November 13, 2019
Johnny Wong, PhD, Senior Planner
Hillsborough Metropolitan Planning Organization
601 East Kennedy Boulevard, 18th Floor
Tampa, Florida 33602
Via email: wongj@plancom.org

SUBJECT: Surtax for Transportation Improvements - City of Tampa 2020 Project Plan Submittal Supplemental Information

Dear Dr. Wong,

The City of Tampa is pleased to submit to you the following supplemental information in response to questions and comments provided by the Independent Oversight Committee during its October 21, 2019 meeting. The information provided clarifies the general descriptions and intent of various proposed projects and programs in the City of Tampa’s Project Plan as follows.

Table 1 – Complete Streets & Safety Improvements

1. Complete Streets enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Each project is unique and depends on community context. A complete street may include: sidewalks, bike lanes, special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts and micro-mobility improvements. (Refer to the enclosed City Council Resolution No. 2012-184 supporting the design and construction of Complete Streets for more information). All projects listed in Table 1 will include Complete Street elements depending on the context and characteristics of the corridor and which will be determined during the concept development phase with input from the corresponding communities and stakeholders.
2. **Twiggs Street (Ashley Dr. to Nebraska Ave.) Complete Streets & Safety Improvements** – Table 1 for the Surtax Project Plan had a slight discrepancy. The project description had only indicated a Construction phase; however, the proposed budget for this project also includes funding for the Design phase.

**Table 2 – Congestion Reduction**

1. **Interbay Boulevard Corridor Improvements** – This project will include capacity improvements consistent with the Long Range Transportation Plan project description, including addition of turn-lane capacity at several intersections within the corridor, (such as Lois Ave, Himes Ave, MacDill Ave, and Bayshore Blvd), and other safety and walk-bike network improvements throughout the corridor. The City is not including additional through lanes under this project.

**Table 3 – Neighborhood Improvements**

1. **Terrace Park Roadway Improvements** – This project will consist of spot improvements to a limited number of road segments and locations within the neighborhood and is not intended as a comprehensive neighborhood-wide resurfacing project. The following proposed locations are based on requests from the neighborhood association (Note: some locations will require additional analysis and design):
   a. Serena Drive (Takomah Trail to Myrtle St.);
   b. Linebaugh Ave. (Takomah Trail to Myrtle St.);
   c. 50th St. at Serena Dr.;
   d. Temple Heights Rd at Ninevah Rd;
   e. Parade St. between Myrtle St. and Sassafras St.;, and,
   f. Myrtle St. at 97th Ave

**Table 4 – Intersection Improvements**

1. **Rowlett Park Drive and Sligh Avenue Intersection Improvements** – the specific safety improvements for this location will be determined during the preliminary engineering phase with community input.
Table 5 – Bike & Pedestrian Improvements

1. **Green ARTery Perimeter Trail** – this project will provide for the design and construction of the remaining segments of the perimeter trail from north of Columbus Drive to north of Adamo Drive. For more information on the perimeter trail project please visit the following webpages:
   b. [https://www.tampagov.net/sites/default/files/transportation/files/walk-bike-phase-v-final-reduced_0.pdf](https://www.tampagov.net/sites/default/files/transportation/files/walk-bike-phase-v-final-reduced_0.pdf)
   c. [https://www.tampagov.net/sites/default/files/transportation/files/walk-bike-phase-v-final-appendix-reduced_0.pdf](https://www.tampagov.net/sites/default/files/transportation/files/walk-bike-phase-v-final-appendix-reduced_0.pdf)

Table 6 – Bridges & Seawalls

2. Although the projects in this group were prioritized based on maintenance needs, the City has identified opportunities to implement additional bicycle and pedestrian network and safety improvements with each project as summarized below:
   a. **Brorein Street Bridge** – wider sidewalks across the bridge, upgraded safety railings, lighting improvements, and reconfiguration of travel lanes to reduce weaving conflicts and accommodate the wider sidewalks.
   b. **Cass Street Bridge** – protected bicycle lanes across the bridge, and reconfiguration of the travel lanes, to connect the Green Spine Cycle Track.

Table 8 – Citywide Programs

The programs listed under this category provide flexibility to address a variety of systemic or programmatic improvements that are not covered under an individual line-item capital project. These may include “quick fix,” short-term or high-priority improvements.

Table 9 – Operating Expenses

1. **Program Management Support (Citywide)** – the proposed budget of $750,000 provides for procurement of professional consultant support services to supplement the City’s staff capacity. Services may include, project management, scheduling, reporting, issue tracking and production support.
2. **Salaries and Wages** – the proposed budget of $1,290,000 will fund approximately eight (8) engineering, surveying and technical positions; however, the final number and descriptions of the positions are still under evaluation and to be determined.

3. **Capital Equipment** – the proposed budget of $725,000 will fund the purchase of several large vehicles and heavy machinery consisting of a double drum compactor, an asphalt paver and a traffic signal bucket truck.

4. **Program Support** – the proposed budget of $250,000 is a cost allocation to provide funding for corresponding City support services, such as procurement and construction management support, and budget and accounting support, from the Contract Administration and the Revenue & Finance departments.

**Other Questions**

1. **Public Outreach** – the City will engage in extensive public outreach during the early stages of the proposed projects to receive input from the affected communities and interested stakeholders. The City also schedules public meetings to present the design concepts and plans to the community before proceeding to construction.

2. **Vulnerable Road Users** – in the context of transportation improvements, vulnerable road users are non-motorized road users (such as pedestrians and cyclists), children and the elderly, motorcyclists, and persons with disabilities or reduced mobility, who sustain a greater risk of injury, and have greater need for protection against collisions with vehicles.

3. **New Automobile Lane Capacity** – the City is not allocating funding towards new automobile lane capacity projects in its 2020 Project Plan.

4. **Roundabouts** – Around 10,000 people die due to crashes at intersections every year. Roundabouts are one of the safest and most sustainable safety treatments that the City can provide for its intersections. Roundabouts eliminate two of the most serious types of crashes that occur at conventional 4-way intersections – the left-hand turn and the head-on crashes. These types of crashes tend to be more severe and often lead to serious injury or even death. These crashes also tend to occur in the middle of an intersection. Roundabouts replace the dangerous middle of the intersection with a raised circular island. (Motorists can run through a stop sign or a red light, but it is very difficult to run through a roundabout). Roundabouts are also much safer for pedestrians and bicyclists since their design forces motorists to drive slower and provides for pedestrians refuge islands at the crosswalks. Per the Federal Highway Administration (FHWA), roundabouts provide for up to 90% reduction in fatalities, 76% reduction in injury crashes, and 30 - 40%
reduction in pedestrian crashes. For more information on roundabouts please visit https://www.tampagov.net/tss-transportation/info/roundabouts.

5. **Streetcar Expansion and Modernization** – the modernization component of this project will provide for a fleet of modern streetcar vehicles. Modern streetcars are high-capacity vehicles containing multiple, wide doors and level-boarding heights, that facilitate easy access for the greatest share of the population, including those with limited or reduced mobility. Other components of the modernization include expanding the maintenance facility, realigning segments of the streetcar track and reconstruction of the existing streetcar stops to accommodate the modern vehicles. The new stops will no longer require a separate access for people with disabilities. For additional project information, please visit the City’s project page at www.tampagov.net/streetcar.

6. **Correcting Historical Legacy of Inequity** – under the 2020 Project Plan, the City will be funding a Citywide Comprehensive Mobility Master Plan to develop a long-term list of capital improvement projects (Refer to the 2nd line under Table 9 – “Operating Expenses” of the 2020 Project Plan). As part of this planning process, the City will continue consulting with the Hillsborough Metropolitan Planning Organization (MPO) and Community Redevelopment Areas (CRA’s) to ensure that it is incorporating equity in its planning and prioritization process to enhance the mobility and connectivity of historically disadvantaged and low-income communities to safely and conveniently access housing, employment, educational, health care, recreational and other services.

7. **Future Project Prioritization** – A consideration of the planning methodology for the Citywide Mobility Master Plan will be to ensure an equitable distribution of projects for the duration of the Surtax. Extensive public engagement and community outreach will be undertaken as part of the Citywide Mobility Master Plan to ensure that the priorities are reflective of the community’s vision.

8. **Sidewalk Requirements for New Developments** – new private development projects will still be required to provide for new sidewalks in accordance with City of Tampa Code of Ordinances Sec. 22-103. - When new sidewalk construction is required; contributions to "sidewalk trust fund" in lieu of constructing a sidewalk.

9. **In-House Staffing vs. Consultant Support** – in addition to hiring several new staff, the City is also budgeting for procurement of professional consultant support to help manage and deliver our expanded capital program (Refer to the 1st line under Table 9 – “Operating Expenses” of the 2020 Project Plan). The Program Management support will be adjusted based on the project schedules and the need for additional resources.

10. **Smart Street Lighting** – In partnership with the City of Tampa, Tampa Electric (TECO) street light replacement program has been converting traditional lighting infrastructure
to energy-efficient Smart LED technology. The LED street lighting system can detect and communicate with the utility when lights are out, and allows for remote control of the fixtures. The City is currently in discussions with TECO to explore the use of smart lighting infrastructure to support additional sensors for functions such as traffic counts, gunshot detection for public safety, air quality monitoring and parking management. TECO will implement and manage the sensors as part of its infrastructure.

11. Supplanting of Existing City Funds with Surtax Funds – The City of Tampa’s Project Plan will not utilize Surtax funds to supplant any existing funding sources (such as Fuel Taxes and Multi-Modal Impact Fees). The City will apply its entire Surtax budget to fund new transportation projects and programs and to increase funding for several ongoing transportation projects and programs.

Certification Statement

In addition to the above clarifications, I have also enclosed a revised Certification Statement to correct the percentage shown under “4) Network Improvements.” in the original certification statement from 23.1% to 13.1%.

Thank you for the opportunity to respond to questions and provide this supplemental information. Please let me know if you have any questions or would like additional information.

Sincerely,

Milton Martinez, P.E.,
Chief Transportation Engineer

Enclosure: Revised City of Tampa Certification Statement
City of Tampa Resolution No. 2012-184 (Complete Streets)
Roundabouts – A Safer Choice Brochure (FHWA)
InVision: Tampa Streetcar Project Overview

cc: Jean W. Duncan, P.E., Director
Vik Bhide, Smart Mobility Division Manager
Calvin Hardie, P.E., Capital Projects Manager
Danni Jorgenson, P.E., Chief Planning Engineer
Stephen Benson, AICP, Transportation Project Coordinator
Certification

In accordance with Section 5, Part (B), of the “Interlocal Agreement Regarding Transportation Sales Surtax” between the Hillsborough County, the City of Tampa, the City of Temple Terrace, the City of Plant City, the Hillsborough Area Transit Authority, and the Hillsborough Metropolitan Planning Organization, I certify that the enclosed City of Tampa Transportation Surtax Project Plan for Calendar Year 2020 complies with the terms of County Charter Amendment XI – Surtax for Transportation Improvements, and Hillsborough County Ordinance No 19-20, Section 2.04 Uses of General Purpose Portion.

The City’s Project Plan proposes to expend its share of the General Purpose Portion of Surtax Proceeds in the following categories and percentages:

1) Maintenance and Vulnerability  31.4%
2) Congestion Reduction    27.0%
3) Safety Improvements    28.5%
4) Network Improvements    13.1%

Milton Martinez, P.E. #54056
Chief Transportation Engineer
RESOLUTION NO. 2012-184

A RESOLUTION OF THE CITY OF TAMPA SUPPORTING THE DESIGN AND CONSTRUCTION OF COMPLETE STREETS IN THE CITY OF TAMPA, FLORIDA, WHERE APPROPRIATE AND FINANCIALLY FEASIBLE; PROVIDING AN EFFECTIVE DATE.

WHEREAS, public streets and roadways that are safe and convenient for all users of the transportation system are accommodated, including pedestrians, bicyclists, public transportation riders, and automobile drivers are known herein as "Complete Streets"; and

WHEREAS, Complete Streets projects should endeavor to support and invite multiple uses, including safe, active, and ample sidewalk space for pedestrians and bicycle lanes and/or bicycle routes, are more conducive to the public life and efficient movement of people than streets designed primarily to move automobiles and trucks; and

WHEREAS, Complete Streets projects should endeavor to supply appropriately sized travel lanes for automobiles, trucks, delivery and emergency service vehicles so as to eliminate hazards and improve the safety for pedestrians and cyclists; and

WHEREAS, by designing Complete Streets to provide for more transit vehicles, facilities and routes, studies have shown that traffic congestion is greatly reduced; and

WHEREAS, by design, Complete Streets should provide on-street parking where appropriate and offer adequate buffer areas for pedestrian safety, utility placement, drainage, and landscaping and/or hardscaping for more pedestrian protection; and

WHEREAS, Complete Streets should incorporate the existing and anticipated future land use context of a roadway or corridor; and

WHEREAS, Complete Streets improvements have been completed on Cargo Road, Nebraska Avenue, 40th Street, North Boulevard, Palm Avenue, Bayside Boulevard and Euclid Avenue; and

WHEREAS, in 2011, the City of Tampa ("City") and the Hillsborough County Metropolitan Planning Organization ("MPO") have completed Walk-Bike Plan Phase I (Central Business District, Westshore Business District and University North District) and Walk-Bike Phase II for the remaining City of Tampa will be completed in 2012; and

WHEREAS, in 2011, the Urban Land Institute ("ULI") Advisory Panel for Tampa determined that the Complete Streets Program should be incorporated in all new development because it offers a competitive economic advantage and could become an economic generator for the core districts; and

WHEREAS, the ULI Advisory Panel suggested the City should evaluate other large corridors according to the standards presented in the Institute of Traffic Engineers ("ITE")
Walkable Thoroughfares Manual, and use this manual as a best practice guide for future rights of way; and

WHEREAS, Complete Street policies are supported in the City of Tampa Comprehensive Plan with the following goals, objectives and policies:
  • Provide a safe, convenient, and efficient bicycle and pedestrian network to facilitate walking trips within neighborhoods and activity centers and bicycle trips both within and between neighborhoods and activity centers;
  • Provide a safe, convenient, and efficient mass transit system to provide for mobility throughout the City and serve as a viable alternative to single-occupant vehicles to access the City’s Business Centers, Urban Villages, Mixed-Use Corridors, Rail Transit Stations and neighborhoods;
  • Preserve neighborhood livability and protect the natural environment through management of roadway traffic and consideration of the impacts of roadway capacity improvements;
  • Preserve livability, optimize the efficiency of the roadway network and protect the natural environment through travel demand management and other supportive strategies.

WHEREAS, Florida Statutes, Section 335.065, titled "Bicycle and pedestrian ways along state roads and transportation facilities" is part of the Florida Department of Transportation's ("FDOT") Pedestrian and Bicycle Procedure and states that "Bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities ... and bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any state transportation facility ..."; and

WHEREAS, in 2005, the Florida Legislature created Florida Statutes 335.067, titled “Conserve by Bicycle Program” is created in FDOT for the purpose to save energy by increasing the number of miles ridden on bicycles, thereby reducing the usage of petroleum-based fuels; increase efficiency of cycling as a transportation mode by improving interconnectivity of roadways, transit and bicycle facilities; reduce traffic congestion on existing roads; provide recreational opportunities for Florida's residents and visitors; provide healthy transportation and recreation alternatives to help reduce the trend toward obesity and reduce long-term health costs; provide safe ways for children to travel from their homes to their schools by supporting the Safe Paths to School; and

WHEREAS, ITE has been involved with several Complete Streets initiatives and with the publication of “Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice” which was a collaborative effort with the Congress for the New Urbanism, U.S. Department Of Transportation-Federal Highway Administration and the Environmental Protection Agency and with the manual as a guide for communities to implement context sensitive solutions in Complete Streets projects; and

WHEREAS, Complete Streets projects can help promote transportation networks that provide citizens with a variety of transportation choices.
NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL
OF THE CITY OF TAMPA, FLORIDA:

Section 1. City Council of the City of Tampa ("City Council"), supports the design and construction of Complete Streets projects where appropriate and financially feasible. It is the intent of City Council that Complete Streets projects shall be designed in a balanced, responsible, and equitable way to accommodate and encourage travel by bicyclists, public transportation vehicles, and pedestrians.

Section 2. City Council supports and encourages all transportation and other public projects within rights-of-way be designed and constructed to accommodate and balance the choice, safety, and convenience of all users of the transportation system including pedestrians, users with disabilities, bicyclists, transit users and motorized vehicles and freight carriers.

Section 3. The City should, during its planning and design of improvements to the rights-of-way, consider enhancements including, but not limited to: reducing rights-of-way storm water run-off, improving water quality, prioritizing and allocating sustainable tree space and planting areas (both surface and subsurface), reusing materials and/or using recycled materials, and promoting energy conservation and efficiency wherever appropriate and financially feasible.

Section 4. Complete Streets Projects, as discussed herein, should include the following types of improvements:

1. Sidewalk space for pedestrians;
2. Bicycle lanes or bicycle routes;
3. Appropriately sized travel lanes for cars, trucks, delivery vehicles and emergency vehicles;
4. Transit vehicles, facilities and routes;
5. On-street parking where applicable;
6. Median use for traffic flow, safety, and pedestrian refuge;
7. Adequate buffer areas for pedestrian safety, utility placement, drainage, and possible landscaping;
8. Landscaping or hardscaping adding pedestrian protection; and
9. The existing and anticipated future land use context or a roadway or corridor.

Section 5. It is the intent of City Council that Complete Streets projects should be encouraged unless bicycle and pedestrian facilities are prohibited by law, the cost is excessively disproportionate, or there is sparse population and employment in the area of such projects.

Section 6. The City should continue to work with its partnering agencies, including but not limited to the Hillsborough County Metropolitan Planning Organization, the Florida Department of Transportation, Hillsborough County, the City of Plant City and the City of Temple Terrace to create attractive Complete Streets projects that meet the needs of the traveling public and support the future vision of the Region.
Section 7. That the provisions set forth in this Resolution should be employed where appropriate and financially feasible in all transportation planning, design, review, operations, major maintenance projects (such as milling and overlay), new construction and reconstruction projects. City departments, including Public Works, Transportation, Growth Management and Development Services and Parks and Recreation should consider the provisions of this Resolution as they plan, design and review improvements within the City’s rights-of-way.

Section 8. That this Resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF TAMPA, FLORIDA, ON _______FEB 16 2012______

ATTEST:

Shirley Jones-Knowles
CITY CLERK/DEPUTY CITY CLERK

Gary G. Green
CHAIRMAN/CHAIRMAN PRO-TEM
CITY COUNCIL

PREPARED AND APPROVED AS TO LEGAL SUFFICIENCY BY:

E/S

JULIA MANDELL COLE
SENIOR ASSISTANT CITY ATTORNEY

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Roundabouts

A Safer Choice

Education is key.

Education is vital to the acceptance and success of a roundabout. Navigating a roundabout is easy. But because people can be apprehensive about new things, it’s important to educate the public about roundabout use.

There are just a few simple guidelines to remember when driving through a roundabout:

1. Slow down.
2. If there’s more than one lane, use the left lane to turn left, the right lane to turn right, and all lanes to go through, unless directed otherwise by signs and pavement markings.
3. Yield to pedestrians and bicyclists.
4. Yield at the entry to circulating traffic.
5. Stay in your lane within the roundabout and use your right-turn signal to indicate your intention to exit.
6. Always assume trucks need all available space — don’t pass them!
7. Clear the roundabout to allow emergency vehicles to pass.

Visit safety.fhwa.dot.gov to learn more about roundabouts.

“Personally, I love them, and I’ll tell you why. You only have to stop one lane of traffic, then go to the middle and wait. The cars can’t go much faster than 20 mph through the roundabout so the crossing aspect is great.”

Denise Haltom
School Crossing Guard, Suamico, Wisconsin
Green Bay Press-Gazette
February 6, 2003

“We have had a lot of people not very happy about the idea of roundabouts, but after they are constructed, those fears mostly go away.”

Brian Walsh
Washington State Department of Transportation
Seattle Times
June 5, 2002

“We all know people speed up to get through a yellow light. But at the roundabout, all the vehicles have to slow down ... we have almost 50 roundabouts now, we have a lot [fewer] personal injuries. We have fewer fatalities.”

James Brainard
Mayor, City of Carmel, Indiana
www.nbc17.com
November 8, 2007
**What is a roundabout?**

A roundabout is a type of circular intersection with yield control of entering traffic, islands on the approaches, and appropriate roadway curvature to reduce vehicle speeds.

Modern roundabouts are different from rotaries and other traffic circles. For example, roundabouts are typically smaller than the large, high-speed rotaries still in use in some parts of the country. In addition, roundabouts are typically larger than neighborhood traffic circles used to calm traffic.

A roundabout has these characteristics:

- **Generally Circular Shape**
- **Counterclockwise circulation**
- **Can have more than one lane**
- **No need to change lanes to exit**
- **Yield signs at entries**
- **Geometry that forces slow speeds**

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**Why consider a roundabout?**

Compared to other types of intersections, roundabouts have demonstrated safety and other benefits.

**Roundabouts:**

- **Improve safety**
  - More than 90% reduction in fatalities*
  - 76% reduction in injuries**
  - 35% reduction in all crashes**
  - Slower speeds are generally safer for pedestrians


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**Reduce congestion**
- Efficient during both peak hours and other times
- Typically less delay

**Reduce pollution and fuel use**
- Fewer stops and hard accelerations, less time idling

**Save money**
- Often no signal equipment to install, power, and maintain
- Smaller roundabouts may require less right-of-way than traditional intersections
- Often less pavement needed

**Complement other common community values**
- Quieter operation
- Functional and aesthetically pleasing

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**Potential vehicle conflict point**

With roundabouts, head-on and high-speed right angle collisions are virtually eliminated.

[Traditional intersection]  [Roundabout]

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**Tips for safely walking and biking through a roundabout**

- Walk around the outside; don’t cross through the middle
- Ride your bike as a vehicle or walk your bike as a pedestrian

**Research is ongoing on additional treatments and design considerations to address the needs of visually impaired pedestrians.**
In October 2018, supported by a three-year FDOT grant, HART initiated service improvements that have resulted in significant increases in ridership. These improvements, which include fare-free service, longer operation hours, and greater service frequency, have attracted more than 180,000 additional riders in the first four months of implementation, nearly tripling ridership over the same period the previous year.

With additional improvements, introduction of accessible, higher capacity vehicles, and extension through the Downtown core, the service has the potential to become an attractive transportation option for a broader cross-section of downtown residents, workers, students, and visitors, as well as serve as a catalyst for reinvestment and economic development. In 2017, the City of Tampa initiated the InVision: Tampa Streetcar Feasibility Study to evaluate modernizing and extending the Tampa Historic Streetcar System. In June 2018, the Federal Transit Administration approved entry of the proposed streetcar extension project into the Project Development phase in consideration for funding under the Small Starts program. The City of Tampa, working with Hillsborough Area Rapid Transit (HART) and Florida DOT, have been advancing planning and project development for the proposed modernization and extension.

**Preferred Alternative Description**

The preferred alternative selected in the InVision: Tampa Streetcar Feasibility Study consists of the following project elements: 1) replacement of the existing replica streetcar vehicles with modern streetcar vehicles; 2) construction of a new 1.3-mile transit fixed guideway with overhead power within existing rights-of-way from the western terminus of the existing system through the core of Downtown Tampa to Tampa Heights, 3) construction of stops along the extension guideway; 4) modifications to the existing 2.7-mile alignment guideway, power system, and stops to support modern streetcar operations; and 5) modifications to the existing vehicle maintenance and storage facility to accommodate new modern vehicles.

**Vehicle Technology**

Modern streetcar vehicles were selected as the preferred vehicle technology for operations along the existing system and extension. The modern streetcar provides the highest-capacity vehicle of the options considered (continued use of historic replica trolleys and premium bus). The configuration of the modern streetcar, with multiple, wide doors and level-boarding heights, would facilitate easy access by the greatest share of the population, including those with mobility challenges. With many portions of the route in a dedicated guideway, a modern streetcar would be able to move large numbers of people while minimizing constraints posed by traffic congestion. The modern streetcar’s larger passenger capacity makes it the most efficient of the options in terms of cost per rider. In a rapidly-growing urban center like Tampa, this capacity provides the greatest degree of system flexibility for meeting mobility demands on a day-to-day basis, and over the long term.

**Extension Alignment**

The evaluation of alignment alternatives resulted in the selection of an extension traveling 1.3 miles north from Downtown to Palm Avenue within existing rights-of-way. The proposed extension alignment is proposed as a north/south couplet pairing Florida Avenue and Tampa Street. The alignment begins near the existing streetcar terminus at Whiting Street and Franklin Street. From the existing track on Franklin Street, the northbound track extension turns east at Brorein Street, then turns north at Florida Avenue to extend through the Downtown Core and Tampa Heights to Palm Avenue. At Palm Avenue, the
The intersection of Channelside Drive and Old Water Street near the Tampa Bay History Center and Amelia Arena.

To serve modern streetcar vehicles, modifications to the existing traction power system will also be required. Modifications will include upgrading the system from trolley wire to overhead contact system to accommodate modern streetcar vehicles. This change can be accomplished using the existing power sources and pole/arm systems.

**Existing System Stop Modifications**

Each of the eleven stops along the existing streetcar line will be retrofitted to accommodate modern streetcar vehicles. Proposed stop modifications will occur with the footprint of the existing stop. The existing stops currently include a high-block boarding platform designed to accommodate the higher interior floor of replica streetcar vehicles. The existing 12-foot by 12-foot high block platforms and ramps will be removed and replaced with a new 14-inch high platform.

Existing shelters and other equipment and amenities will be removed and reinstalled or replaced in-kind. Future design phases will determine if the new concrete platform will be constructed around the existing columns or if the shelters will be removed and installed on the new platform or replaced in-kind. At all of the existing stops, the construction of new platforms will require removal of the existing concrete sidewalks, curb, and platforms, so that the new platform and ramps may be constructed.

**Existing Guideway Modifications**

Four locations along the existing streetcar guideway will require reconstruction to accommodate the larger turning radius of a modern streetcar vehicle. Starting at the northern end of the existing guideway, the four locations are:

- Near Jose Mart Park in Ybor City.
- South of East 5th Street near the intersection of the streetcar and CSX tracks.
- Near East Cumberland Avenue at the roundabout in the Channel District.

One of two stop types will be constructed along the extension. Some stops will be positioned in the parking lane to the right of the guideway, while other stops will be positioned along existing sidewalks adjacent to the guide way. The type of stop depends on the guideway location in the street. During the project development phase of the project, primary stop locations have been identified as well as optional locations for several stops. All stops, both primary and optional, are being evaluated for potential impacts. All potential stop locations are shown on the map above.

**Extension Stops**

To accommodate modern streetcar vehicles and allow for shared use by other transit vehicle types, stops along the extension will be designed with a 14-inch-high platform section for level, ADA-compliant streetcar boarding and a lower, 8-inch-high platform section for bus boarding. The overall footprint of the extension stops will be similar in scale to stops on the existing line, and measure approximately 10-feet-wide by 100-feet-long. New and retrofitted stops will have similar amenities, which will include canopy/covered area; seating, railings, trash receptacles; system information map, kiosk, signage; lighting and security elements; and ADA-compliant access and ramps.

alignment turns west and travels two blocks before turning south onto Tampa Street. The southbound alignment runs along Tampa Street to Whiting Street. At Whiting Street, the alignment turns east to link back to the existing downtown streetcar terminus at the Whiting Street Station.

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<th>Proposed Stop Location</th>
<th>Preferred Extension Alignment</th>
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<th>City of Tampa</th>
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<td>Proposed Stop Locations</td>
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For specific questions, please contact:
Milton Martinez, P.E.
City of Tampa
(813) 274-8998
Milton.Martinez@tampagov.net

August 2019