



**Bridge Factors Factual Report Attachment 5 – TIGER Grant Amendment No. 2
dated December 11, 2017**

Miami, FL

HWY18MH009

(16 pages)

AMENDMENT NO. 2

TO THE GRANT AGREEMENT UNDER THE CONSOLIDATED AND FURTHER CONTINUING APPROPRIATIONS ACT, 2013 (DIVISION F, TITLE I, Pub. L. 113-6, MARCH 26, 2013) FOR THE NATIONAL INFRASTRUCTURE INVESTMENTS DISCRETIONARY GRANT PROGRAM (FY 2013 TIGER DISCRETIONARY GRANTS)

THE FLORIDA INTERNATIONAL UNIVERSITY (FIU) BOARD OF TRUSTEES

UNIVERSITY CITY PROSPERITY PROJECT

FHWA FY 2013 TIGER Grant No. 12

SECTION 1. PURPOSE OF ADDENDUM

- a) The Purpose of this addendum, Addendum No. 2 (the “Addendum”) to FHWA FY 2013 TIGER Grant No. 12 (“Grant Agreement”), is intended to and does recognize changes to the schedule and budget for the University City Prosperity Project (“Project”).
- b) This Addendum will constitute a formal amendment to the Grant Agreement which was executed by the U.S. Department of Transportation, the Federal Highway Administration (the “Government”) and the Florida International University (FIU) Board of Trustees (Grantee” or “Recipient”) (collectively the “Parties”). Except as modified, changed and supplemented by this Addendum, all terms and conditions of the original Grant Agreement shall continue in full force and effect.
- c) The following sets out the amendment to the referenced section of the Grant Agreement.

SECTION 2. AMENDED SECTION 2, GRANTEE AND PROJECT INFORMATION OF THE GRANT AGREEMENT

- a) Section 2.2 of the Grant Agreement is amended and restated in its entirety and will read as follows:

2.2 **Project’s Schedule Summary** (for further information see Attachment B):

Actual Completion of NEPA:	February 25, 2014
Actual LAP Agreement Approval/NTP	June 24, 2014
Actual Release of RFP/PS&E Approval:	June 30, 2014
Actual Completion of NEPA Re-evaluation:	May 5, 2015
Actual Design/Build Contract Award:	November 16, 2015
Actual Notice to Proceed/Start Design-Build:	January 14, 2016
Actual Start Construction:	March 1, 2017
Planned Project Construction Substantial Completion and Open to Traffic:	December 13, 2018

b) Section 2.3 of the Grant Agreement is amended and restated in its entirety and will read as follows:

2.3 **Project's Budget Summary** (for further information see Attachment C):

TIGER Grant Funds and Additional Sources of Project Funds:

TIGER Discretionary Grant Amount:	\$11,397,120	58.8%
Other Federal Funds (TAP ¹):	\$ 2,214,002	11.4%
State Funds (FDOT):	\$ 60,000	0.3%
Local Funds * (City of Sweetwater):	\$ 1,991,061	10.3%
Other Funds **(FIU):	\$ 3,729,013	19.2%
Total Project Cost:	\$19,391,196	100.0%

*Local funds include \$1,745,800 in donated City of Sweetwater Right of Way.

**Other funds include \$2,102,016 in additional *non-match* FIU funding for Additive Alternative 1 and \$569,515 for Titanium Dioxide concrete; total increase of \$2,671,531.

If there are any cost savings or if the contract award is under the engineer's estimate, 23 C.F.R. 630.106(f) shall not apply to any match for the TIGER Discretionary Grant amount, and the Grantee's funding amount and percentage share may be reduced, provided that the Grantee's share of the costs under the Act may not be reduced below 20% for urban area projects.

¹ FDOT approved Federal Transportation Alternatives Program (TAP) funding. No match required.

SECTION 3. AMENDED ATTACHMENT A-STATEMENT OF WORK

Attachment A of the Grant Agreement is amended and restated in its entirety and will read as follows:

ATTACHMENT A STATEMENT OF WORK

The 2013 University City Prosperity Project consists of the following four components:

- i. Pedestrian-Oriented Transit Access Infrastructure Improvements (Infrastructure)
- ii. Community Transit Service Development Enhancements (Community Transit)
- iii. Informed Traveler Program and Applications (ITPA)
- iv. Design/Engineering Services and Construction Management (DES&CM)

Specifically, these project improvements will consist of:

Infrastructure: This part of the Project focuses on pedestrian-oriented transit access infrastructure improvements, that provide for two narrowed traffic lanes and wider sidewalks with landscaping, and pedestrian-oriented streetscaping elements, such as enhanced shade trees, street furniture, street signage, street lighting, a Memorial Plaza in Sweetwater, and an entry plaza located on FIU's Modesto A. Maidique Campus (Maidique Campus); and a signature pedestrian-oriented shared-use bridge across US 41 (a major arterial roadway located between Sweetwater and Maidique Campus).

Major construction activities, in addition to Right-of-Way, include:

- i. Pedestrian-Oriented Shared-Use Bridge extended across US 41 and Tamiami Canal with a landing in Sweetwater at Memorial Plaza and Linear Park improvements located north of the Tamiami Canal and west of SW 109th Avenue to improve pedestrian safety and bridge access
- ii. Site Preparation, Landscaping & Irrigation
- iii. Utilities (i.e., FPL, electrical, telecom, water,) & Lighting
- iv. Storm Water System
- v. Paving & Parking
- vi. Streetscaping/Furnishings/Equipment
- vii. Professional Fees – Fire Marshall, Surveys
- viii. Plazas, Walkways, Pavilions & AIMS including sidewalks along east and west side of SW 109th Avenue bridge to match up with those sidewalks along SW 109th Avenue
- ix. Roadway Improvements & AIMS Platform area
- x. Professional Services – Design-Build, Contractor CEI

Community Transit: Community transit will be enhanced through deploying three community transit vehicles that consist of a: 1) rebuilt, repaired, and enhanced ten passenger Small Hybrid-Electric Rubber Tire Trolley to be owned by FIU and operated in coordination with the University

City Transportation and Management Association of Sweetwater, Inc. (UTMA), which operates community transit services within University City between Sweetwater and FIU crossing US 41 on a high frequency; 2) rebuilt, repaired, and enhanced community transit Back-Up Circulator Bus to accommodate at least sixteen (16) passengers that is owned and operated by the UTMA; and, 3) FIU acquiring a multipurpose, nine-passenger, outreach vehicle to be owned and operated by the UTMA which will also serve as a community transit back-up vehicle.

Major construction activities include:

- i. Acquire new multi-purpose back-up transit vehicle
- ii. Assess Back-Up Circulator Bus & Compile Parts/Equipment Inventory
- iii. Assess Small Hybrid-Electric Trolley & Compile Parts/Equipment Inventory
- iv. Rebuild, repair and enhance Back-Up Circulator Bus & Small Hybrid-Electric Trolley
- v. Testing vehicles & prepare for full operational use

ITPA: The 2013 TIGER funds allocated for the ITPA will be used to deliver a platform to support the first phase of the overall ITPA vision. The ITPA is based on a plan developed in a separate effort led by Miami-Dade Expressway Authority (MDX) to ensure interoperability among the various locally deployed technology systems. The ITPA will develop software that will provide personalized, timely information and advice regarding the most efficient and cost effective travel paths for users in advance of their travel decision points. The ITPA will also provide information to selected members of the traveling public who agree to optimize their trips to and from University City by using ITPA to secure available parking spaces and to timely access community transit and express transit services. These first ITPA effort will be focused on: FIU transit vehicle and passenger movements in and between the FIU's Maidique Campus, the Biscayne Bay Campus and the Engineering Center; Sweetwater community transit vehicle and passenger movements within University City and Sweetwater; a smart parking feature at certain FIU Maidique Campus, Sweetwater, and remote locations connected to FIU by express transit; and, data aggregation and feeds to reduce any traffic delays along US 41 and SW/NW 107th Avenue adjacent University City.

Major construction activities include:

- i. Software Acquisition and Licenses/Development
- ii. Smart Parking Data Formats Development
- iii. Garage, Transit and Street Applications Development
- iv. Sensors, Street-smart, Aerials and other ITS System Design & Installation
- v. Pilot & Communications Plans (Alpha & Beta Trials with feedback)
- vi. Software, Garage & Transit Applications, and ITS Testing
- vii. Independent Verification and Validation (IV&V) – Sensors, Streetsmart, Aerials & ITS Elements

DES&CM: This component consists of design and engineering services and construction management.

Infrastructure Staff Support and Professional Services for Construction, Design and CEI, including: managing development of design; permitting; right-of-way acquisition/approvals and easements; design-build advertisement and competitive selection award process; construction oversight and approvals activities; code administration (FIU is permitting authority); construction accounting, billing, and payment management; and risk management.

Academic & Other Support for Infrastructure, Community Transit Development & ITPA, including: repair of a used four-passenger vehicle as an Engineer-on-Wheels vehicle; project website creation and updating; outreach efforts using Engineer-on-Wheels for University City Prosperity Project designs and construction reviews and to provide support for the improved community transit vehicles; review design documents and provide input to Program Committee; review design-build and ATC proposals and provide input to Program Committee; provide construction and design reviews to Program Committee; review designs for real and perceived safety concerns that will enhance usage of public spaces; advice as to ITPA data collection methodology, instruments and analyses from the user point of view; and coordinate transdisciplinary efforts to functionally connect infrastructure, community transit and ITPA improvements and endeavor to construct and deploy all these University City components as intended consistent with the University City June 3, 2013 submittal for TIGER Discretionary Grant funding.

SECTION 4. AMENDED ATTACHMENT B-ESTIMATED PROJECT SCHEDULE

Attachment B of the Grant Agreement is amended and restated in its entirety and will read as follows:

**ATTACHMENT B
ESTIMATED PROJECT SCHEDULE**

INFRASTRUCTURE

Project Milestone/Deliverable Schedule:

	Actual/Planned Start Date	Actual/Planned End Date
Actual Completion of NEPA:	N/A	February 25, 2014
Actual Locally Administered Federal-Aid Project (LAP) Agreement Approval/Notice to Proceed (NTP)	N/A	June 24, 2014
Actual Release of PS&E/RFP Package Approval:	N/A	June 30, 2014
Actual Design/Build Construction Advertisement:	June 30, 2014	July 30, 2014
Actual Completion of NEPA re-evaluation	October 29, 2014	May 5, 2015
Actual Firm Selected by FIU and Concurred by FHWA/FDOT:	October 29, 2015	November 10, 2015
Design-Build Construction Award:	December 9, 2015	January 12, 2016
Notice to Proceed/Start Date of Design-Build:	January 14, 2016	N/A
Construction Dates:	March 1, 2017	
Pedestrian-Oriented Shared-Use Bridge:	April 7, 2017	November 21, 2018
Site Preparation, Landscaping & Irrigation: ²	March 1, 2017	November 21, 2018
Utilities & Lighting:	March 7, 2017	June 29, 2018
Storm Water System:	March 8, 2017	June 29, 2018
Paving & Parking:	April 24, 2017	October 5, 2018
Streetscaping Furnishings & Equipment:	August 15, 2018	November 21, 2018
Professional Fees – Fire Marshall, Surveys:	March 1, 2017	November 21, 2018
Plazas, Walkways, Pavilions & AIMS:	March 1, 2017	October 12, 2018
Roadway Improvements, AIMS Platform area:	May 1, 2018	October 12, 2018

² Extended site preparation end date reflects site preparation for the Aggregate Image Measurement System (AIMS) platform.

	Actual/Planned Start Date	Actual/Planned End Date
Project Construction Substantial Completion & Open to Traffic:	N/A	January 15, 2019
Final Construction:	N/A	November 21, 2018
Professional Services – Design-Build, Contractor CEI:	October 11, 2016	February 15, 2019
Closeout Documentation:	January 16, 2019	February 15, 2019

COMMUNITY TRANSIT SERVICE DEVELOPMENT ENHANCEMENTS

Project Milestone/Deliverable Schedule:

	Actual/Planned Start Date	Actual/Planned End Date
Transfer of Title from FIU to Sweetwater and Operational Agreements:	November 16, 2015	December 30, 2016
Acquire Community Transit Vehicle & Identify Back-up Use:	November 16, 2015	March 30, 2018
Assess Back-Up Circulator Bus & Compile Inventory:	November 16, 2015	May 30, 2016
Assess Small Hybrid-Electric Trolley & Compile Inventory:	November 16, 2015	May 30, 2016
Rebuild, Repair & Enhance Small Hybrid-Electric Trolley & Back-Up Circulator Bus:	November 30, 2016	December 29, 2017
Complete Testing Vehicles & Prepare for Full Operational Use:	October 16, 2017	December 29, 2017
Begin Service/Small Hybrid-Electric Trolley & Back-Up Circulator Bus:	December 30, 2017	N/A
Closeout Documentation:	January 2, 2018	July 31, 2018

INFORMED TRAVELER PROGRAM AND APPLICATIONS (ITPA)

Project Milestone/Deliverable Schedule:

	Actual/Planned Start Date	Actual/Planned End Date
A Public Interest Finding (PIF) and specific scope approval	April 24, 2014	May 20, 2014
Smart Parking Data Formats Development:	September 15, 2014	December 30, 2016
Garage, Transit & Street Applications Development:	September 15, 2014	December 30, 2016
Sensors, Streetsmart, Aerials & other ITS System Design & Installation:	September 15, 2014	December 30, 2016
Software Acquisition & Licenses /Development:	July 24, 2015	December 30, 2016
Pilot and Communications Plans (Alpha & Beta Trials with feedback):	September 30, 2016	December 30, 2016

	Actual/Planned Start Date	Actual/Planned End Date
Software, Garage & Transit Applications & ITS Testing:	January 5, 2017	March 30, 2018
IV&V - Sensors, Streetsmart, Aerials & ITS Elements:	September 18, 2015	March 30, 2018
ITPA Operational:	March 31, 2018	N/A
Closeout Documentation:	June 29, 2018	September 14, 2018

DESIGN/ENGINEERING SERVICES & CONSTRUCTION MANAGEMENT (DES & CM)

Project Milestone/Deliverable Schedule:

	Actual/Planned Start Date	Actual/Planned End Date
Begin DES & CM:	July 1, 2014	November 26, 2018
Complete Academic and Other Support for Infrastructure, Community Transit Development & ITPA:	July 1, 2014	September 14, 2018
Complete Infrastructure Staff Support & Professional Services for Design, Construction & CEI/IV&V:	September 18, 2015	January 23, 2019
Closeout Documentation:	September 3, 2018	January 23, 2019

SECTION 5. AMENDED ATTACHMENT C-ESTIMATED PROJECT BUDGET

Attachment C of the Grant Agreement is amended and restated in its entirety and will read as follows:

**ATTACHMENT C
ESTIMATED PROJECT BUDGET**

TABLE 1 – OVERALL PROJECT BUDGET SUMMARY							
PROJECT COMPONENT	ACTIVITY	TOTAL PROJECT BUDGET	TIGER	OTHER FEDERAL FUNDS (TAP)	FIU	CITY OF SWEET-WATER	FDOT
INFRASTRUCTURE	Right-of-Way *	\$1,745,800				\$1,745,800	
	Design-Build Construction**	\$14,211,285	\$8,577,913	\$2,214,002	\$3,259,834	\$ 159,536	
COMMUNITY TRANSIT	Community Transit	\$241,335			\$206,187	\$ 35,148	
INFORMED TRAVELER PROGRAM AND APPLICATION (ITPA)	Technology Program Applications	\$2,373,707	\$2,127,059		\$246,648		
DESIGN/ENGINEERING SERVICES AND CONSTRUCTION MANAGEMENT (DES & CM)	Design/Engineering Services & Construction Management	\$819,069	\$692,148		\$16,344	\$50,577	\$60,000
TOTAL		\$19,391,196	\$11,397,120	\$2,214,002	\$3,729,013	\$1,991,061	\$60,000

* Right-of-Way donated by City of Sweetwater as part of matching funds.

**FIU IS CONTRIBUTING AN ADDITIONAL \$2,671,531 FOR ADDITIVE ALTERNATIVE 1 AND TITANIUM DIOXIDE CONCRETE; FDOT IS CONTRIBUTING AN ADDITIONAL \$1,214,002 THROUGH MPO/SUPPLEMENTAL FUNDING.

Table 2 – Infrastructure Project Budget Summary

ACTIVITY/ TASK	ESTIMATED INFRA- STRUCTURE BUDGET	TIGER FUNDS	OTHER FEDERAL FUNDS (TAP)	FIU FUNDS**	CITY OF SWEET-WATER FUNDS	FDOT FUNDS
Right-of-Way *	\$1,745,800				\$1,745,800	
Construction, Design, and Professional Services						
Pedestrian-Oriented Shared-Use Bridge	\$6,544,152	\$4,035,213	\$1,970,224	\$538,715		
Site Preparation, Landscaping & Irrigation	\$922,000	\$896,500			\$25,500	
Plazas, Walkways, Pavilions & Aggregate Image Measurement System (AIMS)	\$3,497,000	\$1,440,000		\$1,997,000	\$60,000	
Roadway Improvements & AIMS Platform Area	\$533,126	\$101,822		\$431,304		
Utilities & Lighting	\$527,200	\$527,200				
Storm Water System	\$130,000	\$67,500		\$32,500	\$30,000	
Paving & Parking	\$69,363	\$55,079			\$14,284	
Professional Services-- Design-Build, Engineering	\$1,726,099	\$1,218,138	\$243,778	\$236,309	\$27,874	
Fire Marshall, Surveys	\$250,698	\$224,814		\$24,006	\$1,878	
Streetscaping Furnishings & Equipment	\$11,647	\$11,647				
Total Budget	\$15,957,085	\$8,577,913	\$2,214,002	\$3,259,834	\$1,905,336	

*Right of Way donated by City of Sweetwater as part of matching funds

**FIU funds are comprised of \$588,303 original matching funds and \$2,671,531 in new non-matching funds

Table 3 – Community Transit Budget						
ACTIVITY/ TASK	ESTIMATED COMMUNITY TRANSIT BUDGET	TIGER FUNDS	OTHER FEDERAL FUNDS (TAP)	FIU FUNDS	CITY OF SWEET- WATER FUNDS	FDOT FUNDS
Acquire new Community Transit Vehicle	\$27,948			\$22,388	\$5,560	
Assess Back-Up Circulator Bus & Compile Inventory	\$2,142			\$2,142		
Assess Small Hybrid-Electric Trolley & Compile Inventory	\$2,142			\$2,142		
Rebuild, Repair & Enhance Small Hybrid-Electric Trolley & Back-Up Circulator Bus	\$208,288			\$178,700	\$29,588	
Complete Testing Vehicles & Prepare for Full Operational Use	\$815			\$815		
Total Budget	\$241,335			\$206,187	\$35,148	

Table 4 - Informed Traveler Program and Application (ITPA) Budget Summary						
ACTIVITY/ TASK	ESTIMATED ITPA BUDGET	TIGER FUNDS	OTHER FEDERAL FUNDS (TAP)	FIU FUNDS	CITY OF SWEET- WATER FUNDS	FDOT FUNDS
Software Acquisition & Licenses/ Development	\$515,000	\$515,000				
Smart Parking Data Formats Development	\$300,000	\$300,000				
Garage, Transit & Street Applications Development	\$500,000	\$287,996		\$212,004		
Sensors, Smartstreet, Aerials & other ITS System Design & Installation	\$689,871	\$655,227		\$34,644		
Pilot & Communications Plans	\$100,000	\$100,000				
Software, Application & ITS Testing	\$141,836	\$141,836				
Independent Verification and Validation (IV&V) Sensors, Streetsmart, Aerials, & ITS Elements	\$127,000	\$127,000				
Total Budget	\$2,373,707	\$2,127,059		\$246,648		

Table 5 Design/Engineering Services and Construction Management (DES & CM) Budget Summary

ACTIVITY/ TASK	ESTIMATED DES & CM BUDGET	TIGER FUNDS	OTHER FEDERAL FUNDS (TAP)	FIU FUNDS	CITY OF SWEETWATER FUNDS	FDOT FUNDS
Infrastructure Staffing Support & Professional Services for Design, Construction & CEI	\$326,003	\$266,003				\$60,000
Academic and Other Support for Infrastructure, Community Transit Development, and ITPA	\$493,066	\$426,145		\$16,344	\$50,577	
Total Budget	\$819,069	\$692,148		\$16,344	\$50,577	\$60,000

SECTION 6. EXECUTION OF ADDENDUM

There are four (4) identical counterparts of this Addendum in typewritten hard copy; each counterpart is to be fully signed in writing by the parties and each counterpart is deemed to be an original having identical legal effect. When signed and dated by the authorized official of the Government, this instrument will constitute a formal amendment to the Grant Agreement. Except as modified, changed, and supplemented by this Addendum, all terms of the original Grant Agreement shall continue in full force and effect. Upon full execution of this Addendum by the Parties, the effective date will be the date the Government executes this Addendum as set forth below.

EXECUTION BY THE GOVERNMENT

Executed this 11 day of Dec., 2017.


Signature of Government's Authorized Representative

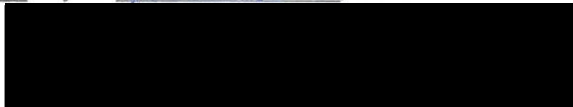
James Christian
Name of Government's Authorized Representative

Division Administrator
Title

EXECUTION BY THE FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES

By signature below, the Grantee/Recipient acknowledges that it accepts and agrees to be bound by this Agreement.

Executed this 16 day of November, 2017.



Signature of Grantee's Authorized Representative

Kenneth A. Jessell

Name of Grantee's Authorized Representative

Senior Vice President + CFO

Title

EXECUTION BY STATE DEPARTMENT OF TRANSPORTATION

By signature below, the State Department of Transportation (SDOT) acknowledges that it agrees to act as a limited agent for the Grantee to assist in the receipt and disbursement of the TIGER Discretionary Grant obligated by this Agreement and to perform such other administrative and oversight duties with respect to the Grant and the Project as the Grantee and the SDOT shall agree upon between themselves. The SDOT acknowledges the fiduciary duty owed to the parties to this agreement and will promptly disburse the TIGER Grant to the Grantee at Grantee's direction and instructions. Further, the SDOT will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the duties it assumes under this Agreement in compliance with the terms and conditions contained herein.

Executed this 17 day of November, 2017.



James A. Wolfe, P.E.
FDOT District VI Secretary