

**AMENDED AND RESTATED INTERLOCAL AGREEMENT AMONG BROWARD COUNTY, THE CITY OF FORT LAUDERDALE, AND THE DOWNTOWN DEVELOPMENT AUTHORITY OF THE CITY OF FORT LAUDERDALE REGARDING ALLOCATION OF FUNDING RESPONSIBILITY FOR THE LOCAL SHARE OF PROJECT COST OVERRUNS FOR THE WAVE MODERN STREETCAR PROJECT**

This Amended and Restated Interlocal Agreement ("ILA") is entered into by and among: BROWARD COUNTY, a political subdivision of the State of Florida ("County"), CITY OF FORT LAUDERDALE, a municipal corporation organized and existing under the laws of the State of Florida ("City"), and DOWNTOWN DEVELOPMENT AUTHORITY OF THE CITY OF FORT LAUDERDALE, a body politic and corporate and an agency of the City of Fort Lauderdale ("DDA") (County, City, and DDA are sometimes collectively referred to as the "Parties").

**RECITALS**

A. On or about June 14, 2016, the County and the Florida Department of Transportation ("FDOT") entered into the Wave Project Agreement ("Wave Project Agreement") regarding the funding, design, construction, operation, and maintenance of the 2.8 mile modern streetcar project known as The Wave Streetcar project (the "Project," as more fully defined below).

B. The Federal Transportation Administration of the United States Department of Transportation ("FTA"), the Florida Department of Transportation ("FDOT"), the City, the DDA, and the County have each allocated certain funds for design and construction of the Project. The allocation of financial responsibility as between the City, the DDA, and the County is set forth in this ILA, which supersedes the prior interlocal agreement into which the Parties entered on or about June 15, 2016 (the "Prior Agreement").

C. The Wave Project Agreement allocates fifty percent (50%) of the responsibility for Project Cost Overruns (as defined therein) to each of FDOT and the County. The County's fifty percent (50%) share of the Project Cost Overruns must be paid from non-federal and non-state funds. The County's willingness to accept responsibility for fifty-percent (50%) of Project Cost Overruns is expressly conditioned on the City's and the DDA's agreement to contribute toward that cost, as outlined in this ILA.

D. The County has conditionally approved a Third Amendment to the Wave Project Agreement ("Third Amendment"). The Third Amendment revises certain material aspects of the Project and modifies the respective financial obligations of FDOT and the County including by making the County (vis-à-vis FDOT) solely responsible for the cost of certain elements of the Project.

Approved BCC 8/16/18 4:46  
Submitted By County Attorney  
RETURN TO DOCUMENT CONTROL

u/c

E The Parties acknowledge that the Third Amendment makes certain changes to the Wave Project Agreement including the following: (i) modifies the Project Description (Exhibit A to the Third Amendment) to remove certain aspects of the Project relating to bridge girders, beams, and a concrete deck; (ii) provides for specified optional vehicle maintenance facility ("VMF") elements as set forth in Exhibit A-1 to the Third Amendment that, if procured, will be funded solely by the Parties in accordance with the terms of this ILA; and (iii) allocates the financial responsibility for any amounts in excess of \$1,280,000 for the fare collection system, non-revenue vehicles, and general tools identified in Exhibit A-2 to the Third Amendment solely to the Parties in accordance with the terms of this ILA.

F. The Third Amendment modifies financial responsibility for certain aspects of the Project from a 50/50 split between FDOT and the local funding agencies (the County, City, and DDA) to become the sole responsibility of the local funding agencies. The County's willingness to enter into the Third Amendment is expressly conditioned upon the City's and DDA's concurrence therewith and the amendment and restatement of the financial obligations of the County, City, and DDA as set forth in this ILA.

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, the Parties agree as follows:

1. **Representations:**

- 1.1 The foregoing recitals are true and correct and by this reference are fully incorporated herein.
- 1.2 The City and DDA represent that they have reviewed the Third Amendment conditionally approved by the County, and that they understand and acknowledge the impact the Third Amendment has on the Wave Project Agreement, including on the scope and on the respective funding obligations of FDOT and the County (with the latter being allocated according to the terms of this ILA).
- 1.3 The City and DDA hereby ratify, affirm, and approve the County's authorization to FDOT "to finalize a new solicitation for a Design-Build Contract."

2. **Definitions:**

- 2.1 Local Capital Funds – The funds contributed by the Parties for Project Capital Costs as stated in Exhibit C.

- 2.2 Enhanced VMF Costs – The County’s share of Capital Cost Overruns under the Wave Project Agreement that are directly attributable to the enhanced portions of the VMF identified in Exhibit A-1 to the Third Amendment (incorporated as Exhibit A-1 hereto), including as same may be amended by FDOT and the County as part of the Wave Project Agreement. As stated in the Third Amendment, the County’s share of the Enhanced VMF Costs vis-à-vis FDOT is one hundred percent (100%).
- 2.3 Local Share of Project Cost Overruns – The County’s share of Project Cost Overruns under the Wave Project Agreement as same has been and may be amended.
- 2.4 Project – The meaning of the term “Project” as defined in the Wave Project Agreement, including as may be amended from time to time.
- 2.5 Project Capital Costs – The meaning of the term “Project Capital Costs” as defined in the Wave Project Agreement, including as may be amended from time to time.
- 2.6 Project Cost Estimate – The cost estimate outlined in Exhibit B.
- 2.7 Project Cost Overruns – The meaning of the term “Project Cost Overruns” as defined in the Wave Project Agreement, including as may be amended from time to time.
- 2.8 Project Description – The description of the Project attached as Exhibits A, A-1 (to the extent these items are included in the final Project Description of the Wave Project Agreement), and A-2 to the Third Amendment, which Exhibits are also attached hereto in their current form as Exhibits A, A-1, and A-2, including as the Wave Project Agreement may further be amended from time to time. The Parties acknowledge and agree that, in accordance with the Wave Project Agreement, as amended, FDOT and County may agree to further modifications to the Project Description; any and all such further modifications to the Project Description in the Wave Project Agreement shall be deemed to be automatically incorporated herein.
- 2.9 Project Cost Savings – The amount, if any, by which the Project Cost Estimate exceeds the total Capital Costs after Project Completion, final acceptance on the Design-Build Contract, and final payment under the Design-Build Contract (as those terms are defined in the Wave Project Agreement).

2.10 SIB Loan Agreement – The State Infrastructure Bank Amended and Restated Loan Agreement between FDOT, the DDA, and the City, dated August 11, 2017, as same may be amended.

3. **Purpose of ILA:** The purpose and intent of this ILA are to allocate responsibility among the Parties for the Local Share of Project Cost Overruns and the Enhanced VMF Costs. For avoidance of doubt, and for purposes of any necessary judicial construction of this ILA, the Parties hereby agree and acknowledge that the primary intent of this ILA is to confirm that, notwithstanding the execution of the Third Amendment and the changes effectuated by the Third Amendment, the Parties are fully responsible to contribute, in their respective shares identified herein, the entire Local Share of Capital Cost Overruns (inclusive of Enhanced VMF Costs) notwithstanding that the County, pursuant to the Third Amendment, is 100% responsible vis-à-vis FDOT for the cost of certain elements of the Project.

4. **Local Capital Funds Committed to Date:** The Parties agree and acknowledge that the Parties have to date respectively contributed the Local Capital Funds in the amounts set forth in Exhibit C.

5. **Allocation of Funding Responsibility for Local Share of Project Cost Overruns (other than Enhanced VMF Costs):** The Parties agree and acknowledge that any Local Share of Project Cost Overruns other than for Enhanced VMF Costs shall be allocated among the Parties as follows:

5.1 **City Responsibility.** The City shall pay fifty percent (50%) of any Local Share of Project Cost Overruns.

5.2 **DDA Responsibility.** The DDA shall pay twenty-five percent (25%) of any Local Share of Project Cost Overruns, up to an annual maximum of Three Million Dollars (\$3,000,000) per County fiscal year in each of County fiscal years 2018, 2019 and 2020; and for all time periods thereafter, fifty percent (50%) of such Local Share of Project Cost Overruns with no annual maximum.

5.3 **County Responsibility.** The County shall be responsible for twenty-five percent (25%) of any Local Share of Project Cost Overruns and for any portion of DDA's share of Local Share of Project Cost Overruns in excess of Three Million Dollars (\$3,000,000) in each of County fiscal years 2018, 2019 or 2020. The County shall be responsible for no portion of the Local Share of Project Cost Overruns after County fiscal year 2020 (which ends September 30, 2020).

6. **Allocation of Financial Obligation for Enhanced VMF Costs:** Additionally, if the work identified within Exhibit A-1 (including as Exhibit A-1 to the Third Amendment may subsequently be amended) is included in the Project, all resulting Enhanced VMF Costs initially paid by the County shall be reimbursed to the County as follows: the DDA shall reimburse the County twenty-five percent (25%) of each payment amount; and the City shall reimburse the County fifty percent (50%) of each payment amount. The County shall be responsible for the remaining twenty-five percent (25%) of each payment amount.

7. **Assent to Continuation of Project:** If the Design-Build Contract price of the intended awardee would exceed 125% of the Design-Build Estimate (as those terms are defined in the Wave Project Agreement) and the County's assent is therefore required pursuant to Section 3.01(22) of the Wave Project Agreement, as amended, to continue the Project, County staff shall provide prompt written notice (by email to the City Manager and the City Attorney) thereof to the City. The County agrees not to provide its assent to FDOT if all of the following occur: (a) the City considers this issue at its next regularly-scheduled commission meeting that is at least five (5) calendar days after receiving the notice from the County; (b) the City approves an item requesting that the County decline to provide the County's required assent to FDOT; and (c) the City notifies the County by email (to the County Administrator and the County Attorney) within twenty-four (24) hours of the action by the City commission requesting that the County decline to provide the required assent. If any of the foregoing elements fails to timely occur, the City will be deemed to have authorized the continuation of the Project. Notwithstanding any decision by the City under this section, the County retains the right to decline to provide its assent to continuation of the Project consistent with the Wave Project Agreement. Nothing in this section requires any approval by the City in connection with the enhanced VMF referenced in Exhibit A-1.

8. **Obligation to Budget and Appropriate:** Until the City and the DDA have fully paid and satisfied all of their payment obligations under this ILA, the City and the DDA each agrees and covenants:

- a. To budget and appropriate sufficient funds each fiscal year to fully meet all of their payment obligations hereunder from their respective non-ad valorem revenues; and
- b. To maintain without reduction, and to renew, to the full extent legally permissible and required to pay all obligations under this ILA, all revenue sources dedicated in whole or in part to the funding of the Project, including, without limitation, the Wave Special Assessment authorized by the City

pursuant to City Ordinance C-13-14 and City Resolution Nos. 13-95 and 13-131 (the "Special Assessment").

9. **Pledge and Assignment:** To the full extent allowed by law, the City and the DDA hereby pledge and assign to the County, as security for all payment obligations hereunder, all proceeds of the Special Assessment subject only to the rights of FDOT to same pursuant to the terms of the SIB Loan Agreement, and to maintain the SIB Loan Agreement in good standing and refrain from taking any action that would adversely affect the availability or sufficiency of funding under the SIB Loan Agreement to satisfy any and all financial obligations of the City or the DDA under this ILA. The Parties agree to execute any and all documents the County determines are reasonably necessary to further establish and evidence this pledge and assignment.

10. **Payment Procedures:** Amounts due under this ILA from the City or from DDA shall be paid to the County within thirty (30) days after the obligor's receipt of written notice from the County. Payments by the City and the DDA shall be made to the County in accordance with wire instructions or other payment instructions provided by the County Administrator. Any amounts not timely paid shall accrue interest in accordance with Section 715.12, Florida Statutes, until all amounts due, including all accrued interest, are fully paid. In the event that notice is given to the DDA to pay its share of Local Share of Project Cost Overruns and the Special Assessment balance at that time is not sufficient to pay all of its required share, the DDA may request reasonable extensions of time to seek SIB Loan Agreement amendments with FDOT.

11. **Project Cost Savings:** The Parties will share pro-rata in any Project Cost Savings based upon each Party's financial contribution to the Project Capital Costs

12. **Obligations Upon Termination of Wave Project Agreement:** Upon termination of the Wave Project Agreement, all of the Parties' respective obligations hereunder shall cease, except for the Parties' payment obligations which shall survive such termination and shall remain in effect until fully satisfied.

13. **Revenue:** The Parties acknowledge that all future revenues from operations of the Wave Modern Streetcar, including, but not limited to, those resulting from fare box collections and advertising, shall belong to the County.

14. **Default:** In the event any Party fails to timely meet its obligation(s) as set forth herein, and such Party fails to cure such failure within ten (10) days of receiving written notice thereof, such Party shall be considered a defaulting Party. The other Parties shall have all remedies available at law and equity against the defaulting Party. The defaulting

Party shall be liable for reasonable attorneys' fees and costs incurred by any non-defaulting Party in connection with enforcement of the terms of this ILA.

15. **Notices:** Whenever the Parties desire to give notice to another, such notice must be in writing and sent by (a) certified United States Mail, postage prepaid, (b) commercial express carrier with acknowledgement of delivery, or (c) hand delivery with a request for a written receipt of acknowledgment of delivery, each with a concurrent copy sent via electronic mail, and addressed to the party for whom it is intended at the place last specified. The place for giving notice shall remain the same as set forth herein until changed in writing in the manner provided in this section. For the present, the Parties designate the following:

For County:

Broward County  
Governmental Center, Room 409  
115 South Andrews Avenue  
Fort Lauderdale, FL 33301  
Attention: County Administrator  
Email: bhenry@broward.org

*With a copy to:*  
County Attorney  
Governmental Center, Room 423  
115 South Andrews Avenue  
Fort Lauderdale, FL 33301  
Email: ameyers@broward.org

For City:

City of Fort Lauderdale  
City Hall  
100 North Andrews Avenue  
Fort Lauderdale, FL 33301  
Attention: City Manager  
Email: lfeldman@fortlauderdale.gov

*With a copy to:*  
City Attorney  
City of Fort Lauderdale  
100 North Andrews Avenue  
Fort Lauderdale, FL 33301  
Email: ceverett@fortlauderdale.gov

For DDA:

110 East Broward Blvd., Suite 1610  
Fort Lauderdale, FL 33301  
Attention: Executive Director  
Email: Jenni@ddaftl.org

16. **Future Expansion:** The City and the DDA hereby commit to negotiate and cooperate in good faith toward future transportation options related to the Project.

17. **Binding Effect:** Each undersigned Party represents that it has been empowered by its respective Party to enter into this ILA and to bind such Party to the commitments and undertakings contained herein. The provisions, conditions, terms, and covenants contained herein shall be of a binding effect. The benefits and advantages hereof shall inure to the respective Parties, and their respective successors and assigns.

18. **Severability**: If any part, term, or provision of this ILA is determined by the courts to be invalid, illegal, or in conflict with any law of the State (through completion of any appellate proceedings), the validity of the remaining portions or provisions shall not be affected thereby.

19. **Merger**: This ILA supersedes in its entirety the Prior Agreement, represents the final and complete understanding of the Parties, and incorporates, includes, and supersedes all prior negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained herein. There are no commitments, agreements, or understandings concerning the subject matter of this ILA that are not contained in this document. Accordingly, no deviation from the terms hereof shall be predicated upon any prior representations or agreements whether oral or written.

20. **Joint Preparation**: Each Party acknowledges that it has sought and received whatever competent advice and counsel as was necessary for it to form a full and complete understanding of all rights and obligations herein and that the preparation of this ILA resulted from the joint effort of all Parties. The language agreed to expresses their mutual intent and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the Parties.

21. **Counterparts**: This ILA may be executed in any number of counterparts, each of which, when executed and delivered, shall be an original, but such counterparts shall together constitute one and the same instrument.

22. **Further Assurance**: The Parties shall execute all such further instruments, and agree to take all such further actions, that may be reasonably required by any Party to fully effectuate the terms and provisions of this ILA and the transactions contemplated herein.

23. **Modification**: No change or modification of this ILA, or waiver of any of the provisions of the ILA, shall be valid unless in writing and signed by all Parties hereto.

24. **Effective Date**: This ILA shall become effective upon full execution by the Parties.


(The remainder of this page is left intentionally blank.)



IN WITNESS WHEREOF, the Parties hereto have made and executed this Amended and Restated Interlocal Agreement on the respective dates under each signature: Broward County through its Board of County Commissioners, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the 6 day of February, 2018, the City of Fort Lauderdale, signing by and through its Mayor or Vice-Mayor, authorized to execute the same, and the Downtown Development Authority of the City of Fort Lauderdale, signing by and through its Chair or Vice-Chair, duly authorized to execute same.

COUNTY

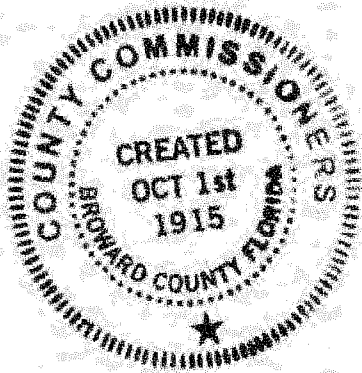
ATTEST:

  
Broward County Administrator, as  
Ex-officio Clerk of the Broward County  
Board of County Commissioners


Broward County, by and through  
its Board of County Commissioners

By   
Mayor

9<sup>th</sup> day of February, 2018



Approved as to form by  
Andrew J. Meyers  
Broward County Attorney  
Governmental Center, Suite 423  
115 South Andrews Avenue  
Fort Lauderdale, Florida 33301  
Telephone: (954) 357-7600  
Telecopier: (954) 357-7641

By  2/7/18  
Angela J. Wallace (Date)  
Deputy County Attorney

AJW/RDH  
2/6/2018  
2018-02-06 Amended and Restated ILA  
#272099.1

AMENDED AND RESTATED INTERLOCAL AGREEMENT AMONG BROWARD COUNTY, THE CITY OF FORT LAUDERDALE, AND THE DOWNTOWN DEVELOPMENT AUTHORITY OF THE CITY OF FORT LAUDERDALE REGARDING ALLOCATION OF FUNDING RESPONSIBILITY FOR THE LOCAL SHARE OF PROJECT COST OVERRUNS FOR THE WAVE MODERN STREET CAR PROJECT

ATTEST:



Jeffrey A. Modarelli, City Clerk

CITY OF FORT LAUDERDALE

By:   
John P. "Jack" Seiler, Mayor

7 day of February, 2018.

By:   
Lee R. Feldman, City Manager

Approved as to form:  
Cynthia A. Everett, City Attorney

By:   
Senior Assistant City Attorney

AMENDED AND RESTATED INTERLOCAL AGREEMENT AMONG BROWARD COUNTY, THE CITY OF FORT LAUDERDALE, AND THE DOWNTOWN DEVELOPMENT AUTHORITY OF THE CITY OF FORT LAUDERDALE REGARDING ALLOCATION OF FUNDING RESPONSIBILITY FOR THE LOCAL SHARE OF PROJECT COST OVERRUNS FOR THE WAVE MODERN STREET CAR PROJECT

DOWNTOWN DEVELOPMENT AUTHORITY OF THE CITY OF FORT LAUDERDALE, through its BOARD OF DIRECTORS, signing by and through its Chair or Vice-Chair, authorized to execute the same by Board action on the 2 day of Feb 2018.

WITNESSES:

  
\_\_\_\_\_  
Signature of Witness

MIKE KUCZKOWSKI  
\_\_\_\_\_  
Print of Type Name of Witness

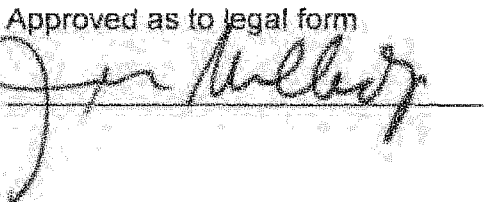
  
\_\_\_\_\_  
Signature of Witness

JENNI MORETON  
\_\_\_\_\_  
Print or Type Name of Witness

DDA

By   
\_\_\_\_\_  
Chair

7 day of February 2018

Approved as to legal form  
  
\_\_\_\_\_

## Exhibit A

### PROJECT DESCRIPTION

#### **Description of Work:**

The Wave Streetcar system will operate at-grade on a fixed rail embedded in the street, sharing the existing roadway right-of-way with vehicular traffic, and will be powered by an overhead contact wire system throughout most of the alignment. The alignment is approximately 2.8 miles in length with two fixed rail guideways, one in each direction. The streetcar vehicles will also be powered by an onboard energy storage system (OESS) for a segment of the alignment that crosses the New River over the existing SE 3rd Avenue bascule bridge.

The Wave Phase 1 revenue service alignment extends from the southern terminus at S 16th Street and S Andrews Avenue to NE 6th Street between N Andrews Avenue and NE 3rd Avenue, primarily utilizing Andrews Avenue, SE 3rd Avenue and Brickell Avenue for north/ south movement. The alignment utilizes SE 18th Street, SE 6th Street, Las Olas Boulevard, S 2nd Street, N 4th Street, and NE 6th Street for east/ west movement. The Wave Phase 1 requires five (5) modern streetcar vehicles with OESS capability; four (4) vehicles for peak service and one (1) spare.

The project includes guideway, traction power, overhead contact system (OCS), train control, communications, civil, structural, roadway, streetcar vehicles, and a Vehicle Maintenance and Storage Facility (VMSF) located on SW 1st Avenue between SW 18th Street and SW 18th Court, adjacent to the Florida East Coast (FEC) Railroad. The project also includes testing, commissioning, training, and safety certification required for a fully functional streetcar system.

#### **Guideway and Trackwork:**

An embedded track slab will be the standard for the mainline track. A reinforced concrete track slab will provide the foundation for this form of track construction. The design of the track slab will be based on automotive vehicle loadings, streetcar vehicles, and soil conditions. Embedded track shall be installed wherever the guideway is shared with rubber tired vehicles, either in mixed traffic or in locations where only emergency and service vehicles will be permitted to travel. All tracks shall be designed in accordance with the current Transit Requirements, included as an attachment to the RFP. The Work includes all drainage required to comply with the permit requirements for water quality and quantity. Track drains will be provided in paved track areas to properly drain the rail flangeways, the pavement surface between the rails, and at track switch locations.

Track work is required at the new VMSF. The yard track work will be constructed with embedded track and will consider its access to/ from the mainline track

The term "special trackwork" designates the trackwork units necessary where tracks converge, diverge, or cross one another. Special trackwork includes turnouts, diamond crossings, crossovers, and expansion joints. A reinforced concrete tub lined with electric isolation material will be constructed for all special trackwork.

### **Structures:**

The Work includes the design and construction of bridge retrofitting within the project limits. The embedded track within bridge retrofitting shall be designed in accordance with the ~~Concept Drawings and Transit Requirements~~ included as an attachment to the RFP.

The construction of the guideway across the SE 3rd Avenue Bridge over the New River requires structural, mechanical, and electrical modifications to the movable span of the bridge and other modifications to the approach spans of the bridge from the north and south. The bridge is comprised of seven spans including pre-stressed concrete spans, steel flanking spans, and a movable steel twin leaf Scherzer rolling lift bridge span with an open grid steel deck. The movable span and the approach spans will be retrofitted for the introduction of the Streetcar. ~~This will require replacement of girders/ beams on the bridge and construction of a concrete deck on the new girders/ beams with the streetcar embedded in that deck.~~

### **Stations:**

The Work includes the design and construction of ~~thirteen (13)~~ fourteen (14) streetcar station stops throughout the alignment, which include ~~eight (8)~~ ten (10) curbside platforms and ~~five (5)~~ four (4) median platforms, and provide level boarding access to the floor of the streetcar. The station platforms are proposed to be not less than 80 feet long, from 10 to 15 feet wide, and have a ramp at one or both ends, depending on the adjacent conditions. Each station stop will have a shelter, benches, public address, passenger information systems, passenger assistance telephone, closed-circuit television, infrastructure for ticket vending machines, trash receptacles, bike racks and other site furnishings. Layover and rest room facilities will be available near at the southern terminus stop at S 16th Street and S Andrews Avenue.

### **Communications/ Supervisory Control And Data Acquisition (SCADA):**

The communications system will provide the necessary functions to support the operational requirements of the streetcar system. The communications systems will include public address, passenger information systems, passenger assistance telephone, internet protocol video (IPV) HD camera system with PTZ (pan, tilt, zoom), remote

monitoring capabilities, and recording equipment. A SCADA system will also be provided to allow for monitoring and control of traction power substations (including intrusion detection), communications equipment houses and cases, fire/ life safety equipment, train control components, public address, public information equipment, and other elements.

#### **Signal and Route Control:**

Where the streetcar operates in mixed traffic, streetcar movements will be controlled by the traffic signal system. This includes interlocking protection at all control points for trains leaving the VMSF, a train-to-wayside communications (TWC) system, and a traffic signal controller that will communicate with the guideway proximity loops. The streetcar will be equipped with train-to-wayside communications systems that will activate special traffic signals and routing. In areas of on-street running, special streetcar signals will be provided at specific intersections and locations to allow the streetcar to proceed through the intersection or switch lanes independent of auto traffic. These signals will be displayed by wayside streetcar traffic signal controllers when activated by the streetcar train-to-wayside communications system. The train-to-wayside controller will have a provision for the manual setting of predetermined routes. The train-to-wayside controller will then proceed to activate and set wayside powered track switch machines appropriate for the route. Manual switch control will also be possible.

#### **Vehicle Maintenance and Storage Facility:**

The Work includes a Vehicle Maintenance and Storage Facility (VMSF) on the property identified as Site K adjacent to the Florida East Coast corridor to accommodate a fleet of five (5) Streetcars. The VMSF will perform daily and routine inspections, maintenance, on-car repairs, and interior/ exterior cleaning of the streetcars. The facility will also serve as a storage and component change-out location. The facility is intended as a light maintenance facility with minor component rebuild, truck overhaul and minor machine shop capabilities. Major machine shop work and sheet metal work may be performed at another location as an outsourced function. The VMSF will house the following functions:

- streetcar storage;
- train operator report area;
- operator and maintenance training,
- streetcar service and inspection;
- streetcar interior and exterior cleaning;
- streetcar air-conditioning, current collector and resistor unit repair;
- fare collection (FC) equipment repair, storage and inspection;
- traction electrification system (TES) service and inspection;
- TES overhead service and inspection;
- facilities maintenance;
- system wide parts storage;

- streetcar operations administration;
- streetcar maintenance administration;
- central control;
- electronic component repair;
- communications equipment repair, storage and inspection;
- storage of streetcar maintenance-of-way (MOW) materials;
- car wash; and
- LAN room for train control and communications.

**Traction Power Supply and Distribution:**

Traction electrification is provided via 750 VDC traction power sub-stations (TPSS) transmitting electric energy from its source to the vehicles. The vehicles will be propelled by electric traction motors. Energy to drive these motors will be supplied to the vehicles by rectifier substations located along the wayside through a system of distribution cables, switches and an OCS installed above each track. A pantograph will be mounted on each vehicle to serve as the interface between the vehicle and the OCS and function as the collector of electrical current for the vehicles. The running rails of each track, bonds, and cabling complete the path of electrical current back to the substation. The sections of the system between the stations, before and after the New River, will be without OCS. Vehicles will travel in these two sections using on-board storage batteries.

**Spare Parts and Maintenance Materials**

The Work will include the furnishing of spare parts and maintenance materials to operate and maintain the streetcar system for the initial startup period. The spare parts and maintenance materials will include keys, special tools, and test equipment required to access, start, operate, monitor, maintain, and perform essential repairs needed for the continued operations of the initial phase of the streetcar system, and the hand tools and general equipment identified in Exhibit A-2.

**Vehicles: (procured by Broward County under separate contract)**

The Work includes the design, manufacture, delivery, and testing of five (5) streetcar vehicles. The Work also includes the design and integration of all vehicle systems, as defined in the RFP, such that all specified requirements are achieved without conflict or error within or between systems.

Each vehicle shall be a double articulated, modern urban streetcar with contemporary styling, with the following characteristics:

- At least a three-section vehicle, with the carbody sections configured as A1-C1-B1.
- Not less than 50% low floor. Carbody section C1 shall be low floor.
- Carbody section C1 shall have at least two double wide doorways per side.
- Capable of bi-directional operation, with a fully functional cab at each end. Operating control and performance shall be equal from both cabs.
- Designed for single unit operation with provisions for towing a non-operable Vehicle.
- Heated and air conditioned consistent with the Fort Lauderdale, Florida climate and the Technical Specifications.
- Design shall incorporate the OESS, i.e. a battery and/or capacitor drive system, which shall provide capability for wireless operation in accordance with the Technical Specifications.



## EXHIBIT A-1

### ADDITIONAL VEHICLE MAINTENANCE FACILITY ELEMENTS

The additional elements for design and construction of the Vehicle Maintenance and Storage Facility (VMSF) not included in Exhibit A are the additional design and construction work required to provide an expanded VMSF to accommodate a fleet of twelve (12) Streetcars. The all-inclusive 12 streetcar VMSF includes:

- Yard track to provide for storage and operations of a 12 streetcar vehicle fleet;
- Non-revenue loop track connecting the yard track at the south end of the VMSF to the two proposed tracks on SW 18<sup>th</sup> Street leading to the VMSF and the revenue tracks along South Andrews Avenue;
- Concrete or masonry structure for the vehicle and maintenance storage building;
- VMSF building third service bay;
- Provide wheel truing machine infrastructure;
- Complete build out and furnishing of second floor office space;
- Provide power switch machines at all switch locations within the VMSF; and
- Provide infrastructure for standalone car wash.

## EXHIBIT A-2

### FARE COLLECTION SYSTEM, NON-REVENUE VEHICLES AND GENERAL TOOLS

#### Fare Collection

Purchase and install the fare collection system, including fourteen (14) ticket vending machines at all streetcar station stops connecting to Project infrastructure, and associated hardware and software.

The available Project budget for the fare collection system is \$280,000.

#### Non-Revenue Vehicles

Purchase and provide non-revenue eleven (11) vehicles for the purpose of operations and maintenance of the Wave Streetcar system. The vehicles shall be used for:

- Traction Power & Overhead Line Maintenance;
- Trackway Maintenance;
- Signal & System Maintenance;
- Facilities Maintenance; and
- Operations Support.

The available Project budget for the 11 non-revenue vehicles is \$800,000.

#### General Tools

Purchase standard hand tools, basic electrical tools and test equipment, safety lights, portable generators, spill kits and basic cleaning equipment for the purpose of general maintenance of the Wave Streetcar system.

The available Project budget for the general tools is \$200,000.

Exhibit B

ORIGINAL COST ESTIMATE  
(in thousands)

CATEGORY		
10-Guideway & Track	\$27,631	
20-Stations & Stops	\$3,217	
30-VMSF	\$15,655	
40-Sitework	\$21,411	
50-Systems	\$23,393	
60-Right-of-Way	\$2,075	
70-Vehicles	\$32,348	
80-Professional Services	<u>\$41,219</u>	
Subtotal		\$166,949
Un Allocated Contingency		<u>\$7,546 *</u>
BASE COST		\$174,495
ADDITIONAL COSTS:		
VMSF: Non-Revenue Equipment	\$2,000	
Misc. Shop Tools	\$500	
Upgrade-Type IV Bldg.	\$1,929 **	
ROW: Poles/Cabinets/Borings	\$1,000	
Design/Build: Design	\$6,391 ***	
Risk	\$4,565 ****	
Stipends	\$1,400	
Incentives/Bonus	<u>\$3,000</u>	
Subtotal		<u>\$20,786</u>
TOTAL		\$195,281

NOTE: Does not include any potential bid price or construction cost overruns

Notes:

\* 4.52%

\*\* Does not include wheel truing machine or complete upgrades under SFRTA plan

\*\*\* 7% of 10-50

\*\*\*\* 5% of 10-50

**EXHIBIT C  
FUNDING COMMITMENT**

Type	Sources	Original	Additional	TOTAL
Federal Funds	Tiger IV	\$18,000,000		
	Section 5309 Small Starts	\$49,650,000		
	Section 5309 Small Starts Supplement	\$11,144,000		
	MPO (federal)	\$3,911,000		
State Funds	FL New Starts Program	\$35,730,000		
	FDOT Match for Broward County	\$5,815,000		
	2016 Additional Funding Commitment (FDOT)		\$11,177,000	
Local Funds	City of Fort Lauderdale Cash & Land	\$10,500,000		
	City Special Assessment District - SIB Loan	\$19,490,000		
	City of Fort Lauderdale Flagler Loop	\$7,545,000		
	DDA Special Assessment Proceeds (thru City)	\$1,100,000		
	Broward County	\$5,815,000		
	SFRTA Local Funds (MPU Swap)	\$4,228,000		
	2016 Additional Funding Commitment (City)		\$5,590,000	
	2016 Additional Funding Commitment (County)		\$4,590,000	
	2016 Additional Funding Commitment (DDA)		\$1,000,000	
<b>TOTAL</b>		<b>\$172,928,000</b>	<b>\$22,357,000</b>	<b>\$ 195,285,000</b>