# GRANT APPLICATION CHECKLIST

<table>
<thead>
<tr>
<th>Grant Application Requirement</th>
<th>Completed? (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project type (1) has been selected.</td>
<td>YES</td>
</tr>
<tr>
<td>Color project maps (if applicable) are included illustrating clearly the proposed project location, existing/proposed service routes and are appropriately labeled.</td>
<td>YES</td>
</tr>
<tr>
<td>A signed and dated Funding Commitment document is included.</td>
<td>YES</td>
</tr>
<tr>
<td>Project Schedule is provided in both narrative and table formats.</td>
<td>YES</td>
</tr>
<tr>
<td>Supporting documentation (Letters of support, ridership documentation, and other supporting documentation) has been included to establish project need.</td>
<td>YES</td>
</tr>
<tr>
<td>Coordination with the adjacent transit providers in the service area has occurred to ensure no duplication of efforts or grant project submissions.</td>
<td>YES</td>
</tr>
<tr>
<td>The Grant Application Project Cost table section has been itemized and completed.</td>
<td>YES</td>
</tr>
<tr>
<td>Grant application submitted meets all stated Service Development Grant criteria.</td>
<td>YES</td>
</tr>
</tbody>
</table>
Service Development Grant Summary – UniversityCity Transit Improvement

Andres Tremante, PhD (Project Manager and Principal Investigator)

Senior Lecturer, Mechanical and Materials Engineering Department, College of Engineering and Computing, Florida International University

10555 W Flagler St, EC 3400, Miami, FL-33174
(305) 348-0149, tremante@fiu.edu

We request funding to complete the funding required for the establishment of a fleet of nine improved public transit vehicles that exhibit increased customer use and operational revenues due to improved passenger comfort and operational conditions. The vehicles will yield lower greenhouse gas emissions, and will integrate with an advanced software system for traveler information and guidance identified as the Informed Traveler Program and Applications (ITPA) which is funded by FIU’s TIGER 2013 grant (see [1]). The requested FDOT funding is 100% matched by local funds: Florida International University (FIU) will contribute 50% ($85,725) and the City of Sweetwater will contribute 50% ($85,725). While the FIU and City of Sweetwater funds are also counted as part of the TIGER match requirement, they are cash contributions on top of an additional TIGER match of $171,450 provided by FIU as a force account (student, faculty and staff time provided as match in the TIGER UniversityCity Prosperity Project).

The proposed measures are compliant with the City of Sweetwater’s Comprehensive Plan (see [2]), which commits Sweetwater to promote development providing “multi-modal transportation connectivity” (pg. 22, objective 7), and to promote “alternate transportation modes, including mass transit” (pg. 22, policy 7.1); and FIU’s Campus Master Plan 2010-2020 (see [3]), which commits FIU to “develop, operate, and maintain a safe and efficient multi-modal circulation system” (pg. 11-1, goal 1.1), to “encourage the use of local connector public transportation” (pg. 11-6, policy 3.1.2.1) and to “coordinate with Miami-Dade Transit and local/host communities” (pg. 11-1, objective 1.1.1).

This request continues with a short description of the project’s background (section 1), followed by an introduction to the proposed service development (section 2). An inventory of the current fleet of vehicles is given, including a description of necessary repairs and enhancements (section 3). This is followed by a list of project parties (section 4) and set of maps describing current conditions and planned services (section 5). The request concludes with a list of key personnel (section 6), the detailed funding request and project cost table (section 7), a project schedule (section 8) and the required funding commitment letters and consultant documents (section 9).
1. Background

The UniversityCity Transit Improvement Project (UCTIP) is a crucial complement to the UniversityCity Prosperity Project, a multimodal project supporting innovation and livability benefits. It will link the City of Sweetwater (Sweetwater) and FIU’s Modesto A. Maidique Campus (Maidique Campus - MMC) through technology improvements, streetscape and the existing and proposed both community transit and express transit services to and from major destinations in Miami-Dade County. The UniversityCity Prosperity Project was awarded a FY2013 TIGER Discretionary Grant (see [4]) to address transportation mobility and safety problems facing Miami-Dade County and the Southeast Florida Region.

The UniversityCity Prosperity Project consists of pedestrian-oriented transit access infrastructure improvements, an advanced software system for traveler information and guidance, referred to as Informed Traveler Program and Applications (ITPA) and express and community transit service development enhancements.

2. Proposed Service Development

UniversityCity Transit Improvement

The requested funds will allow FIU to complete the funding required for the establishment of a fleet of nine improved public transit vehicles to develop or expand the following services:

1. A new service connecting central locations on FIU’s Maidique Campus to Sweetwater’s SW 109th Street and City Hall, thus building a high-frequency core route for the UniversityCity area (see section 5, map 4).
2. An expanded and optimized service connecting FIU’s Maidique Campus to FIU’s Engineering Center (EC) via Sweetwater’s SW 109th Street (see optional route on map 3 of section 5), thus supporting and expanding both UniversityCity’s new core route and expanding FIU’s CATS service (see section 5, maps 3 and 5).
3. A new responsive, demand-oriented express bus service connecting UniversityCity’s Advanced Intermodal and Multimodal Station (AIMS) and the EC to the Miami Intermodal Center (MIC). This UniversityCity Express and Community Transit (UCECT) service will include Bus Rapid Transit elements (see attached application form).

FIU will equip two Sweetwater community small bus vehicles, two Sweetwater Trolley vehicles (see section 5, map 2), and two FIU multipurpose and backup community transit vehicles (MPV-1 and the yet to be acquired MPV-2) with advanced information and guidance systems integrated with TIGER’s ITPA system. All vehicles will be upgraded to improve passenger comfort and a higher sustainability.

The E-Transit Rubber Tire Hybrid Electric Trolley (see section 3, SW-7) will be similarly equipped and operated by Sweetwater as part of the UniversityCity agreement with FIU. The Express and Community Transit Service vehicle will be operated by Sweetwater based upon revenues generated by paying customers between the MIC and AIMS. The other to be enhanced vehicles are already in service or backup vehicles and thus do not need further operational funds.
In addition to measures financed by the requested funds, FIU also plans to give FIU’s inter-campus Golden Panther Express service access to ITPA information, and to acquire one multipurpose vehicle and repurpose a second vehicle FIU already owns for multipurpose use in coordination with UniversityCity improvements funded by FIU’s TIGER grant. These vehicles will be equipped with ITPA technology and will be used as backup community transit vehicles. This therefore amounts to an eventual fleet of seven Sweetwater community transit vehicles and two multipurpose FIU vehicles when TIGER expenditures are coordinated with FDOT Service Development grant funds.

Success criteria

It is well acknowledged that in order to improve and manage a service, one has first to be able to measure its performance. This is especially true when developing a highly innovative advanced system like the UniversityCity Transit service.

As we provide a substantially higher service quality by establishing a more available, convenient and economical public transit system, our main success criteria are increase of ridership and decrease of subsidiaries. The increase of ridership will be indicated by the total number of passengers, the average number of passengers per vehicle, and the average number of passengers per trip. Combined with geolocated data from bus trackers, these will yield reports over time of day, days of the week and geographical areas. As quality of service increases, so will cost, and thus subsidiaries. But that increase in subsidiaries will be overcompensated by the following rise of ridership. It is thus our goal to reduce the subsidiary per passenger over time.

The measurements will start before deployment date of regular service, to establish a base line. After the deployment, there will be constant real-time reports on ridership, brief monthly reports on the decrease of subsidiaries and more detailed quarterly reports.
3. Vehicles

<table>
<thead>
<tr>
<th>SW-1</th>
<th>2008 Ford E-450</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD No. 675667</td>
<td>SW No. 5667</td>
</tr>
<tr>
<td>Cap.: 20+1</td>
<td>Mileage: 121,437</td>
</tr>
</tbody>
</table>

This currently surplus vehicle will be used as main UECT service connecting AIMS to MIC. It will be converted to bio-diesel, take on ITPA equipment, and enhanced seating adequate for express transit, including folding worktables.

Major work items:
- General check-up, inspection and repairs: $8,000
- ITPA equipment: $6,000
- Engine conversion to bio-diesel: $3,000
- Seating and interiors adequate for express transit: $15,000

<table>
<thead>
<tr>
<th>SW-2</th>
<th>1998 Ford Super Duty</th>
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<tr>
<td>MD No. 7140</td>
<td>SW No. 7140</td>
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</tbody>
</table>

This vehicle currently operates in combination with SW-3 as a backup for the Sweetwater community small bus service. Guided by ITPA, it will continue to do that in a more efficient way, and will also be utilized as a responsive community transit vehicle.

Major work items:
- General repairs, including bodywork and repaint: $17,000
- ITPA equipment: $6,000
- Engine renewal and conversion to bio-diesel: $12,000
### SW-3 2005 Ford F-450

<table>
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<th>Tag No.</th>
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<td>678828</td>
<td>8828</td>
<td>1FDXE45P05HB08828</td>
<td>226972</td>
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</table>

- **Cap.:** 22+1  
- **Mileage:** 270,972  
- **Doors:** 1 (four steps), backdoor and handicap access  
- **Color:** wt/bl/yl  
- **Fuel:** diesel  
- **tires:** 225-75-R16

This vehicle currently operates in combination with SW-2 as a backup for the Sweetwater community small bus service. Guided by ITPA, it will continue to do that in a more efficient way, and will also be utilized as a responsive community transit vehicle.

**Major work items:**
- General check-up, inspection and repairs: $8,000
- ITPA equipment: $6,000
- Engine conversion to bio-diesel: $3,000

### SW-4 1995 GMC Vandura (or similar vehicle)

<table>
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<td>1103</td>
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</table>

- **Cap.:** 22  
- **Mileage:** 41,320  
- **Doors:** 1 (four steps), backdoor  
- **Color:** white  
- **Fuel:** gasoline  
- **tires:** 8R19.5

This currently surplus vehicle, or a similar vehicle available as surplus from Miami-Dade Public Schools, will be equipped as a multipurpose vehicle, used as backup for public transit and for special events.

**Major work items:**
- General check-up and inspection: $1,000
- General repairs, including body work and repaint: $13,925
- ITPA equipment: $6,000
- Solar panel and converter: $7,800
<table>
<thead>
<tr>
<th>SW-5</th>
<th>2012 Freightliner MB-65 Supreme Classic American Trolley</th>
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</thead>
<tbody>
<tr>
<td>MD No. 674056</td>
<td>SW No. 4056</td>
</tr>
<tr>
<td>Cap.: 30+4</td>
<td>Mileage: 32,942</td>
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</table>

This vehicle currently operates in combination with SW-6 as “Sweetwater Trolley” on a ninety minutes schedule. It will be utilized as a responsive community transit vehicle, guided by ITPA.

Major work items:
- General check-up, inspection and repairs: $1,500
- ITPA equipment: $6,000
- Engine conversion to bio-diesel: $3,000

<table>
<thead>
<tr>
<th>SW-6</th>
<th>2012 Freightliner MB-65 Supreme Classic American Trolley</th>
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<tr>
<td>MD No. 674061</td>
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<tr>
<td>Cap.: 30+4</td>
<td>Mileage: 35,546</td>
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This vehicle currently operates in combination with SW-5 as “Sweetwater Trolley” on a ninety minutes schedule. It will be utilized as a responsive community transit vehicle, guided by ITPA.

Major work items:
- General check-up, inspection and repairs: $1,500
- ITPA equipment: $6,000
- Engine conversion to bio-diesel: $3,000
### 2001 E-Transit Rubber Tire Hybrid-Electric Trolley (not fully titled)

<table>
<thead>
<tr>
<th>SW-7</th>
<th>2001 E-Transit Rubber Tire Hybrid-Electric Trolley (not fully titled)</th>
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<tr>
<td>SW No.</td>
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<tr>
<td>Vin No.</td>
<td>N/A</td>
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<tr>
<td>Tag No.</td>
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<tr>
<td>Cap.:</td>
<td>10-14 + 2</td>
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<tr>
<td>Mileage:</td>
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<tr>
<td>Doors:</td>
<td>1 (one step), backdoor</td>
</tr>
<tr>
<td>Color:</td>
<td>br/gn</td>
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<tr>
<td>Fuel:</td>
<td>electric</td>
</tr>
<tr>
<td>tires:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

This vehicle is driven by a 120 Volt DC motor, 22 hp with peak hp rating of 75hp, and possesses on-board 6,500 Watt diesel generators for air condition and amenities. It was never titled as finally completed. Its floor is very low to the ground for easy access, generally operating in the range of five to ten miles per hour in close proximity to pedestrians and ten to twenty miles per hour elsewhere, utilizes a clean fuel or energy source with little or no emissions, and is thus consistent with both environmental concerns and pedestrian or bicyclist health, safety and comfort.

It will be converted to a golf cart type of vehicle, take on ITPA equipment, solar panels and energy converter, its diesel generator will be converted to bio diesel. It will be operating as a core line between Sweetwater City Hall, 109th St Plaza, and FIU’s Modesto Maidique Campus, including AIMS.

Major work items:
- General check-up and repairs: $8,245
- ITPA equipment: $6,000
- Solar panel and converter: $4,000
- Batteries, including spare set: $1,836.94
- (Bio-)Diesel generator: $2,000
- Seating adequate for community transit: $6,000

### 4. Project parties

**Florida International University** will implement the UCTIP Project at the direction of Dr. Andres Tremante, Senior Lecturer at the College of Engineering and Computing’s Mechanical and Materials Engineering Department. For an endorsement letter by Senior Vice President and CFO Dr. Kenneth A. Jessell, see section 9.

Second key partner in the project is the **City of Sweetwater**, including direct participation by Mayor Jose M. Diaz and Chief of Staff Robert Herrada. We expect regular participation and briefings with Sweetwater City Council. The UCTIP will receive Police, Maintenance, Building and Finance Departments support as directed by the Mayor and City Commission. For an endorsement letter by Mr. Diaz, see section 9.
5. Maps

Current Routes
Map 2 - Sweetwater Trolley and Circulator
Map 3 - FIU CATS
Another innovative approach to University City transit service will involve rebuilding and enhancing a Small Rubber Tire Hybrid-Electric Trolley to serve Sweetwater residents at stops established along SW 109th Avenue from City Hall to Maidique Campus AIMS, Ryder Business Building and Engineering & Computer Science to augment feeder bus service provided by CATS and UECT.
An innovative approach to University City Express and Community Transit (UCECT) service will involve enhancing a Sweetwater Circulator (#5667). When the need arises, it can pick up passengers at the Miami Intermodal Center and serve Sweetwater residents and shoppers and FIU students, faculty and staff at stops between Maidique Campus and Engineering Center via SW 109th Avenue corridor and similar routes. It will therefore optimize access to Sweetwater destinations and augment feeder bus service along the CATS routes to and from:

- Miami-Dade Transit Bus Station at SW 107th Ave and SW 17th Street
- FIU Bookstore
- Golden Panther Express AIMS Stop (east of PG5)
- Sweetwater City Hall
- SW 109th Avenue / SW 4th Street Intersection
- FIU Engineering Center

In addition to the Small Rubber Tire Hybrid-Electric Trolley and the UCECT service vehicle, five additional Sweetwater vehicles will be improved and made smarter for Informed Traveller Program and Applications (ITPA) guidance and customer appeal. Finally, a small former CATS bus will be transferred to FIU CEC for repairs as a multipurpose vehicle and made smarter for ITPA guidance and more comfortable and useful for customer convenience; it will be used as a backup vehicle (University City site inspections, CEC STEM program and UCT).

TIGER funds will be used to further augment improvements to the Small Rubber Tire Hybrid-Electric Trolley and the UCECT service vehicle as well as the purchase of a new multipurpose vehicle.

Map 5 - University City Express and Community Transit service
6. Key personnel

Andres Tremante
Dr. Tremante serves as Senior Lecturer at the Mechanical and Materials Engineering Department of FIU’s College of Engineering and Computing. He is an international renowned expert in regenerative energy harnessing and energy conversion. Dr. Tremante serves as Project Manager and Principal Investigator of the UCTIP.

Oliver Ullrich
Dr. Ullrich serves as Senior Researcher at the High Performance Database Research Center. He has close to ten years of experience in the field of traffic modeling, simulation and optimization. He is also involved in design and development of the UniversityCity Prosperity Project’s ITPA component, especially in the community transit routing and scheduling management, and will oversee the acquisition and installation of ITPA equipment.

Brian D. Reding
Dr. Reding serves as Coordinator of Special Research Programs at the Mechanical and Materials Engineering Department of FIU’s College of Engineering and Computing. He is a renowned expert in regenerative energy harnessing and energy conversion and has worked in countless projects all around the globe. Together with Dr. Tremante he will design and develop the sustainable transit component of the UCTIP.

Thomas F. Gustafson
Mr. Gustafson, JD, serves as the Director for Research Programs at FIU’s Office of Finance and Administration. He also serves as Lead Facilitator for the UniversityCity Prosperity Project and gives trans-disciplinary and inter-institutional support for it after writing, in a team effort, the 2013 TIGER Discretionary Grant proposal for the UniversityCity Prosperity Project funding.

George Brenyo
Mr. Brenyo has had over thirty-five years of experience in the business of the fabrication of metal products and the manufacturing of custom vehicles. He will provide services in the conversion of local transportation vehicles into smart, low emission, comfortable and pedestrian-oriented and transit access vehicles. In the course of rebuilding, repairing, and enhancing these vehicles, he will also advise on the maintenance and painting of these vehicles by transferring his knowledge to FIU and City of Sweetwater employees. The small rubber tire hybrid-electric trolley (SW-7) is one of the products he has been manufacturing and he will issue title to FIU or Sweetwater as directed by FIU and will provide support and information as necessary for its registration and approval for street use.
7. Funding and Project Cost Table

Funding table

<table>
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<th>Funding institution</th>
<th>Amount</th>
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<td>City of Sweetwater (50% match)</td>
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<td>Florida International University (50% match)</td>
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<tr>
<td>Florida International University CEC force account</td>
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<td>FDOT Service Development Grant (requested)</td>
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Project cost table

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<td>(Bio)-diesel generator</td>
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<td>Seating and interiors adequate for community transit</td>
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<tr>
<td><strong>Consultant</strong></td>
<td>Providing advice as to disassembling and inventorying and initial advise as to rebuilding, repairing and enhancing and the execution of documents for transferring title - George Brenyo</td>
<td>$14,950.00</td>
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<td><strong>Personnel</strong></td>
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<td></td>
<td>CEC PhD, graduate and undergraduate students</td>
<td>$105,450.00</td>
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<td></td>
<td>Dr. Andres Tremante, Project Manager and PI</td>
<td>$30,000.00</td>
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<td>Dr. Naphtali Rishe, Technology Subaccount PI and TIGER ITPA PI</td>
<td>$10,000.00</td>
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<td></td>
<td>Dr. Thomas F. Gustafson, Lead Facilitator</td>
<td>$1,000.00</td>
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<td></td>
<td>Dr. Oliver Ullrich, Lead Computational Transportation Specialist</td>
<td>$45,000.00</td>
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<td>Dr. Marcos Jimenez, TIGER ITPA Project Manager</td>
<td>$7,000.00</td>
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Mr. Chaklader Arefe,  
Computational Transportation Engineer  

Dr. Brian D. Reding,  
Coordinator of Special Research Programs  

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<th>FiU F&amp;A</th>
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<td>$22,363.04</td>
<td>$514,350.00</td>
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8. Project Schedule

The UCTIP will be started on July 1, 2015 and concluded on June 30, 2016. It will begin in phase 1 (July 1, 2015 – August 31, 2015) with a technical assessment of the vehicles, and the acquisition of FIU’s multipurpose vehicle (MPV-2). Phase 2 (September 1, 2015 – March 15, 2016) will consist of repairing and rebuilding the small rubber tire trolley (SW-7), the repair and enhancement of the other Sweetwater public transit vehicles (SW 1-6) and the conversion of the multipurpose vehicle MPV-1. Phase 3 (March 16, 2016 – June 30, 2016) concludes the project with the installation of ITPA information and guidance technology on all nine vehicles.

<table>
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<tr>
<th>Phase</th>
<th>Time Period</th>
<th>Task</th>
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</table>
| Phase 1 | July 1, 2015 – August 31, 2015 | Technical assessment of public transit vehicles  
 Acquisition of multipurpose vehicle MPV-2 |
| Phase 2 | September 1, 2015 – March 15, 2016 | Rebuild and repair of small rubber tire trolley SW-7  
 Repair and enhancement of other public transit vehicles SW 1-6  
 Conversion of multipurpose vehicle MPV-1 |
| Phase 3 | March 16, 2016 – June 30, 2016 | Equip public transit vehicles SW 1-7 with ITPA technology  
 Equip multipurpose vehicles MPV 1-2 with basic ITPA technology |
9. Funding Commitments and Consultants

Duplication of Effort

June 6, 2014

Dionne G. Richardson
Freight Logistic & Passenger Operation Unit Manager
Intermodal Systems Development Office
Florida Department of Transportation
District Six
1000 NW 111 Avenue, Room 6111
Miami, FL 33172

Proposal Title: Operation of UniversityCity Express and Community Transit System
Period of Performance: July 1, 2015 to June 30, 2016
Request Amount: $171,450

Dear Ms. Richardson:

On behalf of Florida International University and Dr. Andres Tremante, I am pleased to confirm that the UniversityCity Express and Community Transit System proposal is highly innovative and no duplication within the area is possible. Similarly, Miami-Dade Transit (MDT) and Miami-Dade Expressway Authority (MDX) are supportive with the recently funded TIGER project into which this project is integrated.

Thank you in advance for your consideration.

Sincerely,

Roberto Gutierrez
Director, Pre-Award

RG/CB
Attachments
June 3, 2014

Dear Dr. Jessell:

This will confirm that Sweetwater will contribute to FIU $85,725 as 50% of the match required for a FDOT Service Development grant to be filed by or before June 6, 2014. This FDOT Service Development grant will seek funds in the amount of $171,450 to improve Sweetwater community transit vehicles in coordination with smart transit improvements funded through the TIGER/UniversityCity grant.

FIU will provide a similar match in the amount of $85,725 for the Service Development Grant expenditures that total $342,900; all amounts to be spend on Sweetwater Circulators, Trolleys, and surplus vehicles as available.

Thank you for coordinating these matters with Sweetwater staff and my office.

Sincerely yours,

Mayor Jose Diaz
City of Sweetwater
Office of the Chief Financial Officer

June 6, 2014

The Honorable Jose M. Diaz
Mayor, City of Sweetwater
500 S.W. 109th Avenue
Sweetwater, FL 33174-1398

Dear Mayor Diaz:

Thank you for your letter dated June 3, 2014 in support of the proposal Florida International University is submitting to the Florida Department of Transportation on June 6, 2014 for Service Development funds. The Service Development funds will be spent on six City of Sweetwater vehicles, two FIU vehicles and the small rubber tire hybrid-electric trolley to be titled to Sweetwater in coordination with UniversityCity TIGER funds as identified by the attached summary.

As partners in the UniversityCity Prosperity Project, the City of Sweetwater and FIU are each providing $85,725 as match funds under the United States Department of Transportation TIGER Grant. These TIGER match funds will be leveraged to fulfill the match required to secure the $171,460 in FDOT Service Development Grant funds. Additionally, as part of the TIGER Grant, FIU will be providing force account efforts of the College of Engineering and Computing Department of Mechanical and Materials Engineering (from students, faculty, and staff) to improve the community transit vehicles identified in the UniversityCity Prosperity Project in coordination with smart transit improvements funded through the TIGER Grant.

I look forward to working with the City of Sweetwater on the UniversityCity Prosperity Project and hope there will be additional opportunities for collaboration between the City of Sweetwater and FIU.

Sincerely,

Kenneth A. Jessell, Ph.D.
Senior Vice President and Chief Financial Officer

Division of Business and Finance
University Park, 11290 SW 8 Street, PC 523, Miami, Florida 33199 • (305) 348-2101 • Fax: (305) 348-3678
Equal Opportunity/Retention Employee and Student
Mr. Brenyo has had over thirty-five years of experience in the business of the fabrication of metal products and the manufacturing of custom vehicles. He will provide advisory services in the conversion of local transportation vehicles into smart, low emission, comfortable and pedestrian-oriented and transit access vehicles. In the course of rebuilding, repairing, and enhancing these vehicles, he will also advise on the maintenance and painting of these vehicles and help to transfer his knowledge to FIU faculty, students and staff and City of Sweetwater employees involved in this efforts. The small rubber tire hybrid-electric trolley (SW-7) is one of the products he has been manufacturing and he will issue title to FIU or Sweetwater as directed by FIU and will provide support and information as necessary for its registration and approval for street use.

**Objective:** Provide guidance and support to enhance use of rubber-tired trolley and Community Transit vehicles. Determine how to rebuild, repair and enhance these vehicles and make them more useful and enjoyable for their users.

**Experience:**

- Designed and fabricated specialty transit vehicles to meet specific client needs. 1994 - Present

- Managed several Resorts Multi-Million dollar annual enhancement programs Walt Disney World. 1977 – 1994

**Education:**

- St. Vincent College, Latrobe, PA  
  English Literature/Science
- Pennsylvania State University  
  Manufacturing Processes
- Mid-Florida Technical Institute  
  Management

**Other:**

- Instructor, U.S. Army Military Police
- Coach, Pop Warner Football and Little League Baseball
CONSULTANT COMMITMENT FORM

All consultants should submit this form when submitting a proposal to Florida International University (FIU). This form provides a checklist of documents and certifications required by sponsors, as well as consultant approval for this submission.

CONSULTANT'S NAME: George Brenyo
FIPS LEAD PI: Dr. Andres Tremante
PRIME SPONSOR: FDOT

SUBMITTED PROPOSAL TITLE: Advanced Community Transit
PERFORMANCE PERIOD BEGIN DATE: July 1, 2015 or sooner
END DATE: June 30, 2016 or sooner

SECTION A - Proposal Documents

The following documents are included in our submission and covered by the certifications below (check as applicable):

☑ Statement of Work
☑ Budget and Budget Justification
☑ Consultant Commitment Form
☑ Biosketches and Other Support of Key Personnel
☐ Other:

SECTION B - Compliance Review and Certifications

1. Cost Sharing: 
   ☑ Yes [ ] No
   Amount: 
   Cost sharing amounts and justification must be included in the consultant's budget. If yes, annual cost share certifications will be included.
   The third party cost share certification form is available at http://research.fiu.edu/forms/awardAdministration/certificationOfThirdPartyCostShare.doc.

2. Conflict of Interest: 
   ☑ Not applicable because this project is not being funded by NIH, NSF, or any other sponsor who has adopted the federal financial disclosure requirements.
   ☑ Yes because this project is being funded by NIH, NSF, or any other sponsor who has adopted the federal financial disclosure requirements.
   ☑ Has not been convicted of or had a civil judgment rendered against him/her for commission of fraud or criminal offense or commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.

☐ Debarment, Suspension, Proposed Debarment:
   ☑ I am presently debarred, suspended, proposed or otherwise criminally or civilly charged by a governmental entity.
   ☑ Has not been convicted of or had a civil judgment rendered against him/her for commission of fraud or criminal offense or commission of fraud or criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.

SECTION C - Additional Information

If any of the responses to Item B.3 above is yes, please provide additional information below. Attach additional sheets if necessary.

R/A
**CONSULTANT COMMITMENT FORM**

**APPROVED FOR CONSULTANT**
The information, certifications, and representations above are true and correct. I am prepared to enter into a consultant agreement consistent with the policies of the project sponsor at FIU. Any work begun and/or expenses incurred prior to execution of a consulting agreement are at my own risk.

(Signature of Consultant)

George Brenyo

(Type or print name of Consultant)

george.brenyo@hotmail.com

(Email)

5412 Glasgow Avenue

(Address)

Orlando, Florida 32819

(City, State, Zip)

321-438-7062

(Phone)

N/A

(Fax)

George Brenyo has 50 years experience in vehicle fabrication; he is manufacturer of the small rubber tire hybrid-electric trolley which is one of the vehicles where work will be undertaken pursuant to this grant. He will be helpful in determining how best to rebuild, repair and enhance the other vehicles being improved pursuant to this grant effort so they are more attractive, useful and enjoyable to customers due to: improved operational characteristics, lower GHG emissions, and enhanced ITPA enabled intelligence to optimize University City community transit feeder bus services and discretionary routing to MIC based on customer demand.

Signature of FIU PI

Type or print name of FIU PI

Dr. Andres Tremante

June 4, 2014

(Date)
June 3, 2014

Kenneth A. Jessell, Ph.D
Senior Vice President/CFO
Florida International University
11200 SW 8th Street, PC 523
Miami, Florida

Subject: 2014 TIGER/UniversityCity submittal

Dear Dr. Jessell:

Please find listed below a proposal to work with FIU and Sweetwater personnel and others to build, repair and enhance FIU’s (two or more vehicles) and Sweetwater’s community transit buses (six vehicles) so that they will be dependable, more accurate and enjoyable to customers using the vehicles. Also included in the proposal is to work with FIU and Sweetwater personnel and others required to repurpose the small rubber tire hybrid-electric trolley currently stored at FIU’s Engineering Center and to issue title to FIU faculty, students and staff or Sweetwater as directed by FIU and will provide support and information as necessary for its registration and approval for street use.

The proposal assumes I will provide technical guidance and quality control services and that FIU or city employees or others assigned to do this work would be available and up to the task subject to any additional training to more effectively provide preventative maintenance services and enhance their overall vehicle rebuild/repair/enhance/maintain/painting skills as I might be able to provide.

Please find my proposal for consulting services and materials involved.

Thank you

George M. Brenyo
Proposal Budget:

1. **Provide advice as to disassembling and inventorying and initial advice as to re-purpose Hybrid-Electric Trolley, conceptual and mechanical consulting**
   - (16 days @ 8 hours per day, $100 per hour) - $12,800.00

2. **Provide advice as to disassembling and inventorying and initial advice as to re-purpose Sweetwater and FIU vehicles, conceptual and mechanical consulting**
   - (2 days @ 8 hours per day, $100 per hour) - $1,600.00

3. **General consulting, via telephone and email and signing of title documents as directed by FIU**
   - (5.5 hours @ $100 per hour) - $550.00

**TOTAL** - $14,950.00

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**Image 6:** Small rubber-tire electric trolley would operate on traffic-calmed streets as well as mixed-mode corridors and transit greenways in MMC and elsewhere. Designed for speeds of 25 mph and less it is a worthy alternative to golf cart vehicles in for use in pedestrian oriented public space. This vehicle is sized between the shuttle vehicles and golf carts and can work within pedestrian oriented built environments.
Consultant George Brenyo – Contract for Service Development Grant

George Brenyo  
Vehicle Design and Fabrication Consultant  
5412 Glasgow Avenue  
Orlando, Florida 32819  
321-438-7062

June 3, 2014

Kenneth A. Jessell, Ph.D  
Senior Vice President/CFO  
Florida International University  
11200 SW 8th Street, PC 523  
Miami, Florida

Subject: 2014 TIGER/University City submittal

Dear Dr. Jessell:

Please find listed below a proposal to work with FIU and Sweetwater personnel and others to build, repair and enhance FIU’s (two or more vehicles) and Sweetwater’s community transit buses (six vehicles) so that they will be dependable, more accurate and enjoyable to customers using the vehicles. Also included in the proposal is to work with FIU and Sweetwater personnel and others required to repurpose the small rubber tire hybrid-electric trolley currently stored at FIU’s Engineering Center and to issue title to FIU faculty, students and staff or Sweetwater as directed by FIU and will provide support and information as necessary for its registration and approval for street use.

The proposal assumes I will provide technical guidance and quality control services and that FIU or city employees or others assigned to do this work would be available and up to the task subject to any additional training to more effectively provide preventative maintenance services and enhance their overall vehicle rebuild/repair/enhance/maintain/painting skills as I might be able to provide.

Please find my proposal for consulting services and materials involved.

Thank you

George M. Brenyo
## Proposal Budget:

1. Advice as to re-purpose Hybrid-Electric Trolley, conceptual and mechanical consulting (18 days @ 8 hours per day, $100 per hour)  
   \[ $14,400.00 \]

2. Advice as to re-purpose other Sweetwater and FIU vehicles, conceptual and mechanical consulting (9 days @ 8 hours per day, $100 per hour)  
   \[ $7,200.00 \]

3. General consulting, via telephone and email and signing of title documents as directed by FIU (34.5 hours @ $100 per hour)  
   \[ $3,450.00 \]

**TOTAL**  
\[ $25,050.00 \]
10. References


