



**SOUTH FLORIDA EAST COAST (FEC)  
ALTERNATIVES ANALYSIS**

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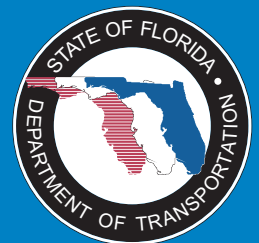
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***SFECC Regional Financial Analysis/  
Plan Tech Memo***

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# Financial Plan

For the

South Florida East Coast Corridor Transit Project

In preparation for



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**1. CAPITAL AND OPERATING & MAINTENANCE COSTS**

The order-of-magnitude cost estimates for the proposed alternatives for corridor-wide transit improvements comprise two distinct elements: capital costs and operating and maintenance costs. Capital costs include vehicles, track or roadway, stations, parking, pedestrian overpasses and elevators in stations, demolition and site preparation, assumptions related to hazardous soils remediation, train and traffic controls, signaling and communication, purchase of real estate, and soft costs such as mobilization, design, project management for design and construction, permitting fees, insurance, and contingencies. Operating and maintenance expenses include the costs of operations and supervision, maintenance of equipment including parts, maintenance of way (where applicable), fuel and expendables, and administration. These costs have been calculated based on the 2030 patronage demand indicated by the SERPM 6.6B3 model.

**Table 1: Costs**

<b>COSTS (2010 DOLLARS)</b>				
	<b>TSM</b>	<b>BRT</b>	<b>Integrated Rail</b>	
			<b>DMU</b>	<b>Push-Pull</b>
Capital	\$220 million	\$2.390 billion	\$2.468 billion	\$2.515 billion
Gross O&M <sup>†</sup>	\$135 million	\$144 million	\$187 million	\$194 million

<sup>†</sup> Net O&M costs, as estimated by Gannett Fleming, are \$47 million for the TSM, \$57 million for BRT, \$100 million for Integrated Rail (DMU), and \$106 million for Integrated Rail (Push-Pull).

As may be observed from the table above, estimated capital costs could be expected to vary widely. The Transportation Systems Management (TSM) alternative is the least costly alternative at \$220 million, but it would entail fairly substantial operating and maintenance costs, relative to the capital costs, because of the slow movement of buses on-street and the need for considerable frequency to satisfy the demand. Bus Rapid Transit (BRT) would require considerably higher capital costs, almost as high as the integrated rail alternatives, but cost less to operate and maintain than rail. The two integrated rail alternatives require the largest capital investment and operation and maintenance expenses.

The transit improvements would also require the acquisition of access rights from the current owner/operator of the FEC railroad corridor. This cost would be in addition to the capital cost estimates above. Access rights can be accomplished through different transactional forms including: a fee for trackage rights, purchase of an easement, and fee simple acquisition of the entire corridor (or portions of the corridor). A fee for trackage rights is typically paid annually and is based on a combination of real estate value and the incremental cost of operating and maintaining the corridor due to the introduction of additional rail service. Purchase of an easement can be paid up front or over time. Acquiring fee

simple title to the entire corridor is typically based on fair market real estate value. The exact pricing of any of these alternatives would be negotiated by the buyer and seller. The negotiation must also consider appropriate discounts for conditions that may impact the buyer's intended use such as the disposition of existing third-party property interests (e.g., utility relocations), clean up of contamination/environmental hazards, or any grant of exclusive operating easements to allow continuation of rail freight service, etc.

In addition to the initial cost of implementing new transit services are the ongoing capital costs related to the renewal and replacement of capital items. Examples include major component replacements, mid-life overhaul of vehicles, and vehicle replacements.

## **2. RESOURCES**

Transportation funding in Florida is accomplished through a variety of sources and a well established process. Particularly in urban areas of the state such as the South Florida East Coast Corridor (SFECC) area, the Metropolitan Planning Organizations (MPO) play a key role in identifying needed transportation improvements and setting priorities for limited financial resources. While certainly not all inclusive, the following sections identify and describe some of the more significant funding and financing options that ultimately may be incorporated into detailed, project-specific capital and operating finance plans. The information below describes potential funding sources available through public sector grant and loan programs; areas where local governments already have authority to generate additional revenues for transportation purposes; and opportunities for the private sector to financially participate in the development of new SFECC transit improvements.

### **2.1. Capital Funding Strategy**

#### **2.1.1. Public Sector Grants**

The capital funding strategy currently envisioned for the SFECC transit improvements assumes a federal share with matching funds from the state and local jurisdictions. The corridor-wide improvements would be implemented in specific geographic segments over time. Once more detailed information is developed regarding scope, cost, scheduling, and ridership, each segment would be evaluated against potential funding sources to arrive at the "best fit," considering the scope and cost of the improvement compared to the eligibility requirements of each funding source/program. For example, the segment between Miami and Ft. Lauderdale may demonstrate the greatest ridership potential and therefore prove the strongest candidate to compete for federal grants through the Federal Transit Administration

(FTA), while on other segments, debt financing repaid from non-federal sources may prove the preferred strategy for initial construction given the lengthy process and structured scoring criteria for securing FTA grants.

Traditional transportation funding sources include grant programs administered by federal and state transportation agencies. Funding transportation improvements within the SFECC will require the use of a variety of sources, including federal and state participation in some form. Following are examples of some of the more prominent federal and state funding programs that may have application.

#### **2.1.1.1. Federal Transit Administration**

Federal funds typically are involved in funding major transportation improvements, including highways and mass transit. Under the U.S. Department of Transportation (US DOT), the FTA administers funding programs designed to assist state and local agencies in funding major new transit projects such as new passenger rail services (“New Starts”). Competition for New Starts funds is intense as many cities and regions around the country advance projects that assume federal participation as a major funding source. The cost of a New Starts project can be significant, and the process applied by FTA to approve a project for funding can be rigorous and time consuming. Nonetheless, FTA New Starts funding has been used by many agencies throughout Florida including Miami-Dade County and the South Florida Regional Transportation Authority (SFRTA, or “Tri-Rail”) to help fund major transit investments.

#### **2.1.1.2. Federal Highway Administration**

The Federal Highway Administration (FHWA) also administers funding programs designed to assist state and local agencies fund transportation improvements. The FHWA funding programs are structured around funding improvements to highways. However, local areas, through their Metropolitan Planning Organizations (MPO), can “flex” highway funding for use on transit improvements. The process involves a transfer of funds from the FHWA to the FTA. Depending on the nature of the proposed transit improvement, the FTA applies its relevant program requirements to the transferred funds.

New federal transportation legislation is currently under consideration by the Administration and the U.S. Congress, which may modify or otherwise restructure the FTA New Starts program as well as create new opportunities for federal funding assistance in the planned SFECC improvements. The State of Florida will be an active participant in the federal legislative process in an effort to shape national transportation policy and new implementing legislation that favor major transportation investment programs such as the SFECC transit improvements program.

### **2.1.1.3. National Infrastructure Innovation and Finance Fund**

In its FY 2011 budget recommendations, the Administration proposed a new National Infrastructure Innovation and Finance Fund (NIIF). Funding is proposed at \$4 billion, which may be made available through either grants or loans. Similar concepts (such as national infrastructure banks) are also under consideration by Congress in the context of new transportation reauthorization legislation. NIIF is intended to fund major projects of national, regional or local significance with eligibility afforded to highway, transit, rail, aviation, ports, and maritime investments. Grants, loans and loan guarantees would be provided for infrastructure projects that improve the sustainability of regional transportation networks or for transportation elements of non-transportation projects. As proposed, this new fund would also be used to promote collaboration on major projects among states, municipalities and private investors.

### **2.1.1.4. Florida Department of Transportation**

FDOT administers many programs to help fund transportation improvements across all modes of transportation. Program initiatives such as the Strategic Intermodal System (SIS) and the Transportation Regional Incentive Program (TRIP) are designed to provide funding for transportation improvements to major statewide or regional transportation corridors. TRIP was established in Florida's Growth Management reform legislation passed by the 2005 Florida Legislature. The SFECC alternatives analysis study is a regional undertaking and will produce a collection of candidate projects that result in improvements to this major tri-county regional transportation corridor. Importantly, the Florida East Coast Railroad is a designated SIS corridor. Consequently, both SIS and TRIP funding are potential capital funding sources for the SFECC improvements program.

The 2005 Growth Management reform legislation also established significant funding for a state "New Starts" transit program. The program is intended to help fund transit capital projects in metropolitan areas. Based on available funding, candidate projects may receive up to 50 percent of the non-federal share of project costs.

### **2.1.2. Local Government Programs**

Local governments in Florida have several basic revenue-raising tools for funding transportation improvements. These tools are based on authority derived from the Florida Constitution and specific state legislation. Examples include ad valorem taxes and related revenue-raising mechanisms, special assessments, and a variety of local option taxes. Transportation improvements within the SFECC will require the use of a broad array of funding mechanisms including those available to affected local governments.

#### 2.1.2.1. **Constitutional and Home Rule Authority**

The Florida Constitution and specific state legislation provide the following authority:

- Tax Increment Financing. Under Section 163, Florida Statutes, municipalities or counties are authorized to designate Community Redevelopment Areas (CRA) in areas that meet specific criteria. CRAs may receive contributions from affected taxing jurisdictions within the area. Generally, the contribution formula is based on new ad valorem tax revenue generated from within the CRA subsequent to its creation (i.e., the “base year”) and adoption of a redevelopment plan. Approval is required by the local governing body and affected taxing jurisdictions. Historically, growth in new development and significant redevelopment within the tri-county region has resulted in the formation of several CRAs to take advantage of this value capture technique.
- Special Assessment Districts. Under Sections 170 and 190, Florida Statutes, municipalities or counties may create improvement districts and levy special assessments on the property owners within the district. Among other things, special assessments may be used for transportation purposes. The improvement or service being funded by the assessment must directly benefit the property owner paying the assessment. Approval is required by the local governing body. Depending on the type of district created, a majority of the property owners also must agree to the assessment. This mechanism has been used successfully around the state to create and sustain business improvement districts (BID), community development districts (CDD), and downtown development authorities (DDA).

#### 2.1.2.2. **Local Option Taxes**

Local option taxes include:

- Fuel Taxes. Under Sections 206.41, 206.87, 336.021, 336.025, Florida Statutes, local governments are authorized to levy up to 12 cents of local option fuel taxes in the form of three separate levies – a one cent levy (known as the “Ninth-Cent Fuel Tax”), a six cent levy, and a five cent levy. The proceeds may be used for transportation and infrastructure development. Depending on the levy, at least a majority vote of the governing body or a voter referendum is required to impose the tax. In the tri-county region, Miami-Dade has levied 10 cents, and Broward and Palm Beach have imposed the full 12 cents.
- Charter County Transportation System Surtax. Under Section 212.055, Florida Statutes, the *Charter County Transportation System Surtax* may be levied at a rate of up to one percent in

eligible counties, which include, among others, Broward, Palm Beach, and Miami-Dade Counties. The proceeds may be used for development, construction, operation, and maintenance of fixed guideway rapid transit systems, bus systems, and roads and bridges. Voter approval, through a county referendum, is required for the tax to be imposed. In the three-county region, Miami-Dade is the only county that has levied a (one-half cent) sales tax under this legislation.

- Local Government Infrastructure Surtax. Section 212.055, Florida Statutes, permits the imposition of the *Local Government Infrastructure Surtax*. This sales tax may be levied at the rate of one-half or one percent. The proceeds may be used for infrastructure development. All counties in the state are eligible to levy the tax. Voter approval is required. The tax has not been imposed by any of the three counties within the SFEC region.

## **2.2. Capital Financing Sources**

While traditional transportation funding sources emphasize federal and state grant programs, innovative financing techniques such as loan programs and public/private partnership (P3) arrangements have become more common. To the extent a funding gap remains after application of available grant funds, the capital costs may be financed through one of the following debt programs or combinations thereof. Debt service payments could be made from state and/or local sources or through private sector sources further described below.

### **2.2.1. National Infrastructure Innovation and Finance Fund**

As described above, the Administration has proposed a NIFF of \$4 billion in its FY 2011 budget that could be used for grants, loans, and loan guarantees.

### **2.2.2. Railroad Rehabilitation and Improvement Financing Program**

The *Railroad Rehabilitation and Improvement Financing (RRIF) Program* was established by the *Transportation Equity Act for the 21st Century (TEA-21)*. Under RRIF, the Federal Railroad Administration (FRA) is authorized to provide up to \$35 billion in direct loans and loan guarantees for projects that acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops; refinance outstanding debt incurred for the purposes listed above; and develop or establish new intermodal or railroad facilities. Direct loans can fund up to 100 percent of eligible project costs. Eligible borrowers include railroads, state and local governments, government-sponsored authorities and corporations, joint ventures that include at least one railroad, and limited option freight shippers who intend to construct a new rail connection.

### **2.2.3. Transportation Infrastructure Finance and Innovation Act**

Under the *Transportation Infrastructure Finance and Innovation Act (TIFIA)*, project sponsors can apply for various forms of federal credit assistance, including direct loans and loan guarantees, in lieu of federal grants. This type of assistance can be a key component in structuring financial plans for major transportation investments. TIFIA loans, for example, are being used successfully to help finance key components of the Miami Intermodal Center (MIC) program. More recently, TIFIA loans were also part of the approved financial plans for the I-595 Corridor Improvements Program in Broward County and the Port of Miami Tunnel in Miami-Dade County. TIFIA is administered by the FHWA.

### **2.2.4. State Infrastructure Bank**

The State Infrastructure Bank (SIB) provides loans to eligible transportation projects at very competitive interest rates and flexible repayment terms. Since the SIB's inception, over \$1 billion in loans have been awarded, representing approximately 13 percent of total project costs. Interest rates applied to these loans have generally been below market rates, with repayment terms ranging from as little as one year to as many as 30 years. FDOT solicits SIB loan applications annually for candidate projects. The SIB will be evaluated during the financial planning process for its potential application on specific project segments as a SFECC financing mechanism.

### **2.2.5. Fixed Guideway Bonds**

Section 215.615, Florida Statutes, authorizes the use of up to two percent of the state's transportation revenues to issue bonds to finance the building, expansion, or reconstruction of fixed guideway systems in urban areas. Each bonded project must be approved by the Florida Legislature. According to FDOT's 2009 Bond Financing Update Report, this bond program can generate \$1.05 billion in bonding capacity for fixed guideway systems at 5 percent interest for 30 years.

## **2.3. Capital Renewals and Replacements**

The FTA has two grant programs that help fund capital renewal and replacement costs. The *Urbanized Area Formula Program* (49 U.S.C. 5307) provides federal funding to urbanized areas and to governors for transit capital and operating assistance and for transportation-related planning. The project proponents may apply for funds to offset eligible costs upon reporting the route miles and revenue miles to the National Transit Database after the first full year of operations with disbursement of the grants following the federal budgeting process.

In addition to funding new fixed guideway systems (New Starts), the federal transit capital investment program (49 U.S.C. 5309) also provides capital assistance for modernization of existing rail systems. Funding is available for fixed guideway systems: any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part, and includes commuter rail. The statutory formula for allocating funds contains seven tiers. Funding under the last three tiers (5, 6, and 7), applicable to any SFECC transit improvements, is apportioned based on the latest available route miles and revenue vehicle miles on segments at least seven years old as reported to the National Transit Database. The statutory formula multiplies the route miles and revenue vehicle miles by the apportionment data unit values for Tiers 5, 6, and 7, which are published annually.

These federal grants require matching on an 80/20 federal/non-federal basis. FDOT may elect to use toll revenue credits generated by Florida's Turnpike (these exceed \$350 million per annum) and by other FDOT toll facilities to match the FTA grants.<sup>1</sup> This "soft match" would only apply once the specific project becomes operational. Toll credits would not be applied as matching funds for the construction of the transit improvements.

## **2.4. Operating Funding Strategy**

Funding sources for the annual operating and maintenance expense of the SFECC transit improvements will comprise a variety of sources including both system-generated and non-system-generated revenue. System-generated revenue may include farebox revenue, ancillary revenue, usage fees, and lease revenue. Non-system-generated revenue may include federal block grants, state operating assistance, and local operating support. Below is a summary of potential sources to fund annual operating and maintenance expenses.

### **2.4.1. Farebox Revenue**

Farebox revenue is typically the single most important source of system-generated operating revenue. Rough estimates of gross farebox revenue were derived from the zonal fare structure in place at Tri-Rail prior to November 2009. Historically, fares for Tri-Rail service have been very low compared with services nationwide. Using Tri-Rail fares resulted in relatively low revenue forecasts for all services.

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<sup>1</sup> Effective September 20, 2007, "it is the policy of the Department to make available the option to use toll revenue credits, authorized by Title 23 U.S.C. 120(j)(1), to Florida transit systems for use as soft match on eligible federal transit capital projects." (Please visit <http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/000725025.pdf> for the policy statement signed by the secretary of the FDOT).

Integrated Rail – DMU has the highest projected revenue, followed by Integrated Rail – Push-Pull and BRT. All build alternatives are projected to generate more revenue than the TSM alternative.

**Table 2: Farebox Revenue**

FAREBOX REVENUE				
	TSM	BRT	Integrated Rail	
			DMU	Push-Pull
Gross Annual Revenue	\$16.0 million	\$18.2 million	\$23.0 million	\$19.8 million

The revenue estimates above combined with the order-of-magnitude gross operating and maintenance expense estimates generate farebox recovery ratios of 10-13 percent. These farebox revenue estimates may be conservative in light of recovery ratios achieved by transit systems elsewhere in the United States. According to the *2008 National Transit Summaries and Trends* from the National Transit Database,<sup>2</sup> recovery ratios nationwide, defined as the percentage of operating expenses paid through fare revenues (in constant 2000 dollars), ranged between 31.4 percent and 37.1 percent between 1999 and 2008. During the same period, the range was slightly higher (33.2 percent to 39.5 percent) for urban areas with a population of one million or more (the metropolitan statistical areas of Miami-Miami Beach-Kendall, Fort Lauderdale-Pompano Beach-Deerfield Beach, and West Palm Beach-Boca Raton-Boynton Beach all have populations exceeding one million).<sup>3</sup> For commuter rail systems in particular, the farebox recovery ratio was 50.3 percent in 2008.<sup>4</sup>

#### 2.4.2. Ancillary Revenues

Ancillary revenues have been used by many local and regional transit agencies around the country to assist with financing new transit services. The private sector has demonstrated an interest in paying for advertising space, naming rights, sponsorships, concessions and other commercial ventures at transit stations or in conjunction with transit vehicles. Having a station in a prominent location carry a name “brand” has value. Likewise, “wrapping” a vehicle with tasteful advertising also has value and has been successfully used by many transit agencies across the United States, including those in Florida. Ancillary

<sup>2</sup> <http://www.ntdprogram.gov/ntdprogram/data.htm>

<sup>3</sup> According to the U.S. Census Bureau, the 2009 annual estimates of the population of the surrounding metropolitan statistical areas were as follows: Miami-Miami Beach-Kendall: 2,500,625; Fort Lauderdale-Pompano Beach-Deerfield Beach: 1,766,476; West Palm Beach-Boca Raton-Boynton Beach: 1,279,950.

<sup>4</sup> Fare revenue of \$2,160.5 million divided by operating expense of \$4,293.8 million, per 2008 National Transit Profile.

revenue mechanisms can generate either one-time or recurring financial contributions from the private sector, which can be applied to funding the cost of new transit services.

### **2.4.3. User Fees**

Should acquisition of access rights from the current owner/operator of the FEC railroad corridor be accomplished through acquisition of the entire corridor, the new owner of the FEC Railroad right of way, presumably a public agency, would find itself in a position to collect fees for use of the asset. A private freight rail carrier, whether the FEC or another company, would want access to the tracks so that freight rail service could continue to the many captive shippers located on the line. Similarly, Amtrak may want access to the tracks for inter-city passenger rail service. Use of the tracks by others typically necessitates the need for usage fees and other charges to be paid to the owner by the freight rail company and/or by Amtrak. Revenues from these sources could be applied to the maintenance of the right-of-way and infrastructure as well as investment in the corridor to develop new passenger rail/transit services.

### **2.4.4. Lease Revenue**

The owner of the corridor may be able to collect revenue from leasing the right of way to utilities and telecommunication companies. The FEC rail corridor in the tri-county area is particularly attractive compared to highway alternatives because it is continuous and unobstructed, it would have a single owner, and installations could be accomplished without significant disruption of traffic. One example of a potential source of revenue is from the leasing of fiber optic conduit. FDOT recently contracted with an independent appraiser to estimate the market rent of the existing fiber optic cable communication system of a national telecommunications company. The cable runs through the 81-mile north-south Tri-Rail corridor between Miami and West Palm Beach alongside track owned by FDOT. According to the market rent estimate, the potential revenue from leasing the fiber optic cable is \$2.81 (2009 dollars) per lineal foot. If the 85-mile alignment of the FEC corridor were to be leased at this rate, the annual revenue would be \$1.3 million (2009 dollars).<sup>5</sup>

### **2.4.5. FTA Block Grants**

A portion of the costs to operate and maintain passenger service along the SFEC could be categorized as preventive maintenance. These costs include engineering and maintenance of way costs related to

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<sup>5</sup> 85 miles = 448,800 feet. 448,800 \* \$2.81 = \$1,261,128.

the track and right of way, bridges and structures, and signals and communications, as well as equipment maintenance costs. Transit-related preventive maintenance costs are of a capital nature and therefore deemed eligible costs by the FTA for purposes of accessing funds from the *Urbanized Area Formula Program* (49 U.S.C. §5307) and the *Fixed Guideway Modernization Program* (49 U.S.C. §5309). Operating revenue may therefore include block grants allocated from these FTA programs to fund preventive maintenance costs.

#### **2.4.6. State Operating Assistance**

State assistance may be a source of operating revenue in, at least, the initial operating period. For example, FDOT currently provides an annual operating subsidy to Tri-Rail along with operating subsidies provided by the three counties served by the commuter rail system. In Central Florida (SunRail), FDOT has agreed to subsidize operations for the first seven operating years; thereafter, the local government partners would fund any operating deficits.

#### **2.4.7. Local Operating Support**

As explained in the Capital Plan discussion, local governments in Florida have authority to employ several means of raising revenue and funding transportation improvements. These may serve as sources not only of capital funding and/or debt repayment but also operating subsidies. Examples include ad valorem taxes and related revenue raising mechanisms, special assessments, and a variety of local option taxes.

#### **2.4.8. Real Estate-Related**

Ideally, the corridor will be attractive for Transit Oriented Development (TOD) comprising residential, workplace, and supporting uses such as retail real estate, creating opportunities for private sector participation around passenger stations or terminal locations. Long-term lease revenues from the private sector in exchange for development rights may be a potential funding source used by local jurisdictions for operating subsidies. This could involve a variety of forms. For example, to the extent that land surrounding potential station areas is already in public ownership or control, or local jurisdictions intend to acquire land surrounding potential station areas, there will be opportunities to explore long-term lease arrangements with the private sector in exchange for some form of development rights.

### **3. RISK AND UNCERTAINTY**

The following matrix identifies initial risk areas along with mitigation strategies to be more fully addressed during subsequent phases of SFECC project development.

**Table 3: Risk Matrix**

<b>Construction Cost and Revenue Risk</b>	<b>Risk Assessment and Mitigation</b>
<p><i>Capital costs are preliminary and represent order-of-magnitude corridor-wide estimates</i></p> <ul style="list-style-type: none"> <li>• Implementation of the SFECC improvements will be phased through specific project segments</li> <li>• The next phase of project development will include detailed segment specific PD&amp;E studies</li> </ul>	<p><i>The PD&amp;E process will afford the opportunity to refine preliminary capital cost estimates</i></p> <ul style="list-style-type: none"> <li>• The preliminary cost estimates include a 20% unallocated contingency</li> <li>• More detailed information will be developed for each segment, e.g., scope, scheduling, and other issues impacting cost</li> <li>• The continuing financial planning process will use this information to match project costs with capital funding source/program requirements</li> </ul>
<p><i>Assumptions regarding FTA New Starts funding may be optimistic</i></p> <ul style="list-style-type: none"> <li>• The New Starts process is very structured</li> <li>• Could potentially delay project implementation and increase costs</li> <li>• Nationally, competition for New Starts funding is intense</li> </ul>	<p><i>Objectively assess the cost/benefit of seeking New Starts funding</i></p> <ul style="list-style-type: none"> <li>• Select only those corridor segments that best meet New Starts criteria</li> <li>• Set realistic funding and timing expectations</li> </ul>
<p><i>Assumptions regarding local capital funding sources may be optimistic</i></p> <ul style="list-style-type: none"> <li>• New local funding sources will be required to implement segment specific projects</li> </ul>	<p><i>Local support for the project will be key to a viable capital financial plan</i></p> <ul style="list-style-type: none"> <li>• Additional public involvement/outreach will be undertaken during the PD&amp;E process</li> <li>• Local governments in Florida have existing authorities to raise revenues/funding</li> </ul>
<p><i>The construction environment will be complex and challenging, potentially increasing costs</i></p> <ul style="list-style-type: none"> <li>• Existing highway and utility easements constrain effective corridor width</li> <li>• Construction would be undertaken within an active rail freight corridor</li> </ul>	<p><i>Reach understandings up front as part of access rights negotiations</i></p> <ul style="list-style-type: none"> <li>• Access rights to the existing rail corridor would need to address construction issues</li> <li>• The disposition of third party property interests would need to be resolved as part of access rights negotiations</li> </ul>

Construction Cost and Revenue Risk	Risk Assessment and Mitigation
Operating Cost and Revenue Risk	Risk Assessment and Mitigation
<p><i>Operating costs are preliminary and represent order-of-magnitude corridor-wide estimates</i></p> <ul style="list-style-type: none"> <li>• Implementation of the SFECC improvements will be phased through specific project segments</li> <li>• The next phase of project development will include detailed, segment-specific PD&amp;E studies</li> </ul>	<p><i>The PD&amp;E process would afford the opportunity to refine preliminary operating cost estimates</i></p> <ul style="list-style-type: none"> <li>• Detailed operating plans would be developed for each segment including refined cost and ridership estimates</li> <li>• The continuing financial planning process would use this information to match project costs with operating funding source/program requirements</li> <li>• The operating financial plan would include provisions for deposits to a cash reserve to address revenue/expense shocks.</li> </ul>

#### 4. CONCLUSION

The estimated capital costs for the proposed alternatives for the SFECC transit improvements vary widely, from the least costly TSM alternative (\$220 million) to the integrated rail alternatives (\$2.5 billion). In addition to the initial cost of implementing new transit services are the costs of acquiring access rights from the current owner/operator of the FEC railroad corridor and the ongoing costs to renew and replace capital items. Operating and maintenance expense forecasts also vary widely.

The capital funding strategy currently envisioned assumes a federal share with matching funds from the state and local jurisdictions. Once more detailed information is developed regarding scope, cost, scheduling, and ridership, each segment would be evaluated against potential funding sources to arrive at the “best fit,” considering the scope and cost of the improvement compared to the eligibility requirements of each funding source/program. To the extent a funding gap remains after application of available grant funds, the capital costs may be financed through innovative financing techniques such as loan programs and public/private partnership (P3) arrangements.

The strategy for funding the operation and maintenance of the transit improvements assumes a variety of sources including both system-generated and non-system-generated revenue.

Subsequent phases of SFECC project development will assess risks on both the cost and revenue sides in more detail and address risk mitigation strategies.