## **8. Impact of Ramp-up on Revenue**

Estimated demand numbers are mature; they have not been adjusted to reflect phasing or ramp-up. The Finance Department strongly encourages that the first year revenues and riders be adjusted to reflect the expected impact of the ramp up period.