

Applicant and Proposal Profile

(TIGGER)

Section I. Applicant Information

Organization Legal Name:

Is this a Consolidated Proposal? Yes No

If so, Select the State DOT

Provide the Consolidated Proposal Title

Total amount of consolidated proposal:

Section II. Project Information (this section repeats, per project)

About the Project

Project Title:

Grant Purpose: Energy Reduction Greenhouse Gas Both

Name of entity to implement project:

FTA Recipient ID Number:

Applicant Eligibility: State
 Indian Tribe
 Public Transportation Agency

Population Served: Urbanized over 200,000
 Urbanized 50,000 - 200,000
 Rural

Description of areas served:

SFRTA operates Tri-Rail, a commuter rail service, with eighteen (18) stations along a 72-mile corridor in Southeast Florida, covering Palm Beach, Broward and Miami-Dade Counties (see Exhibit A for Tri-Rail Service Area Map). Tri-Rail's service area (Southeast Florida) is located in the Miami-Ft. Lauderdale-Pompano Beach Florida Metropolitan Statistical Area (MSA). This MSA has a population of more than 5.5 million people. All Tri-Rail stations connect to bus transit systems and local shuttles

in Miami-Dade, Broward and Palm Beach Counties, and to the Metrorail, a heavy-rail system in Miami-Dade County. SFRTA also provides and supports shuttle bus services to enhance connection to and from most Tri-Rail stations. Tri-Rail's Pompano Beach station is located at 3491 NW 8th Avenue, Pompano Beach, FL 33064, Broward County, Florida. SFRTA's main office is conveniently located directly across from the station.

Description of Services Provided:

Tri-Rail, one of the fastest growing commuter rail systems in the nation, provides service to the Southeast Florida region at peak-hour service of 20 to 30-minute intervals with fifty (50) trains per day on weekdays, with an average of 14,000 trips per day, and sixteen (16) trains per day on weekends and holidays. Tri-Rail's shuttles also provide connection from most stations to nearby employment centers and other destinations, such as airports, hospitals, museums, education centers, and libraries. The Pompano Beach station currently serves about 18,900 passengers monthly. Most passengers at this station go to and arrive from the Metrorail Transfer Station, the Miami Airport Station, and the West Palm Beach Station. Passengers at this station can connect to a Tri-Rail shuttle, which provides access to several office parks, a regional wastewater treatment facility, and several retail plazas. Connection to county bus route #34 of Broward County Transit also takes place at this station. This route connects passengers to several malls and shopping plazas, a county park, and two (2) medical centers.

Is this a capital project as defined under 49 U.S.C. 5302(a)(1)?

Yes No

Will this project Reduce energy user and/or greenhouse gas emissions for the transit agency?

Yes No

Project Executive Summary:

The Pompano Beach Green Station Demonstration is an innovative demonstration project that will showcase Tri-Rail's first green, LEED certified, sustainable station, which will generate more than 100% of the station's energy demand through solar panels. Currently, standard Tri-Rail stations have no energy efficient features, which result in high maintenance and operating costs. SFRTA recognizes the need to make green, energy efficient upgrades to stations rather than continuing to follow the standard.

The proposed green station will have platform canopies that will be partially covered with photo-voltaic panels (solar panels), and which will generate about 80% of the energy required for the station and parking lots. The east parking lot will also have several canopies to provide shaded parking, and to serve as more surface area for solar panels. The solar panels will be connected to the electric grid, with a smart meter that will store surplus energy generated to be drawn at night. Other green, energy efficient features of the project include 100% Low Emitting Diodes (LED) lighting, machine-room-less (MRL) elevators, and specifications for materials, mechanical equipment and finishes which are green and environmentally safe.

The proposed energy consumption of the project is compared to an existing Tri-Rail station with a passenger bridge and continuous platform canopies (Baseline station). The total energy consumption for the proposed green station and parking lots was calculated to determine the minimum amount of solar energy that must be generated from the solar panels on the canopies.

The total project cost is estimated at \$12,836,028.86. SFRTA is financially committed to fund 55% of the project, requesting only 45% to be funded by TIGGER, \$5,713,549.25. Energy consumption savings were calculated to be over \$56,000 per year. The useful life of the solar canopies is 25 years, which results in a useful life savings of up to \$1.4 million. The return on the investment for the project is 41.8%, and this number does not reflect any additional savings SFRTA may receive by generating surplus solar energy.

In conclusion, implementation of this demonstration project will result in a significant reduction in energy consumption, which is consistent with FTA's livability and environmental sustainability goals to support green building. Tri-Rail's Pompano Beach Green Station will be the first transit station for commuter rail in the State of Florida and may be the first one nationally to be 100% supported by solar energy, and will become SFRTA's green station prototype for future improvements at all Tri-Rail stations.

Brief Abstract of project:

The Pompano Beach Green Station Demonstration is an innovative demonstration project that will showcase Tri-Rail's first green, LEED certified, sustainable station, which will generate more than 100% of the station's energy demand through solar panels. Currently, standard Tri-Rail stations have no energy efficient features, which result in high maintenance and operating costs. SFRTA recognizes the need to make green, energy efficient upgrades to stations rather than the continuing to follow the standard.

The new passenger station will have photo-voltaic panels (solar panels), which will generate energy required for the station and parking lots. The solar panels will be connected to the electric grid, with a smart meter that will store surplus energy generated to be drawn at night. Other green, energy efficient features of the project include 100% Low Emitting Diodes (LED) lighting, machine-room-less (MRL) elevators, and specifications for materials, mechanical equipment and finishes which are green and environmentally safe.

The total area of solar panels to be installed will result in a surplus of solar energy production. Therefore, Tri-Rail's Pompano Beach Green Station will be the first transit station for commuter rail in the State of Florida and may be the first one nationally to be 100% supported by solar energy, and will become SFRTA's green station prototype for future improvements at all Tri-Rail stations.

The following are the three (3) main objectives for this project:

Objective 1: Demonstrate and showcase the benefits of solar energy generation in a high visibility location.

The project will demonstrate the feasibility of installing solar panels over platform canopies and parking areas to support 100% of the energy demanded by the station and parking lots. It will also demonstrate to Tri-Rail passengers and the general public all the available technologies and initiatives that exist to have a sustainable and environmentally friendly transit station. One of the long-term benefits of this project is that the installation of the solar panels will be relatively easy to retrofit at other stations and parking lots in the Tri-Rail system. In addition, monitoring, reporting and marketing efforts will highlight the positive benefits of solar power generation, revenue generation, shaded parking and reduced heat gain in pavement.

Objective 2: Demonstrate and showcase the benefits of green, sustainable construction.

The project has been registered under the LEED system to achieve Silver LEED Certification by the US Green Building Council. The project design criteria indicates the requirement to implement green, sustainable amenities in addition to solar energy generation, such as LED lights, energy efficient elevators, charging stations for electric vehicles, and water efficient landscape. The project will also serve as an educational tool for students in the area to visit, learn and study how a green, sustainable, energy efficient transit station works. As a result, SFRTA will utilize this project as a prototype for all Tri-Rail stations in the region.

Objective 3: Assess the potential to generate a new source of operating funds.

The project will allow SFRTA to investigate different methods for financial compensation and cooperation among public and private entities. For example, public and private entities have approached SFRTA with interest in providing electrical vehicles to sit at the Pompano Beach Station, which can be rented by passengers for car-pooling. Another example is the ability to create a surplus amount of solar energy, which can be stored and used as a credit at other stations or SFRTA-owned buildings.

In summary, this project has the potential of creating many long-term benefits, including elimination of electric power expenses, reduction of maintenance cost, adaptation to climate change, and promotion of green building practices.

Description of the project Scope:

The Pompano Beach Green Station Demonstration project includes construction of a new, green and sustainable passenger transit station to replace the existing, and reconstruction of an existing parking lot to be more environmentally friendly and energy efficient. Currently, a standard Tri-Rail station has standard upgrades encompassing two (2) 25-foot-by-400-foot platforms with a full length canopy and a pedestrian overpass. Station and parking lots have high pressure sodium (HPS) light fixtures. The elevators are hydraulic, and landscape meets the minimum requirements to keep

maintenance cost down. There are no back-up generators in case of a power outage, and not all bus waiting areas have canopies.

Baseline Project:

The proposed project is compared to a Baseline Project. Energy consumption data has been collected for a minimum of twelve months for the existing parking lots at the Pompano Beach station, as well as energy consumption at a standard station. The combination of the energy consumption of the two (2) existing parking lots plus the energy consumption of a standard station, are used as the Baseline Project. The Baseline Project is the equivalent estimate of energy consumption for the proposed project if it were to have standard improvements.

Existing Station:

The existing Pompano Beach Station has two (2) 15-foot by 400-foot platforms, several platform shelters, no shelters for bus waiting area, and all Metal Halide (MH) and HPS light fixtures. The station requires an upgrade to current station standards, but SFRTA recognizes the opportunity and need to make these upgrades green and energy efficient, or above the current standards. In addition, the opportunity to generate solar energy to support the station will reduce operating costs.

Proposed Green Station:

The new passenger station will have two (2) 25-foot by 425-foot platform with a full length canopy and a pedestrian overpass. The platform canopies will support photo-voltaic panels (solar panels), which will generate about 80% of the energy required for the station and parking lots. The solar panels will be connected to the electric grid, with a smart meter that will allow surplus energy generated to be stored during the day, and drawn at night. Lighting in the platform and platform building will be 100% Low Emitting Diodes (LED). Two elevators that connect the platforms to the pedestrian overpass will be machine-room-less (MRL), and consume 50% less energy than the standard hydraulic elevators that exist in standard Tri-Rail stations. Specifications for materials, mechanical equipment and finishes require the use of green, environmentally safe products.

The existing station is served by two (2) parking lots; one on the east and one to the west of the station. The west parking lot is fairly new, but lighting is not energy efficient. SFRTA is currently working to replace the light fixtures on the west parking lot with LED fixtures. The east parking lot is older, has inefficient vehicular circulation and pedestrian amenities. The plan proposes to reconstruct the entire east parking lot to provide a separate bus lane for passenger drop-off/pick-up with a full length canopy; a designated taxi/kiss-n-ride waiting area with shelters; more parking spaces; 100% LED lighting; bike racks and bike lockers; preferred parking and charging stations for energy efficient vehicles; several canopies to provide shaded parking to reduce heat gain; solar panels on the parking canopies to meet 100% of the station and parking lots energy demand with solar energy; and a back-up generator that will be used for power outages.

- Project Type: Facility
(Please select all that apply) Vehicle
 Energy Production
 Transit Stop or Station
 Transit Vehicle
 Other

If Other, Specify:

[Empty rectangular box for specifying other project types]

- Transportation Modes used in the project: Regional Rail/Commuter Rail
 Heavy Rail/Metro/Subway
 Light Rail on Private ROW (Fenced)
 Light Rail on shared Track (Freight)

- Streetcars/Light Rail in streets/Circular Bus
- Local/Limited Bus
- Bus Rapid Transit
- Express Bus/Coach
- Ferry

Fuels/Energies utilized in the project:

- Diesel
- Bio-Fuels
- CNG
- Hydrogen from Electricity
- Hydrogen from other fuel
- Electricity
- Solar/wind (for propulsion)
- Gasoline
- Geothermal

Electric Drive Elements Utilized in project:

- Electric drive Accessories (Bus)
- No-Idle Auto/Start/Stop Engine
- Regenerative Braking (Rail)
- On-board Energy storage (Rail)
- Wayside Energy storage (Rail)
- Hybrid Locomotive
- Fuel cells, Turbines, External Combustion Engine
- No drive belts
- N/A

Place of Performance

Primary Address of Proposed project:

Street:

City:

State:

Zip Code:

Additional Info (Including Other Locations Served by Project):

Project is located north of NW 33 Street, between Andrews Avenue and NW 8th Avenue. SFRTA's main office is conveniently located directly across from the station.

Technical, Legal and Financial Capacity

Description of Technical Capacity to Implement Project:

SFRTA has the technical capacity to implement this project, and it has previously been successful with other large scale projects. With competent staff in all departments of the agency, and the support of professional consultants, SFRTA recently completed the Fort Lauderdale Airport Station Parking Garage, a \$5.3 Million project, on time (6 months early) and under budget (\$4 Million less than estimated). Similar to the Pompano Beach Green Station Demonstration project, the parking garage implemented green, energy efficient construction, such as LED lighting and MRL elevators.

Another example is SFRTA's large scale Segment 5 Double Tracking project for the South Florida Rail Corridor, which was completed in 2007. In addition to agency staff present during these projects, the SFRTA has in place several General Planning Consultant (GPC), and General Engineering Consultant (GEC) contracts that assisted in these major construction efforts. These consultants have the background and technical experience to support the design and implementation of this project for SFRTA.

Further, this combination of teamwork and experience will allow this project to be accomplished within the timeframe and budget estimated. SFRTA's procurement and finance departments have also won many awards of excellence from their respective statewide industry organizations.

There are no outstanding legal, technical, or financial issues with SFRTA that would make this a high risk project to implement quickly. SFRTA is in fundable status, and is able to participate in this grant program.

Description of Legal Capacity to Implement Project:

SFRTA's two in house attorneys routinely work with the entire SFRTA staff to implement many complex, large scale projects, ranging from locomotive procurements to small and large scale construction projects. SFRTA's legal counsel know the goals and objectives of the Agency, and are involved in every phase of a project; from inception to completion. The Pompano Beach Station and parking lots are currently owned by SFRTA; therefore no real estate is to be acquired for project implementation.

Description of Financial Capacity to Implement Project:

SFRTA is financially committed to implement this project, which has a total budget of \$12,836,028.86. SFRTA has entered into a Joint Partnership Agreement (JPA) with the Florida Department of Transportation, which provides up to \$3,561,249.81 to fund this project. SFRTA's adopted capital budget includes a matching amount of \$3,561,249.80. This totals \$7,122,479.61 or 55% of the project cost. Therefore, this TIGGER proposal requests FTA for an amount of \$5,713,549.25 or 45% of the total project cost.

SFRTA has adequate financial systems in place, and has controls in place, as evidenced by the SFRTA financial audit, available at the following link: http://www.sfrta.fl.gov/docs/overview/2010_CAFR.pdf.

In addition, financially this project makes sense by looking at the return on investment (ROI).

Total Proposed Green Station Projected Cost = \$ 10,075.23 for Maintenance & operation, no energy cost

Total Baseline Project Energy Cost = \$ 66,794.60 for estimated energy consumption, maintenance & operation

Project yearly savings = \$ 56,719.37

Useful Life Savings = 25 years x \$56,719.37 = \$ 1,417,984.22

Solar Panels Cost = \$ 1,000,000.00 For min. area required for 100% energy demand

Project's Useful Life Savings as a % of Agency Annual Consumption = 138%

Rate of Return on Investment = 41.8% = $(\$1,417,984.22 - \$1,000,000.00) / \$1,000,000.00$

It is important to point out that SFRTA's Operating budget heavily relies on Federal, State and County assistance. Therefore it makes significant economic sense to invest the capital on a project that will reduce the operational and maintenance cost in the future, regardless of the ROI.

Return on investment (ROI) for this project could be further increased due to more intangible considerations not factored into the calculations. For example, the maintenance cost reduction that will result from installing an MRL elevator rather than a hydraulic is unknown at this time. Another factor is that the metal/rust maintenance reduction that will result due to more durable material specifications. There is also the potential surplus energy credits, and revenue increase that will result from more passengers using the station due to the improved amenities.

So to make an immediate calculation, the ROI was based only on the known energy cost savings. Energy savings have a direct relation to the solar panels; therefore, the ROI calculated for this proposal is based on energy savings over the cost of solar panels that provide 100% of the energy demand.

Project Management

Description of Project Management Plan:

As an FTA Grantee, SFRTA has previously prepared several PMP's for project implementation. The following is a section of the PMP that will be implemented for this project. The complete PMP has been attached to this application.

Specific SFRTA Responsibilities:

The SFRTA organization consists of a Board of Directors, an Executive Office, a Deputy Executive Director, and nine Departments: Executive, Finance and IT, Procurement, Engineering and Construction, Marketing, Operations, Planning and Capital Development, Human Resources, and Legal. The Executive Department has the overall responsibility for oversight of all Departments and conclusion of the Agency's visions and missions. All Department Heads report to the Executive Director and his Deputy.

- The Finance and IT Department is responsible for providing administrative support for other departments. Areas of support include accounting, revenue, finance, risk management, business planning, information technology, management of budgets and grants accounting.
- The Procurement Department is responsible for contract administration assistance and procurement of materials, equipment, fabricated products, construction, and services in accordance with approved requisitions, and specifications.
- The Engineering and Construction Department is responsible for executing all capital projects. Its duties include project management and control; monitoring safety compliance; environmental compliance; value engineering; and quality assurance/quality control.
- The Marketing Department is responsible for the development of media related marketing and customer information in order to encourage increased ridership.
- The Operations Department is responsible for ensuring the safe, on-time and courteous delivery of commuter rail service.
- The Planning and Capital Development Department is responsible for Federal, State, and local transportation funding. It is also responsible for meeting the short and long-range planning goals of SFRTA, and for all real estate acquisitions necessary to support SFRTA operations.
- The Human Resources Department reports directly to the Executive Director and is responsible for recruitment and employment of personnel and the implementation and management of SFRTA Employee Benefits Program. The Department is also responsible for the daily administration of personnel policies and procedures, as well as SFRTA training and employee development programs.
- The General Counsel, retained by the Board, provides legal representation for SFRTA. In any legal action taken by or against SFRTA, the General Counsel appears and participates in the case and on behalf of the Board, officer, or employee. The General Counsel may also hire in house attorneys or retain special outside legal counsel to assist with legal matters. Legal staff reports to and serves at the direction of the Board.

Describe any proposed deviations from FTA Circular 5010 Grants Management:

This project does not contain any deviations from FTA Circular 5010.

Does the project Require a waiver of any federal requirements?

Yes No

If so, Explain:

Project Scalability

Is the Project Scalable?

Yes No

If Yes, specify minimum funds necessary:

Provide Explanation:

N/A

Project Useful Life

Expected useful life of project (years)?

25

Explanation of useful life claim:

The most important pieces of investment in this project are the solar panels, because they provide for 100% of the energy demand. The solar systems are installed on a structural canopy, and based on information published by the U.S. Department of Energy, a PV panel system has a useful life of about 25 to 30 years. Therefore, the expected lifecycle used for this investment is 25 years.

Project Calculations

Enter the estimated energy savings and greenhouse gas reduction figures below by using the provided calculator sheets to generate estimates.

(Note that updating the expected useful life, annual saving/reduction estimate or a value in a calculator sheet will overwrite any manually entered estimates entered into the associated calculated field(s)).

Project Annual Energy Savings (Million BTU):

800.13

Project Annual Greenhouse Gas Reductions (tons CO2e)*:

Project Lifetime Energy Savings (Million BTU):

20,003.25

Project Lifetime Energy Savings as a percent of Total Agency Annual Energy Use:

137.612

Project Lifetime GHG Emission Reductions (tons CO2e)*:

20,003

Justification for claims of Energy, Detailed Calculations for energy savings have been prepared and are attached to

Greenhouse gas or other claims made in project proposal:

this supplemental form. It is recommended that these calculations are reviewed to further understand our savings claims. Existing energy consumption data was collected for a period of twelve (12) months, starting April 1, 2010 to March 31, 2011. All energy consumption calculations include accounts owned by, or directly paid by the SFRTA, such as stations, parking lots, and other structures. All data collected was based on invoices and records maintained by SFRTA.

The proposed project is compared to the Baseline Project, which consumes 234,367 KWh. The proposed project will consume 115,807 KWh annually which will be supplied by solar energy. Based on all data gathered the total square footage available for solar panels to be installed on the platform canopies can provide up to 80% (320 KWh) daily. Solar panels installed on the parking canopies will provide the remaining 20% (60 KWh) of the daily energy consumption.

Total annual energy consumption for proposed green station system is 0 KWh, since energy demand will be supplied by solar power.

Total annual energy savings due to project implementation is 234,367 KWh. The annual operations and energy cost savings for the project equals \$56,719.37. See summary below:

Since the project's Average useful life = 25 years
 Total project useful life energy savings = 5,859,175 KWh
 Total Existing Agency Annually Energy Consumption = 5,034,192 KWh
 Total Baseline Project Energy Cost = \$ 66,794.60 for estimated energy consumption, maintenance & operation
 Total Proposed Green Station Projected Cost = \$ 10,075.23 for Maintenance & operation, no energy cost
 Total project useful life cost savings = \$56,719.37 x 25 years = \$1,417,984.22
 Savings as a % Agency Energy Reduction = 138%

Describe or identify any unique, significant, or innovative approaches to reducing energy consumption or greenhouse gas emissions:

Installing solar panels on canopies to meet the station's energy demand, and generating surplus energy is an innovative way to reduce energy consumption and operating costs at stations and other agency owned buildings. Tri-Rail's Pompano Beach Green Station will be the first transit station for commuter rail in the State of Florida and may be the first in the nation to be 100% supported by solar energy. Implementation of Tri-Rail's Pompano Beach Green Station Demonstration project is an important step toward reducing energy consumption.

This project may be easily retrofitted using existing real estate, such as canopy surface area, or other building roof areas to install solar panels. Also implementing green, energy efficient features reduces the station's overall energy demand and the amount of energy that must be generated by the solar panels. This reduced energy demand results in further decreasing operating and maintenance costs.

This project is unique because it is located in an area that received a Sustainable Communities Initiative Grant in 2010, to create a seven County regional vision plan for Southeast Florida. This project fits in with the sustainability concepts that have been suggested to be part of that vision.

The educational approaches provided are also unique to this project. An on-going task for this project is the marketing effort that will bring focus and attention from passengers, students and other agencies in the area. Ideally, schools, universities and colleges in the region will use the Pompano Beach Green Station to learn and study the environmental and fiscal benefits of solar energy.

Describe the National Applicability of

SFRTA will implement these improvements as a demonstration project which will be

the project: implemented at other Tri-Rail stations system wide. This project will also serve as a demonstration project to other transit agencies, regionally or nationally, because it can be replicated or used for retrofit in their own systems. For example, intermodal centers can install solar panels on existing passenger canopies or on new parking canopies on existing parking lots. Solar canopies can be adopted as part of standard design guidelines for future new facilities.

Installing solar panels on canopies at existing and new parking lots can be used for credits under the LEED® rating systems, and is consistent with FTA’s livability and environmental sustainability goals to support green building. Therefore, this project has national applicability and it is an example of energy savings. Other recipients of Sustainable Communities Initiative Grants could easily use this as a model project in their region.

Project Readiness

Project can be implemented within:

- 3 Months 6 Months 9 Months 12 Months 12+ Months

Environmental work for construction projects requiring Environmental Assessment (EA), Environmental Impact Statements (EIS), or documented Categorical Exclusion (CE) has been completed?

- Yes No

Will be Completed in: 3 Months 6 Months 9 Months 12 Months 12+ Months

Implementation plans are ready, including initial design of facilities projects:

- Yes No

Is the Project Proposal listed in the TIP/STIP?

- Yes No

Is the TIP/STIP approved?

- Yes No

TIP/STIP can be amended (evidenced by MPO/State endorsement):

- Yes No

URL to TIP/STIP:

Broward MPO TIP - http://browardmpo.org/mpo/TIP%20FINAL%20FY11.12_15.16.pdf

Project can be obligated and begin implementation quickly, if selected:

- Yes No

Description of project readiness:

The advanced progress of the design plans, procurement documents, approvals, and limited environmental analysis make this project ready to implement. Plans have been advanced to 75% completion, not including the canopies on the parking lot. All other green, energy efficient features and solar panel systems that cover 80% of the energy consumption are included in the current 75% design. Procurement documents have also been drafted, and are to be completed by February 2012.

Project approvals are also in process. Site plan approval process has already started with the City of Pompano Beach Planning & Zoning Department, and approval is expected by October 2011. Water and sanitary sewer plans and permit application have been submitted to Broward County Water & Wastewater Services for review.

In addition, there is no environmental assessment required for the implementation of this project, since facilities are existing, and no land acquisition necessary. A Categorical Exclusion has already been developed for this project. SFRTA is committed to funding up to \$7,122,479.61, or 55% of the cost.

Description of project management capacity to complete proposed project:

SFRTA has the staff and consultant team necessary to implement this project. Coordinated efforts of the Planning, Engineering, Operations, Legal, Procurement and Finance Departments have lead to successful project completions. SFRTA has recently completed the procurement of rebuilt locomotives and rolling stock. SFRTA was also successful in completing design, procurement and construction of Tri-Rail's first parking garage at the Fort Lauderdale Airport Station. The three-level parking garage incorporated green, sustainable construction aspects, which resulted in a decrease in energy consumption for this particular station. Smaller projects, such as LED Lighting for Parking Lots at Tri-Rail's Cypress Creek and Lake Worth Stations were also successfully completed, and have reduce energy consumption at those stations.

SFRTA is also experienced in managing Federal Programs, such as the Job Access and Reverse Commute (JARC) and New Freedom programs, as the Designated Recipient for the region. In addition, SFRTA has been a Florida Department of Transportation and FTA partner in a demonstration project for Diesel Multiple Unit (DMU) passenger rail locomotives.

In addition, SFRTA will comply with FTA's Project Management Plan (PMP) and reporting requirements for this project. As an FTA grantee, SFRTA has previously prepared and implemented PMP's that vary in detail by the size of the project, and Quarterly reports for the FTA. The proposed project will have a web-based tracker for solar energy generation. The ability to collect information on the results for one year following the project's implementation will be easily accomplished. The agency is currently required to report quarterly to FTA, FDOT and Department of Homeland Security on all projects receiving grant funding. All required information (energy savings and quarterly reports) is provided by the Project Manager to the Grants Administrator and reported directly to the funding agency.

Project Budget

Description	QTY	Federal Amount	Local Match	Total Cost
Final Design	1	0	976,553.66	976,553.66
Permitting	1	0	308,840.5	308,840.5
Preparation of Procurement package	1	0	123,536.2	123,536.2
Construction Phase	1	4,632,607.5	4,632,607.5	9,265,215
Project Management	1	308,840.5	308,840.5	617,681
Construction, Engineering & Insoections	1	463,260.75	463,260.75	926,521.5
Flagging	1	308,840.5	308,840.5	617,681
		5,713,549.25	7,122,479.61	12,836,028.86

Describe Project Budget Justification:

The total project cost is estimated at \$12,836,028.86. SFRTA respectfully requests a total amount of \$5,713,549.25, or 45% of the total project cost to be funded by TIGGER. As previously mentioned, SFRTA has entered into a JPA with the Florida Department of Transportation, which provides up to one half of the remaining 55% of the project cost. SFRTA's adopted capital budget includes the balance of the required funds. This project can be obligated to meet the timeline required by the TIGGER program.

A detailed cost estimate was developed by one of our General Planning Consultant team during the 30% design

development. This cost was carefully reviewed to ensure that it corresponds with the scope and material quantities. In addition local industry standards we used to estimate soft cost components, such as design completion, permits, and labor.

The project has been approved and included in the Broward MPO TIP/STIP. Letters of support from the Broward County MPO and other State and Local representatives also provided as an attachment. This project is consistent with the Agency's Transit Development Plan (TDP).

Project Timeline

Timeline Item Description	Timeline Item Date
Final Design - (10 months). Plan review submittals at 75%, 90% and Final Construction Plans. Includes submittal and processing of Site Plan approval, and internal SFRTA reviews.	4/21/2011
Permitting (4 months) - Submittal to all agencies having jurisdiction for water, storm, and sanitary sewer permits. Includes 2 submittals to each agency.	8/8/2011
Procurement (3.5 months) - Preparation of bid package; internal reviews; advertisement of project for a minimum of 30 days; pre-bid conference; bid opening, bid review; and SFRTA Board approval.	1/12/2012
Construction (12 months) - Construction phase expected to last no more than 12 months. Flagging activities are expected to last no more than 26 weeks.	5/1/2012
Project Management (on going) - On-going through the project design, construction and performance.	4/21/2011
Construction, Engineering & Inspections (12 months) - CE&I to prepare daily reports and photographs related to construction activities through the duration of the construction phase.	5/1/2012
Green Station Opening - SFRTA personnel to be trained and become familiar with the project's User's Manual of Operations and Maintenance.	5/20/2013
Monitoring -Begin monitoring energy consumption, energy generation, and warranty period. Prepare quarterly reports as per FTA's requirements, for the useful life of the project.	5/20/2013

Congressional Districts (Place of Performance)

Congressional District	Congressional Representative
FL-019	Deutch, Ted
FL-022	West, Allen
FL-023	Hastings, Alcee L.

