



REGIONAL RAPID TRANSIT

PROJECT MANAGEMENT PLAN

DRAFT
January 7, 2020

Prepared for



Prepared by





Table of Contents

1.0 Basis for the Project..... 1

 1.1 Project Description and Background 1

 1.2 Planning Consistency 2

 1.3 Project Goals and Objectives 2

 1.4 Project Sponsor and Partners 2

 1.5 Project Organization and Key Personnel 2

 1.6 Project Budget and Schedule 6

 1.7 Technical Methodology 10

 1.8 Project Cost and Schedule Control 10

 1.9 LPA Adoption in MPO Long Range Plan 10

 1.10 LPA in TIP, STIP 10

 1.11 Legal Authority to Implement the Project 10

 1.12 PMP Workshop..... 10

2.0 Environmental Assessment/Mitigation Plan..... 11

 2.1 Purpose and Need 11

 2.2 Environmental Site Assessments 11

3.0 Design Control Plan 13

4.0 Project Controls 14

 4.1 Document and Records Controls..... 14

 4.2 Cost Control Procedures – to be completed 15

 4.3 Schedule Control Procedures – to be completed 15

 4.4 Risk Control Procedures 15

 4.5 Dispute/Conflict Resolution Plan (claims avoidance and claims resolution) – to be completed 16

5.0 Project Delivery and Procurement Plan..... 17

6.0 Labor Relations and Policies 17

7.0 Construction of Fixed Infrastructure – Procedures..... 17

8.0 Start up and Revenue Operations..... 18

9.0 Sponsor Management Capacity and Capability Documents 18

10.0 Quality Assurance/Quality Control Program Plan 19

 10.1 Quality Assurance Responsibilities 19

 10.2 Program Quality Control..... 19

 10.3 Review and Comment Tracking Matrix..... 19



10.4 QC Process for Design	20
11.0 Safety and Security Management Plan	21
12.0 Real Estate Acquisition and Management Plan	21
13.0 Fleet Management Plan.....	21

Tables

Table 1: PD&E Study Budget by Scope Task	7
Table 2: PD&E Milestones	7

Figures

Figure 1: PD&E Schedule	8
Figure 2: File Naming Structure	14
Figure 3: Study Logo Variations	15



This Project Management Plan (PMP) is the guiding management document for the Tampa Bay Area Regional Transit Authority (TBARTA) I-275 Regional Rapid Transit project. The RRT is a Project Development and Environment (PD&E) Study for a Bus Rapid Transit (BRT) project on I-275 connecting Pinellas, Hillsborough, and Pasco Counties.

This PMP will establish organizational procedures to be used by the project team during Project Development and will be updated regularly and as needed to take the project from PD&E through construction and implementation. The procedures will provide a clear trail of activity, while assisting in the monitoring and controlling the project budget, schedule, and quality.

The PMP is an evolving document and will initially have many unfinished sections to be completed or updated throughout Project Development, Engineering, and Construction, through closeout of the planned capital grant for the project. This document has the following 13 sections with procedures to be followed strictly by all parties of the project team:

- 1.0 Basis for the Project
- 2.0 Environmental Assessment/Mitigation Plan
- 3.0 Design Control Plan
- 4.0 Project Controls
- 5.0 Project Delivery and Procurement Plan
- 6.0 Labor Relations and Policies
- 7.0 Construction of Fixed Infrastructure
- 8.0 Start up and Revenue Operations
- 9.0 Sponsor Management Capacity and Capability Documents
- 10.0 Quality Assurance/Quality Control Program Plan
- 11.0 Safety and Security Management Plan
- 12.0 Real Estate Acquisition and Management Plan
- 13.0 Fleet Management Plan

Because it is the initial intent to seek federal Capital Investment Grant (CIG) funding from the Federal Transit Administration (FTA), this PMP follows the guidelines set forth in FTA's *Project and Construction Management Guidelines*.

The PMP will be a guide for action, the elements of the action plan will include specific information and procedures for implementing the project, managing the cost, schedule quality, and associated risks. Describing standard procedures are essential for effective management of the project as well, describing approved policies, practices and procedures related to the management, design and construction of the BRT project.

1.0 Basis for the Project

1.1 Project Description and Background

The concept for the BRT project was identified by the Regional Transit Feasibility Plan (RTFP), a two-year comprehensive alternatives analysis. The RTFP assessed the feasibility of potential regional transit options in the urbanized area of the greater Tampa Bay region. The plan identified a regional vision as well as the top performing cost-feasible project to be implemented first. The final document of the RTFP is included as an appendix.

The project being studied as part of this PD&E was identified as the catalyst, serving three counties and six Tampa Bay regional activity centers. It will be the first premium transit system connecting the three counties of Hillsborough, Pasco, and Pinellas. The proposed 41-mile alignment, will provide frequent service to Tampa Bay's population and transit corridors, connecting downtown St. Petersburg, the Greater Gateway area, Westshore, Downtown Tampa, the University of South Florida (USF) area, and Wesley Chapel. The project will include connections to routes operated by Hillsborough Area Regional Transit Authority (HART), Pasco County Public Transportation (PCPT), and Pinellas Suncoast Transit Authority (PSTA). The following recommendations brought forth by the RTFP establishes the basis by which this PD&E will be conducted:



- Rapid transit connection operating in the I-275 corridor between downtown St. Petersburg and Wesley Chapel
- Operation in a combination of dedicated lanes, hardened shoulders, tolled express lanes, and mixed traffic
- Frequent and reliable rubber-tired transit service with separate and consistent branding

1.2 Planning Consistency

The RRT project corridor has been prioritized in the Long Range Transportation Plans (L RTPs) of the Hillsborough Metropolitan Planning Organization (MPO) and Pinellas MPO (Forward Pinellas). This PD&E study will verify the infrastructure treatment. This project will be included in the TBARTA Regional Transit Development Plan when adopted in early 2020.

1.3 Project Goals and Objectives

The study team worked with the TBARTA Citizens Advisory Committee (CAC) to define the goals and objectives of the project, as well as the purpose and need to be used during Project Development.

The goal of the Regional Rapid Transit is to provide all-day modern mobility that provides quick, safe, reliable, frequent, and regional rapid service.

The following objectives were identified:

- Provide mobility for residents and visitors that reduces the need for a personal vehicle
- Use advanced vehicle and fare technologies
- Provide environmental and health benefits
- Support local transit and provides seamless transfers
- Provide context sensitive community stations and minimize adverse impacts to neighborhoods
- Ensure a premium transit experience
- Reduce congestion
- Provide lower cost commuting options
- Provide access to jobs and affordable and attainable workforce housing
- Invest in first and last mile solutions
- Encourage private sector investment and economic development

1.4 Project Sponsor and Partners

This PD&E Study is funded through a project participation agreement between the Florida Department of Transportation (FDOT) District Seven and TBARTA, which outlines that TBARTA is the owner/manager of the PD&E Study and FDOT is providing the funding for the study. The work will be coordinated with TBARTA and stakeholders, which include FDOT, HART, PCPT, and PSTA.

This section will be updated once the project sponsor is identified.

1.5 Project Organization and Key Personnel

The PD&E team structure, working group structure, process for coordination and outreach, and the relationships between each are described below. The teams will be engaged throughout the study and will be driven by input collected through a series of one-on-one meetings, presentations, and workshops. More information about the public involvement program planned during the PD&E is provided in the Public Involvement Plan (PIP).

The PD&E teams will provide direction and help move the project forward, ultimately selecting a Locally Preferred Alternative (LPA) that will be submitted to the Federal Transit Administration (FTA) for consideration and approval of Federal Capital Investment Grant (CIG) dollars. The reporting process begins with the Consultant Team producing draft work products. The Project Management Team will conduct an initial review of the work products before submitting them



to the Executive Team for their review and comment. The Project Management Team will take work products to the TBARTA Board on an as needed basis for their approval.

During the PD&E study, the Consultant Team meets internally bi-weekly, the Executive Team generally meets monthly and the Project Management Team generally meets twice per month. Aside from the scheduled meetings, the Consultant Team and Project Management Team maintain continuous coordination through in-person meetings, phone calls, and email, as needed.

1.5.1 Consultant Team

TBARTA contracted with WSP USA for planning and engineering services to conduct a PD&E study for the project. The Project Management Team will provide guidance and direction related to the effort and progress made for each of the five project milestones. In addition to regular communication, the Consultant Team provides a weekly snapshot to the Project Manager regarding the recent work completed and planned work ahead.

The Consultant Team will lead the public involvement efforts, coordinate closely with the rest of the teams on public involvement activities, and maintain proper documentation and records retention. Project management includes:

Scott Pringle, AICP

WSP USA
Consultant Project Manager

813-520-4298 Office
scott.pringle@wsp.com

2202 N West Shore Blvd, Suite 300
Tampa, FL 33607

Stephen Goodreau, PE, PMP

WSP USA
Consultant Executive Advisor

312-981-3761 Office
stephen.goodreau@wsp.com

30 N LaSalle St, Suite 4200
Chicago, IL 60602

Jennifer Straw, AICP

WSP USA
Deputy Project Manager
Environmental and Public Outreach Task Lead

813-520-4297 Office
jennifer.straw@wsp.com

2202 N West Shore Blvd, Suite 300
Tampa, FL 33607

Eric Heinz

WSP USA
Deputy Project Manager
Technical Task Lead

813-520-4380 Office
eric.heinz@wsp.com

2202 N West Shore Blvd, Suite 300
Tampa, FL 33607

Cutty Gibson, PE

WSP USA
Deputy Project Manager
Design Task Lead

813-520-4479 Office
cutty.gibson@wsp.com

2202 N West Shore Blvd, Suite 300
Tampa, FL 33607



In addition to the project leads listed above, staff from the following firms and institutions will be involved in the project.

- WSP USA (prime consultant)
- AECOM Technical Services, Inc.
- Connetics Transportation Group, Inc.
- University of South Florida Center for Urban Transportation Research
- DJ Public Relations Inc.
- InfraStrategies LLC
- Janus Research, Inc.
- Jarrett Walker & Associates, LLC
- KB Environmental Services, Inc.
- Kittelson & Associations, Inc.
- HW Lochner, Inc.
- Martin Communications, Inc.
- Stokes Creative Group, Inc.
- Tierra, Inc.
- Tindale-Oliver & Associates, Inc.

The Consultant Team will perform a large part of the planning and engineering tasks for the project through consultant services contracts. The scope of the work (provided in the appendix) for the consultant services during the PD&E study include the following:

- Project management
- Refining design standards throughout the project
- Surveying and Mapping
- 10% and 30 engineering designs and specifications for the stations, alignment, and structures
- Environmental documentation
- Locally Preferred Alternative
- Strategic Funding
- Public involvement
- Implementation of the Quality Assurance and Quality Control Program and design review
- Estimation of project costs
- FTA CIG submittal documentation
- Preparation of a variety of project reports and documentation

This section will be updated during each phase of the project development to identify current tasks.

1.5.2 Project Management Team

The Project Management Team will provide guidance and direction related to the effort and progress made for each of the five project milestones and provide key updates regarding the completion of major milestones. This group will also be used to guarantee that there's active communication and coordination with essential partner agencies and municipalities is achieved. The project management team will include the executive director, project manager, and key staff of TBARTA, as well as the consultant project manager, key staff, and others as needed. The team includes:

**David Green**

Tampa Bay Area Regional Transit Authority
Executive Director

813-282-8200 Office
david.green@tbarta.com

4350 W Cypress St, Suite 700
Tampa, FL 33607

Brian Pessaro

Tampa Bay Area Regional Transit Authority
Project Manager

813-282-8200 Office
brian.pessaro@tbarta.com

4350 W Cypress St, Suite 700
Tampa, FL 33607

Chris DeAnnuntis

Tampa Bay Area Regional Transit Authority
Senior Planner

813-282-8200 Office
chris.deannuntis@tbarta.com

4350 W Cypress St, Suite 700
Tampa, FL 33607

Chris Jadick

Tampa Bay Area Regional Transit Authority
Director of Communications

813-639-7743 Office
chris.jadick@tbarta.com

4350 W Cypress St, Suite 700
Tampa, FL 33607

1.5.3 Executive Team

To ensure that the project proceeds in adherence with regional objectives and needs, the Executive Team will review the technical work used in developing the plan and provide comments on all major deliverables. This team will promote the circulation of technical information and the project's progress to multiple agencies, and to possibly resolve any issues that might arise while also analyzing the project from multiple viewpoints providing guidance and direction. Meetings are held monthly throughout development of the plan. The team includes:

David Green

Tampa Bay Area Regional Transit Authority
Executive Director

813-282-8200 Office
david.green@tbarta.com

4350 W Cypress St, Suite 700
Tampa, FL 33607

Brian Pessaro

Tampa Bay Area Regional Transit Authority
Project Manager

813-282-8200 Office
brian.pessaro@tbarta.com

4350 W Cypress St, Suite 700
Tampa, FL 33607

Ming Gao

Florida Department of Transportation, District 7
Intermodal Systems Development Manager

813-975-6454 Office
ming.gao@dot.state.fl.us

11201 N McKinley Dr, MS 7-500
Tampa, FL 33612

Brian Hunter

Florida Department of Transportation, District 7
Freight Coordinator

813-975-6436 Office
brian.hunter@dot.state.fl.us

11201 N McKinley Dr, MS 7-500
Tampa, FL 33612

**Brad Miller**

Pinellas Suncoast Transit Authority
Chief Executive Officer

813-540-1900 Office
bmiller@psta.net

3201 Scherer Dr
St. Petersburg, FL 33716

Cassandra Borchers

Pinellas Suncoast Transit Authority
Chief Operating Officer

813-540-1802 Office
cborchers@psta.net

3201 Scherer Dr
St. Petersburg, FL 33716

Ben Limmer

Hillsborough Area Regional Transit Authority
Chief Executive Officer

813-384-6566 Office
limmerb@gohart.org

1201 E 7th Ave
Tampa, FL 33605

Chris Cochran

Hillsborough Area Regional Transit Authority
Director of Service Development

813- 384-6553 Office
cochranc@gohart.org

1201 E 7th Ave
Tampa, FL 33605

Kurt Scheible

Pasco County Public Transit
Director

727-834-3200 Office
kscheible@ridepcpt.com

8620 Galen Wilson Blvd
Port Richey, FL 34668

William Morris

Pasco County Public Transit
Administrative Services Manager

727-834-3200 Office
wmorris@ridepcpt.com

8620 Galen Wilson Blvd
Port Richey, FL 34668

1.5.4 Board Briefings and Presentations

The Consultant Team facilitates one-on-one briefings with the TBARTA Board members at key project milestones. The intent of these meetings is to keep them informed about the project and to allow them the individual opportunity to ask TBARTA staff and its PD&E consultant questions about the study. Each briefing complies with the Florida Sunshine Law.

In addition to one-on-one briefings, the Consultant Team, with assistance from the Project Management Team as needed, provides presentations and/or updates to the TBARTA Board at key milestones.

1.5.5 Decision-Making Process

The Project Management Team will be the primary decision-maker regarding content of the PD&E Study during its development. The Executive Team will provide regular input and comments to the various deliverables associated with the PD&E Study, which will be taken into consideration by the Project Management Team. The TBARTA Board will be responsible for the adoption of the Recommended Alternative, the Locally Preferred Alternative, the NEPA document, and elements of the project submittal application to FTA for the CIG Program.

1.6 Project Budget and Schedule

The scope of work for the PD&E Study consists of seven tasks. **Table 1** shows the tasks and their associated budgets.



Table 1: PD&E Study Budget by Scope Task

Task	Budget
Task A: Project Management	\$154,865.11
Task B: Design Options, Strategic Funding Blueprint, and Coordination	\$572,029.03
Task C: 10% Design	\$817,059.10
Task D: Environmental Documentation (NEPA)	\$1,112,650.46
Task E: 30% Design	\$1,356,801.84
Task F: Locally Preferred Alternative	\$225,181.47
Task G: FTA CIG Application and Project Documentation	\$300,799.75
Unallocated Contingency and Miscellaneous Services	\$460,613.23
Total	\$5,000,000.00

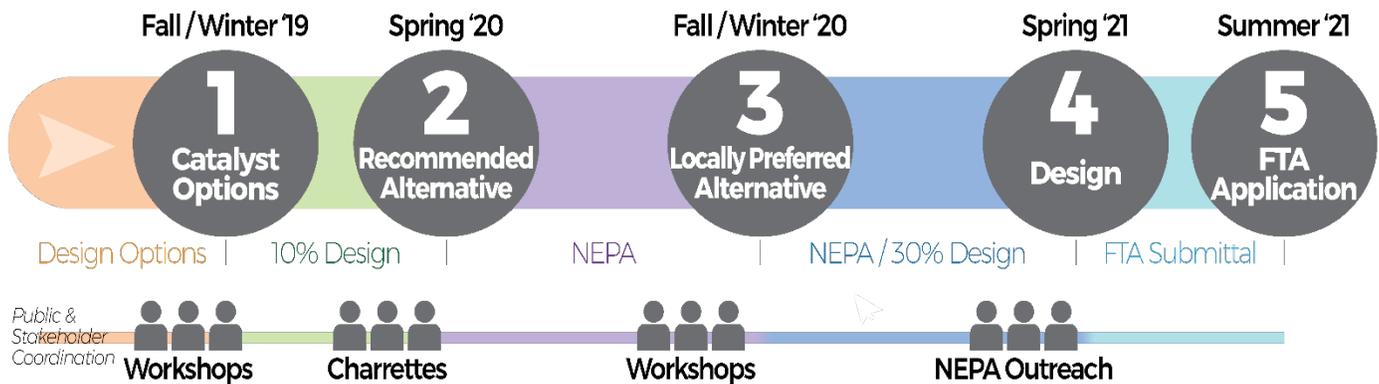
The PD&E project schedule is organized into five key steps, with each step completing a specific aspect of project development and resulting in a milestone. **Table 2** gives an overview of the tasks and timeframe for each phase of the PD&E study. **Figure 1** shows the high-level PD&E schedule. A more detailed description of the tasks to be completed in support of each of these steps and resulting milestones is provided in **Sections 1.5.1** through **1.5.5**.

Table 2: PD&E Milestones

Design Options Summer 2019 – Fall/Winter 2019	Develop options to carry forward into design. Options will be identified based on stakeholder, policy leader, and public input, development of a Strategic Funding Blueprint and partnerships; and coordination with each MPO. Milestone 1: Catalyst Options
10% Design Fall/Winter 2019 – Spring 2020	Identify the Recommended Alternative to be advanced to environmental analysis based on frequency of service evaluations; service route evaluations, station location identification; and schematic lane configurations. Milestone 2: Recommended Alternative
NEPA Spring 2020 – Fall/Winter 2020	Begin environmental review; identify the Locally Preferred Alternative (LPA) to be advanced to 30% design based on environmental effects evaluation, safety and security, and station designs that seamlessly connect to local transit, pedestrians, bicyclists, and other multimodal options. Milestone 3: Locally Preferred Alternative
NEPA/30% Design Fall/Winter 2020 – Spring 2021	Define how the LPA interacts with other modes and complete all associated 30% design submittals. Complete environmental documentation. Milestone 4: Design
FTA Submittal Spring 2021 – Summer 2021	Request a National Environmental Policy Act (NEPA) decision from FTA and submit the project for FTA Capital Investment Grant (CIG) program rating. Milestone 5: FTA Application



Figure 1: PD&E Schedule



More detailed schedule graphic to come.

1.6.1 Design Options

The first step in this PD&E will address community concerns brought forward by the RTFP. By addressing these concerns, a series of design options will be identified to carry forward into design. Options should support TBARTA's mission of connecting regional activity centers, offering better access to jobs, and equity to all. Development of design options will be driven by input collected through a series of one-on-one meetings and workshops with local and regional agencies, policy makers, stakeholders, and the community to brainstorm options and refinements that address community concerns. The evaluation methodology for identifying design options and station areas will be discussed in more detail in the Evaluation Methodology technical memorandum.

The following tasks will be completed as part of this milestone:

- Develop purpose and need
- Define evaluation plan
- Identify multiple design options
- Begin evaluation of station areas
- Develop preliminary framework for Strategic Funding Blueprint
- Conduct stakeholder coordination and public involvement

1.6.2 10% Design

In the second step, the Consultant Team will carry forward a No Build Alternative and multiple Build Alternatives into 10% Design. The second step will culminate in the adoption of a Recommended Alternative that will be carried forward into 30% Design. The Consultant Team will begin collecting geotechnical, cultural, curb-to-curb right of way dimensions, and traffic data to develop a series of schematic lane configurations for the project. Building upon the identified design options, the Consultant Team will use the collected data, leveraging data already produced for Tampa Bay Next, and develop schematic lane configurations and service plan assumption; assess traffic conditions, reconfigure the supporting local transit services, and refine the ridership estimates derived from FTA's Simplified Trips on Project Software (STOPS) used during the RTFP and required for entry into the CIG program.

The following tasks will be completed as part of this milestone:



- Develop No Build Alternative
- Identify evaluation years and basis of comparison
- Evaluate technology and vehicle options
- Develop schematic lane configurations
- Identify number and locations of stations
- Develop preliminary service and operating plans
- Revise planning level cost estimates
- Define draft Recommended Alternative
- Conduct stakeholder coordination and public involvement
- Coordinate with FTA to determine Class of Action (COA) for NEPA analysis and request entry into CIG program

1.6.3 NEPA

The level of environmental analysis leading up to Milestone 3 will be based upon the FTA Environmental COA Determination. All required environmental evaluations and related project effects documentation will be completed as part of this milestone. This effort is further described in Section 2.0 Environmental Assessment/Mitigation Plan.

1.6.4 NEPA/30% Design

Once 10% design and environmental documentation is complete, 30% design plans will be prepared. This will be done in coordination with FDOT so that the RRT project is fully integrated with the Tampa Bay Next projects.

At the close of this step, the LPA will be defined. Defining the LPA is an iterative process whereby project refinements are made because of the environmental assessment and development of 30% design plans. Project recommendations resulting from environmental evaluations will impact 30% design plans. Likewise, when refinements are made to the project design, these refinements have an impact on the environmental assessment. Therefore, the LPA will be identified after the environmental documentation and potentially refined following 30% design plans before submitting to FTA to request a decision on NEPA. The following tasks will be completed as part of this milestone:

- Define vehicle systems and specifications
- Develop methodology and complete traffic engineering
- Begin early right of way coordination
- Begin early utility coordination
- Complete preliminary station conceptual design
- Develop jurisdiction agreements and permits
- Complete preliminary design of safety/security, fare collection and communications systems
- Complete detailed project cost estimates
- Develop detailed Operations and Maintenance Plan
- Develop design criteria
- Complete 30% design
- Request FTA NEPA decision
- Conduct stakeholder coordination and public involvement

1.6.5 FTA Submittal

The final step in this PD&E will include completing the CIG application for FTA rating. At this time, the project will need to be included in TBARTA and the MPOs' fiscally constrained long range transportation plans. The following tasks will be completed as part of this milestone:



- Finalize the Strategic Funding Blueprint
- Submit the project application for preliminary rating from FTA, including all CIG worksheets and backup
- Complete project documentation
- Coordinate with FTA to ensure all documentation is complete

1.7 Technical Methodology

The technical methodology will be provided in an appendix to this document, and will provide detailed methodology for each milestone of the study.

1.8 Project Cost and Schedule Control

To ensure that the PD&E Study is completed on time and on budget, the following controls are in place:

- Weekly snapshots to the TBARTA Project Manager regarding recent work completed and planned work ahead
- Twice a month in-person progress meetings with the TBARTA Project Management Team
- Monthly progress reports and invoices
- Regular communication with TBARTA Project Manager

1.9 LPA Adoption in MPO Long Range Plan

This section will be updated once the LPA is identified and adopted into the MPOs' Long Range Plans.

1.10 LPA in TIP, STIP

This section will be updated once the LPA is identified and adopted into the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP).

1.11 Legal Authority to Implement the Project

This section will be updated at a later date.

1.12 PMP Workshop

This section will be updated following the PMP workshop, if applicable.



2.0 Environmental Assessment/Mitigation Plan

FDOT Environmental Screening Tool (EST) and the guidelines described by the FDOT Efficient Transportation Decision Making (EDTM) will be used to see if the project matches environmental evaluations. The purpose of this task is to prepare the required documentation needed to support Federal Transit Administration (FTA) decision regarding the project’s Environmental Class of Action (COA). This will all be documented with the purpose of being accepted into the FTA CIG program.

2.1 Purpose and Need

As defined by the RTFP, the catalyst is the regional premium transit project that has the greatest potential to be funded and best serves the region today while supporting future growth. The purpose and need for the RRT study will be refined during then NEPA evaluation.

This section will be updated following identification of the purpose and need.

2.2 Environmental Site Assessments

Based upon the FTA Environmental COA Determination, all required environmental evaluations and related project effects documentation will be completed. This documentation will follow FTA NEPA guidelines and the FDOT PD&E Manual to complete the appropriate level of environmental analysis and documentation for the following resources categories:

- Traffic
- Engineering
- Sociocultural Effects
- Aesthetic Effects
- Farmland
- Section 4(f)
- Archaeological and Historical Resources
- Wetlands and Other Surface Waters
- Aquatic Preserves and Outstanding Florida Waters
- Water Quality and Storm Water
- Wild and Scenic Rivers
- Noise and Vibration
- Air Quality
- Contamination
- Floodplains
- Coastal Zone Consistency
- Coastal Barrier Resources
- Protected Species and Habitat
- Essential Fish Habitat
- Utilities and Railroads
- Safety and Security

2.2.1 Coordination and Linkage to Other Environmental Documents

All corresponding segments of Tampa Bay Next are anticipated to be constructed in advance of the TBARTA project. To coordinate the project and prepare for service within the interstate corridor, environmental documentation will need to adhere to environmental recommendations and decisions developed for Tampa Bay Next.

As required by law, recommendations defined under any previous NEPA decisions will be included in this PD&E, specifically the Supplemental Environmental Impact Statement for Tampa Bay Next Segments 4, 5, and 6, as well as the Segment 2 and 7 PD&Es. A similar evaluation will be conducted of other regional efforts and associated NEPA decisions, including the Central Avenue BRT PD&E, current efforts to modernize and extend the TECO Streetcar, HART’s efforts to complete a PD&E Study for arterial BRT in Central Tampa connecting Downtown Tampa and USF via Tampa Street, Florida Avenue, and Fowler Avenue.

Intermodal centers are currently under study for the Carillon/Gateway are in Pinellas County; Westshore, Downtown Tampa, and the USF area in Hillsborough County; and Wesley Chapel in Pasco County. While environmental documents are not being completed for them, due to their direct impact on this study, additional coordination will occur with the intermodal centers studies.



This section will be updated as these other environmental documents are completed, as applicable.

2.2.2 Environmental Effects Determination

Potential impacts associated with the proposed project will be identified and a NEPA review will be completed by preparing a document that adequately addresses potential impacts. The following topics will likely require more extensive analysis during this PD&E. Each will be addressed in a more substantive manner regardless of the FTA COA (subject to FTA's concurrence):

- Environmental Justice
- Land Use and Zoning
- Traffic Engineering and Impacts
- Cultural Resources
- Parklands and Recreation Areas
- Neighborhood and Community Resources

Pending review and concurrence by FTA, the remaining resource categories in the environmental document for which the project is expected to result in limited or no effects will be documented accordingly. The need for supporting technical reports or memoranda will be determined based on input collected during FTA consultation.

2.2.3 Project NEPA Documentation

A compiled draft of the NEPA document will be submitted to TBARTA for review. The draft will include all tables, figures, and supporting technical appendices. After comments are addressed to TBARTA's satisfaction, it will be submitted to FTA Region IV for review.

Additional procedures regarding the environmental assessment will be further defined at a later date. This may include:

- Delineation of NEPA Analysis Requirements/Project Impact Analysis
- Description of Mitigation Principles
- Plan for Management and Implementation of Mitigation Actions



3.0 Design Control Plan

The design control plan will be defined at a later date. This may include:

- Description of relationship between forecasted ridership, operating plan and proposed project transit capacity in guideways, stations, support facilities
- Design criteria for each discipline
- Schedule for the development of contract documents (level of development expected at each milestone for design/construction drawings, specifications, general and supplementary conditions of contracts for construction, and the Division 1)
- Design reviews for drawings and specifications
 - Value engineering review/life cycle review
 - Coordination review – internal to agency and design team; external to third parties, intergovernmental, etc.; transit-oriented and joint development
 - Constructability review
 - Operability and maintainability review
 - Other peer or industry reviews
- Design change and configuration control of documents during design and construction
 - Change identification
 - Documentation procedures
 - Review and approval
- Plan (list and schedule) for third party agreement permits including utilities, real estate, railroads, transit-oriented development/joint development, etc.
 - Plan/schedule for site surveys, geotechnical and materials investigation before/during design
 - Plan/schedule for geotechnical and materials testing during construction



4.0 Project Controls

This section includes preliminary project controls procedures. The project controls will be refined as the project progresses. The information below describes the project controls during the PD&E study.

4.1 Document and Records Controls

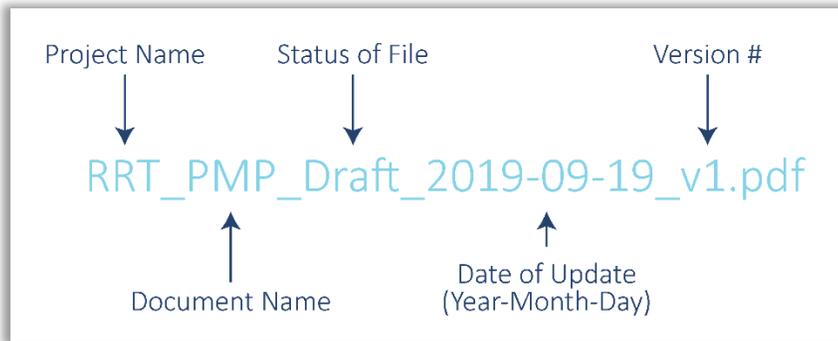
During the PD&E, physical (digital) documents will be stored on the Consultant Team servers until submitted for review. Once submitted, TBARTA will store the draft and final documents on the TBARTA server. Each version will be saved as needed as documents are reviewed, edited, and revised.

TBARTA and the Consultant Team will also use Microsoft Teams for document sharing and review. This tool allows team members to collaborate through a web-based interface. Once uploaded to the site, documents and files can be checked out for review, comments can be added, and the document checked back in with the comments stored. This file sharing tool is designed to provide secure, organized access to documents and content. The files on the site will also be saved locally to the servers. The structure of the Microsoft Teams site includes:

- Files (houses all files uploaded to the site)
- Planner (houses a continually updated to do list)
- Calendar (houses all important dates regarding the project)

All deliverables will have a standard file naming structure as shown in the **Figure 3**.

Figure 2: File Naming Structure



4.1.1 Abbreviations

The following abbreviations should be used for the project:

- Regional Rapid Transit RRT
- Milestone MS
- <additional abbreviations to be defined as needed>

The following abbreviations should be used for the documents:

- Project Management Plan PMP
- Public Involvement Plan PIP
- <additional abbreviations to be defined as needed>

4.1.2 Website



The project website (<http://rrt.tbarta.com>) will be used for the public to access all final documents as they become available. The website is further discussed in the PIP.

4.1.3 Study Logo

A study logo, standard colors, and fonts were identified for the project. The logo variations are shown in **Figure 4**. The concept behind the logo represents movement growing with speed and momentum, symbolizing agility and easy, fast commuting. The logo uses a spectrum of the 3 TBARTA brand colors.

Figure 3: Study Logo Variations



4.1.4 Study Deliverables Style Guide

Reports will be straightforward, easy to read and understand, logically organized, and structured to provide the relevant and important information. Furthermore, all publications will adhere to the Plain Writing Act of 2010, requiring government documents to be written in a “clear, concise, well-organized manner” using plain language. In addition, published reports, graphics, and other information will be prepared in a coherent format and made available to the public. A standard report format template was created and will be used for all major deliverables.

4.2 Cost Control Procedures – to be completed

- Description of estimating methods/assumptions
- Final cost estimating methodology report
- Procedures for maintaining baseline project through minimizing schedule delays, contingency management, contracting techniques, cost allocation
- Procedures for working with construction contractors to maintain FTA’s Standard Cost Categories (SCC) cost breakdown of contract sum through construction, at contract closeout

4.3 Schedule Control Procedures – to be completed

- Description of scheduling methods and assumptions
- Procedures for updating baseline project schedule
- Procedures for keeping the project on schedule

4.4 Risk Control Procedures

The reliability of the Sponsor’s project scope, cost estimate, and schedule over the course of the project life is extremely important, not only for the success of the individual project, but also for the professional credibility of the transit industry including FTA. Professional risk management provides the basis for improving the reliability of project delivery. The Risk Control Procedures will include:

- Description of risk identification procedures pertaining to project team organization, scope, cost, schedule, and quality



- Risk identification in project team, drawings, general and supplementary conditions, Div. 1, Div. 2-48 technical specifications
- Risk evaluation/assessment plan and procedures
- Risk control and management plan and procedures
- Contingency control and management plan and procedures including establishment of minimum contingency levels at each milestone (contingency drawdown)
- Role of insurance

4.5 Dispute/Conflict Resolution Plan (claims avoidance and claims resolution) – to be completed

During the planning phase, conflict resolution will be handled in accordance with TBARTA's adopted conflict resolution process (adopted May 23, 2008).

The conflict resolution process will be defined at a later date. This may include:

- Plan for design phases
- Plan for procurement
- Plan for construction phase
- Plan for startup and revenue operations



5.0 Project Delivery and Procurement Plan

The project delivery and procurement plan will be defined at a later date. This may include:

- Procedures for procurement (advertising, bidding, awarding of contracts for consultants and construction contractors, procurement for equipment, etc.)
- Procurement plan and schedule (indicate project phase, durations for RFP, screening, interviews, selection, board approvals, etc.)
 - Community outreach services
 - Information system services
 - Real estate services
 - Project management services
 - Design services
 - Legal services and other services
 - Construction testing and inspection services
 - Construction
 - Preliminary selection of project delivery method (DBB, DB, CMGC, etc.) (include rationale for and identification of risks inherent in selected method)
 - Final selection of project delivery method
 - Major contract packages – description of packages and construction sequencing
 - Procurement of long lead items and pre-FFGA/SSGA items or work
 - Work by third parties such as utilities, railroads, private sector, etc.
- Contracting strategy for transit-oriented development and joint development
- Identification of Disadvantaged Business Enterprises (DBE) opportunities, federal DBE, state/local WBE & MBE, plans and goals

6.0 Labor Relations and Policies

Labor relations and policies will be defined at a later date. This may include:

- Wage Rates and Classifications
- Wage and Hour Requirements
- State and Local Regulations
- No-strike Agreements

7.0 Construction of Fixed Infrastructure – Procedures

Construction of fixed infrastructure procedures will be defined at a later date. This may include:

- Construction contract administration
- Construction management
- Construction inspection
- Coordination with third parties
- Site logistics plan (materials transport and storage, temporary site facilities, maintenance of existing pedestrian ways, transit and traffic operations during construction, projection of existing utilities)
- Processing shop drawing, bulletin, RFIs
- Negotiating and approving change orders and claims
- Substation completion, final completion



8.0 Start up and Revenue Operations

Start up and revenue operations procedures will be defined at a later date. This may include:

- Testing plan
 - Systems
 - Equipment
 - Vehicles
- Closeout materials (warranties, testing results, O&M manuals, spare parts, etc.)
- Plan for training of staff

9.0 Sponsor Management Capacity and Capability Documents

This section will be defined at a later date. This may include:

- Management capacity and capability



10.0 Quality Assurance/Quality Control Program Plan

The Quality Assurance/Quality Control (QA/QC) Plan will be updated at each phase of the project, as needed.

The QA/QC Plan for the PD&E ensures quality and consistency throughout the PD&E and will ensure the study meets FTA standards for completing Project Development. The QA/QC Plan is designed to evolve as the project progresses. The standards will be revised as required by the study direction, deliverables, and participating partners.

Study Teams, committees, and related staff will use the QA/QC Plan to review all products for compatibility with the study requirements. The process will include quality control checks that ensure all deliverables are accurate, complete, and easy to read and understand; keeping the PD&E on schedule and within budget.

10.1 Quality Assurance Responsibilities

The QA/QC Plan clearly defines the process for ensuring excellence in technical analysis and high quality in all deliverables. The Consultant Team is responsible for ensuring that all deliverables are checked by the assigned QA/QC professional. The Consultant Team will provide the most appropriate experienced professional to serve as a checker for the various tasks. The checker reviews all deliverables, including data, for accuracy, completeness, and consistency. To do this, a logical method must be followed to ensure the reviewer does not miss verifying any information. The following outlines the QC managers:

 Gus Hunter, PE WSP USA Design	 Cherie Royals, PE WSP USA Design	 Alan Danaher, PE, PTOE, AICP, PTP WSP USA Operations	 Chris Hemmer, PE WSP USA Cost Estimating
 Laura Minns, AICP WSP USA Cost Estimating	 Scarlett Sharpe WSP USA Environmental/NEPA	 Christina Kopp, AICP WSP USA Documentation	

10.2 Program Quality Control

A variety of quality control techniques and tools will be applied when producing deliverables to ensure consistency and accuracy. Deliverables may include technical memoranda, milestone reports, presentations, or graphics. This section describes the production guidelines and quality control structure for key deliverables. All major deliverables will be reviewed by each project team; additional deliverables may be reviewed by the FTA, the public-at-large, and stakeholders. Assigned staff is individually responsible for controlling the quality of services for their area of performance expertise. Internal quality control will be conducted prior to submittal of each draft and final deliverable. WSP is ISO 9001 certified, meaning a third-party company specializing in quality, has reviewed our quality procedures and certify they meet international standards for quality. Therefore, WSP follows a very strict quality program, which includes:

- Clear assignment of responsibilities
- Adherence to the study schedule
- Careful checking of each deliverable by a third-party

10.3 Review and Comment Tracking Matrix

A Review and Comment Tracking Matrix will be used to record all comments and provide responses on all major deliverables. This matrix will provide a consistent format for documenting comments and responses at the various review phases. After each comment period, the comment matrix will be posted on the Microsoft Teams site, enabling all team members to see where, when, and how comments were addressed in the deliverables.



10.4 QC Process for Design

The responsible Consultant Team staff will originate the designs, plans and/or reports using thorough, quality-oriented production and review methods for the development, completion, and checking of the work, as needed. The responsible staff performs detailed checks for accuracy, errors, and omissions prior to substantial completion and before each phase submittal review. All calculations, drawings, specifications, and related documents prepared by any person shall be checked by another qualified person. The responsible person will possess senior experience in the discipline in which the checking is performed. No person shall perform quality assurance and/or quality control on his or her own work.

Appropriate responsible technical review staff will check design work. QA/QC procedures for design documents shall strive to achieve the following objectives, as needed:

- **Avoidance of Errors and Omissions** - The documents or drawings shall be thoroughly checked and free of errors and omissions
- **Complete Document** - The documents or drawings shall be complete for the specified scope of work
- **Clear Identification** - The source of information for calculations and the interface with related documents shall be clearly identified
- **In Conformance** - The documents shall conform to Study procedures, criteria, and applicable codes and standards
- **Constructible Design** - The designs shall be economically constructible, either in the shop or in the field, using modern technology and methods



11.0 Safety and Security Management Plan

This section will be defined at a later date. This may include:

- Safety and securing management plan

12.0 Real Estate Acquisition and Management Plan

This section will be defined at a later date. This may include:

- Real estate acquisition and management plan

13.0 Fleet Management Plan

This section will be defined at a later date. This may include:

- Fleet management plan